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Regional Inequalities in Office Property Development and Investment in the UK

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Abstract. The paper considers the influence of finance capital on the regional pattern of physical development in the UK. Access to an appropriate stock of industrial and commercial accommodation is a key supply side attribute of a competitive economy. However, the spatially uneven production of business property has received little attention in the regional studies literature.

The subject is addressed in three stages. First, in an initial empirical section, analysis using location quotients is used to describe the changing regional distribution of the office stock and of office property development and investment – relative to business service activity. Significant and persistent relative differences in the amount of regional office development and investment and in the quality of regional office property stocks are identified. The second section presents a theoretical framework for the remainder of the paper. A four-sector model of the business property market (covering rent determination, investment valuation, new development and stock adjustment) is used to define its structural characteristics and to describe how finance capital may affect regional patterns of property investment and development.

The final section of the paper presents the results of research into the behaviour of UK office property investment decision-makers. In addition to buying more office investments in core regions than in other regions, London-based property investors over-price the former and under-price the latter. The paper argues that this is a result of significant rigidities in property investors' decision-making processes that arise from management practices and social influences. To illustrate this, it draws upon the results of in-depth interviews with 25 London-based office investment decision-makers that explored their application of portfolio benchmarking to investment management.

Benchmarking has become a widely diffused and well-established technique fundamental to the development of institutional property investment strategies in the UK. Benchmarking there is based on information managed by a third party (Investment Property Databank; IPD), which allows member organisations to compare their performance with that of virtual benchmark portfolios constructed from aggregated, anonymised data supplied by their peers. Consequently, performance measurement is self-referential. Benchmarking legitimises and encourages the construction of normal portfolios displaying average performance. Property portfolio benchmarking practice reinforces existing portfolio structures, including their geographies, and is a barrier to the more even regional distribution of office property investment.

More research is needed into the way that finance capital affects regional economies through the property market.

Introduction.

Accommodation is a major factor of production. Its quantity, quality and price will affect the productive capacity and productivity of firms and economies. New accommodation offers very significant gains in functional efficiency and cost effectiveness over older premises. Rented accommodation offers additional advantages to occupiers of flexibility and avoidance of capital outlay and, where it is speculatively developed, of immediate availability (Henneberry 1988). Spatial variation in building provision can, therefore, be expected to influence urban and regional economic development, whether one takes a neo-classical or post-Keynesian view of the process (Armstrong and Taylor, 1993).

From the neo-classical perspective, property development contributes to the growth in an economy's capital stock and, hence, to its output growth. So under-supply of floor space can seriously hamper economic performance. Additionally, any failure to redistribute capital in response to spatial variations in relative property costs and / or investment performance is likely to undermine assumptions about interregional factor mobility essential to the achievement of equilibrium in the neo-classical model. From the post-Keynesian perspective, a key issue is economies' competitive position in the face of external demand for their output. Decisions by the property supply industry may result in an increase in the cost of provision of property in some regions because such property must show relatively higher rates of return than similar property in other regions. This raises the capital cost element of the former regions' export supply function relative to the latter and reduces their competitiveness.

It is argued here that the growth of property investment has increased the power of the supply-side of the property market, which has been subject to the growing influence of investors' requirements and decisions. Consequently, investors' behaviour constitutes a systematic geographical factor behind property supply variations and its effect is significant. Clark (2000) puts it that "… pension funds have had difficulty recognizing local interests in their investment strategies." (page 95) We go further, suggesting that, within the formal logic of investment decision-making, institutional investors make decisions that are biased toward London and the South East and therefore reduce property investment performance. This is quite apart from the impact that such decisions have upon regional economies.

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The Regional Distribution of the Office Property Stock and of Related Property Development and Investment Activity

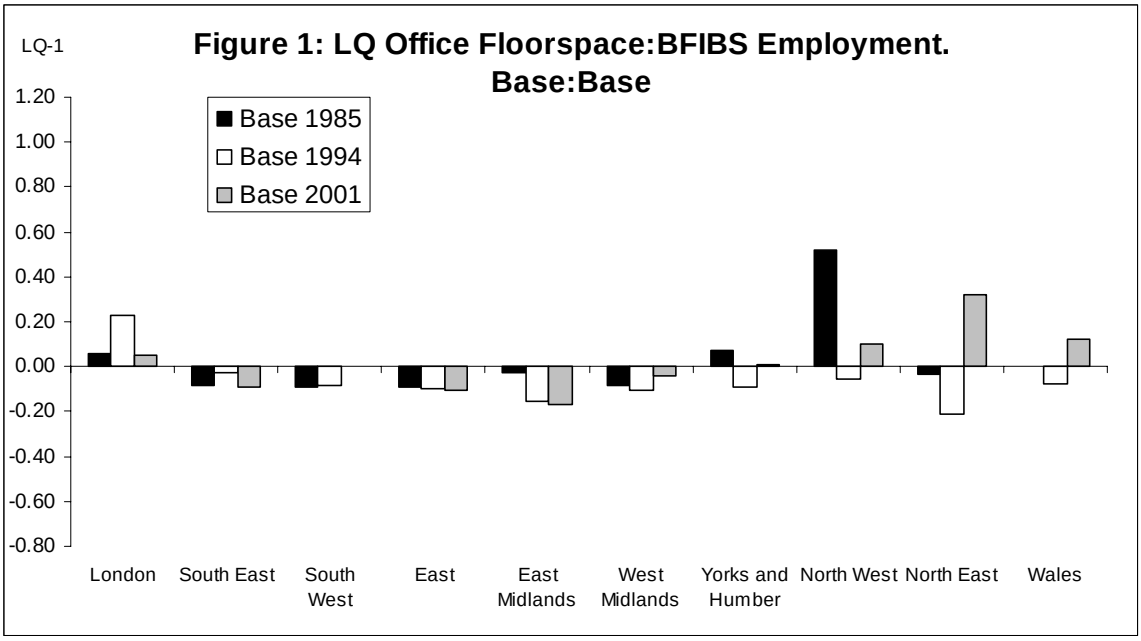
The demand for accommodation is a derived demand. Firms require property in order to carry out their business. Consequently, the effective interaction of property and economic development depends crucially upon the continuous reproduction of a stock of property which corresponds accurately to users' requirements. A strong relationship between the pattern of economic activity and the distribution of the stock of business property - and of related property development and investment - might therefore be expected. In this section of the paper we examine the extent to which circumstance matches expectation in this regard. This is done in three stages. First, an assessment of the size of extant regional property stocks is undertaken. Then regional patterns of two key property-related activities are examined: the main (in)flow variable, new construction; and a significant financial ownership variable, institutional property investment holdings. Finally, stock and development variables are combined to produce an indicator of the quality of regional property stocks. The focus is on the office property sector because it is dominated by rent relations rather than owner occupation – bringing a particular set of investment decision criteria into play - and also because of the importance of business services sector of the economy.

