The New Stage of State Real Estate Cadastre Valuation (in the Russian Federation)

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Abstract. Accurate real estate market data is crucial for decision-making by governments, businesses, and individuals. Without it, costs rise and development of investment and tax policies suffers. In Russia, the state real estate cadastre valuation is the main data source, but its credibility wanes due to errors and delayed updates. This article reviews the 20-year evolution of this system through four stages. The aim of this study is to analyse the problems and shortcomings in conducting cadastre valuation and property assessment in the Russian Federation, and to propose recommendations for improving this system. In the process of research, normative documents that served as an information base for achieving the set goal were analysed, and a comparative analysis of property tax assessment systems and tax policies of various countries was conducted. Based on the conducted analysis, the author proposes recommendations to enhance tax policy and real estate cadastre valuation in Russia. The recommendations involve adjustments, updated tax value criteria, considering diverse property value factors, separating cadastre valuation from mass appraisal, and accommodating variations in tax base calculation. Implementing these recommendations can contribute to addressing issues in cadastre valuation and create a fairer, more effective taxation system for land and property.

Keywords: state real estate cadastre valuation, real estate properties, methodological support for valuation, taxable base.

1 Introduction

Information about real estate market prices is essential for decision-making by both the government, businesses, and individual citizens. The scarcity of such data leads to significant costs and hampers the implementation of economically justified investment and tax policies at all levels. In Russia, currently, the only systematic information on market property values is provided by the results of the state real estate cadastre valuation (hereinafter referred to as the SCV) of land plots and other real estate objects. However, trust in its accuracy has been undermined by systemic errors in organizational and methodological support and a lag behind real market processes.

Over the past 20 years, the SCV system has undergone four stages of development.

During the first stage, which can be referred to as the "Rosnedvizhimost Land Valuation," simultaneous with the establishment of private property rights in the new Land Code of the

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Russian Federation, a decision was made to conduct a comprehensive cadastre valuation of land plots. Its results have been applied since 2004-2006 for determining land tax rates, privatizing land plots into private ownership, and other purposes. The cadastre value of land itself was considered as an equivalent of market value (exchange value), and its calculation was not considered complex by lawmakers based on three well-known approaches. The state cadastre valuation of land plots and other real estate objects was entrusted to the federal agency Rosnedvizhmost (currently Rosreestr) and its subordinate organizations. During that time, the entire territory of the country was valued within a span of two years. However, there was no clear legislative provision for the mechanism of conducting SCV or controlling its results. It was envisaged to update the calculation of the cadastre value of land every 3-5 years. The tax base for buildings and structures remained within the framework of separate taxes on the property of individuals and organizations, based on the Soviet model of construction costs. The Russian market, as a whole, positively perceived the transition to a new system of land tax, as it coincided with an active market development period and rapid price growth.

The second stage of the development of the State Cadastral Evaluation System can be referred to as "private appraisal organizations' assessment of land." During the 2009-2009 crisis, due to the apparent overestimation of cadastral values in the context of a sharp decline in real estate prices, the Government of Russia made a decision to relieve federal authorities of direct responsibility for the results of the State Cadastral Evaluation (SCE) and transfer the authority for calculating cadastral values to private appraisal organizations, incorporating corresponding amendments into legislation. Property owners were granted the right to challenge the cadastral value of their specific real estate objects in regional commissions and courts based on market value, thereby contributing to increased transparency within the entire system. Within a short period, under the guidance of the Ministry of Economic Development of Russia, appraisers themselves adopted a specialized valuation standard and methodological guidelines on the SCE of land plots, including other real estate objects situated on them, in accordance with the country's civil law development concept. Moreover, the budgetary needs prompted the transition, starting from 2014-2015, to tax not only land plots but also major types of other real estate objects based on their cadastral value. Private practicing appraisers played a pivotal role in distinguishing between cadastral and market values as distinct concepts.

Understanding the importance of comprehensive systemic information on the value of real estate objects for the entire governance system compelled the legislator, amid significant market turbulence, to transfer the functions of conducting the State Cadastral Evaluation (SCE) to specially established regional budgetary organizations starting from 2017, marking the beginning of the third stage: "evaluation of real estate by regional government budgetary institutions" (hereinafter referred to as GBU s). Since 2021, regional budgetary institutions have been entrusted with the primary authority to settle disputes with property owners regarding the cadastral value of their objects, while additional powers related to monitoring the regions' work in establishing the cadastral value of land plots and other real estate objects have been delegated to Rosreestr.

