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Jekyll, Hyde and Property Value

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The interaction between financial investment value and transaction evidence are compared are two competing perspectives on property value. The expectations on what a valuer delivers are examined by contrasting community expectations and valuation theory and practice. It is suggested that valuation practice emphasises transaction evidence as the grounding for property valuation and this is highlighted in the Spencer test for value. Conversely, it is argued that the community has a greater interest in the financial investment value of property and expects the valuer to deliver on this basis as well.

The sober reality is that these two values are often misaligned which provides the opportunity in property in good times but the hazard of property in difficult times. The role and purpose of advanced valuation methods, such as discounted cash flow (DCF) techniques are considered. Although there are persuasive arguments suggesting DCF is a most unreliable method of property valuation, it is suggested that it is nevertheless an appropriate methodology based on the sociological function of DCF within the property investment community.

The paper concludes that the realities of valuation practice provide insights that challenge generally accepted economic theory but in so doing place valuers in the invidious position of holding the public responsibility of pointing to economic realities that economic theory suggests do not exist. It is suggested that it is this economic hysteresis that is also responsible for much of the instability that characterises the global economy. Following this line of thought, explorations of the mechanics of property value have the capacity to inform general economic thought and perhaps lead to policy and practice that can avoid excessive pseudo-cyclical financial fluctuations.

Keywords: property value, financial value, property cycles, methodology, speculation and asset price.

The High Court case of *Spencer v. Commonwealth* (5 CLR 418) has provided the reference point for valuation practice in Australia (Rost and Collins 1984) in what has become commonly known as the Spencer test. It is usually taken to place property value very much in the domain of current market price by suggesting that value is the price that willing but otherwise indifferent parties would trade a particular property asset for. In this way the learned judges were linking into a long tradition of thought on the thorny problem of the quantification of value that has concluded that the practical solution is found in the opinion of the market (Dempsey 1935; Charles 1998). The burden of this paper is to examine the meaning and mechanics of the

opinion of the market. In doing so it will relate property valuation to economic and financial conceptions of value and the political realities of the practical market place.

The Objectives of Valuation

The problem of value is the quantification of the almost innate human inclination to believe that there is a fair price for any commodity that is traded. It is shared by diverse cultures such as classical Greek (Aristotle 1981; Meikle 1995), Christian (Dempsey 1935; Aquinas 1981), Moslem (Islahi 1988), Jewish (Kleiman 1987) and the contemporary common modern person (Frey and Pommerehne 1993). Economic market theory is built on the notion of an ideal price as the result of perfect market competition (von Kettler 1981). However it is developed more in terms of theoretical conceptions of efficiency and equilibrium than justice per se (Samuelson 1975).

Our market economy aims at using competition within a deep, mobile and informed market to force prices to a point where economic rents are minimised or eliminated. The ideal economic market is one where there are no economic rents and this ideal, or perfect market is the object of considerable public policy (Small 2000; Small 2007).

If the ideal price is one that is set that by the elimination of economic rent, then it must consist of no more or no less than the normal cost of production. This is straightforward for manufactured commodities where the costs of production and the expectations of normal profit are well understood and quantified through the accounting and financial management processes. It explains why full cost pricing (the practical setting of commodity prices using a margin on costs) is used by firms and not marginalist pricing (setting price using economic theory employing demand and supply curves) for produced commodities (Langholm 1969; Skitmore and Runeson 2006).

This conceptualisation of price results in a problem for property value. If property valuation is the estimation of the price a property will trade for in a near perfect market, then it will equal the normal cost of production of the property. While this can be done for improvements, and even perhaps necessary nearby infrastructure, the component attributable to the unimproved land value can carry no value as it has no cost of production.

In practice two strategies are used to avoid this problem. The easiest way to allocate a value to the pure land component of a property is to look to its cost of acquisition. Unfortunately this does not validate any capital gain, and the latter is a major element in the attraction of property investment. It also challenges the cost of acquisition as this can be considered via regress to consist of a series of unjustified capital gains back to the original grant or act of privatisation.

The second strategy is to justify the land value in terms of its contribution to some future profit that is likely to be made from the land. This strategy is implicitly evident in the residual valuation method applied to development land. It is also the strategy that the monopolist uses in setting prices purely on the characteristics of demand, that is, the future benefit that may be expected from the possession of a thing. The fact that land price has the quality of a monopoly rent is one that reaches back to the dawn of modern economic theory when Adam Smith who concluded: "*the price for the use of the land, is naturally a monopoly price. It is not at all proportioned to what the land lord may have laid out on the improvement of the land, or to what he can afford to take, but to what the farmer can afford to give*" (Smith 1778).

