

Information and methodological support for real estate valuation in the context of economic transformation

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Abstract: The article presents an analysis of the role of information and methodological support for the process of valuation of real estate objects in the general research procedure. In the context of modern regulation of valuation activities in the Russian Federation, the structure and content of general and special federal valuation standards are disclosed, as well as the main problems that have a negative impact on the scope and content of the study aimed at determining the value of assets. It is noted that the issues of the validity of the applied approaches and methods of real estate valuation are closely interconnected with the level of credibility, reliability and sufficiency of external, internal, analytical and regulatory information, on the basis of which various stages of calculating the value of objects are carried out. The proposed solution to the problems of information and methodological support for evaluation studies is aimed at increasing the level of reliability and validity of the final cost of objects. The authors propose a system of price-forming factors and indicators, the consideration of which, when implementing various assessment methods, is necessary in the context of the transformation of the national and regional economy.

Keywords: real estate valuation, pricing factors, valuation activities, real estate market, valuation methods, capital construction projects, liquidity risks

1. Introduction

The development of legislation in the field of construction and land relations, a significant amount of investment directed to the field of new construction, including the development of previously undeveloped territories, as well as the active use of financial instruments in the field of mortgage lending, created conditions for the formation and development of the real estate market. The variety of types of currently existing real estate objects, the composition of the rights transferred at the conclusion of various transactions, the accompanying restrictions and encumbrances leads to different pricing conditions for objects. In this regard, the problem arises of systematizing objects according to the main

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classification criteria with the allocation of general and particular in the system of information and methodological support for the process of determining the value of a real estate object, the solution of which, in the conditions of the progressive development of the market, is the subject of research by various authors [1, 2,3].

As part of solving this problem, much attention should be paid to the development of a standardization system for valuation activities as a separate type of professional activity and the evaluation process as a formalized study aimed at establishing the cost parameters of the object being evaluated [4,5].

Despite numerous attempts to develop an effective system for standardizing the asset valuation process, accompanied by a constant update of the structure and content of federal valuation standards, the global problems of organizing and conducting valuation studies have not been resolved to date:

1. Contrary to the system of self-regulation of valuation activities declared in the legislation of the Russian Federation, in fact, the standards are developed and approved by the Ministry of Economic Development of the Russian Federation - taking into account the opinion of the professional community is formal and does not comply with the principles of self-regulation.
2. The update of the federal valuation standards announced back in April 2022 has not yet been completed - as a result, the new general standards contain methodological provisions that partially contradict the current special valuation standards, including those regulating real estate valuation. At the same time, a system of methodological recommendations on individual special evaluation issues has not yet been created - so far, each SRO of appraisers is forced to use its own developments, which does not allow for uniformity in the methodological approaches used by various specialists.
3. In the analytical space of evaluation, there is no single normalized system of indicators of the real estate market - the terminology and methods for calculating indicators in various studies contradict each other, which leads to ambiguous interpretation and application of data in calculating the value of objects.
4. There is no unified system for monitoring the real estate market based on a common system of indicators - the practice of using various "appraiser's reference books" containing different values of homogeneous indicators leads to conflicting conclusions about the value of objects.
5. Information and methodological support for the process of determining the value in appraisal and forensic activities does not have a unified scientific and methodological base, which leads to a different volume and content of research to determine the value of objects in appraisal and expert studies.
6. In the presence of a mandatory system for passing qualification exams in various areas of valuation activities on the basis of an authorized state institution, there is no educational platform that ensures uniformity in the formation of competencies for asset valuation.

These problems are exacerbated by the economic changes taking place in the country. The economic shock that arose as a result of the COVID-19 pandemic, as foreign policy events develop and sanctions pressure grows, coupled with a change in the structure of the labor market and a restructuring of the system of economic relations of market participants, is undergoing significant changes [6,7]. In this context, new tasks arise to ensure the sustainability of the leading sectors of the economy, which undoubtedly include the construction industry. At the same time, forecasts for the development of the real estate market and the current logic of investors in the field of construction and development are characterized by high uncertainty and instability [8].

