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METHODOLOGICAL POSSIBILITIES FOR ASSESSING THE INVESTMENT POTENTIAL OF THE RUSSIAN REGIONS UNDER ECONOMIC UNCERTAINTY

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The complex uncertain economic conditions developing in a multi-layered regional space have created a number of obstacles to realizing the investment potential of the regions of the Russian Federation. These problems are superimposed on the significant socio-economic differentiation of the territories, which actualizes the need to find and implement new analytical tools capable of diagnosing investment opportunities and priorities in the implementation of investment decisions in the region. The prevailing economic conditions and uncertainty trends have led to a research interest formulated in the form of a goal related to the analysis and specification of key methodological tools and algorithms that allow the regional management system to effectively assess investment positions and priorities in a complex economic space, as well as to assess the investment potential, on the realization of which the productivity and viability of the entire national system depend. The scientific novelty of the research

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lies in monitoring the most relevant methods and approaches to assessing the implementation of the investment potential of the region, which, in conditions of economic uncertainty, contain various sources and databases accumulating heterogeneous parameters and indicators. The paper concludes that building complex methodologies and tools on such a complex structured basis allows taking into account the multidirectional, multilevel nature of modern regional investment processes. The theoretical and methodological basis of the research consists of works in the field of analysis and evaluation of investment processes. In the course of the work, methods of structural and logical analysis of sources and databases reflecting key parameters and metrics of the investment development of the region were applied. The analysis results made it possible to identify significant approaches and techniques that help assess regional investment processes in conditions of economic uncertainty. The results of the conducted research are of interest to federal and regional relevant agencies in terms of developing an investment strategy, forming the main provisions of economic policy and determining priorities in investment development.

Methodological approach, investment potential, regional investment conditions, investor, regional management system, priority areas of development, spatial heterogeneity, investment strategy.

Introduction

In the contemporary economic reality, characterized by high dynamism of financial and economic processes and intensifying competition for key types of resources, financial investments, as well as the monitoring and forecasting of key indicators of regional investment potential, are acquiring critical importance. This task is relevant both for potential investors, enterprises, and organizations seeking new sites for capital allocation, and for the regional governance system striving to ensure sustainable socio-economic development of a territory. This implies that without timely and sufficiently accurate assessment of a region's investment opportunities, effective strategic planning appears challenging.

Understanding the current situation and forecasting future trends help in making informed investment decisions at all levels of governance. In this context, the strategic plan for the socio-economic development of a region serves as a key instrument, unifying a multitude of documents regulating investment activity (Shuliko, 2018). Namely, documents of this kind clearly define priority development directions, mechanisms for attracting investments, and criteria for evaluating the effectiveness of implemented projects (Kuchkovskaya, Novikova, 2018). Furthermore, constant evaluation of such activity is necessary, both across territories and in terms of key investment metrics, which will allow for the selection of promising projects and the implementation of comprehensive solutions that account for the most significant factors (Peshcherov, Solodilov, 2018).

The regional governance system, in addition to developing a set of strategic planning and forecasting documents, is tasked with forming investment priorities, which are currently constrained primarily by the limitation of financial resources (Solodilov, 2018). Accordingly, the ongoing foreign economic transformations and key national trends require not only administrative measures but also systematic work to improve the legislative framework, simplify

registration and licensing procedures, and enhance the transparency of government bodies' activities (Podmolodina et al., 2022), as these processes directly impact the effectiveness of implementing regional investment projects.

Conditions of economic instability predetermine a whole range of additional barriers, including investment barriers (Panenko, 2023), which are superimposed on a regional space characterized by significant differentiation of territories, including in the context of center-region relationships (Kuchkovskaya, Novikova, 2018). In particular, the uneven distribution of investment resources leads to increased economic inequality and deepens disparities between regions (Markova, 2022). The situation is exacerbated by the fact that in certain regions, significant capital outflow to more developed agglomerations is observed, leading to slower economic growth rates and socio-economic problems (Khmeleva, Treshchev, 2023).

For example, as of early 2025, the growth rate of civilian production is rapidly declining, which is associated with the tight monetary policy of the Central Bank, leading to decreased investment activity in the construction sector and a slowdown in consumer demand growth (Pozdnyakov, Markova, 2022). This creates a risk of crisis trends emerging in certain regions, including relatively developed ones (Krasnodar Territory; Leningrad, Sverdlovsk, and Novosibirsk regions, etc.) (Khashir et al., 2023). Solving such problems requires a comprehensive approach, encompassing not only economic but also legal, political, and social aspects, which should be combined within new mechanisms and algorithms for stimulating investments, including in depressed regions, by accumulating financial resources and creating favorable conditions for the development of economic entities (Tishchuk, 2023). Contemporary conditions have predetermined the primary role of state institutions as key actors in investment activity, which, at the regional level, set strategic benchmarks for realizing investment potential (Perina, 2023). This means that the problem of assessing investment potential and selecting evaluation tools is one of the most important when developing strategic priorities for a region's economic development.

This formulation of the problem places upon the regional governance system not only the tasks of developing and adopting relevant laws and bylaws but also constant monitoring of their effectiveness, as well as adaptation to changing economic conditions based on the introduction of new methodological tools and algorithms that account for regional specifics, the degree of intra-regional differentiation, initial investment positions, etc. (Urasova, 2022). Thus, within the framework of this work, it is appropriate to consider the key methodological tools and algorithms that allow the regional governance system to effectively assess investment positions and priorities in a complex economic space, as well as to evaluate the investment potential, the realization of which determines the productivity and viability of the entire national system.

Methodological foundations

In scientific literature, the issue of assessing the development of regional investment potential is addressed using a range of methodological approaches. Primarily, one can speak of a macro approach, which is based on key macroeconomic indicators, such as production volume, gross domestic product, aggregate demand/aggregate supply,

inflation rate, etc. (Ershov, 2011). Experts note that most methodological approaches suffer from a drawback such as the linearization of investment processes, which oversimplifies the entire complexity of ongoing changes, affecting the nature of forecasts that are essentially extrapolations.

Currently, methodologies based on non-linear analysis methods are actively developing. For example, we can note a methodology based on "penetrating indicators" which allows for creating a regulated forecast of the investment process (Ershov, 2011). Such an approach entails computational complexity, sensitivity to initial data, difficulties in interpreting results, high demands on computational resources, etc. Furthermore, a methodology of scientific interest is one based on measuring the spatial heterogeneity of investment resource distribution across the constituent entities of the Russian Federation, serving as a form of assessing the relationship between investments and the real sector of the economy. In particular, such an approach utilizes spatial autocorrelation according to P. Moran's method and the construction of L. Anselin's spatial interdependence matrices (Naumov, 2021). This allows for identifying regions with a high concentration of investment resources, as well as mechanisms for reducing the heterogeneity of the spatial localization of investments (Naumov, 2021). However, this approach is associated with complexities such as the static nature of the set of spatial weights, errors with a small number of objects, false results under conditions of high data polarization, the inability to interpret the clustering of territories, etc.

Other authors use models of graphical maps of the investment market, which are informationally updated, representing interest for direct participants in investment development from the standpoint of positioning themselves and their competitors. In this context, the key problems are the effective collection and analysis of regional data (Tyurin, 2025), as well as the difficulty of organizing regular observations.

Direct investment processes are assessed using the Gini coefficient, the Herfindahl coefficient, the decile differentiation coefficient, etc. (Tyurin, 2025), which are also highly dependent on the quality of the initial data.

A fairly widespread methodological approach involves measuring the integration activity of participants in investment interaction in regions based on constructing integral synthetic indicators, which typically involves various groupings of indicators (Karelina, 2016; Shekhovtseva, Safonova, 2022). In this case, the selection of the set of indicators, justification of their sufficiency and comprehensiveness, present extreme difficulty.