At this stage, the autonomy of regional institutions, including their differences in software and the quality of processing market and other information, does not allow for economically justified regional policies based on fair tax (cadastral) values at the national level. This primarily concerns interbudgetary relations concerning taxes and other mandatory payments for land plots and other real estate objects. However, the absence of any other systemic information about the real estate market constantly intensifies legislators' desire to significantly expand the application of SCE results, which fails to consider the challenges of mass appraisal of real estate. In particular, it is evident that the legislatively stipulated single valuation date for land plots as of January 1, 2022, and for other buildings and structures located on them as of January 1, 2024, with subsequent reassessments every 5 years, does not align with the principles of real estate circulation and will inevitably lead to new conflicts and contradictions in the near future.
The COVID-19 crisis and overall market turbulence in 2020-2021 imply, from an organizational perspective, a transition to the next, already fourth stage of policy changes in the field of property tax reassessment, which can be termed "strengthening state control over SCE." This stage is closely linked to a deeper level of control by the federal center, represented by Rosreestr, over the process of conducting SCE in the regions and its outcomes. Partially, this is already being implemented through the update of methodological guidelines on SCE. Furthermore, it will become a reality after the adoption of a unified software product for all institutions involved in cadastral valuation and a significant enhancement of the qualifications of all personnel involved in the process at both the central and regional levels. Notably, rapid progress is evident in the establishment of a nationwide spatial database encompassing all real estate objects and their characteristics. The quality work of the working group established under Rosreestr to improve the methodological guidelines on state cadastral evaluation will be crucial. In particular, it is important to ensure the active participation of business representatives (industrial, agricultural, banking, real estate, etc.) and other end consumers, including the Ministry of Finance of the Russian Federation. At this stage, it will be necessary to complete the transition to taxing all objects, including industrial ones, based on cadastral value, as well as to standardize taxes on land plots and other real estate objects. Achieving this without increasing trust in the performance of the responsible parties will be extremely challenging. It is also evident that systems for establishing lease payments and redemption prices for land plots owned by public entities will be standardized based on a federal model.

Thus, over the course of 20 years of implementing the transition to cadastral value as the informational basis for state economic and tax policies in the real estate sector, the very organization of the system has undergone significant changes for the fourth time, leading to extremely adverse consequences and costs for all parties involved in the process. In other words, any real estate market crisis necessitates a drastic revision of the property tax assessment system, which clearly contradicts the principles of its stability. What are the underlying reasons for such systemic failure?

The objective of this research work is to analyze the problems and shortcomings in conducting cadastral valuation of land and property in the Russian Federation and propose recommendations for improving the existing system.

The following hypothesis has been formulated: the insufficient stability and effectiveness of the property tax assessment system are the root causes of systemic changes in conducting cadastral valuation of land and property in the Russian Federation.

The theoretical foundation of this research includes works by both domestic and foreign researchers on cadastral valuation of real estate and land value assessment, such as N.P. Barinov [1], V.R. Belenkiy and P.F. Loiko [2], S.V. Bessonov and O.N. Shcherbakov [3], S. Sainz [4], B. Berwoots and N.V. Volovich [5], A. Agosto [6], R. Alterman [7], V.G. Bryzhko, I.V. Bryzhko [8], K. Deininger, G. Feder [9], A.V. Osenyaya, B.A. Khakhuk, D.A. Gura, N.A. Kislitza [10], E. Podryadchikova, L. Gilyova [11]. Regarding the study of cadastral value determination, it is worth noting the author N.V. Volovich and his works [12], [13], N.V. Volovich and E.Yu. Turova [14].

2 Materials and Methods

Appraisal.” The analysis of these documents allowed obtaining completeness and accuracy of information about the current system of cadastre appraisal and identifying its shortcomings and problem areas. Based on this information, the study offers specific recommendations and solutions for improving the real estate tax assessment system in Russia.

The author employed recognized general scientific theoretical methods such as terminological, hypothetical, historical, formalization, abstraction, generalization, and ascending from abstract to concrete. General scientific logical methods such as analysis and synthesis, induction and deduction, and logic were used. General scientific empirical methods such as statistical observation, modeling, and comparison were also employed.

During the research, a comparative analysis of real estate tax assessment systems and tax policies of various countries, including their advantages, disadvantages, and recommendations, was conducted. This helped identify best practices and determine possible solutions for the Russian context.

As a result of the research, an analysis of the reasons for systemic failure and inefficiency of the current real estate tax assessment system in Russia was conducted, and a series of recommendations were proposed to create a stable and transparent system that takes into account the peculiarities of the Russian real estate market and the requirements of tax policy. These recommendations have not been previously highlighted in the scientific literature on this topic. According to the author, the implementation of these recommendations is critically important for the formation of a new stage of state cadastre appraisal of real estate in the Russian Federation.

