# THE PRICE OF SPACE The Convergence of Value in Use and Value in Exchange

# **WORKING PAPER**

(NOT FOR QUOTATION. COMMENTS WELCOME)

# Nick French

Acacia Senior Lecturer and Jonathan Edwards Consulting, Fellow in Corporate Real Estate The University of Reading

#### and Georgina Wiseman

Jonathan Edward Consulting, London.

Correspondence to: The Department of Real Estate & Planning The School of Business The University of Reading, Whiteknights, Reading RG6 6AW, UK Tel: +44(0)118-931-6336 Fax: +44(0)118-931-8172

e-mail: <u>N.S.French@reading.ac.uk</u> or <u>Work@NickFrench.org.uk</u> Home Page: <u>http://www.reading.ac.uk/REP</u>

#### Abstract

This paper discusses concepts of value from the point of view of the user of the space and the counter view of the provider of the same. Land and property are factors of production. The value of the land flows from the use to which it is put, and that in turn, is dependent upon the demand (and supply) for the product or service that is produced/provided from that space. If there is a high demand for the product (at a fixed level of supply), the price will increase and the economic rent for the land/property will increase accordingly. This is the underlying paradigm of Ricardian rent theory where the supply of land is fixed and a single good is produced. In such a case the rent of land is wholly an economic rent.

Economic theory generally distinguishes between two kinds of price, price of production or "value in use" (as determined by the labour theory of value), and market price or "value in exchange" (as determined by supply and demand). It is based on a coherent and consistent theory of value and price. Effectively the distinction is between what space is 'worth' to an individual and that space's price of exchange in the market place. In a perfect market where any individual has access to the same information as all others in the market, price and worth should coincide. However in a market where access to information is not uniform, and where different uses compete for the same space, it is more likely that the two figures will diverge. This paper argues that the traditional reliance of valuers to use methods of comparison to determine "price" has led to an artificial divergence of "value in use" and "value in exchange", but now such comparison are becoming more difficult due to the diversity of lettings in the market place, there will be a requirement to return to fundamentals and pay heed to the thought process of the user in assessing the worth of the space to be let.

# THE PRICE OF SPACE The Convergence of Value in Use and Value in Exchange

## INTRODUCTION

During the last 10 years there has been a significant structural change in the way in which businesses operate. With the advent of new technologies and new business practices, products and services are becoming more transient in nature. In the 1950s, the average lifecycle of a product was 20 – 25 years. That is, the product was developed and apart from regular re-advertising and relaunch campaigns, it remained essentially the same for a 20-year period. This meant that demand could be forecast, businesses were stable and that their space demands were correspondingly steady.

This changed in the 1990s as a range of new innovative workplace products came to the fore. This had two main implications for the property market. On the one hand, new technology has resulted in a number of "new industry" companies experiencing, until recently, massive growth which were translated into large scale property requirements which have led to distortions in some sub-sectors of the property market (for example, the M4 corridor, west of London favoured by a number of US High Tech companies).

However, all companies have had to address the impact of Information and Communication Technology (ICT) on their businesses and their accommodation. "Moore's Law"<sup>1</sup> which predicted that new computer chip technology would ensure that the performance of electronic equipment would double every 18 months has been realised and indeed electronics is now being eclipsed by advances in optical-networking technology.

As technological advances offer a real competitive advantage businesses have had to become increasingly flexible to respond and survive in the new competitive business environment. This has in turn, impacted upon the way in which property is let and utilised. As product cycles have shortened, companies have required greater flexibility in the letting agreements of the space that they occupy to allow them to expand and contract as product demand waxes and wanes.

Conversely, buildings now have longer life spans – wireless technology means that solid slab buildings (of appropriate quality) can be reused without the need to put in raised floors and false ceilings. Thus the supply side is being affected by an decrease in obsolescence (both functional and economic) which will also impact upon the price of exchange for space.

Whilst this is a global phenomenon, the impact in the UK market has been more marked in a marketplace dominated by the institutional 25-year lease. This meant that as the UK market has readjusted to shorter and more flexible letting

<sup>&</sup>lt;sup>1</sup> Gordon Moore, Co-founder of Intel, predicted this in the 1970s

agreements, the change in the "norm" has been more dramatic. Analysis of IPD data (RICS, 1997) shows that the average lease length granted in the 1990s had decreased to fifteen years. However, this does not reflect the diversity and variety of leases granted. The institutional lease is characterised by five yearly upward only rent reviews and no early release options. The new breed of leases, on the contrary, has evolved to meet the requirements of different sub-markets. There is no longer a 'standard' lease.

