



Research
Programme
2006-2009

Issues in Property Investment Valuation: A Discussion Paper for the Investment Property Forum



IPF Research Programme
Short Papers Series
Paper 3

October 2009

This research was commissioned by the
IPF Research Programme 2006-2009



Investment
Property Forum

This research was funded and commissioned through the IPF Research Programme 2006–2009.

This programme supports the IPF's wider goals of enhancing the knowledge, understanding and efficiency of property as an investment class. The initiative provides the UK property investment market with the ability to deliver substantial, objective and high quality analysis on a structured basis. It will enable the whole industry to engage with other financial markets, the wider business community and government on a range of complementary issues.

The programme is funded by a cross-section of 24 businesses, representing key market participants. The IPF gratefully acknowledges the continuing support of the contributing organisations.

ADDLESHAW GODDARD



Deloitte.



PRUPIM



ISSUES IN PROPERTY INVESTMENT VALUATION: A DISCUSSION PAPER FOR THE INVESTMENT PROPERTY FORUM

IPF Research Programme Short Papers Series

Issues in Property Investment Valuation: A Discussion Paper for the Investment Property Forum

IPF Research Programme 2006–2009

The IPF Research Programme Short Papers Series has been established to address current issues facing the property investment market in a timely but robust format.

The aims of the series are:

- **to provide robust information in a short format on specific issues;**
- **to generate and inform debate amongst the IPF membership, the wider property industry and related sectors;**
- **to publish on topical issues in a shorter time-scale than we would normally expect for a more detailed research project, but with equally stringent standards for quality and robustness**
- **to support the IPF objectives of improving awareness, understanding and efficiency of property as an investment asset class**

The IPF Short Papers are published in full and downloadable free of charge from the IPF website. For more information on these and other IPF Research Programme outputs contact Louise Ellison, IPF Research Director (l Ellison@ipf.org.uk) or log on to the IPF web site at www.ipf.org.uk.

ISSUES IN PROPERTY INVESTMENT VALUATION: A DISCUSSION PAPER FOR THE INVESTMENT PROPERTY FORUM

Foreword

When the IPF decided to commission a series of Short Papers on issues currently being debated within the property market, valuation was an obvious early topic choice. A spotlight has been trained on valuers and the valuation process throughout the property market downturn. There has been much discussion about many issues including the speed with which UK property values have been marked down, the perception that the IPD index lags the market, whether data from outside the direct market should be incorporated within valuations, whether there is enough market evidence to produce reliable valuations and so on. In light of this the IPF Research Programme commissioned the School of Real Estate and Planning at University of Reading to explore all of these issues setting out the key elements of each. They were not expected to reach conclusions or make recommendations but to bring together some of the discussions taking place into one paper that could then form the basis for an informed industry debate.

The paper produced by the team at Reading does exactly this and pulls no punches. It provided an excellent starting point for a workshop that took place on 2nd June with 15 valuers and users of valuations drawn from the agency, investment and banking community, where a lively and frank discussion took place. The bulk of that debate has been inserted in boxes at relevant points within the Short Paper, providing an interesting counterpoint or additional thoughts and views from a group of market practitioners. We hope the overall piece achieves its objective of stimulating an informed discussion of an increasingly complex area for our industry.

Louise Ellison

IPF Research Director

Research Team

Neil Crosby, School of Real Estate & Planning, *University of Reading*

Colin Lizieri, School of Real Estate & Planning, *University of Reading*

Patrick McAllister, School of Real Estate & Planning, *University of Reading*

Simon Martin, School of Real Estate & Planning, *University of Reading*

Project Steering Group

Andrew Smith, *Aberdeen Property Investors*

Malcolm Frosham, *IPD*

Colin Lizieri, *University of Reading*

Louise Ellison, *IPF*

Introduction

The objective of this paper is to raise issues for debate concerning the valuation of property investments. We have summarised these into eight questions. Although many of these issues have been brought to the fore by the current downturn, many are inherent in the valuation process, irrespective of market state.

Issue 1 - Is a valuation process which focuses on the individual property sufficient for a contemporary investment market where vehicle structure has significant impacts on value and performance?

Issue 2 - Should comparative market valuation methods be routinely supplemented by cash flow based investment value approaches?

Issue 3 - Are transactions which take place in a thinly traded market representative of market value?

Issue 4 - Should price sensitive information from outside the direct property market be incorporated into property valuations?

Issue 5 - Do valuations for secured lending provide appropriate information for the management of lending risks?

Issue 6 - Should the basis or reporting of valuations for the specific purpose of pricing unit trusts be amended?

Issue 7 - How can the RICS and other institutional bodies ensure that institutional constraints do not hinder developments in methods and use of information?

Issue 8 - Can effective regulation be devised that ensures the independence of valuations?

ISSUES IN PROPERTY INVESTMENT VALUATION: A DISCUSSION PAPER FOR THE INVESTMENT PROPERTY FORUM

Is There a Problem to Address?

This paper has been commissioned by the Investment Property Forum as an “Issues” paper and addresses some questions concerning the property valuation process that have emerged during the current market downturn.. We have debated the issues raised at length within the research team and there are areas of disagreement between us. We have tried to include all of the ideas and issues debated between us rather than exclude those where agreement could not be reached. We also appreciate some of the issues raised will be seen as unpalatable to certain market participants, including both valuers and clients, but hope that some of the points will be taken on in more detail. We also appreciate that the paper is by definition negative. However, we have been asked to take a critical perspective rather than applaud the excellent nature of some parts of the valuation process. The critique is undertaken with the sole aim of contributing to improvement in the valuation process.

Due to the absence of continuously traded and deep markets, commercial property valuations perform a vital function in commercial property markets by acting as a surrogate for prices. Valuers provide key information, estimating the trading prices of commercial real estate assets. As such, their interpretation of markets is central to financial reporting, lending decisions and performance measurement.

Within both the professional and academic communities, there is scepticism about their ability to fulfil this role in a completely reliable manner. At the micro-level, it is accepted that individual appraisals are prone to a degree of uncertainty. In aggregate, this is of little consequence provided that any uncertainty was random. However, whilst the issues are contested, at the macro-level, it is believed that valuation-based indices do not accurately record the market's actual performance.

There is a substantial literature that implies that valuation-based indices lag behind actual prices and smooth out periodic fluctuations in price (resulting in an under-reporting of risk in the asset class). Furthermore, valuers are seen to anchor their valuations on past transactions (IPF, 2007; Diaz and Wolverton, 1998; Geltner, et al, 2003; Clayton, et al, 2001). Existing research on the importance of these factors is in some cases contradictory and is disputed, however, it broadly suggests that valuations appear to lead prices in a falling market and lag prices in a rising market.

