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# Scientific and practical potential of the framework approach concept in mesoeconomics

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#### **Abstract**

The authors explore the theoretical foundations of mesoeconomics. The relevance of the publication is due, on the one hand, to the growing modern risks of the development of regional and national socio-economic systems, and, on the other, to the potential for reformatting interregional ties that ensure the safety and stability of the socio-natural system. The present study is based on the hypothesis of the key role of the framework approach to ensure balanced socioeconomic development of a set of socio-natural complexes. Within the framework of the proposed hypothesis, the authors identify three key frameworks - ecological, economic and culturalhistorical. The interrelation of frameworks covers development factors that go beyond the region, enterprises/corporations, industries - cooperation, multiplicative socio-economic effects, import substitution that go beyond the region, corporations. At this stage of the study, the methods of scientific observation, expert assessments and factor analysis were used. The article includes a brief overview of the state of modern research in the field of mesoeconomics. Based on the conducted research, the authors, among other things, conclude that it is necessary to supplement the institutional approach with the concept of a framework approach. The framework approach is of particular importance for ensuring the goals of balanced spatial development and security of the country.

## For citation

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## **Keywords**

Mesoeconomics, framework approach, ecological and economic framework of the territory, security, economics.

#### Introduction

The scientific and social relevance of research on the history, theory and practice of interrelations of economic actors at the mesoeconomical level is due to the objective need to solve modern problems: balanced spatial development of regions in conditions of uncertainty; advanced professional training of managerial, scientific and engineering personnel in the interests of developing new sectors of the economy; introducing novelty into the knowledge of economic processes.

The research is aimed at scientific substantiation of multiplicative socio-economic effects, including job creation, stimulation of scientific, technical and industrial potential of the region, increasing the economic capacity of the territory, improving the quality and standard of living, adaptation of the socio-economic system of the region to global changes, including climatic ones.

# Methodology

In their work, the authors used an integrated approach using a system-structural method involving interdisciplinarity, formalization of tasks and methods of their solution (environmental economics, sectoral and regional economics; econometrics; management theory; cultural studies; economic geography; history). Also at the preliminary stage, the method of factor analysis and institutional analysis were used.

## **Discussion**

Modern globalization is nonlinear in nature. These processes need to be understood, searched for and justified by scientific paradigms that allow to dampen the difficulties of the period of large-scale changes both for local socio-natural complexes and for the national socio-economic system as a whole. Therefore, the most promising scientific direction is theoretical and applied research of mesoeconomics.

Today, economic research touches on narrow, albeit important aspects of mesoeconomics.

Thus, the issues of local consumer markets, the role of infrastructure, logistics in a regional context are considered by the authors of the study "Competitive environment and entrepreneurial activity in local markets of mass-demand goods in Russia" [Grebennikov, Plyaskina, 2021].

The study 'Food security of Russia in the context of globalization and international restrictions' [Shchetinina et al., 2019] examines various approaches to the study of problems, respectively, food security, including at the regional level.

The authors of the research focus on individual industries or areas: digitalization [Kravchenko et al., 2019], certain demographic aspects of rural areas [Sergienko et al., 2019], innovative processes [Suslov, 2020] and a number of others.

Scientists of the Institute of Economic Research of the Far Eastern Branch of the Russian Academy of Sciences pay considerable attention to the spatial development of regions, considering the results of the implementation of the State Program of Socio-Economic Development of the Far Eastern Federal District for the period up to 2025 [Minakir, 2021], measurements and assessments of the socio-

economic state and trends in the development of the Far Eastern Federal District in the context of regions and industry complexes [Prokapalo, 2019], as well as such traditionally sectoral issues, as the processes of formation and development of agriculture in the Far East, taking into account the influence of climatic, technological, economic conditions and factors on them [Aseeva, Kiselev, Sukhomirov, 2020].

In addition, among the publications that touch on certain aspects of mesoeconomics, works on typology, indicators and other aspects of mesoeconomics are published [Ardasheva, 2007; Nayanova, 2015; Bulguchev, Yusupova, 2020; Andreev et al., 2021; Burmatova, 2021; Gorbashko, 2021; Slepenkova, 2021; Kryukov, 2021; Kryukov, Seliverstov, 2022; Kleiner, 2022]

The most extensive studies of mesoeconomics are presented by monographs published by IE RAS: "Mesoeconomics: Elements of a new paradigm" [Maevskii, 2020] and "Mesoeconomics: state and prospects" [Maevskii, 2018].

