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INDIVIDUAL EVALUATION OF THE PROPERTY

Abstract

In theory of evaluation the assessed market value is understood as the most probable price of the deal, which the evaluator aims to identify. It is a compromise between price of supply and demand. Known approaches of evaluation mainly are oriented towards to price of suplly or the price of demand. To simulate this compromise within individual assessment of residential real estate appraiser must apply the methods of different approaches and approach to the possible price of the deal, ie to market value, harmonizing the gotten results. Evaluation of residential real estate represents a reasoned opinion by a third party about the market value of housing. Purpose of the article - to identify and calculate the market value of housing (three room apartment), using a comparative approach.

Keywords: market value, the comparative approach, an individual evaluation.

The evaluation of the market value of the object is defined as the most probable price at which the object evaluation may be alienated in the open market of competition, when the parties of the deal are reasonable, having all the necessary information, and any extraordinary circumstances does not reflect the value of the deal price.

In all cases, market value is understood as the value of the property, estimated by excluding buy-sell deal and related taxes.

The concept of highest and best use is inherent in the content of determining the market value. The cost of the property at the best and most effective use is maximum and corresponds to market value.

Market value by definition does not depend on the actual deal price, which was held at the valuation date, but is a calculated price, which is expected to be achieved in a deal at the valuation date in market conditions, which is relevant for definition of market value.

Market value - the price at which buyer and seller will converge at a certain time considering the conditions of defination of market value, assuming that each of them had enough time to explore other market opportunities and alternatives. While the time, which may be required for the preparation of contracts and related documentation, is not taken into account.

Thus, the interpretation of market value in sphere of property evaluation reflects the different perceptions and assumptions about the market and the nature of value.

Market value is basically a simple concept. It is an objective value, created by the collective "role models" (patterns) of market. Determining of market value, however, are contradictory. Controversy on this subject are continuing and are reduced mainly to a rather subtle distinctions.

Value, which is affected by the crediting and leasing, may be the market value, because it was created as a result of the collective market. At the same time when for getting the value of object is used price comparable of deal the deal price should normally reflect typical market conditions or should be adjusted to reflect the price of cash equivalents.

Market value is fundamental in the job of appraisers, and its determination is the goal of most of evaluations. Professional appraisers recognize that in the normal course of commerce specific amount depends on the customs charges and conditions of the economic environment, while in the practice of law price may depend on the legislation or decisions of court.

It is known that the prices of a market where supply and demand are in equilibrium (theoretical value), will differ significantly from the prices of the market, where supply and demand are not balanced. When the market is extremely active, prices rise above the normal or "true»(intrinsic), as many believe, level.

In all cases, the market value - a price that is in the market. "True" value is considered by some practitioners and theorists as having no meaning to be applied to market value. Despite differences of opinion about certain aspects of the definition of market value, it is believed that the market value derives from the totality of value-making of market participants, rather than individual decisions. The basis of market value are objective actions of all participants of market.

The concept of market value assumes that the price achieves through negotiations on an open and competitive market. This circumstance is the reason why periodically is used the adjective "open" before the words "market value»(open market value).

The words "open" and "competitive" are relative. The market for the same property can be both international and local, may consist of a large number of buyers and sellers and may be characterized by sharply limited number of participants. A market in which property is put up for sale should not be considered like narrow or limited. In other words, the lack of definition of the word "open" does not mean that considered deals are closed or may be private.

It is also important to emphasize the distinction between "price" and "value".

Often identification is of "price", "value" and "costs ". Indeed, in calculation of prices on the basis of cost is the oldest and most traditional pricing strategy. Nowadays pricing based on costs is an outdated strategy.

There are made the following distinctions between the concepts of value, cost and price in the western theory of evaluation:

The value - a measure of how much the buyer (investor) will be willing to pay for the assessed property. According to international standards of assessment: "value - is not a fact, but the most probable estimated price that will be paid at this time for the goods or services which are for sale".