Economic Activity and Property-Related Activity

Location quotients (LQ; Flegg et al. 1995; Walford 1995) are used as the basic measure of the distribution of property-related activity relative to economic activity. Three different types of LQ were calculated, embodying various stock and flow comparisons[1]. Economic activity was measured by employment and by Gross Value Added (GVA) for the relevant sector: banking, finance insurance and business services (BFIBS).

As Figure 1 indicates, the regional distribution of the stock of offices relative to that of BFIBS employment is quite even (compared with other relative distributions that will be presented below). A LQ of 0 indicates a supply of office floorspace equal to a region's share of BFIBS employment. London is the only region whose office stock exceeds its share of office employment for all three years. Most regions display the reverse relation between office stock and employment. A minority of regions – Yorkshire and the Humber, the North West, the North East and Wales – enjoy a share of office stock higher than their share of office employment in some, but not all, of the three years.

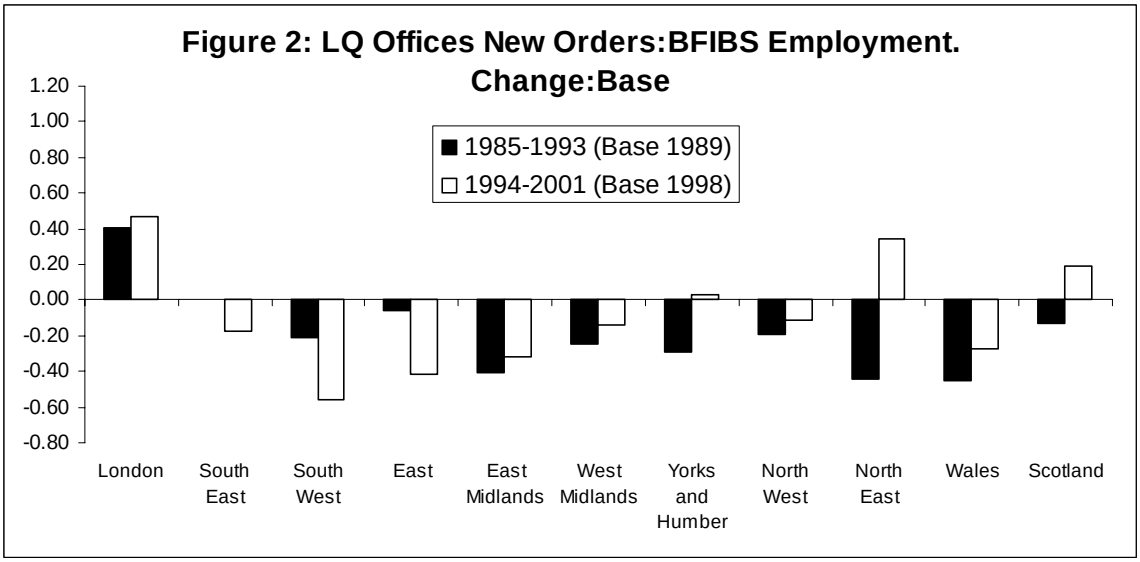
[1] A base:base measure, where the proportions of property-related and economic activity were compared for a specific year; a change:base measure, where the change in a stock variable or the sum of a flow variable for a specified period was compared to a base year for that period; and a change:change measure, where the change in two variables over a specific period were compared.