#### VALUE IN EXCHANGE

Historically, valuation models have relied upon comparison as the principal tool of analysis. Although with capital valuations the principal method is called the "investment method" it is in fact a method of pure comparison. Comparison can only be relied upon where there is a degree of uniformity in the market. However, as the requirement for flexibility has increased; leases have become less uniform in both length and heads of terms and it is now difficult to compare previous lettings with current letting as the terms of the lease might be very different.

There is an old adage in valuation that dictates that one should value using the same approach as was used in the analysis of the information underlying the valuation. On this basis, it is understandable, why the use of an 'all-risk' or 'equivalent' yield has prevailed in the market place. The analysis, and thus the valuation, is simply the ratio of capital value to rental value. It is a simple calculation and in 'normal' markets provides a reasonable estimation of price of exchange in the market place. It is no more, or less, than a crude form of benchmarking. It provides a reference point on which to base the subject valuation.

The Traditional Investment method is simply a crude method of comparison, it does not attempt to analyse the worth of the property investment from first principles. As a result, the valuation profession has forgotten how to determine the 'worth' of a property from the viewpoint of the user. This is equally true in determining rental values that have been determined by comparison with other recent lettings on a pro-rata basis. The purpose of any method of valuation, capital or rental is to model the thought process of the players in the market. The aim of a valuation is to determine the price at which it is expected that a property asset might change hands in the free market. The model should therefore attempt to reflect how the buyers in that market would assess the worth of that property.

If all property and all users were homogeneous there would only need to be one method of valuation. On a pro-rata basis all property would tend toward one unit price. An analogy to this hypothetical situation is the stock market. Any one share is priced the same as any other share in the same company, and that price is determined by what buyers in the market are currently willing to pay. At a fundamental level, the buyers will assess the worth of the shares to them, based on their own perceptions and expectations of the future performance of that company. If they think the future cash flow to be generated from the dividends (and/or capital changes) will produce satisfactory returns, they will pay a high price to receive that cash flow. If they believe the growth prospects are less attractive, they will pay less for the shares. In other words, prices are determined by the buyers' perception of worth. The sale will occur at the point that reflects the worth of that share to the investor with the highest expectation of growth. That investor will outbid those with lower expectations. If the market is efficient, it is likely that this price will reflect the consensus view.

In terms of property, it can be argued that the market is less efficient and that value in use and value in exchange have diverged as rental levels have become disengaged from the tenant's ability to pay. This was particularly true in the office and retail markets in the late 1980s when locational competitive pressure led to rents well in excess of those that could be supported by the fundamentals underpinning the market. In simple terms, each company will have an equilibrium rent that they are "able" to pay. In the boom markets, turnovers and profits may provide an ability to pay in excess of this figure but conversely, in a market downturn the agreed rental figure may be in excess of what they can comfortably afford. If the agreed rents (in the UK) rose and fell in accordance with market conditions, there would not be a significant problem (apart from distortions due to timings of rent changes) but the upwards only rent review provision, which is central to nearly all commercial leases in the UK, has the effect of fixing the rent at the commencement level at the start of the lease. Thus if a lease is signed in a boom market, the "affordable" rent at that date prevails for the lease duration even if at a later date the level is no longer "affordable"

In the long run, rents cannot afford to be out of equilibrium with those fundamental drivers. If they become too disengaged, then the market will crash and readjust as occupiers become unwilling or unable to pay the rents asked. Price should coincide with worth. A fundamental valuation model should therefore reflect the need to determine worth. For example in the office letting market, the rent that is paid by the tenant should bear relation to the ability of that tenant to trade profitably from that location.

This has always been a salient criterion but as competition has forced companies to accept lower margins for their profit levels, the impact of "costs" on the profit equation has become more important. Companies have been forced to look at the costs equation in terms of their space requirements. They are therefore less willing to accept the level of rents in the market and may consider relocating if they feel that current rentals are too high for their cost requirements. This should mean that the market(s) will adjust to ensure that value in exchange (rental level) and value in use (worth to the company) will converge together. Obviously, the speed of this convergence is dependent on the relationship between supply and demand. If there is high demand for a particular location prices are likely to remain high. But should demand decrease or supply of space increase then convergence should be achieved faster.

# VALUE IN USE

The price (rent) of space should reflect the factors that determine the exchange point in the marketplace. If flexibility is considered to be an advantage by a tenant, they will pay for the flexibility but only within the *subjective* broader criteria that determine worth *to themselves*. But generally the more advantageous the terms, the more they will pay. This flexibily would also be reflected not only in the terms of the lease for the duration of occupation, but also in the exit costs at specific points throughout the lease.