Following Smith's lead, the problem of price has been rebadged the problem of value, even though price and value are fundamentally different concepts. Price is a negative concept naturally aligned to cost or burden. Value is the usefulness of a thing to its owner, it is a positive concept and is largely proportioned by the situation of the end owner/user. A thing of value is sought after as a good, and it tends to improve the quality of one's life—the antithesis of a burden. A large component of genuine value is psychological and the result of conditions existing within the end owner. As such it is difficult to precisely quantify and will vary with the individual. Thomas Aquinas recognised that since these aspects of value actually reside within the purchaser, they are the purchaser's property before the transaction and to implicitly include them in the price is to charge the purchaser for something that the latter already owns (Aquinas 1981, II-II Q78 art.1). Modern commerce abandoned this precept in the sixteenth century and the notion of charging partly on the basis of demand is a key component of modern economics, despite being implicitly repudiated in perfect market theory.

By Smith's time the metaphysical basis for price that underpinned Aquinas had been lost, leaving only the possibility of empirical observation of market behaviour that eventually came to dominate economic theory, especially as the discipline was transformed from political economy to economics (Marshall 1890). Today considerable resources are put into reshaping consumer sentiment (through marketing) and quantifying it (through market research) to maximise, quantify, and eventually capture that quality in the consumer, that despite being the property of the consumer, becomes a significant part of the price the vendor charges. To the extent that land price follows very similar fundamentals, it is no surprise that trade in land has multiplied and matured through the modern era. Smith side stepped the distinction between price and value by promoting the replacement of the word *price* by the expression *market value*. In so doing he made it difficult to recognise the deeper theoretical and historical issues that distinguish price and value.

The practical upshot of this confusion is what is now known as the problem of value, though it is more correctly understood as the problem of price. For the purposes of this study it will be referred to by the former term, despite its imprecision. In a monopoly the two concepts do coincide however, since the monopolist has the economic power to set price to capture the major part of the end user's value of the thing traded. This is also the case with land, and financial assets. In each of these price is equated to end utility, and in a material commercial society, utility is evaluated in money terms alone.

The problem of value for property is therefore the problem of estimating the usefulness of a property to the end user. This can be equated to the financial definition of value as "*the present value of the future returns*" of an asset (Wilson and Keers 1990). The present value of the future returns will be referred to here as the *investment value*. If this is the true value of property, then any method that evaluates it should be considered as methodologically applicable to valuation. The residual method of valuing development land and the capitalisation method of valuing income producing properties are examples of methods that return an estimate of the investment value.

Fall of the hammer price versus investment value

Given that all property value is the monetary sum of all future returns, the problem remains as to how to assess it. If humans were possessed of perfect prescience, then the recognition of all future returns and their discounting back to the present would be straightforward, but they are not. There are actually three practical problems that make it difficult to estimate the price of a property with precision.

Firstly, quantification of specific future benefits is difficult, especially as the theory demands that the full set, notionally extending indefinitely into the future, is quantified with precision.

Secondly, there is the problem of setting the appropriate discount rate. This is both a practical and a theoretical problem. The theoretical problem is aligned to the problem of appropriate rates of return that is closely linked to the problem of riba in Islamic thought, or the problem of usury in western thought. It in turn can be linked to the economic forces that tend to result in major periodic financial failure of the sort seen in the 1830s, 1890s, 1930s and apparently taking in the last year or so. The practical problem of discount rates relates to their estimation. Since they are also ultimately individual, and impacted by personal circumstances and opinions, they are hard to precisely quantify in a single general measure.

Thirdly, the impact for the purchaser/end user will be quite individual. The personal situations with respect to leverage, taxation, attitude to risk and timeframe all affect the net value of a property asset to an individual investor. This can be further complicated when the property is to be purchased for owner occupation. Notionally the common estimate could be the average person, except the average person will never own a property: it will be always be sold in practice the person who has the above average interest in the particular asset as the latter will be prepared to outbid the average.

The residual land valuation method overcomes many of these problems by terminating the future benefits with the sale of the development thereby creating a limited timeframe within which to work, but it is still considered risky. The capitalisation method uses current rents as a proxy for future economic benefits and current comparable capitalisation rates as a proxy for the appropriate discount rate. In doing so it cheats by not actually quantifying the present value of future returns at all, but only what the current investment community appears to consider the appropriate capitalisation rate. Jon Robinson (1989) noted that the capitalisation rate is believed to implicitly adjust for all risks and anticipated future variances in the pattern of future benefits, however it does this on the basis of the collective opinion of the market, not as a result of any explicit scientific evidence of the future.