The works contain an overview of foreign publications on the topic of mesoeconomics, which is considered primarily from the point of view of the institutional approach [Maevskii, 2020]. However, we note that the theoretical and applied potential of mesoeconomical research is much broader.

Researchers note a holistic approach and analysis of the economy from a systemic perspective, including aspects of self-organization of systems and subsystems. The predictive potential of the theoretical provisions of mesoeconomics is also noted, emphasizing that the institutional "slice" under study is, although significant, from the point of view of a number of authors [Maevskii, 2018], part of mesoeconomics research, but it is only one of the types of functional structures of the meso-level. As noted [ibid.], "the specificity of the mesoeconomical approach consists in the obvious recognition of the hierarchical nature of the economy". In addition, researchers in the field of synergetics note such an important aspect of modern global processes as self-organization, manifested in the inevitable formation of a hierarchical structure, as properties of any sufficiently complex system.

It is mesoeconomical studies that make it possible to analyze and formalize the interactions of heterogeneous economic objects to a large extent. It is at the meso-level that subsystems undergo stages of transitions from one level of ordering (through structuring) to a higher and more complex level. In turn, a new level, usually characterized by the evolution of the system as a whole, is associated with new challenges.

Threats of ecological and socio-cultural crisis are singled out among the most significant challenges today. Thus, in terms of threats to the ecological crisis, climate change, persistent pollution problems, and ecosystem digression are singled out. In the works of some authors, certain aspects of the problem under study are considered [Tong, 2020; Bolognesi, 2020; Kangas, 2019; Tardieu, 2019; D'yachenko et al., 2019].

Particular issues of environmental threats to regional socio-natural complexes are addressed in the works of the Institute of Economics and Industrial Production Organization SB RAS. Thus, a large study is devoted to energy and energy infrastructure [Tarasov, 2020], but the issues of adaptation of socio-natural complexes are not considered in the work.

The study "Spatial development of Modern Russia: trends, factors, mechanisms, institutions" [Kolomak, 2020] provides an overview and analysis of regional program documents of the regions of the Siberian Federal District, a lot of work has been done to analyze a number of indicators of the socioeconomic state of the regions of the Siberian Federal District. The authors note the importance of climatic conditions for the development of the studied territories.

In the study "Promising agricultural specialization of the macro-regions of Siberia" [Pershukevich, 2020], sectoral issues are considered. The authors, of course, relate to natural and climatic conditions,

noting the importance of operational monitoring of the state of the socio-natural complex and, accordingly, the need to rely on modern research in these matters.

In addition to the environmental factor, we will highlight the socio-cultural factor that influences the formation of consumer preferences, the volume and nature of consumption of both inelastic and goods and services with high demand volatility. The socio-cultural factor has a significant impact on the formation of sales markets and is an important factor in balanced (sustainable) socio-economic development [Kul'tura i ekonomika...., www].

We should also note the historical and scientific continuity of mesoeconomical research, primarily in terms of the spatial placement of objects in the real sector of the economy. Thus, a systematic approach was proposed to solve the problems of linking industries, regions, industrial and social infrastructure at the meso-level into a single complex [Bandman, 2975]. Researchers and developers not only described the planning algorithm at the interregional and intersectoral levels, but also provided for the analysis of mesomodels that occupy a median (meso) position between macro-models of the national economy of the country and micromodels (objects of the real sector of the economy within an administrative-territorial entity) in terms of the composition of conditions and the level of aggregation [ibid., 20]. Based on the mentioned studies, the algorithm should include:

- 1) determination of the object of research, including a set of parameters to be investigated and analyzed;
  - 2) formulation of an economic and mathematical problem;
- 3) selection (or development) of an econometric model corresponding to a specific task and software for processing an array of data;
  - 4) collection of information and preparation of initial data for the solution;
- 5) implementation of the problem solution, including iterations, the purpose of which is to obtain a realistic and optimal model;
- 6) analysis of the results of the decision and preparation of proposals for the development of an appropriate regulatory framework and/or institutions in order to implement the obtained scientifically based models.

