#### Sabina Źróbek\*

# Market Value and Cost Value in Valuation Theory and Practice

#### 1. Introduction

The purpose of real estate valuation is to assess the value and is strictly connected with the particular client's needs, i.e. sale or credit insurance. Therefore the value is assessed by licensed valuer (or other entitled unit) but the purpose of the valuation is formulated by the client. Thus it is very important to know the client's needs to decide whether solving the problem requires making the valuation in accordance to legal rules and professional standards or to procedures designed for assessing mortgage lending value, what means making the expertise. In other cases it can be just property consulting. The type of resulting value must be clearly defined in contract between valuer and client. Nowadays, the number of contracts has been steadily increasing and unfortunately followed by increasing number of disagreements directed to the teams giving opinions on value statements. This tendency underlines the need to intensify the activities directed towards minimizing the risk of loss suffered by clients and suing authors of valuation reports.

Many various real estate market participants, i.e. buyers, sellers, tenants, agents, creditors, tax authorities, and financial institutions, are financially interested in valuation outcome, thus often tend to affect the valuation result to achieve own advantages. These tendencies can be the sufficiently important reasons for naming and defining different value categories both in legal rules and professional standards.

Many categories of value can be found in real estate valuation theory and practice. Progressing globalization caused the urgent need for defining them not only inside particular countries, but also in the international arena. The condition for proper activities undertaken on real estate markets is not only knowing the value of given component of asset, but also proper understanding of given value concept.

<sup>\*</sup> Department of Land Management and Regional Development, Faculty of Geodesy and Land Management, University of Warmia and Mazury, Olsztyn

### The Interpretation of terms: Bases of Value and Basis of Valuation

Valuation professionals should distinguish between two essential concepts, which are defined in International and European Valuation Standards: "bases of value" and "basis of valuation".

The term "bases of value" relates to fundamental measurement principles of a valuation on a specific date. The most often required valuation base is market value, but in legal rules and professional standards other than market values are also explained. Valuation base does not mean used method or the description of assets' condition on the moment of valuation.

However, the term "basis of valuation" (or "valuation approach") is used to describe the method which can be applied to valuation on the basis of available data. The examples of basis of valuation (approaches) consistent with legal rules and professional standards are: comparison, income and cost approach.

According to *International Valuation Standards* (IVS), i.e. depreciated replacement cost method means applying cost approach to assess the value of specialized assets for financial reports, especially when access to direct market data is limited. For this reason also in *European Valuation Standards* (EVS), despite putting this term on the list of value other than market value, the interpretations of this definition state that it is rather the base for valuation than distinct value. In common use the cost approach, depreciated replacement cost, asset value or contractor's method are treated as synonyms.

It can be noticed that both in IVS and EVS the term "replacement value" is not used for defining the bases of value, which is defined in the *Act on Real Estate Management*. According to the literature, in some countries this term can be used for special purposes (i.e. in Germany and Sweden to insurance purposes of construction units).

# 3. Market Value as the Most Important Bases of Value

Market value is the most fundamental value base used for valuation in market economies. Although the definitions in particular countries can vary in details, it is commonly agreed that market value is the result of objective observations and analysis of market participants' behaviours. In Poland this kind of value has been defined in the *Act on Real Estate Management* in the following way:

real estate market value means the most probable market price resulting from analysis of transactional prices, assuming that:

- 1) parties of transactions were entirely independent of one another, acted without compulsion and were willing to draw up an agreement;
- 2) time necessary to expose the real estate on the market and to negotiate the agreement had passed (proper marketing).

For the purpose of gradual adjusting the definition used in Poland to definitions written down in IVS and EVS, and also to standardize these fundamental principles of real estate value interpretation used in National Basic Valuation Standard 1 (NBVS) "market value and cost value", two definitions of market value were written down – one adjusted to International and European valuation standards, and the second one, cited above, from the *Act on Real Estate Management*. Moreover, the interpretation of particular components of this definition was adjusted to interpretation presented in IVS. There is stated, that valuers should apply, if legal regulations are not against, the following definition of market value: "Market Value is the estimated amount for which a property should exchange on the date of valuation between a willing buyer and a willing seller in an arm's-length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently, and without compulsion" (IVS 1 – Market Value Basis of Valuation). The same definition is accepted by TEGoVA and placed in EVS 1 Market Value.

It should be underlined, that assessing market value with the use of the highest and best (optimal) way of use is the fundamental assumption for market value concept.