Direct comparison also uses current sales evidence as a proxy for value, and in so doing does not directly assess the question of present value of future returns. This is also complicated through its use for owner occupied properties, especially in the residential market. The attraction of direct comparison is that it uses concrete evidence and this is taken to be representative of the market's appraisal of the true investment value. This assumption is highly problematic for the following reasons:

- Market evidence usually does not admit investigation into the special circumstances of the purchasers of the comparable properties.
- The persons whose actions constitute the market evidence probably did not execute an exhaustive analysis of the present value of future returns sufficient

to be able to conclude that the market trend was based on anything more than a person's whim or perhaps poorly informed opinion.

- The circumstances surrounding the surrounding sales may not correlate well to the subject purchaser's ability to realise future benefits from the use of the property.
- The market as a whole may be responding to influences that are irrational or erroneous.
- There may be distinctive features with the subject property that make it incomparable to apparently comparable properties.

Some of these problems could be addressed, such as through deeper investigation into the circumstances and reliability of sales taken to be comparable, however the cost implications of the additional work involved makes this unlikely, given the overall remuneration within the profession. Taken as a whole they throw serious doubt on the ability of the direct comparison method to robustly evaluate investment value.

By contrast, direct comparison is taken to be the best indication of value. Given the earlier discussion of price and value, it may be more precise to conclude that direct comparison is the best indication of price, as in the likely price that the property will fetch if sold in the current market. This could be referred to as the "*fall of the hammer value*."

In most market conditions the fall of the hammer value is the more important immediate issue. It indicates the likely price that a property will currently trade for and assuming current conditions continue, it suggests what the property will continue to fetch for security purposes. Prospective purchasers may use the valuation as a guide to bidding and banks may use it as an indicator of collateral value. This popularity does not change the fact that although fall of the hammer value is preferred by valuers and the community, it has a very poor connection to actual investment value for the reasons listed above. It is popular, robust in court, and is usually based on the greater balance of hard evidence, but it is only a proxy derived from the collective action of what could be a mass of uninformed and often irrational individual humans.

The direct comparison falls into a trap that is common across a fair span of modern social science: the fault of confusing a consensus of dubious opinions for true knowledge. It would be like seeking an understanding of who should run a gaol by conducting an opinion survey of all those inside the walls—while the wardens may vote for the status quo, the balance of opinion would likely be otherwise.

Jekyll, Hyde & Property Value

Market pricing for land has been shown to be problematic. If price is utility value as is commonly argued in contemporary market economics, then investment value is the property valuer's true objective. If markets were composed of homogenous individuals and functioned in an informed and dispassionate way then the common estimate of the market, the fall of the hammer value, would equal the investment value. Markets often leave off sober informed and rational functioning and take on a direction of their own. Prices reflect influences that may be believed in the marketplace, but do not exist in the fullness of reality. In these cases the marketplace transforms from something like Dr. Jekyll to his alter ego Mr Hyde and many participants are not aware of the change till it is too late. Various conditions attend this transformation, including:

- Inappropriate market response to changed economic conditions;
- Erroneous interpretation of outcomes related to changed structural use of debt;
- Inappropriate market responses to changed cultural variables;
- Over reaction to public policy changes; and
- Herd behaviour initiated by factors such as the above running markets beyond their rational levels on the basis of capital gains trends and expectations causing bubbles.

What is apparent is that after the market has run in Mr. Hyde mode, its degree of dysfunction will tend to be measured by the degree of departure from the “fundamentals,” that is, the investment value. In the Sydney residential market Shane Oliver (2006) used this approach to suggest that prices were at least 18% too high and movements in the last quarter suggest that the market is beginning to return to more defensible levels. This is illustrating that the irrationality of the Hyde market will eventually sober back to the Dr. Jekyll informed rationality of investment value. Unfortunately at about the same time, people who have purchased properties for seemingly defensible market prices in the Hyde phase will be inclined to seek the blood of valuers whose reports provided fall of the hammer values and not investment values. The problem is especially acute in the case of less common properties where the market is thin and optimism is high.

The Spencer case includes advice against using actors such as the Mr Hyde of the recent sales evidence when Barton J noted that the valuer should consider...*what it is worth to a man of ordinary prudence and foresight, not holding his land for merely speculative purposes, nor, on the other hand, anxious to sell for any compelling or private reason, but willing to sell as a business man would be to another such person, both of them alike uninfluenced by any consideration of sentiment or need* (my emphasis). Clearly, the irrational elements that drive the market beyond rational bounds are precisely what Barton J considers to be inadmissible evidence and in so doing rejects the fall of the hammer price when it is not coolly guided by the calculus of Dr. Jekyll.

