To the issue of weights assigning problem at the stage of assessment results agreement

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Abstract — This article examines the problem of the methodology for obtaining specific weights at the stage of reconciliation of assessment results in order to obtain the final value of the valuation object. The author considers the complexity of forming an objective evaluation result through the definition of the weighting coefficients on the basis of the expert method mainly, which is the most applicable by experts in this sphere, and also the complexity of using other available methods.

Index Terms — valuation of real estate, approaches to assessment, weighting coefficients, specific weights, methods for obtaining weights, reconciliation of assessment results.

1 INTRODUCTION

BEFORE considering and understanding the essence of the problem which is studied in this article, it is necessary to analyze the content of the concept "property assessment" and the essence of application of 3 approaches to assessment.

Real estate cost estimation – process of determination cost of an object or the separate rights concerning a real estate object. Process of determination of cost begins from the moment of preparation of a task for assessment and finishes with formation of the conclusion about total cost.

Estimation of real estate cost usually exists from a position of 3 main approaches:

- Expensive;
- Comparative;
- Profitable.

There are specific techniques within each of three approaches. All of them are applicable for the solution of many tasks for assessment, but first and second approaches, for example, can bring more importance for a concrete task and properties of the estimated object.

For example, expensive approach cannot be suitable for assessment of the old real estate having considerable wear which difficult to measure. In addition, it is not always possible to apply approach of comparative sales to assessment of the specialized real estate in view of lack of enough objects analogs in the market and also lack of comparable data on the found analogs.

Classical approach to assessment requires of all three approaches to be involved in the course of assessment though legislatively the appraiser has the right to refuse application any of approaches with an indispensable condition of an explanation of the reasons of such refusal in the report on assessment.

Thus, use of three approaches leads to obtaining three various sizes of cost of the same object.

2 THE ROLE OF WEIGHTING COEFFICIENTS

At the last evaluation stage, weighting coefficients or specific weights intervenes.

As it was already mentioned, final judgment of the cost of property is taken out based on the analysis of results of all three approaches of determination of object cost of assessment.

In the ideal market all three approaches have to lead to the same size of cost, in practice the determination of size received in the different ways can significantly differ (from 5 to 50% and even more, especially at business assessment).

The foreign expert Joseph Eckert gives the permissible size of such deviation in the work "Property Appraisal and Assessment Administration" for 15 - 20%) [2].

According to the legislation of the Republic of Uzbekistan in the field of real estate assessment, namely to the National standard of assessment No. 10 the divergence of results of assessment at a size more than 30% from the maximum result of assessment any of approaches is considered essential [1].

In the case of one-valued divergence of opinions of various experts on the allowed sizes of this divergence, the way of arrangement of 3 various costs to uniform total value is same.

For aggregation together of the separate values of cost received

by classical approaches to assessment carry out reconciliation of results of assessment.

Reconciliation of results of assessment is an obtaining total project cost of assessment by weighing (through specific weight) and comparisons of the results received with application of various approaches to assessment.

Nevertheless, the single and one-valued recommended for use method of calculation of these weight coefficients is not given in no one normative document. This circumstance is a prerequisite to a possibility of the choice of a way of obtaining specific weights by the expert assessment based on his own judgments.

3 METHODS FOR DETERMINING WEIGHTING COEFFICIENTS

In the evaluation practice, there are certain methods for obtaining weights, the most common of which are the following:

- The method of logical analysis (method of subjective weighing, or, as it is called, expert method);
- The method of analysis of hierarchies (The Analytic Hierarchy Process) [3];
- The method of harmonization by criteria.

All of the above mentioned methods differ in the final harmonization of data by different ways of selecting the weights assigned to the results of the evaluation obtained by different approaches. Solving the question of which value indicators give greater importance and how each approach is weighed against others is key at the final stage of the assessment.

Here lies the main problem considered in this article - due to the lack of elaboration of the methodological base and the absence of clear regulations on the definition and application of weighting coefficients in the final value of the evaluated object, there is a certain amount of distortion.