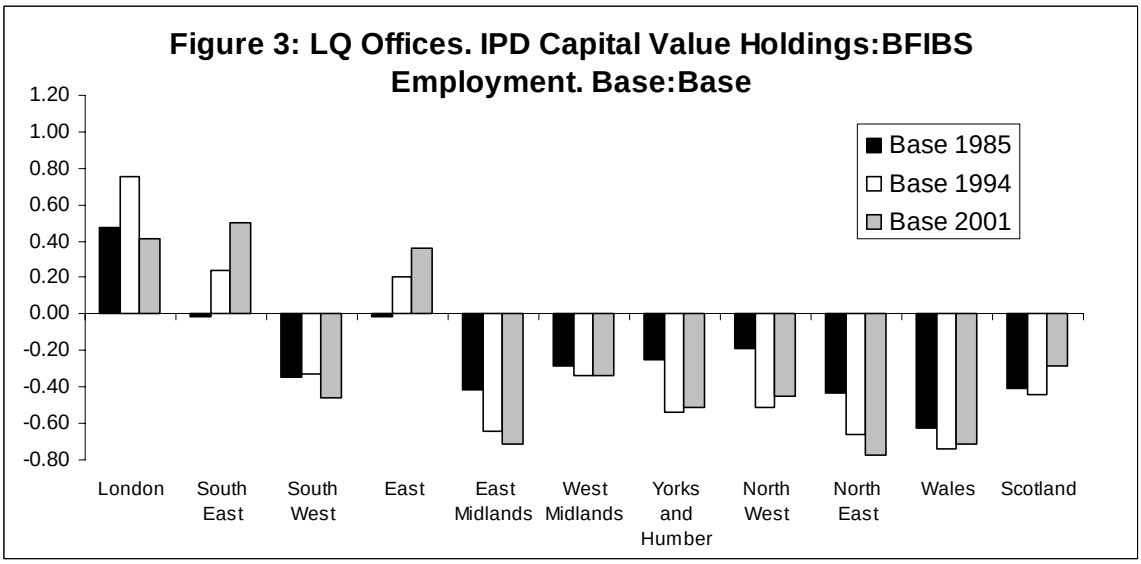


However, major inter-regional variations are evident in the relationship between the distribution of office property development and investment, on the one hand, and the pattern of private business service activity, on the other. The relative distribution of new office development is described in Figure 2[2]. Between 1985 and 2001, London's share of new orders for private commercial office construction was more than 40% higher than its share of BFIBS activity. Put simply, new orders for offices in each base year show development activity substantially above the level that would have been expected, given employment activity alone. Other regions' shares of office development were almost all lower than their shares of BFIBS activity: in most cases, very much lower. The extreme cases in the 1985-1993 period were the East Midlands, the North East and Wales, where office development was over 40% lower than those regions' shares of BFIBS employment. In the period 1994-2001, development was over 40% lower than regional share of BFIBS employment in the South West and East.

Next, consider the regional pattern of investment in office properties by financial institutions (see Figure 3). This is more uneven than the distribution of property development activity and displays a clear core-periphery / North-South 'gradient'. London's share of total institutional office property investment holdings[3] was much higher than its share of BFIBS employment (48% more in 1985; 75% in 1994; and 41% more in 2001), a level of investment activity much higher than would have been stimulated solely by BFIBS employment levels. The redistribution out of London, indicated by the latter LQ, appears to be to the benefit of the South East and the East regions. Institutional office property investment was markedly under-represented in all other regions for all three years. Explanations and implications of this investment pattern are pursued later in the paper.

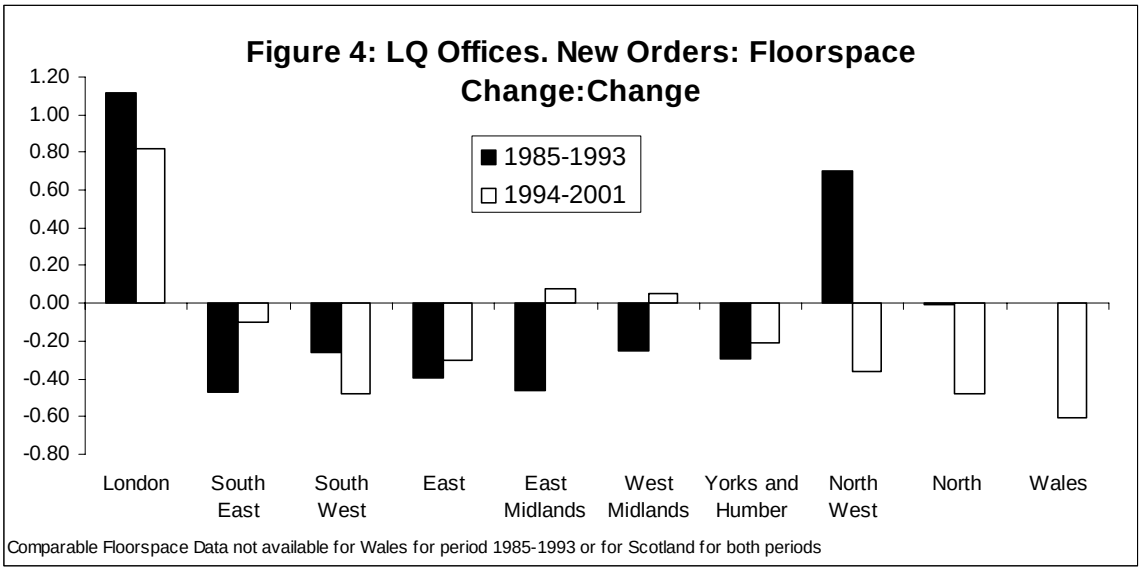
[2] A change:base LQ was used in this analysis. A change:change LQ would have produced significantly greater regional variation.
[3] Adjusted for inter-regional variations in office property capital values.





Finally, a comparison of regional office development trends with changes in regional office stocks provides an additional insight into property / economy relations. Net property stock change is the result of gross additions to and reductions of the stock: that is, net stock change over any period is the difference between new development and demolitions / removals. Data for the latter are not available. However, some understanding of stock effects can be obtained by examining the relation between new development (gross additions) and net stock changes. Figure 4 compares regions' shares of total new orders to their shares of the change in the total stock of floorspace over the periods 1985-1993 and 1994-2001. If a region's share of development is larger than its share of stock change, this indicates that many newly developed buildings are replacing older buildings (the latter's demolition is the reason for relatively low stock growth). Conversely, in regions where the share of new orders is lower than the share of stock growth, new development is adding to stock rather than replacing old buildings. In other words, development will enhance the quality of the building stock in the first case, while stock quality declines in the second case. As Figure 4 demonstrates, the stock of office properties in London is likely to be of

significantly better quality than elsewhere, with implications for the productivity of business service firms.