At the same time, the optimization of logistics and interrelations of branches of specialization, resources (raw materials, labor, energy, research, technological, etc.), the level and quality of life of the population, including environmental protection, is considered as a key task, speaking in modern concepts, in order to create conditions for the formation of a competitive economic actor. Of particular importance is the solution of the problem of such optimization in the context of the actualization of multi-level risks associated with the reformatting of the global economic system. As it is rightly noted, "truly optimal national economic solutions are born precisely in the field of mesoeconomics" [Kleiner, 2022]. That is why the task of developing a unified concept for optimizing approaches and management tools at the meso-level is so important. The solution of this problem should be based on scientific achievements, accumulated (or emerging) arrays of data on the parameters of the studied economic objects and processes (at all levels), and first of all — on long-term fundamental and applied research in the field of mesoeconomics.

## Conclusion

The result of this stage of research was a hypothesis based on a framework approach in the formation and implementation of socio-economic policy at various levels:

In conditions of uncertainty and increased variety of risks (environmental, economic, socio-

cultural), issues of management of socio-economic systems and subsystems at the middle (meso-) level – between the macrosystem and actors at the microeconomic level.

Mesoeconomics, being, in fact, a link between the microeconomic level and the macroeconomic system, is the scientific field where multiplicative effects that go beyond the region, industry, corporation, but reach the macroeconomic level only after a certain number of iterations are manifested and can be most fully investigated. The scale of modern globalization requires a revision of scientific paradigms, which today are focused on market regulation of economic processes. However, the complexity of the current global economy, accompanied by an increase in various risks, requires deep and comprehensive theoretical research, including the development of applied directions in terms of identifying and regulating the interrelationships of socio-economic systems and subsystems.

Institutional, intercorporate, interregional cooperation – in fact, they are precisely a mesoeconomical phenomenon.

Let's highlight the main theses of the hypothesis proposed by the authors.

- 1. Management in the conditions of uncertainty characteristic of modern turbulence of global processes requires, on the one hand, operational intervention (regulation, relief of various risks), and on the other, scientific understanding, allowing to improve and increase (and/or maintain) the effectiveness of management (regulation, including risk relief). socio-economic systems of various levels.
- 2. In modern economic theory and practice, there is a problem of the "middle level link" mesoeconomics, management/regulation of the level between the economy of a region and/or an enterprise/corporation and the national economy.
- 3. Among the concepts of mesoeconomics, the most popular today is the institutional concept focused on the role and importance of institutions (social, economic, political, etc.) in the process of regulating the mesoeconomical level.
- 4. From the point of view of an integrated/systemic approach, the institutional approach needs to be supplemented with the concept of a framework approach, which is based on cooperation, multiplicative socio-economic effects that go beyond the region/corporation, and import substitution. The framework approach is of particular importance for ensuring the goals of balanced spatial development and security of the country.
- 5. The framework approach in mesoeconomics involves, among other things, rethinking hypotheses and theories of both Soviet/Russian classics of spatial development (Kolosovsky, Baransky, Zimin, etc.) and foreign ones (Tyunen, Lesh, Kristaller, etc.).
- 6. The framework of the territory (region and interregional zones) consists of linear and nodal objects. However, the justification of nodes (including their ranking), as well as the significance and versatility of linear objects, needs additional research.
- 7. The Russian Scientific School has extensive experience not only in fundamental research in the field of mesoeconomics, but also in the practical implementation of individual achievements (both positive and negative). In modern conditions, this experience requires rethinking.

In general, at this stage of research, it can be stated that the mesoeconomics of research is characterized by relevance, interdisciplinarity, synergetic and predictive potentials.

#### References

1. Andreev V.A., Sultanova E.V., Ivel'skaya N.G., Kuz'min S.B. (2021) Otraslevye kompleksy Dal'nego Vostoka Rossii – ekosistemy mezoekonomiki ili anklavy? [The industrial complexes of the Russian Far East – mesoeconomic ecosystems or enclaves?] *Ekonomika: vchera, segodnya, zavtra* [Economics: Yesterday, Today and Tomorrow], 11 (9A), pp. 282-

291.

2. Ardasheva E.P. (2007) Tipologiya mezoekonomiki [Typology of mesoeconomics]. *Vestnik Kazanskogo gosudarstvennogo tekhnologicheskogo universiteta (KGTU)* [Bulletin of the Kazan State Technological University], 3-4, pp. 218-229.