As discussed above, in the current market the dominant pricing model considers space from the viewpoint of the investor, based on comparative rents from recent lettings. No analysis is undertaken to relate the rental level to potential occupiers and their ability to pay – the fundamental driver. On the contrary, the last rent paid is considered to be the best indicator of what current users are willing and able to pay. However, the pricing model has become disengaged from the occupier's view of worth. In an efficient market, worth and price should converge.

However, whilst rent is significant to occupiers, they will be more concerned with the total costs of occupying space. Rent is just one factor in the overall occupation costs of a company and few valuers take this into consideration.

# Understanding occupancy costs

Valuers are not alone in misunderstanding or underestimating the impact of total occupancy costs. Many companies have also failed to consider the impact of their property strategy on the "bottom line". However, as a result of changes in business practices and technology and in the economic climate, more companies are taking a closer look at their expenditure. Whilst the papers talk of Goldman Sachs stopping free fruit bowls (\$2.4m per annum) and American Airlines saving \$100,000 by removing a single olive from salads in First Class real savings are being made by companies re-examining their attitude to space and its costs.

Occupancy costs are one of the largest sources of overhead cost for most corporate organisations, typically second only to staff costs. Yet, traditionally property has always been viewed as a 'reactive' asset; one that is bought or rented as a result of operational need. Calculating total occupancy costs and using this data as part of a targeted property strategy can produce significant savings with success judged against a set of predetermined criteria. This will vary according to the priorities of the company but will involve the use of benchmarking – either internally on a year on year basis, between different groups; externally against competitors or similar users of space or a mixture of both.

Where space is rented, the cost of occupancy can be judged directly via the rent and associated costs of occupancy in relation to some common benchmarking measure. The efficient benchmarking of space can help encourage the efficient use of space; it is reasonable to assume that the company will release space that is not being used. This is particularly true if the cost of the property element is "transferred" as an internal cost. Where an organisation chooses to introduce transfer pricing for property, it forces the organisation to recognise explicitly the overhead costs associated with property, and relate them directly to the business activities that incur them. It enables the organisation to take a much more informed view of business performance. Those parts of the business where the property cost overheads exceed, or reduce to unacceptably low margins, the ability of that profit centre to generate a surplus are exposed to management scrutiny.

As a fundamental part of the valuation process comparable rental evidence is relatively easy to accumulate and relatively accurate. However, other occupancy costs evidence is rarely available in the public domain. As demand for such information increases the databases in existence, such as OPD, will become better populated and more effective but in the meantime other measures can be utilised by corporates.

The strategic property aims should reflect the companies' business strategy. As such, it is often useful to measure the performance of the property strategy in terms of the financial performance of the company. Different organisations will follow different approaches to meeting their objectives. However, an increasingly accepted measure of performance is the affordability ratio, which is the comparison of the total cost of occupancy against the revenues of the company.

### Affordability Ratio = <u>Total Occupancy Costs</u> *Revenues*

This measure has its origins in the US where occupancy cost data is routinely provided within a breakdown of costs in the company accounts. UK companies are now starting to follow suit. Therefore companies are able to develop a data set of like occupiers and get an objective understanding of their cost profile.

Once the affordability ratio has been established the property strategy can be directed to lower this number over a predetermined time period (internal benchmarking) and by comparing the company's current affordability ratio against an industry average (external Benchmarking) and develop a strategy accordingly. The affordability ratio is simply an indirect measure of worth. By setting an affordability ratio target, the company can then "solve" the equation for the level of costs that they can afford to pay.

# Example

Company A is a large service provider in central London. Currently they occupy a 50,000 sq ft office in the West End of London. The lease on that property is due to

expire in 12 months and the company wishes to take the opportunity to reassess their property requirements<sup>1</sup> with a view to lowering their occupancy costs.

Currently Company "A" has an affordability ratio of 13.5% compared to industry average of 12%. After significant analysis and consultation it was decided that the strategic aim would be to reduce it to 10%. To ensure that this was achieved through lower costs rather than by increased revenue, an additional objective to achieve a 20% saving in occupancy costs was also agreed.

By setting the affordability ratio, the calculation can be "solved" to determine the maximum rent affordable. This represents the "worth" of the space to the occupier at these given objectives.