The Persistence of Differences between Economic and Property-related Activity

Significant mismatches between the distribution of property development and investment activity and the pattern of economic activity – and the consequences for the quality of regional building stocks - have been identified. The persistence of these disparities is now considered. If the disparities can be shown to have been maintained or to have grown over a long period, this will strengthen claims for the property market to be considered a significant influence on regional economic competitiveness. The approach adopted was to test for regional convergence or divergence of property development.

Convergence studies have not been without their critics. Armstrong (1995) for example, urges considerable caution in interpreting the results of such analyses because of data limitations, problems of regional definition and the impact of public policy which masks underlying growth trends. Cheshire and Carbonaro (1995) forcefully echo these reservations. They point out that "... apparent convergence or apparent divergence can be 'found' depending on how the model is specified ..." (Ibid., page 89) and that it would be more realistic to take the view "... that there are some forces producing convergence and others producing divergence and the actual outcome over time is determined by the net effect of these forces". (Ibid., page 108). Giannias et. al (1999) concur with this perspective.

Our examination of convergence in regional property development is sensitive to these points. We adopt a cautious approach. Data limitations, in any case, prevent the application of other than basic statistical techniques. We attempt only to determine whether property development and investment are forces which tend to produce convergence or forces which tend to produce divergence, allowing that other influences in the economy are likely to outweigh their impact.

The results of this analysis are presented in Table 1. A measure of σ-convergence was used (Rey and Montouri 1999); the coefficient of variation of the regional LQs of

the specified, property-related activities for the dates and periods given. The inter-regional differences in office property stocks declined between 1985 and 2001 (COVAR 0.19 → 0.14). However, the pattern of office development became more uneven (COVAR 0.30 → 0.35)[4] and the distribution of institutional office property investment much more so (COVAR 0.38 → 0.65). Regional differences in the stock quality measure declined, but remained substantial (COVAR 0.58 → 0.49).

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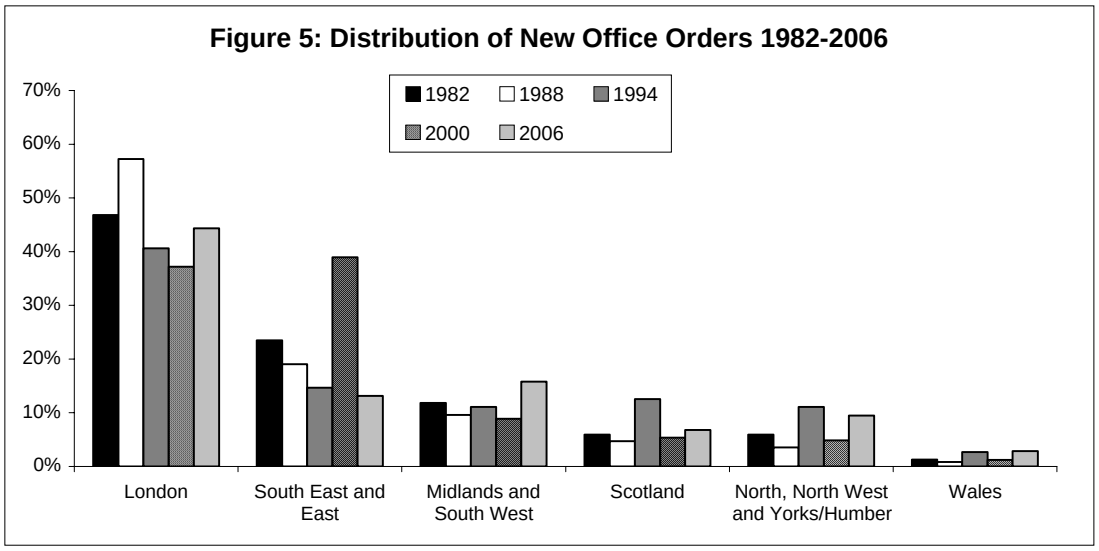
Data lags prevent the above analyses being extended much beyond 2001. However, available information suggests that there has been no significant change in the overall pattern of activity in the office property market in recent years. Figure 5 describes regions' shares of new orders for offices in selected years. Between 2000 and 2006 there was some decline in the relative position of the South East to the benefit of more peripheral regions. In contrast, London enjoyed its greatest share of new orders since 1988.

[4] This finding is in line with the results of a similar analysis (Henneberry and Rowley, 2000) covering the periods 1970-82 and 1983-95 between which the COVAR increased from 0.129 to 0.291.



The Structure and Operation of the Business Property Market

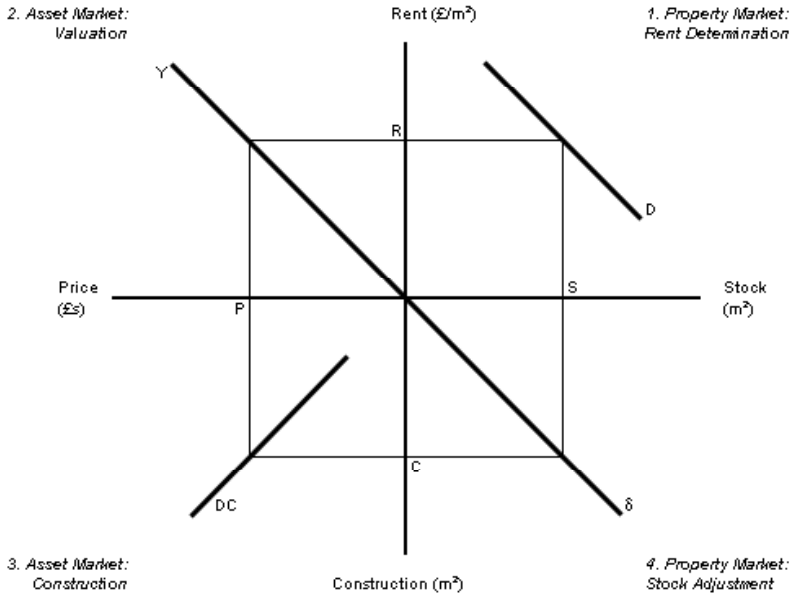
To understand why interregional variations in the character of business property stocks have developed, it is necessary to consider the structure and behaviour of the property market. There are two main ways in which demand for and supply of accommodation are reconciled in the property market. First, organisations may produce buildings - or buy buildings produced by others - for their own occupation and use. Second, they may occupy for rent buildings owned and produced by others. The scope for conflict between the demand and supply sides of the property market is significantly larger in the rented sector than in the owner-occupied sector. How has market structure in this and related respects changed?