- 3. Aseeva T.A., Kiselev E.P., Sukhomirov G.I. (2020) *Sel'skoe khozyaistvo Dal'nego Vostoka: usloviya, problemy i potentsial razvitiya* [Agriculture of the Far East: conditions, problems and development potential]. Khabarovsk.
- 4. Bandman M.K. et al. (1975) *Metodicheskie polozheniya optimizatsii proizvodstvennoi struktury ekonomicheskogo raiona* (*Predvaritel'nyi variant*) [Methodological provisions for optimizing the production structure of an economic region (Preliminary version)]. Novosibirsk.
- 5. Bolognesi T., Nahrath S. (2020) Environmental Governance Dynamics: Some Micro Foundations of Macro Failures. *Ecological Economics*, 170, 106555.
- 6. Bulguchev M.Kh., Yusupova M.D. (2020) Formirovanie innovatsionnogo podkhoda k razvitiyu sotsial'no-ekonomicheskikh sistem na urovne mezoekonomiki [Formation of an innovative approach to the development of socio-economic systems at the mesoeconomics level]. *Ekonomika: vchera, segodnya, zavtra* [Economics: Yesterday, Today and Tomorrow], 10 (1A), pp. 145-152.
- 7. Burmatova O.P. (2021) *Metodologiya i instrumentarii analiza ekologo-ekonomicheskikh aspektov regional'nogo razvitiya* [Methodology and tools for analyzing the ecological and economic aspects of regional development]. Novosibirsk.
- 8. D'yachenko A.V. et al. (2019) Metateoriya vliyaniya turistsko-rekreatsionnoi deyatel'nosti na prirodnye parki [Metatheory of the impact of tourism and recreational activities on natural parks]. *Servis v Rossii i za rubezhom* [Service in Russia and Abroad], 13, 1 (83), pp. 151-154.
- 9. Gorbashko E.A. (2021) *Sovremennyi menedzhment: problemy i perspektivy* [Modern management: problems and prospects]. St. Petersburg.
- 10. Grebennikov V.F., Plyaskina N.I. (2021) *Konkurentnaya sreda i predprinimatel'skaya aktivnost' na lokal'nykh rynkakh tovarov massovogo sprosa v Rossii* [Competitive environment and entrepreneurial activity in local markets of massmarket goods in Russia]. Novosibirsk.
- 11. Kangas J., Ollikainen M. (2019) Economic Insights in Ecological Compensations: Market Analysis with an Empirical Application to the Finnish Economy. *Ecological Economics*, 159, pp. 54-67.
- 12. Kleiner G.B. (2022) *Mezoekonomika Rossii: strategiya razbega* [Mesoeconomics of Russia: a take-off strategy]. Moscow.
- 13. Kleiner G.B. (2022) Strategicheskoe planirovanie i sistemnaya optimizatsiya natsional'noi ekonomiki [Strategic Planning and System Optimization of the National Economy]. *Problemy prognozirovaniya* [Problems of Forecasting], 3, pp. 6-14.
- 14. Kolomak E.A. (2020) *Prostranstvennoe razvitie sovremennoi Rossii: tendentsii, faktory, mekhanizmy, instituty* [Spatial development of modern Russia: trends, factors, mechanisms, institutions]. Novosibirsk.
- 15. Kravchenko N.A. et al. (2019) *Vyzovy tsifrovoi transformatsii i biznes vysokikh tekhnologii* [Challenges of digital transformation and high-tech business]. Moscow.
- 16. Kryukov V.A. et al. (2021) TEK Aziatskoi Rossii v mire peremen [Fuel and Energy Complex of Asian Russia in a World of Change]. In: Sotsial'no-ekonomicheskoe razvitie Aziatskoi Rossii na osnove sinergii transportnoi dostupnosti, sistemnykh znanii o prirodno-resursnom potentsiale, rasshiryayushchegosya prostranstva mezhregional'nykh vzaimodeistvii [Socio-economic Development of Asian Russia Based on the Synergy of Transport Accessibility, Systemic Knowledge of Natural Resource Potential, and Expanding Space of Interregional Interactions]. Novosibirsk.
- 17. Kryukov V.A., Seliverstov V.E. (2022) Ekonomika Sibiri: trudnyi put' k sinergii prirodnogo i chelovecheskogo potentsiala, svyaznosti prostranstva i interesov federal'nogo tsentra i regionov [Economy of Siberia: The Difficult Path to Synergy of Natural and Human Potential, Connectedness of Space and Interests of the Federal Center and Regions]. Novosibirsk.
- 18. *Kul'tura i ekonomika. Obzor vzaimosvyazei* [Culture and Economy. Review of Interrelations]. Available at: https://gtmarket.ru/library/articles/2561 [Accessed 04/04/2024]
- 19. Maevskii V.I. (2020) *Mezoekonomika: elementy novoi paradigmy* [Mesoeconomics: Elements of a New Paradigm]. Moscow.
- 20. Maevskii V.I. (2018) Mezoekonomika: sostoyanie i perspektivy [Mesoeconomics: Status and Prospects]. Moscow.
- 21. Minakir P.A. (2021) Razvitie ekonomiki Dal'nego Vostoka Rossii: effekty gosudarstvennoi politiki [Development of the economy of the Russian Far East: effects of state policy]. Khabarovsk.
- 22. Nayanova E.A. (2015) Sistema indikatorov urovnya rynochnogo razvitiya mezoekonomiki (na primere Kostromskoi i Ivanovskoi oblastei). Doct. Dis. [System of indicators of the level of market development of mesoeconomics (on the example of Kostroma and Ivanovo regions). Doct. Dis.]. Ivanovo.
- 23. Pershukevich P.M. (2020) *Perspektivnaya sel'skokhozyaistvennaya spetsializatsiya makroregionov Sibiri* [Promising agricultural specialization of Siberian macroregions]. Omsk.
- 24. Prokapalo O.M. (2019) Regional 'nyi monitoring: Dal'nevostochnyi federal'nyi okrug [Regional monitoring: Far Eastern