Direct Investment Value Methodologies

If the market periodically moves from Dr. Jekyll to Mr Hyde, then perhaps valuers should focus more on investment value than fall of the hammer value. Capitalisation is an attempt to evaluate the investment value of a property. It has the advantages of being simple, grounded in hard observable facts, and seemingly responsive to the complexities of circumstances through the reigning capitalisation rate.

Unfortunately the determination of the capitalisation rate is both the charm and the Achilles heel of the method. It is the charm because the capitalisation rate does reflect the market's collective adjustment for the complexity of circumstances. It is the Achilles heel because in deriving the capitalisation rate from the market in this way it simultaneously makes itself subject to the very Jekyll and Hyde oscillation that would be better avoided. In some ways it is more hazardous as it obscures the adjustment process in a single simple catch all figure. Like other market dependant approaches, it mistakes prevailing market opinion for sober investment valuation.

An improved approach could be to stipulate capitalisation rates and in this way quarantine them from the irrationality of the market. This has merit but would require a subtlety of theoretical defence that does not appear currently available. It would also put a wedge between market facts and value that may not be acceptable to the community.

The ascendancy of Discounted Cash Flow (DCF) approaches appears to fill the gap for investment valuation. DCF evaluates all the future financial parameters and applies a discount rate that can be flexibly derived. Conceptually, DCF has the advantage of being a complete computation of investment value but it has several major shortcomings that have made it unacceptable to Australian courts. The major ones are as follows:

Firstly, it places heavy reliance on forecasts as opposed to other methods that use concrete current and historical facts. Forecasts cannot be grounded on independent verifiable facts, and therefore create a problem for comparison when in conflict.

Secondly, the selection of discount rate may suffer from similar problems to the capitalisation rate, being influenced by current opinions regarding future financial parameters. In addition, there are several methods for determining a discount rate and these may be incommensurate. Theoretical texts are loath to suggest a unique approach to selecting the discount rate and its common synonym “the required rate of return” hints at its ultimately subjective nature. The complexity of DCF analysis makes deduction of the rate from comparable properties almost impossible and critical information is often confidential. The best that could be expected is the development of an industry standard methodology for determining the discount rate, but this could suffer from the same defect failing to parallel practical reality as a standardised capitalisation rate.

Thirdly, DCF analysis of investment properties do not include all cashflows as these extend indefinitely into the future. For depreciating assets this is not a problem, but for property, with its tendency to appreciate, it means that the major single cash flow is a valuation of the notional end sale that is not derived from DCF. This creates a logical problem, in that it is hard to argue that DCF is the most reliable method of valuation if it contains as its most significant single quantity a property value that is determined by another (supposedly inferior) method. The fact that this major cash flow comes at the end of the analysis period and it therefore most heavily discounted may diminish the severity of this weakness, but it does not eliminate it.

Fourthly, it also suffers from the problem of immense mathematical complexity, and while standardised models may become acceptable as admissible computational algorithms, this will take time. As it stands, it is possible for models to contain mathematical errors that could take extensive resources to identify, considerably beyond the practical resources of reviewing bodies, such as courts.

The development of industry standard DCF models will probably be the most promising course for the eventual adoption of the method. If this problem is overcome, then the matter of agreeing on data will be relatively less significant. This is not to suggest any lowering of educational emphasis on understanding cash flow modelling for property professionals, but the reverse. If DCF is to become better accepted, practitioners will need to be able to demonstrate a superior capability in both its use and the interpretation of models. Control and detection of errors is also an important aspect of maintaining quality in cash flows. A second avenue for

overcoming the difficulties with data could be the more extensive use of sensitivity analysis and the development of more effective ways of investigating variance in the input parameters.

DCF and the Market Actors.

There is a separate argument for the inclusion of DCF as an acceptable valuation methodology. In *Spencer v. Commonwealth Isaacs J* noted that the test for property value must assume "*both (parties) to be perfectly acquainted with the land, and cognizant of all circumstances which might affect its value.*" The level of knowledge inferred within this phrase would be such as to make it possible to complete a DCF analysis. This would suggest that in order to meet the Spencer test, the valuer must consider parties who could complete a valid DCF analysis. Given that the parties would expect investment value when they considered trade, a DCF would be the preferable vehicle for appraisal as mere market facts could be tainted with imperfect knowledge and limited comparability.