Other important assumptions for market value concept include i.e. that:

- described value is equal to estimated (expected and the most probable)
   price, which can result from hypothetical transaction on the date of valuation;
- valuation date means the date, when value was assessed (it cannot be after the date of the report, exceptionally can be earlier); thus market value cannot be treated as long-term value, which is demanded by banks and financial institutions;
- buyer and seller as hypothetical parties of transactions were entirely independent of one another, acted without compulsion and were willing to draw up an agreement; thus the valuation client does not have any influence on its assessment;
- property was properly and sufficiently exposed on the market, and time of exposure foregoes the valuation date. This condition can be omitted in special cases, i.e. when credited party acted under pressure.

It should be added here, that national legal regulations, European Union directives and professional standards allow for particular specific purposes to take

into consideration specific factors, i.e. transaction costs, VAT or current way of use. These possibilities can be found in market value definitions in European Union and European Economic Area law (EVS 1).

To assess market value the valuer should first define the best use or the most probable use of property. This use can be simple continuation of previous use or the alternative one. According to IVS, the way of use should be chosen on the base of market information, and the most common methods of assessing market value are sales comparison approach, income approach (income capitalization) including discounted cash flows analysis (income flows) and cost approach. In NBVS 1 is also stated, that way of use can be also determined by the purpose of valuation. This record is important for the valuation practice in Poland, because many official decisions are made in connection with real estate market value assessed i.e. with assuming its current way of use. Whereas according to *Act on Real Estate Management*, market value can be assessed with application of comparison approach, or conditionally mixed approach, because the result of cost approach is also real estate reconstruction value.

# 4. Cost or Reconstruction Value – Bases of Value or Basis of Valuation?

According to the *Act on Real Estate Management*: "real estate reconstruction value is equal to the costs of its reconstruction with taking into consideration the depreciation".

In NBVS 1 Market value and cost value, real estate reconstruction value is defined as "assessed amount equal to the total cost of land purchase and its components after taking into consideration accumulated depreciation, assuming that this cost was covered on the day of valuation".

In the view of above presented analysis of International and European Valuation Standard the term "reconstruction value" does not mean individual value base. However, it can be treated as important base for assessing market value or other than market values, i.e. individual, fair or mortgage lending value. Data availability determines which valuation method is most relevant and appropriate.

This is the reason why authors of standards and real estate valuation handbooks focus rather on presentation of cost approach procedures as the basis for valuation using typical for this approach substitution rule.

In IVS cost approach is defined as comparison method, which takes into consideration the possibility that as the alternative for purchasing particular component of the modern equivalent asset with the same utility can be bought. But there

are some restrictions – the time, inconvenience, risk and price, which would be paid for asset component wich is assessed, cannot be higher than cost of modern equivalent.

In this approach value is assessed through estimating the cost of land purchase and building new object with the same utility or adapting old object, not including additional expenditures caused by lag. Regarding older asset's components some adjustments must be introduced that take into consideration different kinds of depreciation (physical deterioration, functional, economic or external obsolescence) to assess value which is near to market value (IVS – Interpretation Note Number 1). Data used in valuation procedure relates to costs of building or development, and adjustments are also introduced in the case of qualitative or quantitative differences and real estate usefulness as a whole or its parts. Additionally, the analysis of comparison data relating to land and deprecition is conducted.

Estimation of the level of depreciation is the duty of the valuer. In Interpretation Note number 3 "Application of cost approach in real estate valuation", the particular kinds of depreciation are defined as following:

- Physical deterioration means of object's wear and tear over time caused mainly by lack of maintenance, influence of atmospheric conditions and way of use.
- Functional obsolescence means deterioration of object's utilitarian features comparing to objects with similar function on the adequate market caused mainly by not fulfilling the demands of current users, norms or technical conditions.
- External obsolescence means the deterioration of ability to fulfill assumed function of property as the result of external factors' influence, especially changes in direct or economic surroundings, worse access to raw materials.

Some kinds of depreciation can be correlated, and then the analysis should be conducted jointly. To estimate the influence of depreciation on buyers' decisions (prices) the valuers should collect and analyse, using comparison techniques, data concerning reconstruction costs or replacing property's components and the level of market value assessed for the same day. To estimate the rate of depreciation the income capitalization techniques can be also applied. It is the critical moment in the procedures of using cost approach to assess market value. It is underlined in NBVS 1 "market value and cost value" by the record, that in special cases, after taking into consideration the type of property and real estate market conditions, the reconstruction value assessed with cost approach can be used for the same purposes as in the case of market value. But there is a restriction, that realization of methods and procedures designed for this approach must be based on data and

market relations, both for assessing market value of the land and cost of building including current depreciation.

According to the same standard, using cost approach to assess reconstruction value instead of market value requires specific justification. It should be indicated in valuation report that the result of valuation is reconstruction value. Moreover, assumed legal conditions, other assumptions for valuation and particular data should be presented.