In the current downturn this academic literature is reinforced by industry comment. For example, most industry speakers at the recent UK IPF/IPDProperty Investment Conference in Brighton implicitly suggested that they felt that valuations had fallen at a slower rate than prices, even though there is also recognition of the fact that the UK valuers had reacted to the downturn more quickly than at any time in the past (IPE Real Estate, 2009). The implication was that, even if the market had actually reached its lowest point, valuations would continue to fall (see report in EG Capital, 2008, pp 14-16).

Therefore, there appears to be both academic and practitioner evidence that valuations are perceived to lag the market and this paper discusses a number of issues that may contribute to this perception.

At a very fundamental level, there are questions to be asked about a number of assumptions that underpin the valuation process in the UK and elsewhere. Valuation has evolved over a considerable time period and focusses on the market valuation of individual assets. But the wave of innovation in financial markets which has fed into all areas of investment, including real estate, has had impacts on the way in which prices are formed and real estate investments traded. The type, quality and quantity of information have changed, but valuation methods have seen little change. We discuss whether valuation methods and techniques can ignore such fundamental changes in the market.

IPF SHORT PAPERS SERIES: PAPER 3

Valuations in the UK take place within a long established regulatory framework which sets out the bases and definitions of value. This is tied to a set of methods which have achieved common acceptance. The most recent practitioner discussion on valuations concentrates mainly on two purposes; financial statements/performance measurement and bank lending security. Therefore, this paper will discuss the basis and use of valuations for these two purposes in some detail.

Often a major problem for valuers themselves is a lack of information on market pricing. The reliability of standard investment valuation techniques is contingent upon the quality of market information. In particular, in the recent downturn, reduced levels of trading have meant that there have been few (if any) reliable market signals of trading prices. As a result, valuers can be faced with significant problems in estimating Market Values or, put differently, there is increased uncertainty about Market Value. We discuss a number of issues concerning the information base for valuations including whether the few transactions that do take place in a downturn truly represent market prices and what other information could be incorporated into valuations.

Finally, there is a discussion of the institutional constraints to change and also the basis of fees and client influence on the valuation process. This paper addresses these issues, before reaching some conclusions, in an attempt to stimulate debate and discussion. Does the valuation system require some radical rethinking, some tweaking around the edges or is it operating at maximum efficiency?

ISSUES IN PROPERTY INVESTMENT VALUATION: A DISCUSSION PAPER FOR THE INVESTMENT PROPERTY FORUM

Issue 1 – Is a valuation process which focuses on the individual property sufficient for a contemporary investment market where vehicle structure has significant impacts on value and performance?

The Basic Framework and Approach to Valuations

In the last four decades, often linked to market downturns, there has been increasing institutional regulatory intervention in the production of valuations. In 1994, in the wake of the downturn in the early 1990s, the RICS produced the Mallinson Report, which aimed to address criticisms, particularly from banks, concerning valuations carried out in the bull market of the mid to late 1980s (RICS, 1994).

Following the accounting and auditing scandals at the turn of the century, the RICS set up the Carsberg Committee: many of the conflict of interest and valuation process regulations in the RICS Red Book stem from that report (RICS, 2002).

But there are wider issues and these “valuation debates” have always been internal to the property industry. They relate to existing custom and practice, to the institutional structure and professional framework of the valuation system and to methods that owe more to historic origins than to contemporary financial thinking. As a result, the debates tend to be very insular, dealing often with discussions about the precise meaning of particular techniques, rather than dealing with fundamental questions about pricing in private markets. Property is not unique in pricing in thinly traded, heterogeneous, private markets where there are problems of transparency; nor is it insulated from financial asset markets. Yet many of the valuation issues and concerns raised by the profession continue to focus on individual buildings and individual tenancies and revolve around non-standard terms and calculations.

It might be valuable to step right away from this insular approach and consider the fundamentals of a property pricing process. What is actually being traded? It is not a building or a tenancy, but a bundle of claims which relate to the investment vehicle, its capital structure, the risk of the underlying assets (and the interaction between assets in a portfolio or fund). It is the vehicle that has a particular risk-return characteristic which should determine the equilibrium required return and hence an appropriate price. Do valuers need to have a better appreciation of the drivers, constraints and circumstances of buyers/investors who set prices in private markets in order to be able to provide better estimates of exchange price?

This discussion raises a number of operational questions as to how valuers can incorporate complex structures and arrangements into technique and has implications for concepts, bases and method as well as for communication and reporting to clients.

To summarise, a transaction reflects asset fundamentals such as capital structure and institutional characteristics and this is not part of the more insular valuation debates which have been held in the past. This raises issues for both education and practice. The education of valuers around the world is still embedded in a variety of academic paradigms, ranging from built environment to business school. This suggests that there is no real consensus concerning the basic framework of the valuation discipline, which in turn is bound to lead to variability within the approach.

Issue 2 – Should comparative market valuation methods be routinely supplemented by cash flow based investment value approaches?

Concepts of Value and Methods of Valuation

For bank lending and performance measurement valuations, the international “Market Value” definition is the basis of valuation adopted. For acquisition, sale and portfolio management purposes, more sophisticated analyses are undertaken, often based around international definitions of “Investment Value”. It should be noted that the precise usage of these terms is specific to the property industry. In public financial asset markets, the price of an asset is largely observable and, hence, the estimation of a likely selling price is not a critical exercise. Here, valuation assesses the investment worth of an asset or a company, in large measure by discounting the cashflow at appropriate risk adjusted discount rates. This is very close to the property market’s Investment Value definition. Therefore prices are observed through the interplay of supply and demand; valuations seek to identify mispriced assets based on fundamental factors and there are many other private asset markets with similar pricing issues to real estate.

In property markets, the Market Value definition is an exchange value concept and is intended to replicate observed price of the asset in the absence of the ability to observe it directly from the market trades. As indicated above, Investment Value is a value in use concept and is defined as the value to an individual or group of investors. In some international jurisdictions, a sustainable value concept is used for bank lending purposes, termed Mortgage Lending Value.

Methods used in valuation in the UK often differ for different valuation definitions. Market valuations, the estimation of exchange prices, typically use a comparison approach with similar property comparables, even for investment processes. Discounted cashflow approaches are rarely used for UK market valuations. They are, however, used (often as part of a multi-method approach) to estimate exchange price in some other international markets, often where the market is dominated by large, multi tenanted buildings. UK commercial markets are normally characterised by smaller buildings let to fewer tenants transacted relatively frequently.

A major issue is whether, due to the high turnover, UK valuers have been able to escape addressing questions of method raised by a dearth of transactions. Should valuers use cashflow methods in addition to basic comparison techniques to estimate Market Values and would this practice have major benefits concerning efficiency of markets and advice to clients? Does the UK have anything to learn from the practices of valuers and appraisers working in other markets? In particular, can techniques developed in markets where large lot size, multi tenanted buildings are more prevalent - for example, in the central business districts of Australasian, North American and Asian cities - be used in a UK market which has traditionally assessed properties with few or single tenants? If cashflow models were allied to comparison based models, it could also facilitate the incorporation of debt and equity risk into the appraisal and, given the importance of the role that the debt-equity mix has played in the property market in the recent market cycle, would this help prices to be assessed in a more informed process?