In general, it must be stated that the methodological approach to assessing investment processes at any level of management must consider the connectivity of the national economic space, adjust for changes in investment conditions and participants' positions, and contain algorithms for overcoming conditions of economic uncertainty.

Thus, it is appropriate to present a systematization of key methodological approaches to assessing the investment potential of the Russian Federation's regions under conditions of economic uncertainty *(Tab. 1)*.

Based on this, three groups of methodological approaches can be distinguished, each focusing differently on investment processes.

The first group of approaches (e.g., macroeconomic, non-linear) views investment processes as an integration of key participants, whose consensus on price predetermines spatial changes (Goodwin et al., 1999; Barrett, 2001). That is, investments are considered integrated if prices for the same goods coincide (Glushchenko, 2017). This means investment processes encounter various difficulties, such as differences in regional prices within average transport costs, and trade flows separated in time (Spatial Development..., 2020). Using this approach makes it possible to detail delocalization processes in regional space and obtain aggregated estimates regarding the connectivity of the economic space (Yazgan, Yilmazkuday, 2011). This approach is also applicable when analyzing long-term investments and the positions of key participants in a region.

The second group of approaches (e.g., externalities-based) is founded on the thesis of the spatial conditioning of economic changes, expressed in spatial externalities as the influence of some market elements on others (Anselin, 2003; Capello, 2009). Methodologies within this approach do not limit the channels for transmitting spatial externalities, which avoids the need for deep theoretical justification of the calculations. Key analysis methods here are spatial econometrics methods, which consider regions, municipalities, and other territorial units as objects of analysis. In the context of investment development, regional and local investment systems are

Table 1. Systematization of key methodological approaches to assessing the investment potential of the Russian Federation's regions under conditions of economic uncertainty

Approach name	Methods used	Outcome
Macroeconomic	Analysis of key macroeconomic indicators (production volume, gross domestic product, aggregate demand/supply, inflation rate, etc.)	Accumulation of investments is achieved through the influence of external factors affecting regional investment processes
Non-linear	Methods for calculating leading indicators, econometric analysis methods	Effectiveness of investment development as a result of interaction among participants in the investment process
Price-based	Assessment of price response to spatial changes, aggregated estimates regarding the connectivity of economic space	Investment balance is achieved in case of progressive movement of capital by origin and use over a certain period
Externalities-based	Measurement of spatial externalities as the influence of investments on regional development, methods of spatial econometrics and multilevel modeling	Consolidation of investments as a result of interaction among participants, creation of common structures
Balance-based	Interregional balance models, cooperative game theory, aggregated methods	Accumulation of investments is achieved through forming linkages between participants, establishing a favorable investment climate
Source: own compilation.		

distinguished, and their development is assessed based on the average statistical elements of such subsystems (Kolomak, 2010). To assess investment processes involving the merger of market structures, proponents of this approach resort to a synthesis of spatial econometrics methods and multilevel modeling (Corrado, Fingleton, 2012). Alternatively, the use of methods within the framework of Markov chain theory is proposed, which allows for accounting for the relative dynamics in the development of elements of the national economic space (Bufetova, 2016). As a result, assessments of investment process development at a more general level emerge.

The third group of approaches (e.g., price-based, balance-based) conveys the hypothesis that investment balance is established when connections are formed between economic agents operating in a region, resulting in mutually reinforcing positive effects. Key methods within this approach include interregional balance models and cooperative game theory (Miller, 1969; Granberg, Suspitsyn, 1988; Suslov, 1991). The realization of these effects is based on the consolidation of investments through active economic exchange. Here, investment development is not tied to specific types of investments; instead, the application of structural models reveals multipliers of interregional balances and the economic interconnections of regional investment systems. In practice, research builds both aggregated and detailed assessments of a region's investment potential realization. For instance, one can note models reflecting the process of decentralization and the formation of investment directions along the "center-periphery" axis (Robinson, Miller, 1991). In this context, the functioning of price mechanisms is of secondary importance (Dzhurka, 2021).

Thus, the first group of approaches conducts analysis at a more general level, assessing investment development as a result of consolidation; the second group focuses on the significance of external factors determining the development of the regional investment system; the third group allows for assessing the processes of consolidating regional investments in the context of systemic effects. The synthesis of these key approaches generates a diversity of methodologies that reveal various aspects of investment activity in a region.

Research materials and methods

Considering the available sources and databases in the public domain that specialize in accumulating indicators and parameters of regional investment development, one cannot overlook the methodology of the rating agency "Expert RA"[1]. Its foundation is index-based assessments comprising over 60 indicators distributed across five groups: infrastructure, economic, social, financial, and environmental. Weights (levels of significance) are determined for each indicator group. The data used as a basis come from official statistics, the Central Bank of the Russian Federation, the Federal Treasury, the Russian Ministry of Finance, the Russian Ministry of Internal Affairs, etc.

Thus, the level of a region's investment attractiveness is determined *(Fig. 1)*.

[1] Methodology of the rating agency "Expert RA". Available at: https://raexpert.ru/researches/regions/invest_regions_2023/?ysclid=m7326ro62f524868447 (accessed: 06.02.2025).

Figure 1. Level of investment attractiveness of Russian constituent entities for 2024
Source: https://raexpert.ru/researches/regions/invest_regions_2023/?ysclid=m7326ro62f524868447#lg=1&slide=0

As can be seen from the provided data, one can speak of a substantial differentiation among Russian constituent entities in terms of investment attractiveness. The best positions are held by the Primorye Territory, Krasnodar Territory, the Republic of Tatarstan, and the Yamal-Nenets Autonomous Area. The lagging regions include the Irkutsk Region, the republics of Buryatia, Tuva, Kalmykia, Kabardino-Balkaria, Karachay-Cherkessia, etc.

This methodology allows for obtaining a differentiated investment assessment across groups of indicators. On the other hand, weighting these groups makes it possible to adjust the integral assessment relative to individual groups. However, this approach leaves the list of indicators open to additions and variations, and the final results may become "blurred" in relation to the overall assessment.

Another effective methodology is the rating system of the Agency for Strategic Initiatives[2]). It comprises a system of indicators and a methodology for calculating metrics, including over 200 indicators grouped into four categories: regulatory environment, institutions for business, infrastructure and resources, and support for small and medium enterprises. The sources of information include surveys of entrepreneurs and experts, as well as statistical data. This methodology emphasizes the managerial processes of the regional governance system aimed at creating favorable business conditions, thereby accumulating the best regional practices.

[2] Methodology of the Agency for Strategic Initiatives. Available at: https://asi.ru/government_officials/rating/?ysclid=m734v8pxzu830813685 (accessed: 04.02.2025).

The compiled data is normalized to a unified scale from 0 to 100 and is also weighted within each category. Accordingly, the integral index is the sum of scores across all categories.

Among the regions lagging in these metrics are the Republic of Kalmykia, Kirov Region, etc. Some constituent entities of the Russian Federation were unable to confirm their status as investment regions (Bryansk Region, Nenets Autonomous Area (NAA), Altai Republic).

The leaders of the rating for the state of the investment climate in Russian constituent entities for 2024 are presented in *Figure 2*.

This methodology is also rating-based, which, on the one hand, allows for the addition and adjustment of initial data, and on the other hand, provides a sufficiently general assessment within the boundaries of an integral indicator.

Another relevant methodology is the approach presented on the portal "Investment Projects of the RF"[3]. It is based on data from over 25,000 projects at various stages of implementation. Based on this data, a forecast for project completion and the efficiency of investment is calculated. The "Investment Projects of the RF" platform is an information resource where data on announced and ongoing investment projects in industrial and civil construction, both in Russia and CIS countries, is entered. The platform developers receive information from relevant government agencies and update the project database daily. Accordingly, since the database contains all projects supervised and coordinated by relevant agencies of the Russian Government, the sample can be considered representative.