- Federal District]. Khabarovsk.
- 25. Sergienko A.M. et al. (2019) *Migratsiya sel'skoi molodezhi: v fokuse Altaiskii krai* [Migration of rural youth: Altai Territory in the focus]. Barnaul.
- 26. Shchetinina I.V. et al. (2019) *Prodovol'stvennaya bezopasnost' Rossii v usloviyakh globalizatsii i mezhdunarodnykh ogranichenii* [Food security of Russia in the context of globalization and international restrictions]. Novosibirsk.
- 27. Slepenkova Yu.M. (ed.) (2021) Aktual'nye voprosy ekonomiki i sotsiologii [Actualissues of economics and sociology]. Novosibirsk.
- 28. Suslov V.I. (ed.) (2020) *Razvitie innovatsionnoi ekonomiki: analiz, metody i modeli* [Development of innovative economy: analysis, methods and models]. Novosibirsk.
- 29. Tarasov O.V. (2020) *Infrastruktura prostranstvennogo razvitiya RF: transport, energetika, innovatsionnaya sistema, zhizneobespechenie* [Infrastructure of spatial development of the Russian Federation: transport, energy, innovation system, life support]. Novosibirsk.
- 30. Tardieu L., Tuffery L. (2019) From supply to demand factors: What are the determinants of attractiveness for outdoor recreation? *Ecological Economics*, 161, pp. 163-175.
- 31. Tong Q., Qiu F. (2020) Population growth and land development: Investigating the bi-directional interactions. *Ecological Economics*, 169, 106505.

# Научный и практический потенциал концепции рамочного подхода в мезоэкономике

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#### Аннотация

Авторы исследуют теоретические основы мезоэкономики. Актуальность публикации обусловлена, с одной стороны, растущими современными рисками развития региональных и социально-экономических национальных систем, другой, потенциалом переформатирования связей. обеспечивающих межрегиональных безопасность устойчивость социоприродной системы. Настоящее исследование базируется на гипотезе о ключевой роли рамочного подхода для обеспечения сбалансированного социальносоциоприродных комплексов. экономического развития совокупности предлагаемой гипотезы авторы выделяют три ключевых рамочных подхода, экологический, экономический и культурно-исторический. Взаимосвязь рамочных подходов охватывает факторы развития, выходящие за рамки региона, предприятия/корпорации, отрасли кооперацию, мультипликативные социально-экономические эффекты, импортозамещение, выходящие за рамки региона, корпорации. На данном этапе исследования использовались

методы научного наблюдения, экспертных оценок и факторного анализа. Статья в ключает краткий обзор состояния современных исследований в области мезоэкономики. На основании проведенного исследования авторы, в том числе, приходят к выводу о необходимости дополнения институционального подхода концепцией рамочного подхода, который имеет особое значение для обеспечения целей сбалансированного пространственного развития и безопасности страны.

## Для цитирования в научных исследованиях

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#### Ключевые слова

Мезоэкономика, рамочный подход, эколого-экономический каркас территории, безопасность, экономика.