ISSUES IN PROPERTY INVESTMENT VALUATION: A DISCUSSION PAPER FOR THE INVESTMENT PROPERTY FORUM

This debate could be characterised as a mark-to-model v mark-to-market debate. Mark-to-model has been identified as a valuation based on internal assumptions or financial models. Rather than the traditional mark-to-market valuations represented by market valuations using comparables of market prices, assets marked-to-model either don't have a regular market that provides accurate pricing, or valuations rely on a complex set of reference variables and time frames. This creates a situation in which guesswork

and assumptions must be used to assign value to an asset (Investopedia.com). In financial markets these assets are typically derivative contracts or securitized instruments, and most do not have liquid trading markets. However, the property market has a dearth of transactions at present, not an absence, and cash flow models include market derived information and can be used to analyse transactions, so the debate about methods in property valuation is not so clear cut.

Valuation workshop discussion

Looking across Europe the market has been marked down more quickly in the UK than elsewhere. Looking further afield, the US market downturn lagged the UK by approximately 15 months.

The speed of adjustment in the UK was attributed by the workshop participants to the quality of market information that is available which was in turn supplemented by the number of retail funds that were carrying out monthly valuations (and sometimes more frequent still) in light of capital outflows. This produced valuation information that was available to the valuers. In previous downturns there were far fewer funds of this type and certainly fewer requiring such frequent valuations so this data is new to the market in this cycle. Additional important factors influencing the speed of adjustment include the culture of communication that operates within the UK market and the experience UK valuers have of previous market downturns.

The lease structure in the UK was felt to be a further factor. This structure makes yields the mechanism via which valuations are moved in the short term. The current period of yield shift is now felt to be ending. It was felt that the second phase of this market will be driven by occupier demand/rental values which could lead to another dip in values.

Notwithstanding the speed with which the market has moved there is still a lag in the valuation process. However it was generally felt that this is appropriate; if valuers are scorekeepers within the market there will always be a lag between reported values and the market, particularly when it is moving quickly. Valuers should not be ahead of the market - the process is backwards looking.

The use of a mark to model process suggests that a model could be produced which is inherently 'better' than the market at estimating value. Given the great complexity of markets, the group questioned whether this is possible.

Issue 3 – Are transactions which take place in a thinly traded market representative of market value?

Pricing Information in Thinly Traded Markets

A major question raised by the current downturn is the price information given by the transactions that do occur and whether there is other information that should be used to supplement the low number of comparables.

Transactions

The first issue is the pricing signals from the transactions that do take place. In practice, there are questions about whether the sales that do take place in a market with very low trading activity are “forced sales” (it is notable that there is no definition of this concept in the RICS valuation standards) and are therefore not representative of market levels since the seller has no negotiating power.

There is little support for this argument within UK valuation standards and guidance. The definition of Market Value includes both willing seller *and* willing buyer and assumes that a seller will sell if the Market Value is obtained. The fact that many investors would chose not to sell at current price levels appears to be immaterial. Any sale that takes place and has been properly marketed for an appropriate period is a market transaction. A restricted sale price only comes from restricted marketing (RICS 2008, PS 2.3, p 25). If a vendor has to sell a property *for any reason*, the price realised in the market could be assumed to represent market price if the property is afforded a normal marketing period and process. Genuine firesale prices may well be lower than market value if any imbalance in negotiating power is translated into a quicker sale than the market would require to achieve the best price in that market.

Many of the issues in estimating the Market Value of real estate assets have clear resonances in the debate about the valuation of the illiquid securities (such as some tranches of collateralized debt obligations) held by major banks and hedge funds following the collapse of the U.S. sub-prime mortgage market in mid-2007. When trading volumes were adequate, it was possible to use the quoted prices for actively traded, identical or similar assets to mark such assets to market. As trading volumes fell, many market participants were forced to use mark-to-model valuation techniques. Indeed, there has been a substantial debate about whether mark-to-market accounting rules should be suspended because they were causing a downward spiral of falling asset prices. Essentially it was argued that valuations based on the prices achieved from “fire-sale prices in a frozen market” were not representative of “fundamental value”. Ben Bernanke (2008) commented that it is

“fire sale pricing and the markdowns that it creates for banks that is one of the sources of why capital is being reduced and why banks are unable to expand credit...it's possible for the government to buy these assets, to raise prices, to benefit the system, to reduce the complexity, to introduce liquidity and transparency into these markets and still acquire assets which are not being overpaid-for in the sense that under more normal market conditions, and if the economy does well, most or all of the value can be recouped by the taxpayer”

ISSUES IN PROPERTY INVESTMENT VALUATION: A DISCUSSION PAPER FOR THE INVESTMENT PROPERTY FORUM

Whilst it is expected that any price anomalies would be identified and arbitrated, it was argued that the lack of access to finance was preventing arbitrage and efficient pricing emerging. Whilst these debates are far from resolved, and despite many commentators expressing reluctance to depart from evidence provided by open market transactions and move towards mark to fair value techniques, recent change to US FASB 157 have introduced some flexibility in this regard for US banks.

Theoretical work by Fisher *et al.*, (2003) suggests that there exists an equilibrium level of trading. Transactions volumes above or below that level indicate an excess (or a shortage) of demand and supply of assets. This can affect achieved prices. In particular, in poor markets, owners may “withhold”

assets from the market: this curtailing of supply of assets helps to dampen price falls¹. This would, however, imply that owners believed that current prices in the market did not represent the fundamental value of the retained properties or portfolios - and that potential investors were mispricing assets. These considerations emphasise the importance of liquidity in determining prices in property markets. Liquidity impacts are complex. As the IPF (2004) research report noted, it is a multi-dimensional concept which includes time to transact, pricing effects, bid-ask spreads and more.

So a major question for valuation research in a thinly traded market is precisely what price signals are given by the few transactions that do take place.

Workshop discussion

One of the clearest messages to emerge from the workshop discussion was that the perception of the market being thinly traded is not entirely accurate. £22.5bn of property was traded in 2008; about 50% of the 2007 figure but 2007 could be characterised as an unusual market. This level of trading was considered to be more a return to the longer term trend for transaction levels than a thinly traded market.

Mark to market valuation is undoubtedly a more straightforward process in a liquid market, but even in the current market, evidence remains available. In the five or six weeks following the collapse of Lehman Brothers there were very few transactions and the GN 5 clause was invoked as advised by RICS. However it was dropped again by the year end valuations.