Costs - a measure of the cost required to create an object similar to that evaluated. These costs may not differ from the amount that would be willing to pay a prospective buyer. Depending on several factors, including the buyer's needs, the availability of equivalent facilities and the activity of other customers, these costs may be higher or lower than value on the valuation date.

The term "price " is often used as a synonym for the value of the exchange, although these are different concepts. Price is usually understood as a certain amount of money transferred by the buyer to the seller in exchange for a object in the real or perceived deal. In each specific deal price is determined by two judgments of specific individuals, while the value in exchange (market value) – it is an evaluation of objects by the market. At the same value object can be sold for a variety of prices.

Thus, the value and price are equal only in a perfect market. The value applied to the property represents the expected price.

Valuation of market value is determined by the kind of "thought experiment" conducted by an appraiser - hypothetical fair deal, carried out under the conditions, set out in the definition of market value. (Оценка.., 1998: 384 с).

Market price, as it often happens in reality, can be established as a result of someone's whim or despair, someone's carelessness or ignorance, an abnormal pressure or social ambition, selfishness or other manifestations of feelings, and many other factors. The market value is hypothetical or estimated value of the purchase price, which would be the result of careful consideration by the buyer and seller of all information relating to this deal. The definition of "market value" is closely related to prevailing competition type in the market. (.Эккерта Дж.К, 1997.).

As in other pricing mechanism, the price of each buy-sale deal of real estate is defined by a set of diverse factors.

At the first level of classification, they can be divided into objective and subjective factors. At a certain conventionality of this division, it groups the factors in dependent and independent of the individual participant of concrete deal.

In determining market value, there are considered only the objective factors. It should be noticed, that subjective factors are related to the behavior of a concrete buyer, seller or broker settling the transaction, which is not defined directly by the economic conditions (temperament, knowledge, honesty, patience, trust, personal likes and dislikes, etc.). Analysis of these factors, related to the field of psychology, not economics, beyond the scope of the assessment.

The evaluation process is expected that they correspond to the average (typical) level in the market.

Objective factors mostly are economic, determining ultimately the average price of specific transactions. But the price of each particular transaction is under the influence of other factors and is a kind of a random variable that fluctuates around this average level. That`s, economic theory argues that the value - it is the law that explains the movement of specific prices.

The definition of "market value" does not imply any kind a particular seller or buyer of a particular property being evaluated. This is about hypothetical transaction between a typical seller and buyer of a typical - imaginary representative participants of market, whose views and judgments are typical for most real-world market participants, where the transaction is taking place.

Appraiser as a professional with specialized skills and knowledge, has to be able to conduct a deeper analysis than the typical market participants. Accordingly, his conclusions about the "right" or "fair" price may differ on how the cost is estimated by the market. The market may, according to the appraiser`s point of view, "be wrong"; underestimate or overestimate the value of the property. Nevertheless, the market value is determined by the market and not by the appraiser, in respect to is the market "right" or "wrong" from the perspective of the appraiser.

Consequently, estimating the market value, the assessor should in his "thought experiment" think and act in a way to adequately simulate the thoughts and actions of a typical market participant, who is buying or selling the evaluated property. If the appraiser will be guided by his own views and opinions, he won`t get market value, but something quite different - the one value that would become market if the market consisted mainly of professionals, like appraiser or, if the majority of market participants in determining the transaction price would have turned for help and advice to such professionals (which is much more real in the future).

The process of evaluation - a sequence of actions performed in the course of determining the market value of residential property. Usually it consists of eight stages.

Let`s discuss the most important stages of valuation of residential property.

Point "identification of the object" of the first stage of the evaluation contains the following information: address, type of object, estimated rights to object, geographically - the economic zone on the territory on which the object is located. Note, that we are interested in the following types of residential real estate: apartment in a mansion, residential house for the one or several hosts.

