

# Objectivity in Valuation Techniques

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### Introduction

Valuation techniques have been subject to much criticisms in the past. These criticisms are invariably aimed at the apparent weaknesses in the techniques, in particular, the subjectivity or the lack of objectivity in the application of these techniques.

This paper examines the issue of objectivity of valuation techniques. It firstly defines what is objectivity and provides a review of the key methods of valuation and how the problem of the lack of objectivity is perceived in each method. It then discusses some recent developments in valuation techniques with particular reference to how these have helped to improve their objectivity.

### Definition of Objectivity

The Concise Oxford Dictionary defines "Objective" as:

"belonging not to the consciousness or the perceiving or thinking subject, but to what is....external to the mind, real."

"(Of person, writing, picture, discussion, etc.) dealing with outward things, exhibiting actual facts uncoloured by exhibitor's feelings or opinions."

Two aspects of this definition are important. The first is that being objective has to do with what is external to the mind or dealing with outward things. In other words, a person making an objective statement does it not from within himself but merely stating what is external to him. The second is that being objective has to do with actual facts which are not influenced by a person's feelings or opinions.

Objectivity is therefore opposed to subjectivity which is predicate on the individual, his viewpoint and feelings. Facts and figures are objective and so is stating a common viewpoint; but a person's opinion is likely to be subjective as it would reflect his set of preferences and prejudices.

Clearly, the issue of objectivity does have an important bearing on valuation techniques because valuation is often described as a matter of opinion and that it is as much of an art as it is a science. While most valuations are market oriented, according to the definition of the open market value, and should be based on the market's viewpoint, it is inevitable that certain amount of subjectivity will be present as valuations are, after all, a matter of opinion.

### **Review of Valuation Techniques**

The five methods of valuation which are widely accepted and used by the valuation discipline are:-

*a. Direct comparison*

The basic principle of this method is that no one would pay more than what he would be able to obtain from the market a property which is similar or at least in being able to provide the same amount of utility. The transaction price of a similar property is therefore deemed to be indicative of the value of the subject property if the transaction

is considered *bona fide* and that the terms and conditions of the open market are satisfied. However, as no two properties are exactly similar, adjustments to the transaction prices of similar properties must be made to account for the differences. The value of the subject property is then arrived at after the necessary adjustments have been made and that a value can be reconciled.

*b. Cost*

The cost method relies on the economic law that cost is equal to value. In the absence of market comparables, the value of a property might have to be determined from the cost perspective, i.e., how much does it cost to erect the building. The method calculates the current replacement cost of the improvements less depreciation since the improvements would have been depreciated through time and use. The depreciated replacement cost is then added on to the value of the land, as though vacant, to arrive at the capital value of the subject property.

*c. Income*

The main premise of the income method is that the value of the property can be calculated from the anticipated future income that is derived from the ownership of the property. This future income stream less the necessary outgoings and expenditure is then discounted to present value at an appropriate rate of discount to arrive at the capital value of the property.

*d. Residual*

The residual method is largely applied to the valuation of vacant sites or sites with development potential. The concept is that the value of the site is the residual of the capital value of the site when fully developed less all development costs and profits. The range of items under development costs includes construction cost, interests, fees, marketing and legal costs and other incidental or contingency cost.

*e. Profits*

The profits method is similar to the income method except that where in the latter the income can be assessed from market comparables, the potential rental under the

aspects of the erosion of value, such as wear and tear, functional as well as economic obsolescence. Measures which have been suggested to account for depreciation include general rules of thumb and the cost to restore to current standards. Nevertheless, the element of subjectivity cannot be avoided as opinions would differ on the appropriate rule to use or on the amount necessary to make good.

*c. Income*

Amongst the various methods of valuation, the income method, being financially based, has witnessed the most changes to its development and evolution. While the basic concept of discounting future income to present value has not changed, many of the traditional income methods of valuation, such as the dual rate method, have been questioned on their validity and rationality. The main problem is the reliance on a single yield rate with arbitrary adjustments made to account for differences in tenure and other property attributes. These adjustments depend on the valuer's judgement and his perceptions of risk and return. Increasingly, the valuation discipline has attempted to make the discounting process more explicit, in particular, the use of the discount rate. The rate of discount should not only reflect the risk and return of property but capable of being compared with the risks and returns of other forms of investment. In a way, this has helped to reduce the amount of subjective and arbitrary adjustments needed especially if data on investment performance and risk and return become more widely available.