Over the last twenty years the private sector has assumed the role of the predominant supplier of buildings in Britain. In 1977 just over half (52%) of construction new orders were made by the private sector; by 2006 the private sector accounted for almost 80% of all new construction orders. In parallel with the increase in the relative importance of private property development, a similar growth in the rented sector of the non-residential property market has occurred at the expense of the owner-occupied sector. In the most recent analysis of the UK non-residential building stock, Key and Law (2005) estimated that the capital value of commercial property was £611 billion at the end of 2003. Of that total, £489 billion (80%) was in the form of retail, office and industrial property. In turn, £235 billion (48%) of this 'core' commercial stock was held by owner-occupiers and £254 billion (52%) was held by investors. The dominance of investors was greatest in the office sector, where they own 63% by value of the total stock of buildings. Financial institutions (that is investors other than the traditional estates, charities and private and non-categorised investors) held £221 billion of property, 45% of the core stock and 36% of the total stock by value. It is "… legitimate to ask whether such a high penetration of large-scale investors has any bearing on how the market works" (Callendar and Key, 1996, page 6).

The Operation of the Rented Sector of the Property Market

Given the growth in the scale and influence of private rent relations in property – and, especially, the increasing sway of institutional property owners – it is important to understand how the rented sector of the property market operates. DiPasquale and Wheaton's (1996) representation helps in this regard (see Figure 6). It combines the market for the use of space (the occupier market) with the asset (or investment) market for property ownership. In equilibrium, with a stock of space, S, and demand for space, D, rent, R, will be determined in the user market (Figure 6: 1). In the first part of the asset market (Figure 6: 2), asset prices (values), P, are derived by the application of the capitalization rate (yield) to the rent. The yield is represented by the slope of Y (the rent-to-price ratio). Note that a steeper slope (a higher capitalization rate) will reduce the price: that is, yields are inversely related to capital values. Investors are willing to accept a lower initial return on (that is, pay a higher price for) property with high potential for rental growth and a low risk of this potential not being fulfilled.

Figure 6: Four Sector Model of the Property Market



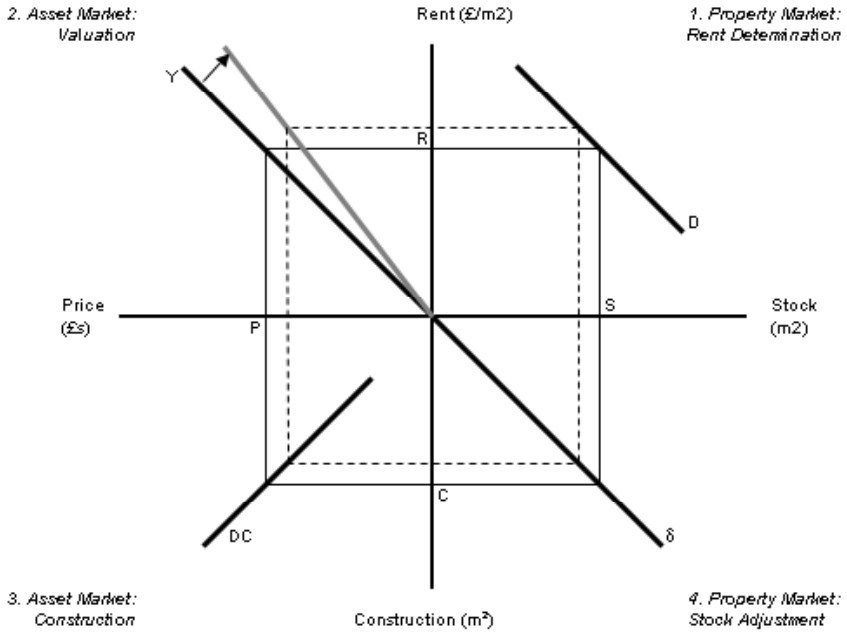
Source: DiPasquale and Wheaton (1996), Figure 1.1, page 8, amended by authors.

The relation between prices (capital values) and the development cost schedule, DP (Figure 6: 3), will determine the volume of new construction, C, that occurs in any period. Development costs have four main elements: construction costs, land costs, (short term) finance costs and a profit margin sufficient to compensate the developer for effort and risk. For a given price, P, an amount of construction, C, will be viable because "… lower levels of construction would lead to excess profits, whereas higher levels would be unprofitable" [5] (Di Pasquale & Wheaton 1996, p. 9). The impact that new construction, C, has upon the stock of buildings, S, will be affected by the depreciation rate, δ. As buildings become physically and functionally obsolescent they are removed from the stock. In equilibrium, new construction will match depreciation, maintaining a constant stock, S.

[5] Assuming a competitive market.