The next component of the stage "problem statement" - is "purpose of the evaluation". The purpose of evaluation is to determine the market value of the object.

The fourth stage - "the definition of variant that will be most effective in use". As much as the object of evaluation can be either flat or house, the best use is accepted a use as a housing without consideration of other options.

The fifth stage – “the valuation of the land” takes place when a house is assessed for one or several hosts.

The sixth stage - "the valuation of the object". Since year 1910 three main approaches of estimating market value - cost, income and comparative - were identified in the literature.

Thus, in the sixth stage of the individual assessment of residential real estate appraiser has choice: the first, the evaluation approach, the second, the evaluation method.

It should be noted that none of the three approaches, which are commonly used in assessing the value of the property, does not fully reflect the distribution of supply and demand, but they all require the presence of market information. Let`s consider a real estate appraisal using a comparative approach.

Comparative approach based on the actual sales prices of similar properties, when cross demand and supply curves. Deals, which are executed on the open market in a competitive environment, where buyers and sellers are well informed and are not dependent of each other, are a good guide of the price at which similar property could be sold. Amendment of the sales price of real estate provides a comparable consideration of differences between them. Sale prices of analogue with amendments, will reflect the price for which would a valued property be sold to at typical market conditions. They take into account the interaction and balance of supply and demand.

Comparative approach works best when comparable properties sold frequently, and there are enough reliable market information about properties-analogues. In the United states of America this approach is widely used in the valuation of residential single-family homes and undeveloped land, and sometimes in the assessment of apartment buildings and commercial properties. Markets where is high level of competition generate selling prices reflecting the true market value of the goods. In markets with low level of competition prices likely reflect the value of invested capital or use-value. (Эккерта Дж.К., 1997).

Approach to evaluation from the point of view of sales comparison is based on direct comparison of estimated object with other properties that were sold or included in the register for sale. The market value of property is determined by the price paid by the typical buyer for the same quality and usefulness of the object.

The comparative approach is more active for objects of real estate about which there is sufficient information about recent sales transactions. Any difference of the terms of compared object sale of the typical market conditions at the valuation date should be taken into account in the analysis.

Calculation of market value using a comparative approach in is made in the following order:

1) Selection of information about sale, offer for sale of objects, analogue of evaluated.
2) Selecting of the parameters of the comparison.
3) Comparison of object and analogues using the elements of comparison and adjustment of sales prices to determine the unique value of the property.
4) coordination of data of the analogues and obtaining the estimated value of the object.

On the day of assessment, we had information about the proposals for the sale of eight objects, comparable with the considered, located in Riga, with roughly similar layout of rooms and the same set of utilities. Table 6 shows the main parameters of these objects.

Table 6.

The parameters of objects of residential property in Daugavpils

Street	Floor	Number of floors	Living-space S, m^2	Total space, S, m^2	Toilet facilities	Condition of apartment	Value, LVL
1	5	9	41	64	separated	No data	20800
2	4	7	38	65		Repair is necessary	20100
3	7	9	38,6	63	separated		21300
4	8	8	45,2	67	separated	satisfactory	23654
5	6	7	42	65,2		good	23400
6	6	9	44,5	67,6		Repair is necessary	26321
7	3	5	43,9	68,1	separated		24729
8	5	9	46	70		good	27566

Source: compiled by the author according to unpublished materials of SIA ARCO REAL ESTATE

Theory of evaluation provides sufficient amount of methods for calculating the market value of the object using the application of the approach from point of view of sales comparison. In this case, is applied the method of correlation - regression analysis. He was not chosen by chance, as its mathematical system gives possibility to determine the dependence of the price of the object from several options, including such, whose evaluation is possible only through the expertise, but specific evaluation of the object (in this case of apartment) is that its value affects many factors.

In general, the dependence of the price of the object by its parameters is defined in formula:

$V = f(x1, x2, ..., xn)$, where

V - the price of the object;

x1, x2 ,..., xn - parameters.