Figure 2. Leaders of the investment climate rating in Russian constituent entities for 2024

Source: https://asi.ru/government_officials/rating/

As a result, a database on the implementation of investment projects in more than 20 economic sectors across Russian regions is formed *(Fig. 3)*.

Such a methodology, based on qualitative parameters, allows for building an understanding of the implementation stages of investment projects both by sector and by region. However, the analysis results face limitations due to incomplete project data, characterizing this methodology as dependent on the database and its updates.

Thus, it can be noted that the most relevant methodologies include rating-based approaches, combine quantitative and qualitative data groups, and are oriented toward building a competitive model in interregional development.

Within the framework of our work, it seems appropriate to apply a rating methodology that incorporates an indicative methodological approach, as it most fully reflects and accounts for the multifaceted nature of a region's investment potential and also provides an opportunity to enhance the efficiency of the tasks being solved. Furthermore, the choice of logical-structural and content analysis applied to the most relevant methodological tools and techniques allowed for identifying the criteria and metrics that reflect the processes of realizing a region's investment potential.

[3] Investment Projects of the RF. Available at: https://investprojects.info/materials (accessed: 02.02.2025).

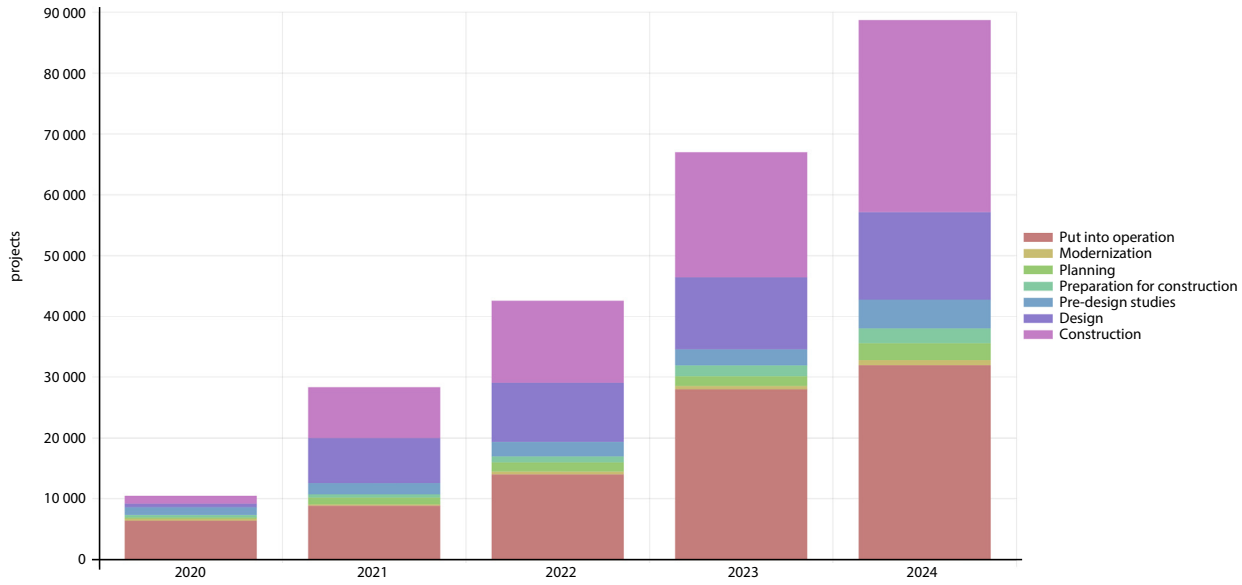

Figure 3. Dynamics of investment project development in Russian constituent entities, 2020–2025
Source: https://investprojects.info/regions/

Research results

Let us examine the process of implementing investment projects in key economic sectors across the constituent entities of the Russian Federation to identify the most significant trends and tendencies in investment decision-making *(Fig. 4)*. The analysis is based on data concerning the implementation of 142,000 projects across 20 sectors[4].

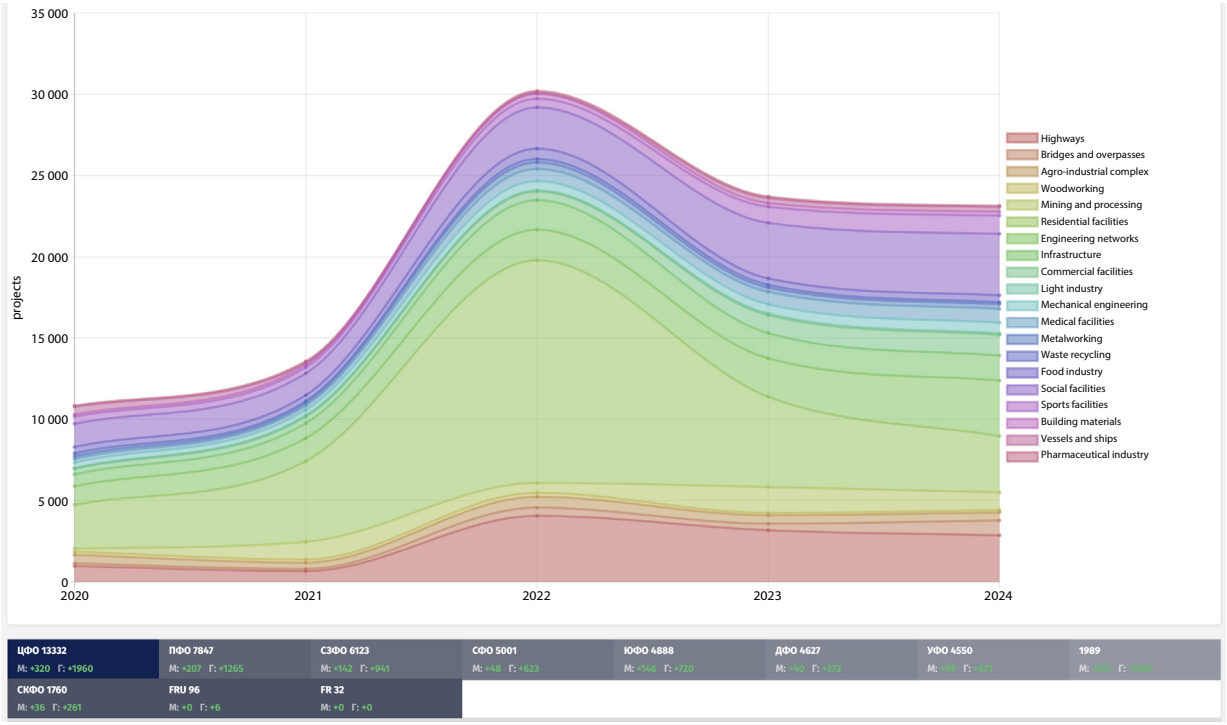

Figure 4. Sectoral dynamics of the number of investment projects in federal districts of the Russian Federation, 2020–2024
Source: https://investprojects.info/regions/

[4] Investment Projects of the RF. Available at: https://investprojects.info/materials (accessed: 02.02.2025).

A negative trend in the number of investment projects in federal districts from 2020 to 2024 is noted in almost all areas and sectors, with the exception of the road industry and road infrastructure objects. This may be linked to the imperative of road maintenance and the long-term planning of construction projects whose implementation fell within this period. The decline in dynamics may be associated with the start of the special military operation and the reduction in budgetary support for a number of sectors (Khanin, 2022). At the same time, it should be noted that in terms of the number of investment projects, the Central Federal District holds the leading position (with over 15,000 projects), followed by the Volga Federal District (over 8,000 projects). The other districts occupy roughly similar positions, except for the North Caucasus Federal District, which concludes the conditional ranking. Among the priority sectors for financing are infrastructure (engineering, transport) and the construction industry.

To examine intra-district dynamics, let us separately highlight the trends in implementing investment projects in the Ural Federal District in 2024 *(Fig. 5)*.