Change in any part of the property market will result in adjustments elsewhere that will (or may eventually) result in a new equilibrium. If investors' required yield on property assets increases[6], this will result in lower property prices and a reduction in the amount of development that will be viable. Less new construction occurs, resulting in the (shrinkage of and then) maintenance of a smaller stock of space (see Figure 7). Thus detrimental shifts in yields, result in lower property supply and higher rents (beneficial shifts in this variable would have the opposite effect). The stock effect of new construction rates falling below depreciation rates may be articulated in two ways. Either obsolete buildings are removed from the stock, which shrinks (as discussed). Or, if obsolete buildings are not removed from use, thus maintaining the size of the stock, constant rents may be paid for accommodation of declining quality.

Figure 7: Impact of Change in Yield



Source: DiPasquale and Wheaton (1996), Figure 1.4, page 14, amended by authors.

Yields are determined in the investment market. Changes in the yields required by investors on local property investments reflect changes in investors' perceptions of likely future local rental growth and in their general and specific (to that locale) demand for property investment[7]. For most regions, yields are an exogenous influence on development activity because investment decision-makers are concentrated in London. Attention therefore turns to the determination and application of yields by institutional investors and their advisers.

[6] For example, because the relative performance / attractiveness of competing assets classes is higher or because property investment performance – some combination of higher risk or lower income (rent) growth - is considered to be lower.

[7] Assuming allowance has been made for the relative risks/returns offered by competing asset classes.

Investment Decision-making and the Pattern of Building Production.

Investment Yields and Property Prices

The initial yield (y) on property is traditionally derived from the following equation:

$$y_t^i = r_t + \rho_t^i - {}^e g_t^i + d_t^i .$$

where r is the nominal risk free rate derived from the conventional gilt market; ρ is the risk premium for property; g is the anticipated average rental growth in perpetuity; and d is the depreciation in perpetuity (Ball et al 1998). A key feature of yields is that they are composed of a combination of national and local components. The general character of property both in its own terms and relative to other investment media is determined by national, aggregate analysis and comparison. In addition, there is a set of factors that are specific to local property markets and that affect both the risk premium and expectations of rental growth. These include the structure and performance of the underlying local economy, location, the quality of local infrastructure and services, the balance between demand for and supply of business accommodation, and local market stability and liquidity[8]. The key issue is how effectively yields incorporate spatial variations in risks and returns into property prices.

Table 2: Office Property Investment Returns and Risks, 1980-2003

Office Market Segment	Total Returns (average pa)	Volatility (SD of returns)	Market Sensitivity (Beta)[1]	Liquidity (transaction rate, 2000-2002)
Standard Offices	8.9%	10.6	1.20	20.0%
Central London	9.1%	12.8	1.38	19.0%
Rest of London	7.8%	10.5	1.07	19.8%
Southern England[2]	8.1%	8.5	0.91	19.9%
Rest of UK	10.1%	8.2	0.70	24.9%

Sources: IPD, 2005; Key, 2004

1. Relative to the property investment market as a whole.
2. South East, East and South West.

There is evidence of significant pricing inaccuracies in the office property market. Research over a long period has demonstrated that locations preferred by property investors have exhibited relatively poor investment performance (the earliest such research was undertaken by Investment Property Databank, 1993 and 1996; and by Smith and Wyatt, 1996). Industry data (Investment Property Databank, 2005) show that office property returns were significantly lower in London and adjacent southern regions than in the rest of the UK (see Table 2). These low returns were not compensated by lower risks: the volatility of returns and their sensitivity to market movements were markedly higher in core than in peripheral regions. In addition, liquidity is higher in peripheral than in core office property markets[i].

[8] Key (2004) uses transactions rates as the measure of liquidity. While liquidity has many dimensions and transactions rates are only a partial indicator (Crosby and McAllister 2004), they are valuable to an understanding of the concept (Lizieri and Bond 2004).

What this indicates is that yields are lower - and investment prices are higher - in locations where office property investments perform relatively poorly: and vice versa. In other words, London based property investors over-price (and hold more) London property investments and under-price (and hold fewer) regional property investments. Consequently, Key et al's (1998) observation still holds.

> "investors have clearly favoured specific areas of the country... as primary locations for their portfolios (page 6)... in offices… investment flows have tended to run out of London and into the rest of the South East fairly consistently, and irrespective of their relative performance. These consistent flows have been shifted only marginally by short periods of exceptionally strong performance from other locations (such as the provincial markets in the late 1980s), or exceptionally weak performance from the favoured locations (such as the collapse of the RoSE markets in the early 1990s). (Page 11)... [preferred] geographical location appears to have been a stronger influence on investment flows than economic performance." (Page 12, square brackets added).

Investment Decision-making

For mainstream economists, the behaviour described above is irrational because it reduces investment performance. Once investors are informed of this, yields (and capital values) should be adjusted to remove the price imperfections. Property investment holdings in the regions should increase as a consequence. However, as our empirical evidence (above) demonstrates, such an adjustment has not occurred in the office property market. Why not? We argue that the explanation lies in the existence of significant rigidities in institutional investors' decision-making that arise from technical, management and social influences.

This part of the paper is based on the results of 64 in-depth interviews with property investment decision-makers undertaken between March 2003 and September 2003: 19 in Paris, 25 in London and 20 in Germany, the latter spread between the six major centres (for more detailed treatments, see Roberts and Henneberry, 2007; Henneberry and Roberts, 2008). Investment decision-making in the UK is distinguished from that in France or Germany by the emphasis that is put on the setting of the investment strategy and, in particular, on its detailed articulation.

The use of a performance benchmark – within an investment portfolio management context - is the main cause of this difference. For the majority of UK interviewees, the benchmark was the most important single influence on property investment. Furthermore, *every* interviewee in the UK identified the IPD benchmark as the *primary* influence on the geographical diversification decision, considering it to be more important than market transparency and liquidity. "*We are constrained by the benchmark; it is more than our job is worth not to.*" (Researcher, UK investment management company) This prompts further consideration of benchmarking.

