

REAL PROPERTY VALUATION METHODS

Introduction

Valuation of a property may be prepared by different methods. The appropriate application of a method of valuation depends on the nature of the property as well as availability of reliable data. When the value arrived at by different methods are wide apart and judgment cannot fix with reasonable certainty which out of them is close to the more accurate market value, an average of two or more than two methods of valuation is applicable.

Definitions

Real estate appraisal, property valuation or land valuation is the practice of developing an opinion of the value of real property, usually its Market Value. The need for appraisals arises from the heterogeneous nature of property as an investment class: no two properties are identical, and all properties differ from each other in their location - which is one of the most important determinants of their value. So there cannot exist a centralized Walrasian auction setting for the trading of property assets, as there exists for trade in corporate stock. The absence of a market-based pricing mechanism determines the need for an expert appraisal/valuation of real estate/property.

Market value:

Market value of a property is the value at which it can be sold in the open market at a particular time. On the open market: means the property is offered for sale by advertising in newspapers and all necessary steps are adopted so that every person who desires to purchase the same can make an offer. The owner willing and not obliged to sell might reasonably expect the price from a willing purchaser with whom he was bargaining for the sale. So, Market value must be free from forced value or sentimental value. It is the estimated amount for which a property should exchange on the date of valuation.

1. Comparable prices method

The method proposes a valuation of properties considering prices of other similar properties in the same location and approximately with the same characteristics within a specific period of

time which is naturally short. The comparison is mainly based on: the location, architectural design, use, dimensions (mainly floor area), construction materials, structural design and construction technology.

Procedure:

The central task is to systematically collect data on comparable properties. Basically, the factors influencing value have to be weighed against each other. Transaction characteristics like date of transaction, means of payment and transaction speed together with comparison factors (referred to above) are of high consideration.

The best way to compare property would obviously be to inspect it in person. Since this option is very time consuming and not always possible, the next best solution is to search property transaction database. An ideal database will contain information relating to transaction date, price paid, property features and size etc. The Institute of Real Property Valuers in Rwanda (IRPV) shall provide the database.

Steps in the sales comparison approach

1. Research the market to obtain information pertaining to sales, listings, pending sales that are similar to the subject property.
2. Investigate the market data to determine whether they are factually correct and accurate.
3. Determine relevant units of comparison (e.g., sales price per square meter), and develop a comparative analysis for each.
4. Compare the subject and comparable sales according to the factors of comparison and adjust as appropriate.
5. Reconcile the multiple value indications that result from the adjustment of the comparable sales into a single value indication.

Advantages of the method:

- ✓ It is the most easy and straightforward and more practical for residential housing market;
- ✓ It leads to an objective valuation being on the property. The outcome is connected to the actual market value as opposed to an individual's preferences.

Disadvantages:

- ✓ Sometimes it might be difficult to locate enough similar property transactions to draw meaningful conclusions with regards to what the value should be;
- ✓ Market value and price might differ due to “unreasonable” actions by other actors;
- ✓ This technique makes no reference to intrinsic value. If a property’s price is reasonable on a comparable basis, it does not necessarily follow that this is reasonable buying or selling price for an individual.

2. Comparison of land values countrywide as an alternative land valuation methods

Where comparable prices are not available for land in a particular area, the valuer may use comparable prices of similarly classified land from other areas of the country. Prices shall vary depending on the quality and location of the land. The valuer shall fulfill his/her valuation duties governing the valuation profession and the council.

The method considers widely the land properties. The following factors govern the comparison: location, dimensions, geometrical shape, basic infrastructures within the environment, frontage and/or turn frontage, landscape and geological & geotechnical soil properties. The method works for land valuation.

The same advantages and disadvantages as for the Comparable prices method are also considered.

3. Replacement cost approach as an alternative valuation method for improvement

The method estimates the replacement value of a property by analyzing the cost component of the specific land and building. It lies somewhere between the inferred and the intrinsic methods, and is not a fully autonomous method. Value is calculated by adding the free market value of the land as if vacant to the reconstruction cost of the building, minus depreciation suffered over the years in comparison to a new building.

Procedure

1. Estimate the value of the land as if vacant, by comparing it to similar properties;

2. Estimate the replacement cost of the building at present. Factors to be considered include site preparation, utilities, types of building improvements, tenant improvements, and soft costs;
3. Assess the depreciation that has occurred to the building and deduct the figure from the replacement cost new;
4. Add the estimated worth of the land. The resulting figure will be an indication of the value of the property.

Advantages

- ✓ The method sets the value at the actual price of the property.

Disadvantages

- ✓ Relies upon other valuation methods to derive the value of the land;
- ✓ Neglects the difference between cost and value, namely that one property might be cheaper than another but generate a much higher net income.

Important Note

Depreciation is the loss in the value of the property due to its use, life, wear, tear, decay and obsolescence. This is an assessment of the physical wear and tear of the building or property and is naturally dependent on its original condition, quality of maintenance and model of use. Thus the value of a building or a property (but not land) decreases gradually up to the utility period due to depreciation.

Depreciation can be calculated by using different methods as follows:

a. Straight line method:

In this method the property is assumed to lose value by a constant amount every year, and thus a fixed amount of original cost is written off every year so that at the end of the term when the asset is worn out, only the scrap value remains.

$$\text{Annual depreciation} = \frac{\text{original cost} - \text{scrap value}}{\text{Number of years}}$$

Scrap value: Scrap value is the value of dismantled materials of a property at the end of its utility period, and absolutely useless except for sale as scrap. When it has applied to an old

building which has outlived its useful span of life and repairing for reuse is not available, a certain amount can be got by selling the old useful materials like bricks, steel, wooden articles, etc, less cost of demolition of the buildings. Scrap value is also known as junk value or demolition value, and on rare occasions scrap value may be zero or negative.

b. Constant percentage method or Declining balance method

In this method the property is assumed to lose value annually at a constant percentage of its value (book value).

Book value: book value is defined as the value of the property shown in account book in that particular year, i.e the original cost less the total depreciation till that year. Thus the book value gradually reduces at a constant amount year after year up to the limit of scrap value i.e up to its utility period. Book value is applicable on building and movable properties but not on land. This is usually required in the accounts book of a company to show the assets and also required to determine the reserved price for court sale.

Let p =percentage rate of annual depreciation for the constant percentage method expressed in decimal.

C =Original cost; S_c =Scrap value; n =life of the property in years.

V_i = value of the property at year i

$$V_1 = C(1 - p)$$

$$V_2 = \{C(1 - p)\}(1 - p) = C(1 - p)^2$$

$$V_3 = \{\{C(1 - p)\}(1 - p)\}(1 - p) = C(1 - p)^3$$

Hence, at the end of n years value of the property becomes ultimately the scrap value the scrap value.

$$S_c = C(1 - p)^n$$

$$\text{Then } p = 1 - \left(\frac{S_c}{C}\right)^{\frac{1}{n}}$$

c. Quantity survey method

In this method, the property is studied in details and extent of physical deterioration worked out in an endeavor to calculate depreciation.

4. Use of multiple valuation methods

It is a combination of methods depending upon the nature of property. One shall choose from the methods above to see which methods will be combined for a specific case.

There is a number of other methods used worldwide and which may be used also in Rwanda. Valuers will be authorised to use them after necessary discussions are made on them, proposed to and approved by the Regulatory Council of the valuation profession.

References:

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