In terms of investment development, the Ural Federal District represents a rather unbalanced meso-formation, as the Sverdlovsk Region outpaces other regions by almost two times, and the gap with the lagging region (Kurgan Region) reaches six-fold. Furthermore, it cannot be said that the other subjects occupy equal positions; it is sufficient to compare the indicators of the Tyumen and Chelyabinsk regions (over 800 projects) with those of the autonomous areas (over 500 projects). This situation may be due to the fact that the Ural Federal District includes regions with significant differences in economic structure and varying levels of socio-economic development (Voronov, 2022). Such differences predetermine not only asymmetric characteristics in the level of investment attractiveness and substantial differentiation of basic investment indicators but also hard-to-measure investment opportunities. This

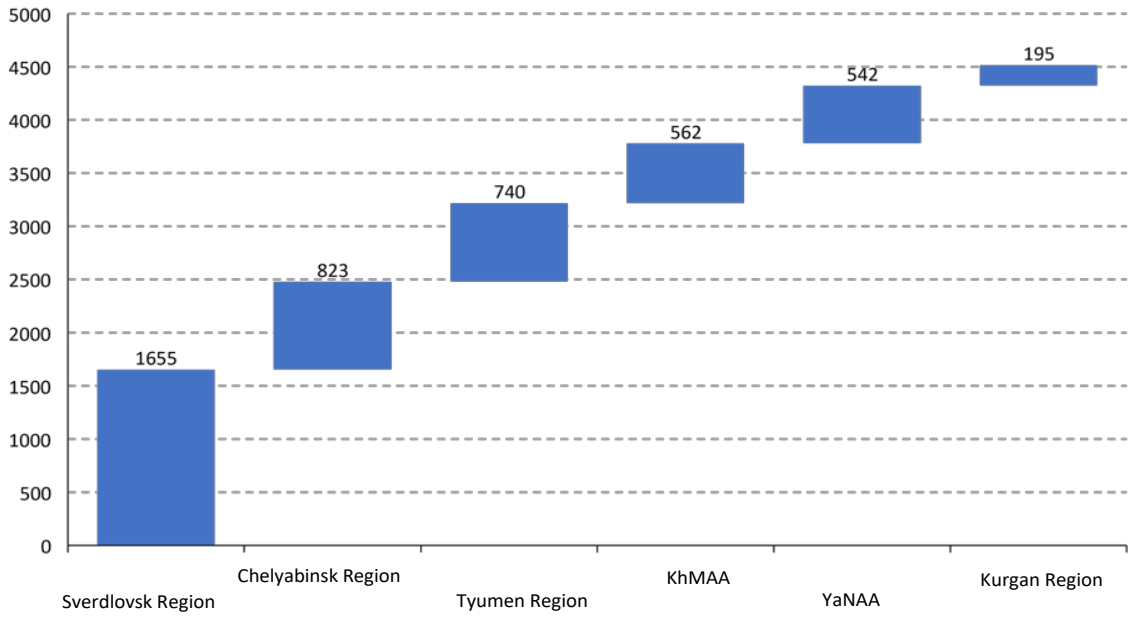

Figure 5. Number of investment projects being implemented in constituent entities of the Ural Federal District in 2024

Source: https://investprojects.info/regions/chart

explains the configuration of strategic priorities, investment goals, and objectives, which, under negative external economic circumstances, have varying effectiveness and degrees of realization, bringing industrial territories to the forefront (Demyanko, 2019). Thus, the effectiveness of implementing investment policy within the entire network of relationships among investment market participants largely depends on the activity and initiative of regional executive authorities (Gusmanov et al., 2024; Kvon, 2019). The thesis about bringing industrial territories to the forefront, coupled with the initiative of the regional establishment, is vividly demonstrated by the dynamics of investment project emergence in the regions of the Volga Federal District in 2024 *(Fig. 6)*.

The Volga Federal District includes a large number of traditionally industrial regions. However, the presented quantitative sample does not reflect a direct dependence between the level of industrial production and the number of investment projects. This compels a search for reasons in the influence of other factors. Leading positions are held by the Nizhny Novgorod Region, the republics of Bashkortostan, and Tatarstan. Following with a significant gap are the Perm Territory and the Samara Region. Then, with an even larger gap and a sequential decrease in the indicator, the remaining regions are positioned. We should note, for example, the distinct industrial profile of the Republic of Udmurtia. At the same time, it must be emphasized that without considering the cost of investment projects, an analysis based solely on their number only allows for judgments about general trends in this sphere and does not reflect all aspects of realizing a region's investment potential.

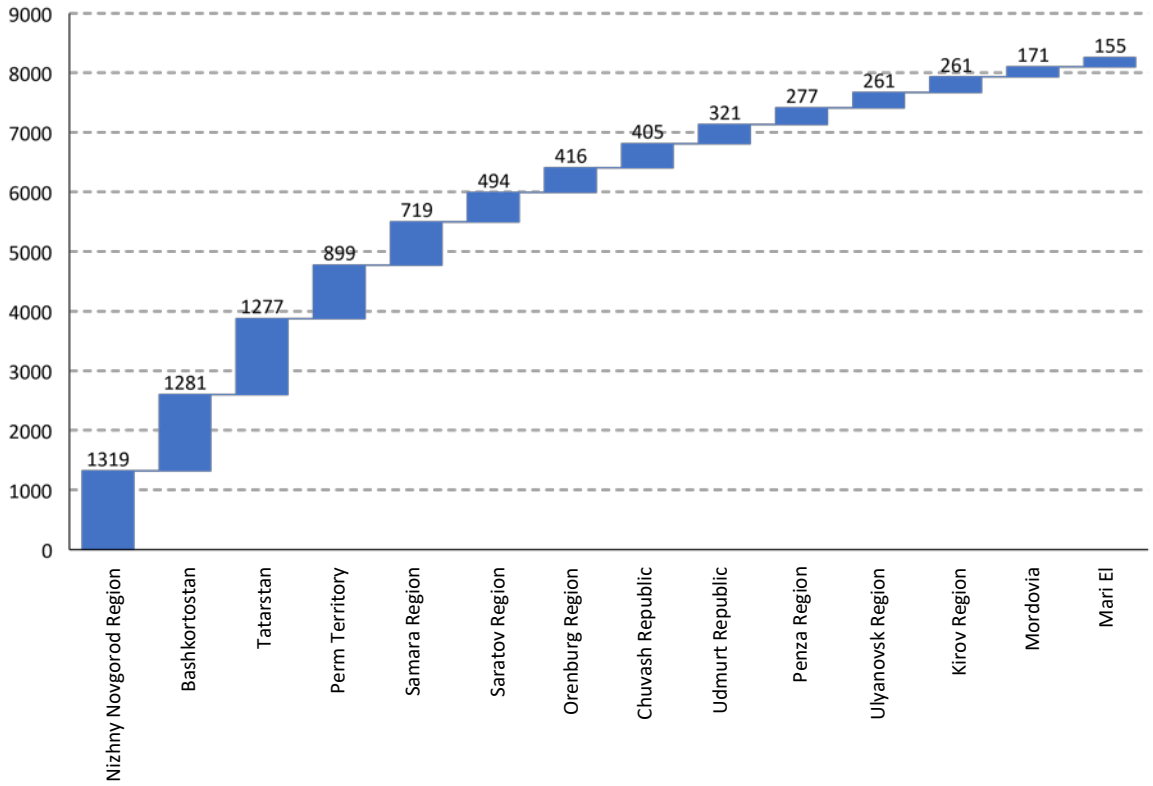

Figure 6. Number of investment projects in regions of the Volga Federal District in 2024

Источник: https://investprojects.info/regions/chart

Overall, the rating methodological approach, whose possibilities are demonstrated above, can be considered one of the most important in constructing and forming the methodological foundations of a region's investment development. This is because it allows for demonstrating the positions of Russian constituent entities within the framework of investment indicators, including in relation to other metrics of the territorial system's development (Kolmakova, 2015). Such an approach enables the assessment of sectoral investment parameters (e.g., the level of existing infrastructure or the volume of available resources, etc.) within rating groups and blocks. The effectiveness of applying this approach is linked to implementing procedures for searching and selecting investment indicators, and to the validity and comprehensiveness of a set of measures and actions, the implementation of which determines the investment environment and the level of favorability. This, in turn, predetermines the achievement of socio-economic effects and the region's competitiveness indicators (Krivenko et al., 2023). Thus, the procedures for searching for and substantiating indicators constitute the most important methodological task. Solving it entails the necessity of choosing methods and tools for conducting an indicative analysis, aimed at accelerating the process of realizing a region's investment potential amid the entire set of influencing factors that significantly affect the region's transformation processes as a whole.