Portfolio Management and Benchmarking

The aim of portfolio management is to construct portfolios that optimise expected risk and return elements of performance by identifying assets with low correlations, to diversify away specific risk. "Property portfolios have... traditionally been diversified across property sectors and geographical areas." (Hammelink et al, 2000, page 2).

The logic of this diversification strategy rests on the assumption that property sectors (office, retail and industrial markets) are subject to the varying influences of different economic drivers (services employment, consumer expenditure and manufacturing production respectively), and that efficient diversification across the sectors will achieve commonality in returns. The same principles underlie geographic diversification and combined sector-area diversification (for reviews of diversification strategies see Hoesli et al, 1997 and Hammelink et al, 2000).

Portfolio management does not occur in a vacuum. In the market, business can only be retained and expanded if competitive returns are made by the fund manager (both the company and the individual employee). Consequently, fund objectives are set not in isolation but in relation to the market as a whole or to some sub-set of market competitors (Hoesli and McGregor, 2000; Brown and Matysiak, 2000). Similarly, fund performance is measured in comparison to the selected benchmark. The difference between the fund and the benchmark is known as the 'tracking error'. If a fund's portfolio tracks the market / benchmark perfectly – that is, it has the same structure as the market – then the relative return and the relative risk will both be zero.

> "Thus, even if the benchmark has high *absolute* risk and the portfolio has the same high risk structure, its *relative* risk is zero." (Hoesli and McGregor, 2000, page 144, emphasis in the original) [and] "Your investment strategy then revolves around trying to identify those properties that you believe are mispriced, or valued, relative to that benchmark. In the UK the IPD index is generally regarded as the target to beat." (Brown and Matysiak, 2000, page 578).

It would be difficult to overstate the implications of the application of this ultimate of self-referential management tools. The IPD portfolio and index is dominated by the holdings of institutional investors. Its structure and performance reflects the historical and current bias of investment pricing and trading described above. Consequently, "… a convergence in the portfolio composition of … funds … is logical as fund managers try persistently to match the benchmark's asset structure, attempting to reduce tracking error risk." (Byrne and Lee, 2003, page 201) No matter how poor is the performance of a portfolio of this character as long as it is no worse than other such portfolios the tracking error is zero. Expunging from funds any assets other than 'normal' or 'average' ones results in uniformity and rigidity in fund structure and the concentration of performance around a bounded range of sub-optimal returns. As a result, the funds will not lose customers and their managers will not lose their jobs (but the customers may well lose their shirts).

Investment decision-makers are well aware of the implications of portfolio benchmarking, both for the performance of their portfolios and for investment in regional office property markets – even if their opinions are mixed.

> *"The fund wants investment in London, greater London at a push – this means that we have the biggest and best buildings of any fund in the company. I certainly wouldn't want to be having to invest in piddling little markets miles away from the core."* (Director of property funds, UK investment management company)

"… if all the management want is for you to beat the benchmark, it is quite easy to do it. By doing this they are not setting us a particularly high target because the benchmark is generally quite low relative to the returns that can be made in property." (Director of research, Global investment management company)

"The industry is restricting itself and altering the UK property market, by affecting the markets in which it invests, for example London. The benchmark has a much greater effect on the markets that we do not invest in, it has implications for their ability to compete and the growth of the markets are hampered by the over subscription to the benchmark. It is supposed to act as a guide to show performance of institutional portfolios, not to be followed blindly by so many funds. Many of these are contributors to the benchmark; as a result all they are doing is following their own structures. It is a vicious circle." (Director, Global investment management company)

"Benchmarking is good for showing how we are doing in comparison to our counterparts in the industry; it is difficult to extricate yourself from that on an everyday basis because you are working in it, as long as it does not reach the stage where all funds are based on the index. That is going too far and everyone will end up with the same returns as every other portfolio in the industry; that is not an achievement." (Director, Property company)

"The success of the IPD has definitely limited the scope of fund managers to make independent investment decisions; it always comes back to the IPD. IPD world is self constraining, it has created a view in industry that the further you stray from the benchmark, the further you will fall, i.e. if you go against the benchmark, the market will sting you. If you ignore the benchmark, you are leaving yourself open to being caught out." (Fund manager, Fund management company)

Conclusions

There are significant and persistent regional inequalities in the character of the stock of office buildings and in office property development and investment activity. This is in the face of economic theory and performance evidence that would support more even spatial distribution. At least part of the explanation for these circumstances relates to investment decision-making practices in general and property portfolio benchmarking in particular.

Property portfolio benchmarking has a significant impact on the constitution of the property market. Over the last 20 years benchmarking has become a widely diffused and well-established technique fundamental to the development of institutional property investment strategies in the UK. It therefore has a pervasive influence on the property investment decisions of such organizations. By definition, the benchmarking arena is proscribed. Consequently, performance measurement is self-referential. Institutional investment properties may only be compared with institutional

investment properties. More restricting is the style of property portfolio benchmarking. This involves increasingly like-for-like comparisons. Initially, the most common benchmark was the IPD universe: the sector's average portfolio. While this is still widely used, the development of bespoke and stylised benchmarks has resulted in subject and referent portfolios becoming more similar.

The inherently restrictive and conservative nature of property portfolio benchmarking has been noted. This is reinforced by the way that it is applied. The technique is not just that; it is an essential element of a wider corporate operational culture. Fund managers are free to decide which properties to acquire; but only if these decisions maintain a portfolio structure defined by reference to the benchmark. The individual penalties for straying from the benchmark are very real: admonishment or loss of salary or job. The corporate penalties are no less real: demotion in performance league tables or loss of contracts. It is not surprising that there are few, if any, attempts to construct property investment portfolios that are different.