# Current Occupancy Costs Get correct costs

Area	50,00	0 sq ft	
Rent	£45	per sq ft	£1,968,200
Rates	£36	per sq ft	£1,574,600
Service Charge		£7.50 per sq ft	£ 328,000
Other		£5.00 per sq ft	<u>£ 218,700</u>
Total			£4,089,500

Based upon the fact that the company (a partnership) had 333 partners, the per partner the cost of occupation was £12, 300. It was useful to express the occupancy cost in this way as the partners, as decision makers, could relate any costs savings to their own person circumstances.

# Target Occupancy Costs

Area

	00,00		
Rent	£35	per sq ft	£1,513,300
Rates	£28	per sq ft	£1,210,700
Service Charge		£7.50 per sq ft	£ 328,000
Other		£5.00 per sq ft	<u>£ 218,700</u>
Total			£ 3,270,700

50.000 sa ft

<sup>&</sup>lt;sup>1</sup> In assessing their property needs the company also looked at the way in which they used space and determined that the needed a similar (or larger) space allocation in future. Obviously these issues impact on the overall occupancy costs but are not discussed at length in this paper

Based upon these figures the "per partner cost of occupation" was reduced to  $\pm 9,800$ .

The £35.00 rental figure therefore represents what the company feels, in the context of its business strategy; it can afford to pay for the space. It is their value in use, or worth calculation. However, Company "A" had to accept that they were competing in a market (West End) where competing users could afford or were prepared to pay more - value in exchange.

It has already been established that the level of rents in the (sub) market is set, indirectly, by the view of the most "bullish" occupier. This is reinforced by the reliance of the valuation profession upon comparable evidence. Therefore, if the company were not able or willing to pay the maximum rent, they would need to reconsider their priorities and consider relocation.

The West End "per partner cost of occupation" was £13,400 and well above both the current cost of occupancy and the new target figure. Thus to meet the criteria set out in the property strategy, the company needed to consider a relocation to another area of London. Based upon a logical analysis of their aims and requirements Company "A" prioritised "cost" over "location"

# Midtown Occupancy Costs

00 sq ft
(

Rent	£35	per sq ft	£1,513,300
Rates	£28	per sq ft	£1,210,700
Service Charge		£7.50 per sq ft	£ 328,000
Other		£5.00 per sq ft	<u>£ 218,700</u>
Total			£ 3,270,700

By relocating to a midtown location Company A was able to meet its target of a "per partner cost of occupation" of £9,800.

Obviously this analysis has isolated the rent issue for illustration. In reality, the new location had to match the other criteria (such as flexibility of lease terms; functional use of space; availability; access) set by the company.

Company "A" were prepared to relocate in order to secure the space they required at an alternative rent. Whilst there will always be companies which are tied to a particular location – for example the need to be near a specialised labour force, natural resources or major market – there are an increasing number of companies who are able and willing to relocate to a more cost effective location. However, there are other ways that companies can act to develop their

property strategies such as reviewing physical space usage or by entering into the new breed of service agreements with specialist service providers.

### CONCLUSIONS

The driving force in the re-emergence of companies assessing their property costs in relation to their perceived value in use is the rapidly changing business environment, compounded by changes in the major economies.

Occupiers require greater flexibility to be able to meet change and they are willing to pay for that advantage but only within strict parameters of overall worth to the company.

In the past occupiers have not fully considered the pricing of space. Property costs have been a low priority in the overall business costs and as such the value in exchange has been the dominant consideration. However, occupiers are now more aware of the worth of the space that they occupy and this is affecting their view of what they are willing to pay. There is a convergence of value in use and value in exchange.

## References and Further Reading.

Crosby, N and Murdoch, S (1994) Capital Valuation Implications of Rent-Free Periods, *Journal of Property Valuation & Investment* 12, 51 - 64.

French, N. (1997) Market Information Management For Better Valuations: Concepts and Definitions of Price and Worth, *Journal of Property Valuation & Investment*, 15, 403-411.

French, N., (1999) Pricing flexibility in Real Estate, TEN (Television Education Network) Commercial Programmes, July.

French, N., (2001) Uncertainty in Property Valuation : The Pricing of Flexible Leases, Journal of Corporate Real Estate, 3:1 pp 17-27.

French, N.S. and Ward, C. (1995) Allowing for Rental Incentives: Capital Value Implications, *Property Review*, 5, pp 119-122.

RICS (1997) Right Space: Right Price? RICS Research Publications.

Ward, C., Hendershott, P. and French, N. (1998) The Pricing of Upwards Only Rent Reviews: an International Perspective, *Journal of Property Valuation & Investment* 16, 431-446.

Ward, C. and French, N (1997) The Valuation of Upwards Only Rent Reviews: an Option Pricing Model, *Journal of Property Valuation & Investment*, 15, 171-182.