In this regard, conducting a study to determine the value of assets provides for high variability - since, along with the traditional understanding of the value of real estate,

market participants begin to perceive the risks associated with the acquisition of an asset and its further use in a different way. Due to the subjectivity of approaches to valuation and the observed economic transformations, the problem arises of forming "typical judgments" of market participants, on the basis of which the assessment of the market value of assets is traditionally carried out. The new conditions for the functioning of the market create prerequisites not only for the development of additional methodological support for the assessment, but also for the improvement of the system for working with market data, which makes it possible to increase the level of reliability of conclusions about the value of objects.

These circumstances determine the relevance of the research topic proposed by the authors.

2. Materials and Methods

The basis of information and methodological support for real estate valuation lies in the system of standardization of valuation activities, which has been developing on the territory of the Russian Federation since 1998, when the federal law "On valuation activities in the Russian Federation" No. FZ-135 of 07/29/1998 was first adopted. Along with the basic terminology, methodological provisions and requirements for the information used in the assessment, federal assessment standards contain a number of organizational and technological requirements for the assessment agreement, the main stages of the assessment and the final document - the assessment report [5].

Thus, it can be argued that the evaluation process in the evaluation activity is regulated in two interrelated areas - organizational and technological and information and methodological. Together with the standards and rules developed by self-regulatory organizations of appraisers, these areas define the basic methodology for appraisal activities, including real estate appraisal. In this case, the present study refers to the direction of information and methodological support.

The objectives of the study are due to the need to develop a system of indicators as part of the information and methodological support of the real estate appraisal process, allowing to take into account the dynamics of the current socio-economic conditions, which are characterized by a high level of uncertainty and additional risks in the field of construction and real estate.

To achieve these goals, the following tasks were solved:

1. The analysis of the structure and content of the current provisions of the federal appraisal standards (FAS) in terms of information and methodological support of the appraisal process was carried out.
2. The structure of the main methods of real estate valuation has been formed in conjunction with generally accepted approaches to valuation, and the main pricing factors (indicators) that require separate accounting in the current economic conditions have been identified.
3. Based on the analysis of the requirements for information support of the real estate appraisal process, provisions and indicators are formulated, the application of which should be based on taking into account the current and forecast indicators of the country's economic development.

Taking into account the goals and objectives of the research, the authors, in fact, presented a modification of the real estate valuation methods provided for by the general federal valuation standard "Approaches and methods of valuation (FAS V)", approved by order of the Ministry of Economic Development of Russia dated April 14, 2022 N200 and a special federal valuation standard "Real Estate Appraisal (FAS №7)", approved by Order of the Ministry of Economic Development of Russia dated September 25, 2014 No. 611. In

our opinion, this will increase the level of reliability and validity of the final cost of the object.

Moving from methodological issues to the problems of information support for the valuation of real estate, according to the authors, the following components of information can be distinguished that have a significant impact on the research process and the final value of the property:

1. *Internal information* on the legal, technical and economic characteristics of the object of assessment (land plot, building, structure or complex of objects).
2. *External information* about the characteristics of the location of the object, its transport accessibility, features of the environment and other parameters that determine the properties of the object being evaluated.
3. *Analytical and reference data* on socio-economic indicators, the state of the construction and real estate market, economic indicators, data on sales of objects in various market segments and others.
4. *Regulatory sources* that combine legal acts in the field of taxation, land use, development of territories and territorial planning, norms and rules in construction, information on the cost of construction of facilities and other.