The view was that there has been and remains a mismatch between vendor and purchaser expectations in most markets but transactions are taking place. Transactions that are happening are not felt to be forced sales. Banks are currently seen to be avoiding precipitating forced sales of assets. There are undoubtedly areas of the market where there are simply no trades but this was not felt to be the norm. The sense was that the criterion of a willing buyer and a willing seller is not being compromised.

¹ We note that this is the opposite of the “forced sale” effect claimed by some practitioners in the current market downturn. This is dealt with below.

Issue 4 – Should price sensitive information from outside the direct property market be incorporated into property valuations?

Use of Indirect Property Information and Derivatives in Valuing Direct Property.

It could be argued that valuers need to use *all available price-sensitive information* to form their valuations and not simply rely on transaction evidence. For example, if real interest rates increase, values should fall and price evidence from the period before the interest rate increase must be adjusted downwards. However, there may be practical difficulties in quantifying the level of price effects in the absence of evidence from market trades. As the comparative method does not include any indicators from outside the direct property market, it may be possible to improve the accuracy of valuations by use of additional information to augment comparable evidence from, possibly stale, transactions.

Valuation occurs in a private market, where there is incomplete information on trades, thin transactions and information asymmetry. Traditional guidelines/texts on valuation methods focus almost exclusively on information derived from within that market. However, it can be argued that valuation should reflect all available price sensitive information. There is a strong case that evidence of price movements of assets in other traded markets that are driven by property returns should be incorporated into the valuation process.

An obvious example is the price of public-traded real estate companies, whether REITs or taxed corporate entities. Evidence shows that in the long-run, the return behaviour of listed real estate is inextricably linked to the underlying real estate assets held. Research also demonstrates that public market real estate indices *lead* valuation-based indices by a considerable period (see, for example, EPRA, 2009). In UK markets most studies suggest a six to nine month lagging effect in valuations. There are many possible explanations of this. The first is that equity markets are forward-looking. Today's prices

reflect information that *will* influence real estate returns going forward. This is somewhat troubling, as the same should be true in the underlying asset market - the law of one price should apply and there should not be price discovery effects. Since property company and REIT shares are traded continuously, it is possible that relative movements in listed real estate prices provide valuable indicators of changes in the factors driving values in the private property market even in the absence of direct transaction evidence.

Additional evidence from the public listed real estate market comes from discounts (or premia) to Net Asset Value. Once again, these do appear to act as leading indicators for valuation-based property market indices. Care must be taken to distinguish between fundamental, company level, drivers of discounts which include (for corporate entities at least) contingent capital gains tax liability, marking of debt to market, the existence of control premia and liquidity premia in estimating the residual value of the firm and so forth. Once corrected for those, changes in NAV discounts indicate the listed market's perception of the changing value of the underlying real estate. Where shifts downwards (upwards) in NAV discounts or premia occur, it suggests that the listed market has processed price sensitive information that indicates a change in the fundamental value of the underlying asset base. This provides transaction-based evidence that could - even should - inform the valuation process.

Some notes of caution are necessary. While, in the long run, the returns of REITs and property companies are linked to the underlying property market, there may be short-run noise that comes from the relationship between REIT shares and the parent equity market. This will be exacerbated when leading REITs and property companies are found in key equity market tracker indices. Thus, in the UK, the six largest REIT stocks make

ISSUES IN PROPERTY INVESTMENT VALUATION: A DISCUSSION PAPER FOR THE INVESTMENT PROPERTY FORUM

up around 60% of the total sector capitalisation and with those stocks being found in the large cap and mid cap indices (FTSE 100, FTSE 250), their returns may be influenced by portfolio allocation decisions and basket trades that are unrelated to their performance as companies or to the asset market in which they are invested. Second, returns are a function of the activity and asset base of the company *and* the company's capital structure. Geared returns will not have the same trajectory as ungeared returns, they will have a higher volatility. This needs to be taken into account.

Similar evidence may also be gleaned from the unlisted property funds market, even where performance measures rely on valuations. Unlisted funds such as unit trusts have a NAV but equally trade at a discount or a premium to NAV. Large discounts or premia to NAV - far greater than required by transaction costs - may be an indicator of price movements in the asset market that have not yet been reflected in valuations - particularly in strongly trending markets or where there is scant evidence of property-level transactions. Variations in bid-ask spreads may also give indications of the state of the market that are independent from, but predictive of, movements in transaction prices. Evidence might also be drawn from sales of fractional interests in non-unitised funds - for example sales of partnership interests in LPs. There is limited research in this area, partly because of the private nature of the funds market, which makes collection of good quality time series data problematic.

With the development of a relatively actively traded property derivatives market, there has been much discussion about whether total return swap spreads represent a "forecast" of the market and many commentators have published research which assumes that they are. From an analytical perspective, swap spreads should *not* predict the market. Equity index swaps trade at very small margins and do not reflect differences between expected equity returns and LIBOR. However, the nature of real estate as an

investment market means that its derivative market will not necessarily behave like those of financial assets. In particular the lagging and smoothing effects of the valuation-based index produce a certain degree of predictability in the index - at least in the short term. Thus spreads for the remainder of a current year and for the year ahead reflect historic sub-period valuations and the autocorrelation between current and historic returns. However, since those effects disappear relatively quickly, this cannot really justify use of derivatives as a forecasting tool in the medium term. It should also be noted that in the context of this paper we are interested in whether derivatives can tell us anything about 'what has happened to prices?' rather 'what will happen to prices?'.

An alternative mechanism relates the relative immaturity of the swaps market to cost and timing issues in the underlying property market. Because of the "costless" nature of gaining a long or short exposure in the market using a derivative, an investor will be prepared to pay a premium when compared to actually trading in the market. For example, an investor wishing to gain exposure to real estate for a three year period can take a long position in a derivative or can acquire and then sell a portfolio of buildings. However, in the latter case they face in the order of 7% round trip transaction costs and hence they will be prepared to pay a swap spread equivalent to the amortised value of those transaction costs over the life of the swap.

The same would apply to an investor who wished to reduce their exposure to real estate for a period. There are also timing issues, the existence of (or belief in) alpha for particular portfolios and other factors which create a rational "swap window" around the neutral swap margin.

Trading could, in principle, occur anywhere within that window, leading to positive or negative margins. However, due to the cyclical nature of real estate markets and due to strong consensus views, it is likely - at least at this stage in the development of property

derivatives - that there are strong imbalances between the number of investors wishing to go long and the number of investors wishing to go short. This will drive margins to relatively extreme points in the trading window. Thus, in the current market, there are far more investors seeking to reduce their exposure to real estate than seeking to increase their exposure and insufficient parties willing to trade against the short sellers, driving spreads strongly negative. From this perspective, the spreads may NOT be forecasts of future returns but may merely be indicators of sentiment. However, it should be noted that if sufficient market participants *do* believe that swap spreads should represent the difference between forecast property returns and LIBOR and trade on those beliefs, then, until critical mass and liquidity is achieved it is possible that spreads do indicate market consensus. We stress, though, that, other than for short tenor contracts, they *should not* do so.