Once more, for gradual adjusting valuation method used in Poland and in international arena, in NBVS 1 recorded that:

in special cases after taking into consideration the type of property, valuation purpose and real estate market conditions, reconstruction value resulting from cost approach can be the substitute for market value if realization of methods and procedures designed for this approach is based on market data, both in relation to market value of land and cost of building including accumulated depreciation.

# 5. Summary

Literature review enables to formulate the conclusion that real estate value assessment regardless of applied approach is made through realization of procedures comparing assessed property with other comparable properties.

In this context the thesis can be advanced that each approach to real estate valuation is in fact kind of market approach. Proper determination of bases of value depends on quantity and quality of data collected from real estate market and its skillful interpretation. Established in theory and practice rules of market value assessment basing on prices and incomes (comparison and income approach) do not raise arguments nowadays. The discussion is raised, especially in Poland, over proposal to legal ability to describe this bases of value also with cost approach.

In the cost approach there is theoretically assumed that land and its components operate separately. This type of approach is based on substitution principle and assumes that any buyer will pay more for property than the total value of land and the cost of building objects and structures. Therefore, nobody will buy or lease old buildings if is able to build new objects in more efficient system for the same price.

However, in many cases, time necessary to build new objects restrains potential buyer from building when there are properties available on the market for slightly higher prices. In such situation, the buyers prefer to pay additional money for completed buildings. Therefore, already mentioned substitution principle can

have only limited influence on equalizing cost value (understood according to Polish legal regulations) and market value. It is underlined in majority of elaborates, that value resulting from cost approach is more probable than from other approaches, especially when there is insufficient amount of proper market data to establish reliable correctional adjustments.

It should be taken into consideration that in cost approach value of land and its components including depreciation are assessed separately, what can result in [6]:

- overestimation of real estate value that derives from insufficient skills to apply fundamental concept of real estate valuation – highest and best way of use, which should be differently understood for developed and undeveloped land;
- weak documentation and justification of estimated depreciation rate deriving from the fact, that methods practically used in cost approach are not up-to-date, although there is significant progress in valuation theories and application of modern technologies to collect and process data; it concerns especially assessing depreciation, known as accumulated depreciation;
- overestimation of construction objects' value in the case of existing excess, what results also from insufficient awareness and ability to estimate functional obsolescence.

The analysis of construction market indicates that expenditures on materials and labour are more stable and less prone to change then real estate market prices. It is underlined that the risk of unsuccessful valuations made with the use of cost approach, therefore also reconstruction value, increases with fast changes on the financial markets. Relying on cost of building and land purchase leads to essential differences between values resulting from comparison and cost approach. Here is the important role of the valuer – to estimate properly the rate of depreciation, especially the external obsolescence.

On the other side, cost approach and reconstruction value can be the alternative to internal analysis conducted by institutions financing property improvements; where as the base of analysis is assumed i.e. return rate on investment realization costs and calculation of minimal rent for object which allow to pay back long-term credit. If the result of calculations is equal to or lower than market rent, that means that real estate guarantees that total costs of credited investment are not overestimated. Reconstruction value can be also used as point of reference to value received from the use of other approaches, and in the case of large divergence can indicate the necessity of checking out the valuation process or revising the level of development costs in projects' financial feasibility study [7].

To sum up – market value and cost (reconstruction) value, assessed on the base of sufficient amount of reliable market data and with skillful calculation of various factors' influence, including all kinds of depreciation, on prices set on the real estate market, can be useful both for the needs of banks and financial institutions.

It should be also reminded, that these institutions often need the knowledge not only about real estate value, but also about the factors influencing it. In this aspect the cost approach should not be eliminated from valuation methods, but rather as fast as possible introduced to practice the principles necessary for its proper use.

#### References

- [1] Ustawa z dnia 21 sierpnia 1997 roku o gospodarce nieruchomościami [Act from 21<sup>th</sup> August 1997 on Real Estate Management]. Dz. U. z 1997 r. Nr 115, poz. 741.
- [2] Powszechne Krajowe Zasady Wyceny [Common National Valuation Standards]. PFSRM, 2009.
- [3] European Valuation Standards. 6th edition. TEGoVA, 2009.
- [4] International Valuation Standards. 8th edition. IVSC, 2007.
- [5] Krajowy Standard Podstawowy 1. Wartość rynkowa i wartość odtworzeniowa [National Basic Valuation Standard 1. Market value and cost value]. PFSRM, 2008.
- [6] The student Handbook to the Appraisal of real estate. 13th edition. Appraisal Institute, 2009
- [7] Rees W.H., Hayward R.E.H. (eds): *Valuation: Principles into Practice*. 5<sup>th</sup> edition. Estates Gazette, 2001.