As practice shows, using individual investment indicators for specific regions is not very effective, since all indicators are systemically interconnected, each reflecting certain aspects of investment changes. Therefore, conducting a regular indicative analysis can help identify problem areas and potential reserves when situational investment decisions are necessary. Implementing a rating approach that includes indicative analysis can not only ultimately lead to a reduction in the time required for coordinating and implementing investment programs but also increase the reliability of investment scenarios. However, such a system, which divides indicators into thematic groups, is based on comparing actual and forecasted indicator values while ignoring the need for an in-depth retrospective analysis. This blurs the final assessments, simplifying a significant portion of the obtained results.

Thus, the implementation of investment policy in the Russian Federation is based on the traditional approach, where economic activity is conducted based on the need to attract and implement investments, which are a key driver of economic growth (Maltsev, 2024). At the same time, considering the non-linear nature of investments, the necessity for their non-linear measurement and evaluation arises, including assessing the dependencies between investment and socio-economic indicators.

The thesis is undeniable that the problems of realizing a region's investment potential are especially large-scale during periods of economic transformation and phenomena of uncertainty, when all participants in the investment process become most vulnerable (Pyankova et al., 2022).

This situation leads to the fact that the constituent entities of the Russian Federation are forced to search for additional resources and funding sources, retaining potential investors, maintaining the level of investment attractiveness, and preserving established interconnections with other sectors of the economy. In this sense, the indicative approach, if implemented at the managerial level, is capable of forming such monitoring mechanisms that, one way or another, account for the most significant external factors, allowing for measuring their impact. Thereby, it enhances the effectiveness of investment measures by considering threshold values of indicators, weighting coefficients, and risk indicators. That is, adhering to such nuances requires constant improvement of the principles for applying the indicative approach to maintain the dynamic nature of calculations and to account for the complex, constantly changing

conditions of the external environment and the influence of significant macroeconomic factors. Such improvement should include the modification and adaptation of the methods and calculation principles used within the framework of monitoring the implementation of regional investment policy.

The complexity of transformation processes and the existing investment differentiation among the constituent entities of the Russian Federation create a broad research context for searching and developing new methodological approaches, tools, individual mechanisms, and algorithms. These should make it possible to account for the level of transformation, the multifaceted nature of external factors, and the wide coverage of analyzed metrics (Urasova, 2022).

Thus, among the methods popular in the scientific community, characterized by sufficient development, one can list comparative and correlation-regression analysis, econometric modeling, spatial autocorrelation algorithms, cluster methodologies, etc. However, none of them alone allows for a progressive and systemic solution to the problem of assessing a region's investment development.

In this sense, most methodologies involve the synthesis and various configurations of existing methods, modifications of individual formulas and algorithms. Therefore, in most cases, when solving specific tasks, it is possible to establish:

– secondary and indirect factors identified and measurable from the perspective of analyzing investment processes in the region;

– boundaries of measurable parameters and weighting coefficients according to which the assessment is made;

– interconnections between mechanisms and models of transforming the region's investment space;

– forecast parameters of aggregated metrics and indicators of socio-economic processes in relation to the results of implementing specific investment decisions and projects.

A rating methodology that incorporates an indicative methodological approach most fully reflects and accounts for the multifaceted nature of a region's investment potential and also provides an opportunity to enhance the efficiency of the tasks being solved. This allows it to be considered as an element of the planning system in a region. Rating is inherently linked to continuity in the system of public administration, as ratings or ranking systems for various elements of the investment process exist at all levels of management. However, due to the fragmented presence of these elements, any comprehensive assessment of realizing regional investment potential is hindered and does not fully reflect local specifics and transformation constraints, which precludes a deep justification for the investment decisions being developed.

The prevailing transformation conditions, combined with regional investment trends, create research demand for solving the task related to searching for and implementing new advanced approaches to realizing investment potential (Urasova, 2022).

Based on the results of the conducted analysis, let us outline the transformational aspects that should be accounted for within an improved methodological approach:

– the creation of new types of resources (e.g., digital), whose distribution among regions needs to be measured and redistributed;

– the development of social responsibility in connection with investment processes;

– the engagement of the potential of all participants in the region's investment process, including enterprises;

– the alignment of the developed regional investment development plans with strategic priorities at the national level.

The transformation period of regional investment potential relies on a complex of

resources: administrative resources as the aggregate potential of municipal and regional authorities; material resources (financial and non-financial sources); institutional resources as framework conditions determining opportunities for acquiring new resource sources.

Consequently, the key tasks for the regional governance system include regular comprehensive analysis and monitoring of investment plan implementation and assessing the pace of investment potential realization. The success in solving these tasks is directly linked to data quality.

In addition to the rating methodology and indicative approach, a differentiated approach can be identified. Within this framework, parameters reflecting the characteristics of uneven investment development of regions in various directions come to the fore. As elements, one can consider dynamic indicators of the speed of transformation processes, characteristics of the uneven implementation of investment resources; procedures for monitoring the achievement of key planned indicators. The implementation of this approach directly depends on the distribution and concentration of resources and is expressed in reducing the dispersion of regional indicators.

At the same time, any methodological approach requires the formation of an effective system of financial support from the executive authorities of Russian regions and the investment participation of economic entities. It also requires regulatory and legal reinforcement of transformational changes and investment priorities while preserving the possibility for sequential preventive actions in case of rising uncertainty and for participation in creating institutional infrastructure. That is, any implemented approach entails a significant sequence of managerial actions.

Thus, under modern conditions, clearly defining investment boundaries acquires particular importance. This is a key step toward effective resource management and regional development, encompassing not only the formation of an investment planning system but also the active integration of methodological tools into the existing governance system. Such a setup allows for creating a more flexible and adaptive investment environment capable of effectively responding to emerging transformational changes (Sitokhova et al., 2022). In this context, one of the important tasks is the assessment and analysis of the investment potential of each region. Therefore, it is necessary to consider not only quantitative but also qualitative characteristics, such as the level of personnel training, availability of infrastructure, access to financial resources and innovative technologies, etc. All these factors collectively necessitate the development of a new methodological approach that would activate the process of realizing regional investment potential. This approach should be aimed at adapting the established interconnections between various economic entities to transforming national and regional conditions (Sorokina, Prokhorov, 2012). This implies transforming not only the interaction between state bodies but also the system of cooperation with the commercial sector, scientific institutions, and public organizations involved in the investment process. It is important to create investment mechanisms that will facilitate the exchange of resources, ideas, and experience, which, in turn, will help increase the investment attractiveness of regions. Considering the existing administrative and functional boundaries of resource exchange, the implementation of any methodological approach must utilize established mechanisms, including clusters, cooperative structures, public-private partnerships, etc. An interesting

example is the agricultural sector, where interaction is organized between farmers, processors, and scientific institutions, helping to improve production efficiency and introduce new technologies. Thus, for the progressive investment development of regions, it is necessary to form solid institutional boundaries, an effective system of state subsidies, and a system of interaction among participants in the investment process.