Further market information might be gained from observing redemption yields in traded property bond, CMBS and ABS markets. A debt security held to redemption does not deliver a property return (except insofar as property returns have bond-like qualities). However, its price in the secondary market should reflect the discounted value of the remaining coupon and capital repayments, and the discount rate should reflect the risks associated with that cash flow: prepayment risk (which can be controlled with penalty clauses), delinquency, default and loss given default. Now, the risk of default is directly linked to the underlying asset market. Behind the securities are mortgages; behind the mortgages are properties, generally tenanted. Positive rental growth and low vacancy rates provide greater income cover for the underlying loans and hence greater security for the coupon payments. Rising capital values reduce the risk of default, increase the probability of refinancing at redemption and increase the security that prevents loss given default. This should reduce the risk of the cashflow, reduce the required return and increase the price of the security in the secondary market.

The converse is of course true in a falling market as rising vacancy rates, falling rents and declining capital values increase the probability of default and the likelihood of loss in the event of default, reflected in a higher required return and a lower security price. However, there is very little empirical research on the direct links between debt security returns and the property market (there is rather more research on residential mortgage backed securities, but largely in a US context where institutional factors increase the relative importance of prepayment). It is possible that pricing effects that are related to real estate fundamentals are swamped by more general bond market factors and by overall sector sentiment and confidence, as in the current credit crisis.

A final area of relevance is the use of leading indicators which focus on the fundamental supply and demand drivers of property returns. Given that we know that property returns are driven by overall economic demand (measured in aggregate by economic growth and output and at sectoral level by business service employment, consumer spending and industrial output, for example) and given that such variables are predicted by leading indicators (for example consumer confidence surveys, surveys of purchasing manager intentions and similar), it would seem reasonable that changes in the values of such leading indicator series should be reflected in equilibrium property prices. They thus form a potential source of price sensitive data that should be influencing the valuation process. Again, this rests on the idea that the equilibrium price of a property should reflect the discounted value of the expected future cashflows, processing all available information that should influence the expectations about those future cashflows. If the valuation is intended to capture that "true" equilibrium price, then it needs to incorporate all price sensitive information.

While the benefits of operationalising this price information are clear, there remain significant barriers to effective use. Most notably only a few market participants are able to justify the financial cost of building and maintaining the infrastructure (both

ISSUES IN PROPERTY INVESTMENT VALUATION: A DISCUSSION PAPER FOR THE INVESTMENT PROPERTY FORUM

human and data) required to capture and process a full range of price sensitive information. Even those that do may struggle to apply it effectively. In addition to the points noted above, there are two substantial practical barriers to using price information from indirect sources to estimate the price changes of individual property assets. Many of the financial instruments are not 'pure' property but can be a bundle of assets and liabilities. As such, observed price changes may reflect non-property factors as well as changes in property markets. Many of the financial instruments provide information on prices changes at an aggregate level. There are then practical difficulties

about applying such information to individual assets. Furthermore, there may be considerable valuer resistance and questions about the skill set of the profession. At the IPF workshop on valuation in October 2007, all three valuer speakers representing three of the five major firms who make up the majority of the IPD monthly index valuations, relied on property market transactions and other direct property market information such as deals in progress, but resisted calls to use non direct property market information. There is clear scope for research on the extent to which the valuation process can be improved by using price information from these sources.

Workshop discussion

The workshop discussion acknowledged that of course valuation is more straightforward in a liquid market, but also pointed out that part of a valuer's skill is in constructing a sound argument for a value from all the evidence that is available. This requires a valuer to form a judgement from a range of different pieces of evidence, and, according to the group, 'soft' evidence from outside direct market transactions is being used. However there is no formal mechanism for incorporating soft information into a valuation other than as background information and to guide judgement.

In support of this use of different types of data, the group felt they have more sophisticated forecasting provision and data now than was available, particularly in the early 1990s downturn, and there is a strong culture of communication within the market. But the valuer is still creating a snap shot of value at a point in time. Share prices are a forecast of future cash flows; market valuations are not. Property Derivatives prices may be pricing a further capital fall in the IPD index but how would that information be applied to specific buildings, locations or even sectors? It was also pointed out that the Property Derivatives market itself is immature and pricing within it will be influenced by its own liquidity.

One area of concern was that the adoption of additional price signals could push values 'ahead of the curve'. The key message from the industry workshop was that useful information is coming back from other markets. However there is a potentially dangerous issue of circularity if valuers rely on Property Derivatives and indices in producing valuations. Indices should be a product of valuation and property derivatives prices a product of indices. It is important that this remains the case and the relationships are not allowed to become blurred.

The point was made that the RICS is discussing a number of issues including the possibility of giving a prediction of where value will go within a Red Book valuation, the need for further guidance for valuers on periods of marketing, **without** any return to Estimated Realisation Price, and on what advice to give clients in difficult markets.

Issue 5 –Do valuations for secured lending provide appropriate information for the management of lending risks?

The Role of Valuations

As indicated previously, much of the practitioner comment on valuations in the current downturn has been directed at bank lending and property performance issues, particularly the breaching of loan to value covenants and the pricing of Property Unit Trusts.

Bank Lending Valuations

Bank lending valuations raise a particular issue regarding concepts and bases. Banks have historically asked for current market valuations at the beginning of the loan and at various points throughout the loan period to help their decision making for secured lending. They use loan to value ratios as an indicator of the probability of default and expected loss in the event of default.

In the current market, the falls in market value have put pressure on LTV ratios. Max Sinclair from Eurohypo, speaking at the 2008 IPF/IPD conference, suggested a suspension of bank lending valuations as they were forcing some fund managers to sell and putting loans into default (EG Capital, 2008). Maxted and Porter (2008) report that 32% of loans put into default in 2008 were because the Loan to Value covenant had been broken, up from 23% in 2007.

If banks want to suspend information flows on one of their major criteria for secured bank lending, this raises a major question of whether any form of Market Value is the appropriate basis for bank lending, regardless of whether it is perfectly accurate or not. The issue, then, is more about the optimal definition of valuation than the process of estimating market values. Market Value may be a useful indicator for bank lending but are banks putting too much weight on it in their decision making?

In certain areas of Europe, sustainable value concepts have been suggested as the basis for bank lending (or, at very least, for banking supervision). The application of this concept has been heavily criticised by one of the authors of this paper, not least for the lack of any conceptual framework for the definition and the variable application of the technique within mainland European practice (Crosby, et al, 1999) although the related idea of equilibrium or fundamental value has been employed in academic research on property market adjustment processes. In contrast, the use of Investment Value could afford lenders some protection as it should identify mispricing in asset markets through time, encouraging lending when traditionally lenders are more reluctant to lend and vice versa when asset prices reach above equilibrium levels. Should the use of valuations by banks and other lenders be subject to a major review starting with the fundamental question of what basis is appropriate for bank lending decision making?