The challenge is to find the mathematical expression of the function f by processing the available information about prices and parameters of object-analogues. Steps for constructing a mathematical model of the type of regression is as follows:

1) The choice of parameters, the greatest impact on the price level of the object-analogue.
2) The choice of type of regression equation (the form depending on the price of the parameters).
3) Formation of an array of initial information.
4) Determination of the coefficient of regression equation.
5) Analysis of the got results and checking of the adequacy of the model.
6) Determination of estimation of object value on the basis of the model.

Form the array of initial information indicating the range of dependent and independent parameters. As the basis for determining the coefficients are selected parameters of the object evaluation (see Table 7).

Table 7.

The parameters of objects of residential property in Daugavpils

	Floor(x1)	Living space (x2)	Total space (x3)	Balcony (x4)	District(x5)	Factor of apartment decaration (x6)	Price, LVL (y)
Object	1	36,9	57,2	0,95	1	1	?
1	1	41	64	0,95	1	0,9	20800
2	0,9	38	65	0,9	1,1	0,9	20100

3	0,9	38,6	63	0,9	1	1	21300
4	1	45,2	67	0,95	0,95	1	23654
5	0,95	42	65,2	0,9	0,9	1,1	23400
6	0,9	44,5	67,6	0,9	1	0,9	26321
7	1	43,9	68,1	0,9	0,9	1	24729
8	0,9	46	70	0,95	0,95	1	27566

Source: compiled by the author according to unpublished materials of SIA ARCO REAL ESTATE

To handle the resulting array of data is used the standard function of a linear regression analysis "ЛИНЕЙН", fitted as standard delivery package of data analysis spreadsheet of Microsoft Excel 7.0. This function calculates the statistics for the data series using the least squares method to calculate the straight line that best approximates the data. The function returns an array which describes the resulting line. Equation of a line in the general case is as follows:

$$y=m_1x_1 + m_2x_2 + ...+m_ix_i + b,$$

where *y* - the value of the regression function, *m* - regression coefficient, *x* - the value of the *i-th* factor; *i* - the number of factors; *b* - constant term of regression equation.

The meaning of parameters (factors of regression) x is defined on the basis of expert analysis of real estate market.

Calculations using the function of " ЛИНЕЙН " produced the following results:

b_0 =- 28166; b_1 = 475; b_2 = 240; b_3 = - 3496; b_4 = -25083; b_5 = -11250; b_6 = 52653.

Model to determine the value of the property assessment is as follows:

$V = -28166 \cdot Ф_1 - 475 \cdot Ф_2 + 240 \cdot Ф_3 - 3496 \cdot Ф_4 - 25083 \cdot Ф_5 - 11250 \cdot Ф_6 + 52653$

where $F_1, F_2, ..., F_6$ -value of the factors .

Substituting the values of the factors, we obtain:

V = -28166*1 + 475*36,9 + 240*57,2 - 3496*0,95 -25083*1 - 11250*1 + 52653

The value of property assessment, obtained through a comparative approach, taking into account the rounding is: **16088 LVL**.

One of the issues of assessment methodologies that significantly affect both the reliability and the speed of estimation, is the question about holding of duplicate payments for each facility, with subsequent comparison of results and elimination of the agreed outcome of the evaluation. Harmonization of evaluation results obtained from different approaches, allows to come out to the following conclusions. The result, which is the closest to the concept of probable market price, is obtained by the methods of the comparative approach. Thus, according to point of view of Kovalev A.P. comparing this result with the result of cost or income approach in the best case doesn`t give much, and the question of how this improves the reliability of estimates is an open question. [Ковалёв А.П. ,2002: с.41].

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ESF EIROPAS SOCIĀLAIS FONDS

EIROPAS SAVIENĪBA

IEGULDĪJUMS TAVĀ NĀKOTNĒ

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