3 Results

When analyzing the problems and shortcomings in conducting cadastral land and property valuation in the Russian Federation, it is necessary to start with the first stage of the Cadastral Valuation System, namely, the valuation of land by Rosnedvizhimost. The chosen strategy of equating the tax value to the market value through mass appraisal methods for the cadastral value of all real estate objects could not avoid conflicts when attempting to apply these results to all possible regulatory spheres. It is evident that simultaneously solving two problems—creating a database of accurate market values for an emerging real estate market and establishing a stable tax system based on it—is doomed to failure.

In Russia, the real estate market is still in the process of formation, and the mechanism of government regulation is also being developed. It is not accidental that the model of tax (market) valuation of real estate has fundamentally changed every 6-7 years, and each model failed to withstand the challenges posed by real market crises, indicating insufficient stability and effectiveness of the system. This statement confirms the hypothesis put forward. In these circumstances, it is unrealistic to entrust the task of collecting and systematizing market data to regional budgetary institutions with their limited human resources. The attempt to assign the function of monitoring the real estate market to the Federal Service for State Registration, Cadastre, and Cartography (Rosreestr) in 2012 proved to be unrealistic as well, as the program was phased out within 5 years. The creation of a government system for analyzing market processes is yet to be achieved. During this discussion, the following recommendation was formulated: it is necessary to adjust the tax policy by providing regional budgetary institutions with more normatively calculated indicators of the tax value of objects, following the example of Germany, in order to reduce the existing anarchy. This will make the procedures for verifying the tax assessment process more transparent rather than formal, and ensure comparability of the property tax base between different municipalities and regions.

Due to the uniqueness of each land plot, conducting market valuation using mass appraisal methods is challenging. At least, even in stable market conditions, the most optimistic forecast
for the development of a high-quality software product based on artificial intelligence would require a minimum of 5 years. Currently, within the framework of mass appraisal, various expert opinions are used without evidence of their validity based on market data in the region. This practice itself violates the existing guidelines of the Cadastral Valuation System, but it has become a simplified approach.

The next recommendation highlighted during the research is the update of requirements for calculating the tax value of real estate. These requirements should also be updated from a methodological perspective to achieve uniformity among regional institutions. The simplest example is the inclusion/exclusion of value-added tax (VAT) in the cadastral value of buildings and structures. The interpretation of existing regulations leaves the implementers with a choice. This issue has long been solely within the competence of the Ministry of Finance of the Russian Federation, yet there is no clear understanding. As a result, in 2022, the changes proposed by the appraisal community to the Federal Valuation Standards (FVS) implied amendments to the concept of "market value," suggesting the exclusion of VAT from this value. However, considering the specificities of different tax regimes of property owners, it would be impossible to implement this uniformly.

Regardless of the system used to determine the tax base, the systematic analysis of the influence of various factors on property value remains a more complex issue. Therefore, as a recommendation to improve the functioning of the cadastral valuation system in Russia, it is suggested to consider the impact of various factors on property value. For example, in Russia, some regions include the factors related to the availability of engineering and transportation infrastructure in the land value, while others do not consider them at all. This lack of comparability of results is problematic. Additionally, the situation is exacerbated by the fact that the state constantly changes the rules in terms of the availability of infrastructure objects, including co-financing investment programs for infrastructure construction, as well as the obligation for developers to bear the cost of connection to such facilities.

The next recommendation involves separating cadastral property valuation, performed for tax purposes, from mass property valuation. This would allow countries with unstable markets to achieve the strategic goal of forming a more economically justified state policy in the field of land and property relations. Theoretically and practically, it has been proven that market value is oriented towards the price under the most efficient utilization, whereas the tax assessment cannot exceed its actual income. Each country's tax system comprises all types of taxes and mandatory payments, which means that any reform aimed at increasing revenue from one specific tax cannot avoid compensatory reductions in other payments made by property owners.

Practice has shown a clear distinction between the principles of calculating the tax base for property tax and property ownership tax. In particular, in Russia, the cadastral value of real estate is calculated without considering other rights besides ownership, such as leases or mortgages. From this statement, the final recommendation is derived: it is important to consider the differences in calculating the tax base for property tax and property ownership tax, as well as to take into account other rights related to real estate, such as lease and mortgage. In the world, there is a practice of coexistence of these two types of taxes (property tax and property ownership tax). For example, in some cantons of Switzerland, the calculation of property ownership tax includes factors such as ownership of shares or antique collections, as well as the taxpayer's debts. This requires not only a high level of trust in the state from citizens but also solutions for complex interbudgetary relations between municipalities. Property tax addresses many issues more simply, but it is also impossible to ignore the consideration of the real financial condition and actual payment capacity of households and businesses. Achieving this through tax rate adjustments has limitations. Notably, the tax rates in leading European economies are set at a minimum level. Following the example of the Netherlands, where the rates of the main property tax are oriented towards fractions of per mille, Germany is also reducing the rates as part of its reforms. Ultimately, for the tax base of property tax, the principle
of comparability based on uniform valuation principles is more important than striving to align it closely with market value. Moving towards the latter is strategically correct but requires significant investments in time and resources to improve the quality of the entire governance system.