ISSUES IN PROPERTY INVESTMENT VALUATION: A DISCUSSION PAPER FOR THE INVESTMENT PROPERTY FORUM

Workshop discussion

It was felt very important within the workshop discussion that a distinction be made between the use of a valuation and its *production*. The advice that accompanies the number in a valuation report is equally important. But the lending decision is a separate one that is for the bank and not the valuer.

For lending decisions the valuation was described as a spot figure on which the loan to value ratio can be based. The lender is aware that the valuation may well move, but is less concerned with this over the course of a loan if the debt is being reduced through the income stream. This makes interest cover a more significant factor than the capital value of the asset. The valuer is not necessarily wrong but the lending decision might be. This is a different problem and nothing to do with the valuer.

The question should therefore focus more on whether there should be more stress testing and cash flow modelling done within the lending decision. The valuers were not considered to be in a position to provide some sort of tool for the banks to help them make lending decisions.

In a competitive market where banks are incentivised to lend, the creation of some sort of 'investment value' was felt unlikely to reduce lending in risky markets. The nub of the debate is not about valuers but about the decisions that are made, based on the valuation.

This does not mean the workshop group felt there is nothing to be done. They identified a need to understand the banks better and to try to ensure more stress testing on property lending is undertaken. But this is not the valuers responsibility. There is an intrinsic link between banking, bank lending and property and there needs to be greater communication between the sectors.

Issue 6 – Should the basis or reporting of valuations for the specific purpose of pricing unit trusts be amended?

Property Unit Trusts

Much of the recent practitioner comment concerning valuations has focussed on open ended real estate funds where the pricing of units is based on the net asset values, which in turn are mainly based upon the monthly valuations of the individual property assets (EG Capital, 2008; IPE Real Estate, 2009). Practically, given their direct influence on the unit pricing process, it is very important that the valuations are accurate (at the aggregate level) and mark to market with no lag.

Funds which have a requirement to redeem at reported NAV may, therefore be particularly keen to have any perceived falls in value recorded quickly. It is reported that some funds have been requesting valuations at even more frequent intervals than monthly.

The role of the external valuer remains the same as for all other funds; to identify the current exchange price/value as accurately as possible. So it would appear that there are no additional issues concerning the valuations for these types of fund other than the traditional lagging and smoothing issues already discussed.

However, there may be one additional issue with this type of fund which needs addressing. The current market value definition suggests the marketing period has already taken place but, in the case of a unit trust, any redemption or purchase of assets/units will take place in the future. The idea that a valuation basis that has the marketing period in advance of the valuation date is reminiscent of the concept of Estimated Realisation Price that was briefly advocated for banks in 1992 in the aftermath of the late 1980s lending boom and the capital value falls of the early 1990s. For such a

model to be effective (for the banking sector at least), valuations would have to assess fundamental values rather than simply extrapolate short-term market trends - as, in the latter case, ERP would be well above MV in upward trending bull markets and well below MV in rapidly falling bear markets, which may not be the appropriate result. A trend-extrapolation model applied to open ended fund NAVs might be beneficial to fund managers in falling markets but be advantageous to investors at the crest of rising markets.

This issue was not discussed within the valuation workshop.

ISSUES IN PROPERTY INVESTMENT VALUATION: A DISCUSSION PAPER FOR THE INVESTMENT PROPERTY FORUM

Issue 7 – How can the RICS and other institutional bodies ensure that institutional constraints do not hinder developments in methods and use of information?

Institutional Constraints

Valuation standards and guidance do not constrain methods and applications. There is nothing in the Red Book that instructs a valuer in the way in which they obtain the Market Value; the Red Book is silent on methods and use of information.

The major institutional intervention in the UK has come from the valuer's self regulating body, the RICS. UK Valuation Standards suggest that, where valuers are valuing in markets where a particular level of uncertainty exists, they include a statement which draws attention to the cause of valuation uncertainty (RICS, 2008, GN 5). A recent advisory note issued by the RICS to members suggests that a lack of market transaction evidence could be a cause of increased valuation uncertainty (RICS, 2008b). A general lack of activity in markets may precipitate a general caveat to all valuations - which it has in that 82% of the IPD October monthly valuations had the RICS Red Book caveat applied to them. It may be helpful to a client to know that in thinly traded markets, valuers are more

uncertain about their valuations derived from using comparative methods but does not address any of the underlying problems discussed previously.

The institutional constraint on valuers lies in the litigation and dispute resolution arena. Crosby *et al.*, (1998; 2003) discuss valuation negligence and valuation expert witness precedents and behaviour and the competent practitioner tests that are applied. Examination of cases indicates that expert witness testimony and subsequent court decisions are based in the use of direct market evidence and the use of alternative methods has normally been rejected. Departure from this approach to valuation could be hazardous to any valuer facing a negligence claim who had adopted cashflow techniques and/or utilised information from other markets, despite the Valuation Standards being silent on the matter. An ongoing issue for the RICS is keeping up with changes and ensuring that their regulatory and education functions ensure that innovation is not stifled by the institutional constraint highlighted above.

Workshop discussion

During the very thin market over the five or six weeks post the collapse of Lehman Brothers the GN 5 Clause was used, as advised by the RICS. However it was dropped again in time for the year end valuations.

The GN5 clause provoked some discussion in itself within the workshop group. The clause is seen as a caveat or clarification that the market is changing very rapidly, giving valuations a short shell life. It can create problems, particularly for open ended funds where there was concern that valuations, so crucial during periods of redemptions, could not be relied upon. The banks also challenged the clause which was found to vary from report to report. Overall the use of the GN5 clause was felt to have had little impact on the market in this instance.

Issue 8 – Can effective regulation be devised that ensures the independence of valuations?

The Role of Clients

Most valuers have anecdotes of attempts by clients to influence the outcome of a valuation and the academic literature is full of evidence of this influence (for example, Diaz, 2002; Baum, et al, 2000). The valuation process allows high levels of interference by clients. This ranges from the selection of the valuers to the discussion of the outcome at draft valuation meetings. The bonus structures of clients are sometimes based on short term outcomes tied to performance targets. Additionally, the fee structure of clients is also often tied to valuation outcomes. This means that the fees/bonuses may not be closely aligned with the long-term sustainability of the investment decision. Bonuses are paid when performance is positive but not always paid back when performance is negative - the moral hazards are obvious and need to be acknowledged. It could be argued that performance rewards based on valuation driven indices and/or unleveraged return benchmarks for leveraged portfolios should be re-assessed.