It can be concluded that under conditions of economic uncertainty, it is advisable to turn to various sources and databases that accumulate heterogeneous parameters and indicators. Constructing comprehensive methodologies and tools based on such a complexly structured foundation allows for accounting for the multidirectional and multi-level nature of investment processes.

Conclusion

The analysis of methodological approaches and tools reflecting the process of realizing the investment potential of Russia's regions revealed a critical dependence of the efficiency of using available resources on the methods of their identification and subsequent implementation. The absence of a single universally accepted approach to this process is due to a number of factors whose influence is difficult to assess. Firstly, it is the constantly changing landscape of economic reality, characterized by the unpredictability of transformational trends and conditions of economic uncertainty. Globalization, technological breakthroughs, and shifts in world politics are global trends shaping a dynamic and uncertain environment in which regional investment strategies must be developed. Secondly, the significant diversity of the constituent entities of the Russian Federation necessitates accounting for their unique characteristics – from the sectoral structure of the economy and resource potential (e.g., presence of minerals, developed agriculture, or high-tech industry) to the level of infrastructure development, workforce qualifications, and investment climate. Substantial differences make the application of universal solutions impossible and require an individual approach. Therefore, developing an effective investment development strategy for each region is a complex, multi-level task demanding deep analysis of a range of significant factors. This means that, at the methodological level, it is necessary to consider not only the current economic state but also to forecast future trends, assessing potential risks and opportunities.

The diversity of approaches to assessing and realizing investment potential opens new opportunities for improving state programming and enhancing the efficiency of coordinating the efforts of all participants in the investment process. This implies creating an effective system of interaction between various stakeholders: authorities at federal and regional levels, business representatives, scientific institutions, public organizations, and local communities.

Despite the fact that most tools used by major analytical agencies/organizations primarily employ rating methodologies aligned with the spatial conditioning of economic changes and the influence of some market elements on others, there remains a broad horizon for developing assessment tools by incorporating new methodological principles and frameworks.

The successful implementation of investment projects requires from the regional establishment not only a deep understanding of current transformational trends but also the ability to quickly adapt to changes, respond flexibly to new challenges, and effectively utilize available

resources. This implies the application of appropriate methodologies and tools, including procedures for monitoring the economic situation, analyzing market conditions, forecasting future changes, and timely adjusting investment strategies. A comprehensive approach that integrates various aspects of regional development will allow for the most efficient use of investment potential and ensure sustainable economic growth for each constituent entity of the Russian Federation.

REFERENCES

Anselin L. (2003). Spatial externalities, spatial multipliers, and spatial econometrics. *International Regional Science Review*, 26(2), 153–166. Available at: https://doi.org/10.1177/0160017602250972

Barrett C.B. (2001). Measuring integration and efficiency in international agricultural markets. *Review of Agricultural Economics*, 23(1), 19–32.

Bufetova A.N. (2016). Spatial aspects of economic activity concentration in Russia. *Prostranstvennaya ekonomika=Spatial Economics*, 3, 38–56. DOI: https://doi.org/10.14530/se.2016.3.038-056 (in Russian).

Capello R. (2009). Spatial spillovers and regional growth. A cognitive approach. *European Planning Studies,* 17(5), 639–658. Available at: https://doi.org/10.1080/09654310902778045

Corrado L., Fingleton B. (2012). Where is the economics in spatial econometrics? *Journal of Regional Science,* 52(2), 210–239. Available at: https://doi.org/10.1111/j.1467-9787.2011.00726.x

Dem'yanenko A.E. (2019). Assessment of the potential and features of socio-economic development of the regions of the Ural Federal District. *Diskussiya*, 5(96), 20–35. DOI: 10.24411/2077-7639-2019-10038 (in Russian).

Dzhurka N.G. (2021). The system of spatial markets in the national economy: Measurement problems. *Prostranstvennaya ekonomika=Spatial Economics*, 17(4), 16–40. DOI: 10.14530/se.2021.4.016-040 (in Russian).

Ershov D.E. (2011). A systematic approach to the analysis of regional markets based on the methodology of penetrating indicators. *Trudy NGTU im. R.E. Alekseeva*, 1(86), 265 (in Russian).

Glushchenko K.P. (2017). The Moscow market in the economic space of the country. *Prikladnaya ekonometrika*, 48, 5–21 (in Russian).

Goodwin B.K., Grennes T.J., McCurdy C. (1999). Spatial price dynamics and integration in Russian food markets. *The Journal of Policy Reform,* 3(2), 157–193. Available at: https://doi.org/10.1080/13841289908523402

Granberg A.G., Suspitsyn S.A. (1988). *Vvedenie v sistemnoe modelirovanie narodnogo khozyaistva* [Introduction to the System Modeling of the National Economy]. Novosibirsk: Nauka.

Gusmanov R.U., Salimova G.A., Lubova T.N., Zakarchevskii O.V. (2024). the formation of the innovation and investment process in the regions of Russia. *Ekonomika, trud, upravlenie v sel'skom khozyaistve*, 6(112), 49–60. DOI: 10.33938/246-49 (in Russian).

Karelina M.G. (2016). Comprehensive assessment of integration activity of business structures in Russian regions. *Ekonomicheskie i sotsial'nye peremeny: fakty, tendentsii, prognoz=Economic and Social Changes: Facts, Trends, Forecast,* 5(47), 103–121. DOI: 10.15838/esc.2016.5.47.6 (in Russian).

Khanin G.I. (2022). Economic consequences of SMO and Western economic sanctions. *Idei i idealy*, 4-2. Available at: https://cyberleninka.ru/article/n/ekonomicheskie-posledstviya-svo-i-zapadnyh-ekonomicheskih-sanktsiy (accessed: 03.08.2025; in Russian).

Khashir B.O., Shvetsova I.N., Usanov A.Yu., Ponomarev S.V. (2023). The specifics of digitalization in Russia and the regions under conditions of uncertainty. *Vestnik Kemerovskogo gosudarstvennogo universiteta. Seriya: Politicheskie, sotsiologicheskie i ekonomicheskie nauki*, 8, 2(28), 249–258. DOI: 10.21603/2500-3372-2023-8-2-249-258 (in Russian).

Khmeleva G.A., Treshcheva A.A. (2023). Theoretical and methodological approaches to the formation of investment attractiveness of a region in a limited open economy. *Vestnik evraziiskoi nauki*, 15(4) (in Russian).

Kolmakova E.M. (2015). Expansion of forms of regulation of investment activity of territories in the economy of the Russian Federation. *Ekonomika i predprinimatel'stvo*, 8-1(61), 1137–1140 (in Russian).

Kolomak E.A. (2010). Spatial externalities as a resource for economic growth. *Region: ekonomika i sotsiologiya*, 4, 73–87 (in Russian).

Kolomak E.A. (Ed.). (2020). *Prostranstvennoe razvitie sovremennoi Rossii: tendentsii, faktory, mekhanizmy, instituty* [Spatial Development of Modern Russia: Trends, Factors, Mechanisms, Institutions]. Novosibirsk: IEOPP SO RAN.

Krivenko N.V., Trynov A.V., Epaneshnikova D.S. (2023). Investment activity in the Ural Federal District in the context of import substitution. *Regional'naya ekonomika: teoriya i praktika=Regional Economics: Theory and Practice*, 21, 6(513), 1105–1133. DOI: 10.24891/re.21.6.1105 (in Russian).

Kuchkovskaya N.V., Novikova V.S. (2018). Investment attractiveness of the regions: problems and solutions. *Poisk (Volgograd)*, 1(8), 121–124 (in Russian).

Kwon G.M. (2019). Regional aspects of investment development potential of the Ural macroregion. *Regional'nye problemy preobrazovaniya ekonomiki*, 9(107), 51–60. DOI: 10.26726/1812-7096-2019-9-51-60 (in Russian).