As part of the federal assessment standard "The Assessment Process (FAS III)", approved by Order of the Ministry of Economic Development of Russia dated April 14, 2022 N 200, the main requirements for working with information provide for the compliance of the information used with the criteria of credibility, reliability, materiality and sufficiency. At the same time, it is allowed to use information received from the customer of the assessment, the copyright holder of the object, experts in the market and the industry to which the object of assessment belongs, as well as from other sources [9]. In the changing conditions of the functioning of the economy, indicators that in one way or another reflect the change in the conditions for the functioning of the object and its value in the market for sale and lease deserve special attention. In turn, the change in the state of the real estate market environment as a product that has a uniquely fixed location is primarily due to the socio-economic conditions in the territory where the object is located, the state of the construction complex, the level of competition in the corresponding market segment and general macroeconomic changes [8,10,11].

As a result of the study, the authors proposed a structure of indicators and reflected the features of accounting for various types of information, the use of which makes it possible to take into account current economic changes in the valuation study and determine the degree of their impact on the value of real estate.

3. Results

Along with the appraisal activities, the tasks of a reasonable determination of the value of real estate are solved by specialists in other types of activities. These include studies to determine the cost of the parameters of objects in the production of forensic examinations (forensic activities) and the so-called "internal assessments" in the structural divisions of credit institutions, corporations, development companies that manage assets and others. Nevertheless, appraisal activity as a specialized type of research, exclusively aimed at determining the cost parameters of objects, is the main activity, for the implementation of which an effective structured system of information and methodological support is required [12,13]. In this regard, we consider the results of the study in conjunction with the content of the FAS, the use of which is mandatory for the subjects of valuation activities [14]. Table 1 presents the structure of the main approaches and methods for real estate valuation, provided by the Federal Security Service, supplemented by the pricing factors proposed by the authors, which are to be taken into account in the valuation process, taking into account

current economic changes. A comprehensive accounting of the factors presented by the authors on the basis of the proposed methods implemented in the process of cost research will allow, in the conditions of operational changes in the real estate market, to the greatest extent possible to provide for all the special conditions characteristic of modern circumstances in which market participants are located.

Table 1. The structure of the main methods of real estate valuation and the composition of additional pricing factors with recommended methods for their accounting

Assessment Method	Composition of additional factors to be taken into account in the new conditions	Ways to take into account additional pricing factors
Comparative approach		
Adjustment method (sales comparison method)	1. Location relative to high-risk areas. 2. The level of investment activity in the region (taking into account the development of new industries and the closure of previous)	Integral location correction based on: 1. Distances to war zones, active climate change, migratory flow zones 2. Change in production volumes and volumes of investments in fixed assets
The rental multiplier method		The data sample for the calculation must be homogeneous in terms of the integral indicator of location
Methods of correlation and regression analysis		
income approach		
Discounted cash flow method	1. The risk of changes in the liquidity of the object 2. Inflation risks 3. Limited set of investment instruments and unstable returns 4. The risk of growing losses from underutilization 5. Unstable key rate 6. The level of state support for the industry	1. Low liquidity risk premiums 2. Inflation forecast based on current operational forecasts 3. Losses from underutilization, taking into account the dynamics of indicators for the last calendar year 4. Application of up-to-date reference information, taking into account the current expectations of market participants
Direct capitalization method		
Capitalization method according to calculation models		
Cost approach		
Method for determining the cost of reproduction	1. Decline in the profitability of developers and investment activity in general 2. Regulation of the mortgage lending market 3. Changing the criteria for the quality of construction and material support 4. Industry changes in the application of the object	1. Decreased business income 2. Economic depreciation of the object as a factor of its location 3. Functional obsolescence when using substitute materials with a decrease in the quality of operation
Replacement cost method		
Orderly liquidation method	The liquidation scenario is determined taking into account	1. Growth of the discount rate

	possible plans for the re-equipment of the facility and its modernization, taking into account the current need.	2. Liquidity and terms of sale of the asset
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Table 2 reflects the structure of information proposed by the authors, which has a significant impact on evaluation research in the context of economic transformations.