Following Carsberg in 2002, the RICS developed a compliance team to monitor client influence. However, no research has been undertaken into its operation and whether it is effectively countering any influence issues which remain. The RICS is currently discussing a new monitoring regime and part of that monitoring process should still include the ways in which clients participate in the valuation process.

There is a diverse set of investor circumstances and motivations. In the performance measurement area, motivations of some clients may be to persuade valuers to mark properties to market more accurately while others may try to influence valuers in order to mitigate

losses or maximise gains. For example, property unit trusts with redemption obligations may be more interested in correct valuations to stop holders

redeeming units which they think are over-priced. By contrast, listed property companies/REITs may be more interested in keeping asset values as high as possible if they feel that the published net asset value is important to the share price.

In the bank lending sector, there are more stakeholders. In addition to the lender (or more accurately, the representative of the lender negotiating the deal), there are borrowers involved, along with brokers, other professionals and, possibly, providers of insurance, guarantees and indemnities. According to Crosby et al. (2004), even though the valuer should have the aim to produce an objective independent valuation, especially as in the last downturn the number of valuers sued for negligence by banks increased significantly, they can be subjected to pressure by other stakeholders in the transaction (including the individual banker). They may all have a vested interest in the deal going ahead and a lesser interest in the sustainability of the transaction.

This discussion raises issues of internal supervisory relationships within organisations including fee structures, appointing and reporting mechanisms between the valuer and client, and professional supervisory processes and their effectiveness that go well beyond the remit of this discussion paper. Nonetheless, these issues occur irrespective of the market state (although they come most clearly into prominence in market downturns) and require constant monitoring.

This issue was not discussed within the valuation workshop.

ISSUES IN PROPERTY INVESTMENT VALUATION: A DISCUSSION PAPER FOR THE INVESTMENT PROPERTY FORUM

Conclusions

In the light of the discussion above, eight separate but, in many cases, related issues have been identified and are listed in the Executive Summary as questions. These issues range from a number of detailed changes to the valuation process to a full ranging academic discussion of some of the major foundations underpinning valuation practice.

The current downturn has focussed attention on valuations and the valuation process from which they are obtained. The issues raised, though, are fundamental and it is important that they are debated rigorously and openly. Hasty, short-term solutions to the difficult market environment are unlikely to provide long-run improvements to the valuation system.

Valuation now operates within a sophisticated and complicated financial regime. The motivation of investors is not restricted to the individual property and takes place in an environment of different ownership structures and debt financing. Do market valuation methods ignore the wider market dynamics and concentrate on the individual trades of a few assets as its main database for all valuations and if they do, can they survive?

At the individual asset level, it is not reasonable to expect precise accuracy in a valuation. There is always some uncertainty in a valuation. However, it is clear that comparison-based valuation approaches have inherent limitations that result in lagged recording and possibly under-recording of price changes. Both these limitations of a comparison-based approach may be exacerbated in a periods of low trading volume and/or rapid market movement. The key question is whether other approaches are possible. These other approaches include different concepts and bases for valuation, other methods for arriving at a valuation and other information sets that can be used to inform the valuation process.

We believe that there needs to be a fundamental review of concepts and bases - which ones should be used for the different roles - and then which methods

should be adopted for each of the different concepts. The concepts are not normally the problem. It is the matching of the role with the concept that needs investigation. Methods of valuation also need to be reviewed. Some of the traditional practices of valuers are tied into historical perceptions of correct approaches and this also needs to be challenged. These perceptions may have been reinforced by the physical nature of the UK property market and the institutional context of the market. It has a large number of smaller sized assets, often let on one or a few tenancies and frequently traded. In some overseas markets, properties are larger, multi tenanted and infrequently traded and valuers cannot rely so easily on capitalisation rate approaches alone. They often turn to the use of a variety of methods including those that the UK market has reserved for Investment Value. Can valuers in the UK continue to rely on comparison based approaches when all of the academic evidence and industry perception is that this leads to lagging of markets and valuations following markets down and up at a slower rate than reality? Or do cashflow techniques add value to existing forms of transaction analysis and do they enable valuers to bridge the time gap between their existing data sources and the actual market? Given the importance of notions of debt and equity driving the property investment market, do they also enable these issues to be modelled and considered?

Therefore one major question that emerges is whether the use of cash flow models transcends both Market Value and Investment Value and applications can be adopted to help both market values to be more accurate and more adaptive to market changes and help better decision making in other contexts using Investment Value. Would a market where comparable based methods are routinely tested with cash flow analysis create a better output?

In this respect, bank lending valuations require special mention. Bankers also need a fundamental re-evaluation of their use of valuations in lending decisions. Is too much stress placed on Loan to

Market Value ratio at loan origination? Does the call for valuations to be suspended because it forces banks to initiate defaults imply the system is broken? As the security of a loan to any business is dependent upon the cashflow generated by the activity, prospective cashflow in the context of investment value may be a more significant factor. We therefore feel that the time is ripe for a fundamental review of the role property plays as security for loans and the type of valuations used in that process.

The role of information in valuation is fundamental to the process. We believe that the impact of liquidity on market prices needs to be better understood and that we need to have an academic framework for valuations in markets where transactions have virtually ceased. There is some academic work on constant liquidity prices: this should be debated and developed if we are to decide on the relevance of so-called forced sales in illiquid markets. We are of the view that, in the majority of cases, forced sale is not a distinct concept or a basis and does not breach the willing seller concept in the market value definition. We therefore find it difficult to accept that transactions in the current market place do not represent a true reflection of prices.

There is also a debate that needs to be had concerning the use of information from markets other than the direct property market. We suggest that derivatives may not provide direct signals about underlying property prices (although they may be indicative of changes in market sentiment) but that other forms of indirect do give signals which should form part of any appraisal process.

Whilst we do not believe that property unit trusts require a different basis or approach than any other form of property ownership, we accept that in rapidly rising or falling markets there is a mismatch between the basis and the actual process of buying or selling assets or units. The problem may lie in an underlying misalignment between the liquidity of the assets and the units. However, there is little doubt that there are

valuation issues associated with the open ended fund model as experienced in both Germany in 2005/2006 and more recently in the UK and that the lagging issues with market valuations are involved, despite the view that market valuations have adjusted more quickly in the current downturn than in any other.

Finally, we believe that conflicts of interest and client influence are still an issue in the UK property investment market and the use of performance related bonus schemes are an obstacle to an objective valuation process. In the wake of Baum et al. (2000) at the IPD conference, one of the authors called for the practice of performance related fees and bonuses based on valuation induced performance to be stopped. Questions are now being asked across the whole economy concerning the performance and bonus culture and property owners and fund managers are no exception. RICS monitoring of the main valuation providers is essential but this implies blame on the valuer rather than the client. The purpose is therefore to give the valuer some ammunition to resist the client. It is now incumbent on the client industry bodies to implement a similar regime.