Mal'tsev D.K. (2024). Analysis and scientific and practical recommendations for increasing the investment attractiveness of the Sverdlovsk region. *Teoriya i praktika mirovoi nauki*, 8, 27–31 (in Russian).

Markova E.S. (2022). *Teoretiko-metodologicheskie osnovy prostranstvennoi organizatsii regiona v usloviyakh ekonomicheskoi nestabil'nosti* [Theoretical and Methodological Foundations of the Spatial Organization of the Region in Conditions of Economic Instability]. Lipetsk: Lipetskii gosudarstvennyi tekhnicheskii universitet.

Miller R. (1969). Interregional feedbacks in input-output models: Some experimental results. *Western Economic Journal*, 7(1), 41–50. Available at: https://doi.org/10.1111/j.1465-7295.1969.tb01462.x

Naumov I.V. (2021). Research and modeling of spatial localization and movement of bank capital. *Ekonomika. Nalogi. Pravo*, 14(6), 41–51. DOI: 10.26794/1999-849X-2021-14-6-41-51 (in Russian).

Panenko A.I. (2023). A system of decision-making principles in the field of investment support for the economic development of regions. *Russian Journal of Management*, 11(4), 579–591. DOI: 10.29039/2409-6024-2023-11-4-579-591 (in Russian).

Perina P.I. (2023). Investments in the development of the mineral resource industry of Yakutia. *EGO: Ekonomika. Gosudarstvo. Obshchestvo*, 1(50), 17–23 (in Russian).

Peshcherov G.I., Solodilov A.V. (2018). Ways to improve the investment potential of Russian regions. *Mirovye tsivilizatsii*, 3(2), 3 (in Russian).

Podmolodina I.M., Kolesnikova E.Yu., Kolomytseva O.Yu. (2022). Assessment of the impact of investment attractiveness on the economic security of the region. *Vestnik Voronezhskogo gosudarstvennogo universiteta inzhenernykh tekhnologii=Proceedings of the Voronezh State University of Engineering Technologies*, 84, 2(92), 407–412. DOI: 10.20914/2310-1202-2022-2-407-412 (in Russian).

Pozdnyakov S.A., Markova E.S. (2022). Ensuring the economic security of regions in the context of global instability. *Innovatsionnaya ekonomika i pravo*, 4(23), 94–100. DOI: 10.53015/2782-263X_2022_4_94 (in Russian).

P'yankova S.G., Mitrofanova I.V., Ergunova O.T. (2022). State regional policy under uncertainty: The practice of the Ural Federal District. *Obshchestvo: politika, ekonomika, pravo=Society: Politics, Economics, Law*, 8(109), 28–35. DOI: 10.24158/pep.2022.8.4 (in Russian).

Robison M.H., Miller J.R. (1991). Central place theory and intercommunity input-output analysis. *Papers in Regional Science*, 70(4), 399–417. Available at: https://doi.org/10.1111/j.1435-5597.1991.tb01740.x

Shekhovtseva L.S., Safonova I.Yu. (2022). Dynamics of integral assessments of regional development in the context of regional policy justification. *Kreativnaya ekonomika=Creative Economy*, 16(5), 1721–1740. DOI: 10.18334/ce.16.5.114646 (in Russian).

Shuliko E.V. (2018). Innovation and investment activities of regions in the context of uncertainty and structural changes in the economy. *Vektor ekonomiki*, 5(23), 90 (in Russian).

Sitokhova T.E., Khachirov K.A., Kumaritova Z.A. (2022). Macroeconomic instruments for the development of the investment paradigm of the regional economic space. *Ekonomika i upravlenie: problemy, resheniya*, 1, 7(127), 113–121. DOI: 10.36871/ek.up.p.r.2022.07.01.011 (in Russian).

Solodilov A.V. (2018). Investment potential of regions in conditions of economic instability: New approaches and prospects. *Vestnik Moskovskogo gosudarstvennogo oblastnogo universiteta. Seriya: Ekonomika*, 1, 92–100. DOI: 10.18384/2310-6646-2018-1-92-100 (in Russian).

Sorokina E.A., Prokhorov A.Yu. (2012). The problem of increasing the competitiveness of the investment potential of a resource-deficient region. Upravlenie ekonomicheskimi sistemami, 8(44). Available at: http://uecs.ru/uecs44-442012/item/1479-2012-08-01-07-07-20 (accessed: 15.11.2024; in Russian).

Suslov V.I. (1991). *Izmerenie effektov mezhregional'nykh vzaimodeistvii: modeli, metody, rezul'taty* [Measuring the Effects of Inter-Regional Interactions: Models, Methods, Results]. Novosibirsk: Nauka.

Tishchuk M.O. (2022). The impact of tourism on investment behavior of the population: The experience of the Kaliningrad region. *Rossiiskie regiony: vzglyad v budushchee*, 9(3–4), 51–63 (in Russian).

Tyurin D.V. (2025). Features of regional industry market analysis. *Prakticheskii marketing*, 1(331), 44–47. DOI: 10.24412/2071-3762-2025-1331-44-47 (in Russian).

Urasova A.A. (2022). Transformation of the regional industrial structure in the context of technological evolution. *Ekonomika promyshlennosti*, 15(2), 198–205. DOI: 10.17073/2072-1633-2022-2-198-205 (in Russian).

Voronov A.S. (2022). Innovative attractiveness of the regions of the Ural Federal District: A comparative analysis. *Diskurs-Pi*, 19(1), 124–149. DOI: 10.17506/18179568_2022_19_1_124 (in Russian).

Yazgan M.E., Yilmazkuday H. (2011). Price-level convergence: New evidence from U.S. cities. *Economics Letters*, 110(2), 76–78. Available at: https://doi.org/10.1016/j.econlet.2010.10.013

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ЛИТЕРАТУРА

Буфетова А.Н. (2016). Пространственные аспекты концентрации экономической активности в России // Пространственная экономика. № 3. С. 38–56. DOI: https://doi.org/10.14530/se.2016.3.038-056

Воронов А.С. (2022). Инновационная привлекательность регионов Уральского федерального округа: сравнительный анализ // Дискурс-Пи. Т. 19. № 1. С. 124–149. DOI: 10.17506/18179568_2022_19_1_124

Глущенко К.П. (2017). Рынок Москвы в экономическом пространстве страны // Прикладная эконометрика. Т. 48. С. 5–21.

Гранберг А.Г., Суспицын С.А. (1988). Введение в системное моделирование народного хозяйства. Новосибирск: Наука. 304 с.

Гусманов Р.У., Салимова Г.А., Лубова Т.Н., Закарчевский О.В. (2024). Исследование инновационно-инвестиционного процесса в регионах России // Экономика, труд, управление в сельском хозяйстве. № 6 (112). С. 49–60. DOI: 10.33938/246-49

Демьяненко А.Е. (2019). Оценка потенциала и особенности социально-экономического развития регионов Уральского федерального округа // Дискуссия. № 5 (96). С. 20–35. DOI: 10.24411/2077-7639-2019-10038

Джурка Н.Г. (2021). Система пространственных рынков в национальной экономике: проблемы измерений // Пространственная экономика. Т. 17. № 4. С. 16–40. DOI: 10.14530/se.2021.4.016-040

Ершов Д.Е. (2011). Системный подход анализа региональных рынков на основе методики проникающих показателей // Труды НГТУ им. Р.Е. Алексеева. № 1 (86). С. 265.

Карелина М.Г. (2016). Комплексная оценка интеграционной активности бизнес-структур в российских регионах // Экономические и социальные перемены: факты, тенденции, прогноз. № 5 (47). С. 103–121. DOI: 10.15838/esc.2016.5.47.6

Квон Г.М. (2019). Региональные аспекты развития инвестиционного потенциала Уральского макрорегиона // Региональные проблемы преобразования экономики. № 9 (107). С. 51–60. DOI: 10.26726/1812-7096-2019-9-51-60

Колмакова Е.М. (2015). Расширение форм регулирования инвестиционной активности территорий в экономике РФ // Экономика и предпринимательство. № 8-1 (61). С. 1137–1140.