Benchmarking legitimises and encourages the construction of normal portfolios displaying average performance. This minimises corporate risk but, insofar as it limits the scope of competition, it is to the detriment of investors. A cost is also borne by those cities and regions under-represented in institutional property investment portfolios. Property portfolio benchmarking practice reinforces existing portfolio structures, including their geographies. The rigidity that is the by-product of portfolio benchmark tracking is a barrier to geographical diversification of office property investment.

References

Armstrong, H. (1995). *An appraisal of the evidence from cross-sectional analysis of the regional growth process within the European Union.* In H. Armstrong and R. Vickermann (eds.) Convergence and Divergence among European Regions, London: Pion, 40-65.

Armstrong, H. and Taylor, J. (1993) *Regional Economics and Policy*, Hemel Hempstead: Harvester Wheatsheaf.

Ball, M. Lizieri, C. and MacGregor, B., (1998) *The Economics of Commercial Property Markets*, Routledge, London.

Brown, G. and Matysiak, G. (2000) *Real Estate Investment: a Capital Market Approach*, Pearson Education Ltd., Harlow.

Byrne, P. and Lee, S. (2003) An Exploration of the Relationship between Size, Diversification and Risk in UK Real Estate Portfolios: 1989–1999, *Journal of Property Research*, 20(2), 191–206.

Callender, M. and Key, T. (1996). *The Total Value of Commercial Property in the UK*. Paper presented at the Cutting Edge Annual Research Conference of the RICS, Dublin, September.

Cheshire, P. and Carbonaro, G. (1995). Convergence-Divergence in Regional Growth Rates: An Empty Black Box? In H. Armstrong and R. Vickerman (eds.) Convergence and Divergence Among European Regions, London: Pion, 89-111.

Clark, G. (2000) *Pension Fund Capitalism*, Oxford University Press, Oxford.

Crosby, N and McAllister, P (2004) *Deconstructing the Transaction Process*, Working Paper 2. In Bond, S, Crosby, N, Hwang, S, Key, T, Lizieri, C, Matysiak, G, McAllister, P and Ward, C 'Liquidity in Commercial Property Markets', Research Findings, IPF, London, 22-39.

DiPasquale, D. and Wheaton, W. (1996) *Urban Economics and Real Estate Markets*, Prentice-Hall, Englewood Cliffs.

Flegg, A., Webber, C. and Elliott, M. (1995) On the Appropriate Use of Location Quotients in Generating Regional Input-Output Tables, *Regional Studies*, 29(6), 547-561.

Giannias, D., Liargovas, P. and Manolas, G. (1999). Quality of Life Indices for Analysing Convergence in the European Union, *Regional Studies*, 33(1), 27-35.

Hammelink, F., Hoesli, M., Lizieri, C. and MacGregor, B. (2000) Homogenous Commercial Property Market Groupings and Portfolio Construction in the UK. *Environment & Planning A*, 32(2), 232-344.

Henneberry, J. (1988) Conflict in the Industrial Property Market, *Town Planning Review,* 59, 241-262.

Henneberry, J. and Roberts, C. (2008) Calculated Inequality? Portfolio Benchmarking and Regional Office Property Investment, *Urban Studies*, 45(5 & 6), 1217-1241.

Henneberry, J. and Rowley, S. (2000) Property Market Processes and Development Outcomes in Cities and Regions, *RICS Foundation Research Papers*, 3(9), 1-59.

Hoesli, M, Lizieri, C and McGregor, B (1997) The Spatial Dimensions of the Investment Performance of UK Commercial Property*, Urban Studies*, 34 (9), 1475-1494.

Hoesli, M. and McGregor, B. (2000) *Property Investment: the Principles and Practice of Portfolio Management*, Longman/Pearson Education Ltd., Harlow.

Investment Property Databank (1993) *Key Centres Report.* London: Investment Property Databank.

Investment Property Databank (1996) *Key Centres Report.* London: Investment Property Databank.

Investment Property Databank (2005) *UK Property Investors Digest.* London: Investment Property Databank.

Key, T. (2004) *The Analysis of Transactions Evidence*, Working Paper 3. In Bond, S, Crosby, N, Hwang, S, Key, T, Lizieri, C, Matysiak, G, McAllister, P and Ward, C 'Liquidity in Commercial Property Markets', Research Findings, IPF, London, 40-85.

Key, T. and Law, V. (2005) *The Size and Structure of the UK Property Market*, Investment Property Forum, London.

Key, T., McBurney, D and Moore, B. (1998*) Commercial Investment Property - Towards a Comprehensive Geography*, paper presented at the 'Cutting Edge' Property Research Conference of the RICS.

Lizieri, C. and Bond, S. (2004) *Defining Liquidity in Property*, Working Paper 1. In Bond, S, Crosby, N, Hwang, S, Key, T, Lizieri, C, Matysiak, G, McAllister, P and Ward, C 'Liquidity in Commercial Property Markets', Research Findings, IPF, London, 7-21.

Rey, S. and Montouri, B. (1999) US Regional Income Convergence: A Spatial Econometric Perspective, *Regional Studies*, 33(2), 143-156.

Roberts, C. and Henneberry, J. (2007) Exploring Office Investment Decision-making in Different European Contexts, *Journal of Property Investment and Finance*, 25(3), 289-305.

Smith, A. and Wyatt, P. (1996) *Commercial Property Analysis and Advice: Information Holds the Key*. Paper given at the Cutting Edge research conference of the RICS, Bristol, September.

Walford, N. (1995) *Geographical Data Analysis*, Chichester: Wiley