ISSUES IN PROPERTY INVESTMENT VALUATION: A DISCUSSION PAPER FOR THE INVESTMENT PROPERTY FORUM

Conclusions from the workshop discussion

The valuers attending the workshop showed little appetite for a fundamental review of the concepts and bases of the valuation process. As reflected in the boxes within the paper, the view was that the existing system had shown itself to be capable of reflecting rapidly changing markets, at least in the UK if less so in other jurisdictions. It was clearly acknowledged that valuing in illiquid markets is extremely difficult. However it was also felt that during the current market downturn there had been no danger of compromising the willing buyer/willing seller concept and that, in spite of relative market illiquidity, transactions were still taking place and valuers had evidence to look to. The concept of marking to a model raised the idea that a model could be created which would accurately reflect the market, or where the market should be. There was clear scepticism that a model capable of accurately replicating the market could be created.

It was also clear from the discussion that evidence from outside the market is being used and reflected within the valuation process, in spite of there being no formal mechanism for incorporating this data within a valuation. The market is now rich with data that was not available in the last major downturn of the early 1990's. However caution was also expressed with regards the use in particular of property derivatives pricing and indices as values should be leading these not following them.

The existence of a lag within the property market indices was accepted as part of the market and not seen as a major concern. The prevailing view was that a lag should be expected given that price information was not fed into the indices on a daily basis. What was more problematic was judging how much lagging was acceptable and determining its extent at any one time.

The importance of the relationship between valuers, values and the raising of debt was an area the workshop felt needed further discussion preferably with the banks. Whilst it was not felt that some kind of new valuation tool for loan valuations would be useful or practical, it was considered that greater engagement between the banks and the valuer community would be helpful. The nub of the debate rests on the use which is made of a valuation rather than the valuation itself. It was suggested that more stress testing of cashflows should be carried out and income data analysed. However it was felt that this was not a role for the valuer. Valuers can provide additional information based on the interpretation of forward looking data and long term trends but, providing more information is expensive and banking is a competitive business. A valuer providing more data analysis will have to charge more and may then be less likely to be used for the valuation. This area of information provision was seen to be an important one to focus on. Any potential dialogue between the property community and banking community was to be encouraged.

The workshop discussion was wide ranging and has provided useful feedback on the issues raised. However some were covered only fleetingly or not at all. In particular issues 6 and 8, did not get a full

discussion, hence the lack of feedback on these issues from the valuers. It is hoped these issues will be picked up through further discussion and debate generated by the paper.

IPF SHORT PAPERS SERIES: PAPER 2

With thanks to the following individuals and companies for attending the workshop debate:

Andrew Smith - Aberdeen Property Investors

Gillian Bowman - AEGON Asset Management

Duncan Preston - Aston Rose

Keith Steventon - BNP Paribas Real Estate

Nick Knight - CB Richard Ellis

Russell Francis - Colliers CRE

Andy Miles - Cushman and Wakefield

Philip Parnell - Drivers Jonas

Julian Schiller - Jones Lang LaSalle

Kevin Biggs - RBS

David Wood - Savills

Aviva Investors

IPD

Strutt & Parker Real Estate Financial Services

ISSUES IN PROPERTY INVESTMENT VALUATION: A DISCUSSION PAPER FOR THE INVESTMENT PROPERTY FORUM

References

- Baum, A, N. Crosby, P. Gallimore, P. McAllister and A. Gray (2000) *The Influence of Valuers and Valuations on the Workings of the Commercial Property Investment Market*. London. Investment Property Forum/Jones Lang LaSalle/RICS.
- Benanke, B. (2008) Quoted in Real Time Economics - Daily Archive, September 24th. *Wall Street Journal*. <http://blogs.wsj.com/economics/2008/09/24/>
- Clayton, J., D. Geltner and S. Hamilton (et al, 2001) Smoothing in Commercial Property Valuations: Evidence from Individual Appraisals. *Real Estate Economics*. 29(3) 337-60
- Crosby, N. A. Lavers and J. Murdoch (1998) Property valuation variation and the 'margin of error' in the UK. *Journal of Property Research*, 15(4) : 305-330.
- Crosby, N. N. French and M. Oughton (1999) Bank Lending Valuations on Commercial Property: does the European Mortgage Lending Value add anything to the process? *Journal of Property Investment and Finance*, 18(1) 66-83. 2000.
- Crosby, N., C. Hughes and J. Murdoch et al, (2004), Influences on Secured Lending Property Valuations in the UK . *Working Papers in Real Estate & Planning* 14. The University of Reading, pp 26.
- Crosby, N., J. Murdoch, D. Kincaid and A. Lavers (2003) Expert valuation witnesses in Australia and the UK. *Journal of Property Research*. 20(3) 281-304
- Diaz, J. (2002) *Behavioural Issues in Appraisal*. London : RICS Foundation.
- Diaz, J., and M. Wolverton (1998); A Longitudinal Examination of the Appraisal Smoothing Hypothesis. *Real Estate Economics*. 26(2) 349-58
- EG Capital (2008) Fund managers question their values as liquidity crisis bites. *EG Capital*, December, p14-16.
- EPRA (2009) *Listed Property Performance as a Predictor of Direct Real Estate Performance*, report by Cohen and Steers, Schipol: EPRA
- Fisher, et al,J., D. Gatzlaff, D. Geltner and D. Haurin (2003) Controlling for the impact of variable liquidity in commercial real estate price indices *Real Estate Economics*, 31(2) 269-303.
- Geltner, D., B. MacGregor and G. Schwann (2003) Appraisal Smoothing and Price Discovery in Real Estate Markets. *Urban Studies*, 40(5-6) 1047-64.
- IPE Real Estate (2009) Special Focus - Valuations. *IPE Real Estate*, January February, pp 28-31
- IPF (2004) *Liquidity in Commercial Property Markets*. London: Investment Property Forum.
- IPF (2007). *Index Smoothing and the Volatility of Commercial Property*. London: Investment Property Forum.
- Maxted, W. and T. Porter (2008). *Property Lending Review 2008*. Leicester: De Montfort University.

IPF SHORT PAPERS SERIES: PAPER 2

RICS (1994) *The Mallinson Report - Commercial Property Valuations*. London: RICS.

RICS (2002) *Property Valuation - The Carsberg Report*. London: RICS

RICS (2008) *RICS Valuation Standards*. London: RICS.

RICS, (2008b) *Valuation uncertainty and market instability*. London: RICS

RICS/IPD, (2008) *Valuation and Sale Price Report 2008*. London: RICS/Investment Property Databank.



Printed on recycled paper

Investment Property Forum

New Broad Street House

35 New Broad Street

London EC2M 1NH

Telephone: 020 7194 7920

Fax: 020 7194 7921

Email: ipfoffice@ipf.org.uk

Web: www.ipf.org.uk