Коломак Е.А. (2010). Пространственные экстерналии как ресурс экономического роста // Регион: экономика и социология. № 4. С. 73–87.

Кривенко Н.В., Трынов А.В., Епанешникова Д.С. (2023). Инвестиционная активность в Уральском федеральном округе в условиях импортозамещения // Региональная экономика: теория и практика. Т. 21. № 6 (513). С. 1105–1133. DOI: 10.24891/re.21.6.1105

Кучковская Н.В., Новикова В.С. (2018). Инвестиционная привлекательность регионов: проблемы и пути решения // Поиск (Волгоград). № 1 (8). С. 121–124.

Мальцев Д.К. (2024). Анализ и научно-практические рекомендации повышения инвестиционной привлекательности Свердловской области // Теория и практика мировой науки. № 8. С. 27–31.

Маркова Е.С. (2022). Теоретико-методологические основы пространственной организации региона в условиях экономической нестабильности. Липецк: Липецкий государственный технический университет. 170 с.

Наумов И.В. (2021). Исследование и моделирование пространственной локализации и перемещения банковского капитала // Экономика. Налоги. Право. Т. 14. № 6. С. 41–51. DOI: 10.26794/1999-849X-2021-14-6-41-51

Паненко А.И. (2023). Система принципов принятия решений в сфере инвестиционного обеспечения экономического развития регионов // Russian Journal of Management. Т. 11. № 4. С. 579–591. DOI: 10.29039/2409-6024-2023-11-4-579-591

Перина П.И. (2023). Инвестиции в развитие минерально-сырьевой промышленности Якутии // ЭГО: Экономика. Государство. Общество. № 1 (50). С. 17–23.

Пещеров Г.И., Солодилов А.В. (2018). Пути совершенствования инвестиционного потенциала регионов России // Мировые цивилизации. Т. 3. № 2. С. 3.

Подмолодина И.М., Колесникова Е.Ю., Коломыцева О.Ю. (2022). Оценка влияния инвестиционной привлекательности на экономическую безопасность региона // Вестник Воронежского государственного университета инженерных технологий. Т. 84. № 2 (92). С. 407–412. DOI: 10.20914/2310-1202-2022-2-407-412

Поздняков С.А., Маркова Е.С. (2022). Обеспечение экономической безопасности регионов в условиях глобальной нестабильности // Инновационная экономика и право. № 4 (23). С. 94–100. DOI: 10.53015/2782-263X_2022_4_94

Пространственное развитие современной России: тенденции, факторы, механизмы, институты (2020) / под ред. Е.А. Коломак. Новосибирск: ИЭОПП СО РАН. 502 с.

Пьянкова С.Г., Митрофанова И.В., Ергунова О.Т. (2022). Государственная региональная политика в условиях неопределенности: практика Уральского федерального округа // Общество: политика, экономика, право. № 8 (109). С. 28–35. DOI: 10.24158/pep.2022.8.4

Ситохова Т.Е., Хачиров К.А., Кумаритова З.А. (2022). Макроэкономические инструменты развития инвестиционной парадигмы регионального экономического пространства // Экономика и управление: проблемы, решения. Т. 1. № 7 (127). С. 113–121. DOI: 10.36871/ek.up.p.r.2022.07.01.011

Солодилов А.В. (2018). Инвестиционный потенциал регионов в условиях экономической нестабильности: новые подходы и перспективы // Вестник Московского государственного областного университета. Серия: Экономика. № 1. С. 92–100. DOI: 10.18384/2310-6646-2018-1-92-100

Сорокина Е.А., Прохоров А.Ю. (2012). Проблематика повышения конкурентоспособности инвестиционного потенциала ресурсодефицитного региона // Управление экономическими системами. № 8 (44). URL: http://uecs.ru/uecs44-442012/item/1479-2012-08-01-07-07-20 (дата обращения 15.11.2024).

Суслов В.И. (1991). Измерение эффектов межрегиональных взаимодействий: модели, методы, результаты. Новосибирск: Наука. 252 с.

Тищук М. О. (2022). Влияние туризма на инвестиционное поведение населения: опыт Калининградской области // Российские регионы: взгляд в будущее. Т. 9. № 3–4. С. 51–63.

Тюрин Д.В. (2025). Особенности анализа регионального отраслевого рынка // Практический маркетинг. № 1 (331). С. 44–47. DOI: 10.24412/2071-3762-2025-1331-44-47

Урасова А.А. (2022). Трансформация региональной промышленной структуры в условиях технологической эволюции // Экономика промышленности. Т. 15. № 2. С. 198–205. DOI: 10.17073/2072-1633-2022-2-198-205

Ханин Г.И. (2022). Экономические последствия СВО и западных экономических санкций // Идеи и идеалы. № 4-2. URL: https://cyberleninka.ru/article/n/ekonomicheskie-posledstviya-svo-i-zapadnyh-ekonomicheskih-sanktsiy (дата обращения 03.08.2025).

Хашир Б.О., Швецова И.Н., Усанов А.Ю., Пономарев С.В. (2023). Специфика цифровизации в России и регионах в условиях неопределенности // Вестник Кемеровского государственного университета. Серия: Политические, социологические и экономические науки. Т. 8. № 2 (28). С. 249–258. DOI: 10.21603/2500-3372-2023-8-2-249-258

Хмелева Г.А., Трещева А.А. (2023). Теоретико-методологические подходы к формированию инвестиционной привлекательности региона в условиях ограниченно открытой экономики // Вестник евразийской науки. Т. 15. № 4.

Шеховцева Л.С., Сафонова И.Ю. (2022). Динамика интегральных оценок развития регионов в контексте обоснования региональной политики // Креативная экономика. Т. 16. № 5. С. 1721–1740. DOI: 10.18334/ce.16.5.114646

Шулико Е.В. (2018). Инновационная и инвестиционная деятельность регионов в условиях неопределенности и структурных изменений экономики // Вектор экономики. № 5 (23). С. 90.

Anselin L. (2003). Spatial Externalities, Spatial Multipliers, and Spatial Econometrics. *International Regional Science Review*, 26(2), 153–166. Available at: https://doi.org/10.1177/0160017602250972

Barrett C.B. (2001). Measuring Integration and Efficiency in International Agricultural Markets. *Review of Agricultural Economics*, 23(1), 19–32.

Capello R. (2009). Spatial Spillovers and Regional Growth. A Cognitive Approach. *European Planning Studies,* 17(5), 639–658. Available at: https://doi.org/10.1080/09654310902778045

Corrado L., Fingleton B. (2012). Where is the Economics in Spatial Econometrics? *Journal of Regional Science,* 52(2), 210–239. Available at: https://doi.org/10.1111/j.1467-9787.2011.00726.x

Goodwin B.K., Grennes T.J., McCurdy C. (1999). Spatial Price Dynamics and Integration in Russian Food Markets. *The Journal of Policy Reform,* 3(2), 157–193. Available at: https://doi.org/10.1080/13841289908523402

Miller R. (1969). Interregional Feedbacks in Input-Output Models: Some Experimental Results. *Western Economic Journal*, 7(1), 41–50. Available at: https://doi.org/10.1111/j.1465-7295.1969.tb01462.x

Robison M.H., Miller J.R. (1991). Central Place Theory and Intercommunity Input-Output Analysis. *Papers in Regional Science*, 70(4), 399–417. Available at: https://doi.org/10.1111/j.1435-5597.1991.tb01740.x

Yazgan M.E., Yilmazkuday H. (2011). Price-Level Convergence: New Evidence from U.S. Cities. *Economics Letters*, 110(2), 76–78. Available at: https://doi.org/10.1016/j.econlet.2010.10.013

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