Of all the methods of finding specific weights in practice, the so-called expert approach is most often used. The main problem of the expert approach is a high degree of subjective perception in the evaluator's views about the estimated cost of the assessed object. At the same time, normative and legal standards of this area of state and world level require objective evaluation results from persons engaged in appraisal activity.

Other methods of determining specific weights are practically not used in practice due to greater complexity.

If, in a subjective weighing, the evaluator relies on his own experience, the hierarchy method is a method of mathematical modeling.

The method of mathematical modeling or weighing represents the problem of matching in the form of hierarchies. For the purpose of harmonizing results, three-level hierarchies are used, which have the following form:

- Top level of evaluation;
- Intermediate level - reconciliation criteria;
- Lower level - evaluation results obtained from different approaches.

The most difficult issue is the definition of the criteria for reconciliation.

The most important criteria determining the applicability of an approach in the assessment are:

- Sufficiency and reliability of information in the evaluation (criterion A);
- The ability of the approach to take into account market conditions (criterion B);
- The ability of the approach to take into account the specific features of the assessment object (criterion C).

The advantages of this method of hierarchies are:

- Using paired comparisons, which simplifies the choice of weighting factors;
- Ability to evaluate and select coefficients taking into account the hierarchy of levels.

The disadvantage of this method is a rather complex process, depending all on the same logical analysis as in the expert approach, which, in turn, related to a subjectivism in the results of assessment.

The method of reconciliation by criteria uses four criteria to determine the weights of different approaches, which describe some of the advantages or disadvantages of the calculation method used, taking into account the specific features of the assessment of a particular object.

Calculation of the weights of the methods used is carried out in several stages:

- A matrix of factors is constructed, in which each approach is assigned four types of scores in accordance with four criteria;
- The sum of the scores of each approach is determined, then the sum by the approaches used;

• With respect to the sum of scores of this approach to the sum of scores of all the approaches used, the estimated weight of the approach in percent is determined;

- The calculated weights of approaches are rounded off.

The advantage of this method is the relative easiness of its application in comparison with the others method, but the disadvantage is all the same, the scoring is based on the experience of the evaluator, that is, in the final result of the assessment, there is a part of subjectivity again.

4 CONCLUSION

Data reconciliation and the final cost estimate is one of the most critical steps in the assessment process, requiring practical experience. In the process of agreement by the evaluator, an analysis of the weight coefficients is made off, which determining the degree of influence of the result obtained by one or another approach to the final result of the evaluation.

The reconciliation of the evaluation results obtained on the basis of different evaluation approaches is the last step in determining the value of the evaluated object. The final result of the valuation is presented in the form of one monetary unit.

The final value is not the average of the arithmetic results of the three evaluation approaches. The importance of each approach is determined by the type of property being valued, the purpose of the assessment, the content of the literature used in the evaluation process, the structure of the assets of the valuation object, and also the extent to which this approach is supported by factual data. The evaluator has the right to abstract from the results of one (or even two) of the approaches, provided that the corresponding explanations of such decision are given in the evaluation report.

It is known from practice that in the process of reconciliation, the main disadvantage of the appraisers is the lack of a properly conducted analysis of the reasons for the considerable discrepancy in the results of the evaluation obtained with the use of different approaches.

Accordingly to the mentioned above, it can be concluded that the problem of competent assignment of weights at the stage of agreement of the results of the assessment is topical and requires the search for its solution at various levels of research activity.

REFERENCES

[1] National standard of assessment of the Republic of Uzbekistan No.10 "Valuation of real estate", 2009

[2] Joseph K Eckert, “Property Appraisal and Assessment Administration”, Chicago, Ill.: International Association of Assessing Officers, ©1990.

[3] Saaty, T.L. (1980) “The Analytic Hierarchy Process”, New York: McGraw Hill. International, Translated to Russian, Portuguese, and Chinese, Revised editions, Paperback (1996, 2000), Pittsburgh: RWS Publications

[4] Estimate of the value of property, - Study Guide, Volume Two. Tashkent, 2010