*d. Residual*

The residual method requires, right from the onset, the valuer to make a series of decisions, many of which are likely to be influenced by his perceptions and his set of circumstances. While there are certain facts pertaining to the development potential of the site, the ultimate product is the result of how these facts are interpreted. Next a valuation of the hypothetically completed development needs to be carried out. Even if there were consensus on what the development would be, there still might be differences on what the development would be worth. If there are different opinions on the capital value of the development when completed, the final residual value of the site would be different. This difference would be further compounded as after the

value of the hypothetical development is assessed, a whole range of development costs needs to be estimated. This opens the room for variations. Although there may be market norms, for example, current cost of construction, professional scale of fees, market interest rate and so on, different valuers may adopt different rates which are peculiar to their set of circumstances. The residual method therefore has a heavy dose of subjectivity. Given that deviations in the final valuation are to be expected, it is not surprising that the method cannot be accepted as evidence in the court of law.

*e. Profits*

In the profits method, there are also a number of areas in which subjectivity can arise. The first is in arriving at the net maintainable profit. Usually, profit and loss accounts of businesses are difficult to obtain because of their confidentiality nature. How the set of figures is derived may also not be clear and as such, subjective interpretations may be necessary to arrive at a reasonable estimate of net profit. The second is the item commonly known as tenant's share. This is the amount estimated to be accruable to the operator for his effort and entrepreneurship. Again, while there may be market yardsticks, obviously, it would be difficult to account for all the differences and peculiarities of individual companies and businesses.

#### **Approaches Towards Objectivity**

There are therefore some elements of subjectivity in all the five valuation methods. As a result, there has been a contention that valuers are not doing enough in developing more "scientific" methods which can withstand the criticisms of subjectivity. Proponents of this allegation often point to the development in the financial markets and how analysts have evolved more sophisticated techniques for investment analysis. Such arguments ignore two fundamental issues regarding property valuation. First, an interest in property, for which a valuation is done, has characteristics which are fundamentally different from those of a financial investment. These characteristics include the heterogeneity of property interests, the lumpiness of property as an investment, the long transaction time required, the presence of an agglomeration of sub-markets rather than a central market and the imperfections of the property market.



While some of these characteristics can change as a result of financial innovations such as the securitisation and unitisation of property, this will take time to evolve and become accepted. Until such a time, there will still be a need to look at property differently and use the existing methods to value it. However, this is not to say that the valuation discipline has remained stagnant all these years and that the methods have not changed. On the contrary, developments in valuation methodology have taken place, partly in response to the criticisms and partly as a result of the changing market place. This is the second aspect which tends to be overlooked.

As discussed previously, the income method has witnessed substantial changes in the last two decades. Much of this change has helped to reduce the need to make arbitrary adjustments, particularly to the rate of discount. The decomposition of the property yield into an equated yield component and a growth component has been a significant development in the income method. The equated yield, which reflects the return for the risks associated with the property, can, in principle, be compared with the rates of return for other investments with different risk profiles. The growth component can also be better gauged with econometric forecasting. This explicit treatment to the cashflows and the discount rate not only helps to rationalise the valuation but also reduces the onus on the valuer to make subjective adjustments.

For the direct comparison method, various approaches have been suggested to overcome the problem of subjectivity, including the application of multiple regression analysis, as early as the sixties. Regression analysis seeks to measure the factors which affect value. By analysing large quantity of transactions, an equation can be derived to predict the value of a property or the dependent variable given the values of a set of factors or independent variables. The equation will provide the beta coefficients of the independent variables which represent the adjustments to be made to the factors. This will then remove the need for the valuer to make adjustments. Besides, the same equation can then be used for valuing other properties. This has therefore great appeal for public sector valuations. Indeed, government valuation departments in many countries have adopted the multiple regression technique or similar techniques to carry out their large number of valuations. There are, however,

a number of limitations, including the amount of data required (even for a single valuation), which have prevented it from being widely adopted for routine valuations.

With the growing influence of information technology, the idea of developing computers and computer programs to do valuations has also been introduced. This will remove the need for subjective adjustments, and in fact, remove the need for the valuer altogether. Expert systems and fuzzy theory applications are two examples. However, the limitations are at present still overwhelming for these approaches to be incorporated into the day-to-day valuation practice.

Nevertheless, information technology itself has brought about much positive impact on valuation. Compared to the past, valuers are now better equipped with more up-to-date information and technology. This has to some extent mitigate the problem of subjectivity since part of the problem was the lack of data, especially timely data. More information can also help to establish indices and trends. Such improved information would certainly be a fillip to the valuation profession.

The power of computers has also allowed the introduction of more sophisticated techniques to enhance valuation. In residual valuations, for example, sensitivity analysis and simulation can now be incorporated. This will help to provide the valuer and the client a better picture of the valuation. In this sense, the subjective element can be accounted for.

### **Conclusion**

The discussion has highlighted the problem of subjectivity in all the valuation techniques used in practice. While this has provided fodder for criticism, much developments have taken place to enhance the objectivity of valuation. However, as long as property valuations are still carried out within the present context of the market and its attendant characteristics, some amount of subjectivity will remain. Valuation is, after all, both a science as well as an art.