In recent times, DCF has become a commonplace tool for investment analysis, suggesting that actual market actors are as likely to use it as any other method. If their knowledge of the property is sufficiently developed to produce a DCF appraisal considered reliable, then it could be considered highly likely that they would rely on this in forming their judgement of the property's worth. In the Spencer case, Griffith CJ could have been thinking of this very person when he advised that the valuer should ...*put yourself as far as possible in the position of persons conversant with the subject at the relevant time*" if DCF had been as widespread an investment appraisal tool in his day. For this reason, the common use of DCF would itself form a persuasive argument for its adoption by the courts as it reflects that actual appraisal calculus of actual market actors and in so doing is a better fit with the Spencer case than the capricious evidence of the fall of the hammer market.

From this theoretical position it is possible to drop back to the more practical reality that even if the level of forecast knowledge is not perfect, so long as market actors are willing to accept those forecasts and use them in DCF analyses that are then used in forming a judgement of value, the DCF approach represents an accurate mapping of the value formation processes carried on by actual and hypothesised market actors. From this, it becomes evident that the Spencer test, more than simply permitting DCF, could be read to demand it in cases where the market is filled with actors who are as likely to use the method as any other method of appraisal.

The fact that the parameters used in the method are forecasts becomes irrelevant if they are nevertheless routinely adopted as best estimates. This is reflected in the IVSC GN 9 that admits commonly accepts forecasts as acceptable inputs for valuations. Even if forecasts could later be shown to be objectively wrong in terms of their realisation in fact, their use at the time of purchase still makes them the most valid method of fulfilling the Spencer test. This line of argument would reverse the current tendency to view the Spencer test as favouring market comparison methods, and use it instead as a call to utilise the most effective investment valuation tools available.

Valuers, Investment Advisors and the Community

If it can be shown that valuers should be aiming at providing investment values for properties in preference to fall of the hammer valuations, then the role of the valuer may be reviewed. In NSW at present investment advice is a separate occupational

area to property valuation, to the extent that property valuers are not permitted to provide investment advice without separate certification. By contrast, investment advisors may give investment advice on property investments without any formal property qualifications. Unwittingly, the valuation profession has allowed itself to be painted into a corner where it has left itself with the most problematic aspect of property analysis, while allowing the most important appraisal service to be transferred to non-specialists.

The community could reasonably expect valuers to report on the true value of a property, and not simply deduce the likely price at an imminent sale. This focus was hinted at by Griffith CJ in the Spence case itself when he recommended focusing not on what the actual market did achieve on a particular day but "*What would a man desiring to buy the land have had to pay for it on that day to a vendor willing to sell it for a fair price but not desirous to sell?*". It is particularly true if the client was inclined to pay the currently anticipated market price and the investment value was somewhat less, as often happens in the Hyde phase of the market. The community should not be expected to understand that there is often a gap between what is being paid for property and what it is soberly worth. Ideally, the valuer should supply both figures, but the reality is that unless it is in the context appraising the fall of the hammer value, the valuer is actually prevented from doing this, despite being the more appropriately trained professional for the task.

In the early 1990s there were a spate of claims against valuers on the basis that their valuations reflected market behaviour better than sober investment fundamentals. It is very possible that a similar attack of valuers may occur if property values plunge in the near future.

Conclusion

The property valuer has the invidious task of operating between the unreality of economic theory and the practicalities of the real world. Economic value as a result of the perfect or near-perfect operation of the market would suggest property values that could bear no relationship to practical reality. The valuer must understand the actual components of property value as they operate in the real world and provide a resolution of the problem of value to their clients. The gap between current market prices and rational investment value is void that the valuer must be skilful at straddling.

It has been shown that the Spencer test actually points more towards investment value, than to market comparables. This suggests that the valuer should pursue appraisal methodologies that directly yield investment value, such as DCF analysis. The importance of DCF appraisal is not primarily due to its demonstrable precision, which is problematic, but from its wide acceptance in the investment community. As such a valuer using DCF is more closely modelling the behaviour of the market actors hypothesised in *Spencer v Commonwealth* than by assessing the opinions of actual market participants. This is because actual market participants may be acting irrationally, which would immediately violate the anthropology assumed by the High Court.

It is unfortunate that the valuation profession has allowed itself to be divested of the right to give investment advice, especially as that service is now the domain of persons not specifically skilled in property. It is suggested that the property profession should seriously consider strategies for reclaiming the task of supplying property

investment advice. The community expects valuers to supply robust appraisals of property value and this infers investment value. At the very least valuers should add an appraisal of the investment value of properties as a secondary figure to likely market price. If the community were apprised of the gap between current market prices and underlying investment value it could well assist in taming the Mr. Hyde that occasionally takes property markets into very destructive bouts of irrationality.

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