4 Discussion

The results of our research lead to the following recommendations:

1. To improve tax policy, it is necessary to make adjustments, taking into account the experience of Germany, where regional budget institutions are provided with higher normatively calculated indicators of the tax value of properties. This will help eliminate anarchy and create more transparent procedures for tax assessment, as well as ensure comparability of the property tax base among different municipalities and regions.

2. It is advisable to update the requirements for calculating the tax value of real estate.

3. It is proposed to consider the influence of various factors on the value of real estate, such as location, infrastructure, regional economic potential, etc.

4. Attention should be paid to separating cadastral property assessment for taxation purposes from mass appraisal, which will allow for a more accurate and adequate tax value of properties, taking into account their individual characteristics.

5. It is recommended to consider the differences between the principles of calculating the tax base for property tax and asset tax.

These recommendations are based on the results of this research and represent an important step towards improving the tax system and ensuring a more fair and efficient functioning of the taxation system in the real estate sector.

Initially, let's consider comparing the obtained data with the results of previous research conducted by other researchers. It is interesting to note that some of the findings of this study are consistent with the previously published data in the article by N.V. Volovich and E.N. Nikitin [15], confirming certain trends and conclusions made in their work. The study by R. Füss, J.A. Koller, A. Weigand [16] also provides support for the fifth recommendation of this article. However, differences were also found with the work of E.V. Maryin [17], which describes the current state of the real estate cadastral assessment system as exclusively positive.

Based on this research, several possible directions for future research in this field arise:

1. Researching the impact of tax policy changes on the real estate and land market. An analysis can be conducted on the effects of implementing the recommendations proposed in this study on market prices and transaction volumes in real estate, as well as the behavior of market participants.

2. Studying the application of new methods and approaches to calculating the tax value of real estate. More accurate and modern assessment methodologies can be developed, taking into account a wide range of factors, including location, environmental conditions, infrastructure, and other parameters that can influence the value of real estate and land.

3. Investigating the impact of the tax burden on the behavior of property owners. The study can examine how tax rates and rules affect the decisions of property owners, such as selling, renting, or using properties for commercial purposes.

4. Researching the effectiveness of the control and supervision system for tax assessment of real estate and land. An analysis can be conducted on the existing control mechanisms and identify opportunities for improvement to more effectively prevent abuses and reduce corruption risks.

These research directions will contribute to further developing scientific understanding in the field of property tax assessment and contribute to the improvement of tax systems, transparency, and fairness in this area.
5 Conclusion

This research work analyzed the problems and shortcomings in conducting cadastral assessment of land and property in the Russian Federation and provided recommendations for improving the system. Based on the hypothesis, the conclusion was drawn that the insufficient stability and effectiveness of the property tax assessment system are the causes of systemic changes in cadastral assessment in Russia. These recommendations, based on the results of this research, represent an important step towards improving the tax system and ensuring a more fair and efficient functioning of the taxation system in the real estate sector. Further work in these directions can contribute to addressing the problems and shortcomings in conducting cadastral assessment of land and property, as well as contribute to the development of an effective and stable property tax assessment system in the Russian Federation.

References

1. N. P. Barinov, Property Relations in the Rus. 6, 6–24 (2018)
2. V. R. Belyenkiy, P. F. Loiko, Multilayer land use in Russia: the concept of land transformations and land resource management (Bylina, Moscow, 2001)
3. S. V. Bessonov, O. N. Shcherbakov, Commercial and residential real estate development (ANO DPO "Corporate University of Sberbank", Moscow, 2018)
4. S. Seins, Real estate appraisal: from cost to value (All-Russian Public Organization "Russian Society of Appraisers", Moscow, 2009)
11. E. Podryadchikova, L. Gilyova, Improvement of the methods of state cadastral assessment of agricultural lands while accounting the expenses for bringing a land plot to the state of maximum use efficiency. E3S Web of Conference: EMMFT-2020, 244(03003), 1-9 (Voronezh, 2021). DOI: 10.1051/e3sconf/202124403003
12. N. V. Volovich, Quest. of Asses. 04(105), 27-34 (2022)
15. N. V. Volovich, E. N. Nikitina, Property Relations in the Rus. 9, 50-63 (2014)
17. E. V. Maryin, Contentus, (7), 52-57 (2020)