Table 2. The structure of information that has a significant impact on evaluation research in the context of economic transformations

Type of information	Composition of information for operational monitoring	Indicators recommended for use
Inside Information	- Is the property offered and rented out. Dynamics of the rental rate for premises for the last 1.5-2 years. - Level and dynamics of occupancy of premises for the last calendar year - The presence of encumbrances and restrictions on the claims of third parties - The technical condition of the object on the date of assessment and the conditions of its maintenance during the last calendar year	- Indicators of the liquidity of the object in the market of sale and lease - Current and projected indicator of profitability and workload of the object - Accounting for registered encumbrances and restrictions - Physical deterioration of the object structures
External Information	The presence of external events and non-standard threats of various types related to the safety of staying directly in the area of the object's location	- Growth in the supply of similar properties against the backdrop of falling demand - Reducing the level of prestige of the area where the object is located
Analytical and reference data	- Macroeconomic indicators - The presence of non-systemic events that are not typical for the region where the facility is located - the closure of enterprises, the activation of new industries, demographic changes, the presence of a high-risk zone, etc. - Change in the level of economic activity, including - budgetary institutions and large companies - Dynamics of indicators of the construction complex of the region	- Use of current analytical and reference data in calculations - with caution when using retrospective information - Accounting in calculations for current and forecast indicators of the market and industries, adjusted for current changes in indicators - Forecasting construction volumes and market capacity, taking into account the current and prospective state of the construction complex
Regulatory sources	- Real estate taxation - Change of territorial planning documents	Results of the state cadastral valuation and conditions for their application

	3. Regulation of pricing in construction 4. Changes in the regulation of certain industries and types of business activities 5. Regulation of the mortgage lending system and implementation of relevant government programs	2. Change in the cost of construction of facilities 3. The level of availability of mortgage lending for various groups of the population, 4. Benefits, payments and other forms of support for market participants
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It should be noted that the indicators proposed by the authors do not contradict the current standards of standardization of valuation activities. However, the recognition of the expediency of their use in research requires the introduction of methodological recommendations at the level of the authorized body for the regulation of valuation activities. And, of course, the application of uniform information and methodological support in related activities, which, as mentioned above, includes forensic activities in terms of cost research, remains an extremely important task [15].

4. Discussion

All the accumulated experience in regulating valuation activities within the legal field, which provides for the introduction and development of a set of norms that simultaneously regulate organizational, methodological and informational provisions of real estate valuation, has not yet led researchers to create mechanisms for harmonizing approaches to the formation of information and methodological support for the valuation process. In this regard, numerous discussions about assessment methods and criteria for the reliability, sufficiency and reliability of the information that forms the basis of the study lead to the presentation in the public space of only private judgments, which, unfortunately, are not brought to generally recognized methodological provisions. Nevertheless, the authors believe that the phased introduction of the proposed forms of adaptation of information and methodological support for real estate valuation to modern economic changes will give push to the development of a new direction of research in this area, which will be reflected in a unified system for regulating research to determine the value of assets.

5. Conclusion

The study conducted by the authors made it possible to solve the main objectives of the study. Based on the analysis of the current provisions of the Federal Security Service in terms of information and methodological support for the valuation process, the main directions for improving the valuation process in terms of indicators that take into account economic transformations that are not provided for by the theory of valuation in the context of the classical understanding of the real estate market are identified. The paper forms the structure of the main methods of real estate valuation in conjunction with generally accepted approaches to valuation with the allocation of additional indicators, the accounting of which allows you to fully anticipate current changes. Also, the problem of developing an information support system for the real estate valuation process based on provisions and indicators interconnected with current and forecast indicators of the country's economic development has been solved.

At the same time, the authors believe that the presented study can form the basis for the development of a unified methodological support for all market participants in determining the value of real estate of various types, unification of reference data based on a common

system of indicators, as well as solving the problem of harmonizing information and methodological support for valuation activities and forensic expertise activities.

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