# Библиография

- 1. Андреев В.А. и др. Отраслевые комплексы Дальнего Востока России экосистемы мезоэкономики или анклавы? // Экономика: вчера, сегодня, завтра. 2021. Том 11. № 9А. С. 282-291.
- 2. Ардашева Е.П. Типология мезоэкономики // Вестник Казанского государственного технологического университета (КГТУ). 2007. № 3-4. С. 218-229.
- 3. Асеева Т.А., Киселев Е.П., Сухомиров Г.И. Сельское хозяйство Дальнего Востока: условия, проблемы и потенциал развития. Хабаровск, 2020. 162 с.
- 4. Бандман М.К. и др. Методические положения оптимизации производственной структуры экономического района (Предварительный вариант). Новосибирск, 1975. 149 с.
- 5. Булгучев М.Х., Юсупова М.Д. Формирование инновационного подхода к развитию социально-экономических систем на уровне мезоэкономики// Экономика: вчера, сегодня, завтра. 2020. Том 10. № 1А. С. 145-152.
- 6. Бурматова О.П. Методология и инструментарий анализа эколого-экономических аспектов регионального развития. Новосибирск, 2021. 441 с.
- 7. Горбашко Е.А. Современный менеджмент: проблемы и перспективы. СПб., 2021. 933 с.
- 8. Гребенников В.Ф., Пляскина Н.И. Конкурентная среда и предпринимательская активность на локальных рынках товаров массового спроса в России. Новосибирск, 2021. 194 с.
- 9. Дьяченко А.В. и др. Метатеория влияния туристско-рекреационной деятельности на природные парки // Сервис в России и за рубежом. 2019. Т. 13. № 1 (83). С. 151-154.
- 10. Клейнер Г.Б. Мезоэкономика России: стратегия разбега. М., 2022. 808 с.
- 11. Клейнер Г.Б. Стратегическое планирование и системная оптимизация национальной экономики // Проблемы прогнозирования. 2022. № 3. С. 6-14.
- 12. Коломак Е.А. Пространственное развитие современной России: тенденции, факторы, механизмы, институты. Новосибирск, 2020. 500 с.
- 13. Кравченко Н.А. и др. Вызовы цифровой трансформации и бизнес высоких технологий. М., 2019. 352 с.
- 14. Крюков В.А. и др. ТЭК Азиатской России в мире перемен // Социально-экономическое развитие Азиатской России на основе синергии транспортной доступности, системных знаний о природно-ресурсном потенциале, расширяющегося пространства межрегиональных взаимодействий. Новосибирск, 2021. 51 с.
- 15. Крюков В.А., Селиверстов В.Е. Экономика Сибири: трудный путь к синергии природного и человеческого потенциала, связности пространства и интересов федерального центра и регионов. Новосибирск, 2022. 124 с.
- 16. Культура и экономика. Обзор взаимосвязей. URL: https://gtmarket.ru/library/articles/2561
- 17. Маевский В.И. Мезоэкономика: состояние и перспективы. М., 2018. 314 с.
- 18. Маевский В.И. Мезоэкономика: элементы новой парадигмы. М., 2020. 392 с.
- 19. Минакир П.А. Развитие экономики Дальнего Востока России: эффекты государственной политики. Хабаровск, 2021. 208 с.
- 20. Наянова Е.А. Система индикаторов уровня рыночного развития мезоэкономики (на примере Костромской и Ивановской областей): дис. ... канд. экон. наук. Иваново, 2015. 189 с.
- 21. Першукевич П.М. Перспективная сельскохозяйственная специализация макрорегионов Сибири. Омск, 2020.

240 c.

- 22. Прокапало О.М. Региональный мониторинг: Дальневосточный федеральный округ. Хабаровск, 2019. 210 с.
- 23. Сергиенко А.М. и др. Миграция сельской молодежи: в фокусе Алтайский край. Барнаул, 2019. 325 с.
- 24. Слепенкова Ю.М. (ред.) Актуальные вопросы экономики и социологии. Новосибирск, 2021. 125 с.
- 25. Суслов В.И. (ред.) Развитие инновационной экономики: анализ, методы и модели. Новосибирск, 2020. 440 с.
- 26. Тарасов О.В. Инфраструктура пространственного развития РФ: транспорт, энергетика, инновационная система, жизнеобеспечение. Новосибирск, 2020. 456 с.
- 27. Щетинина И.В. и др. Продовольственная безопасность России в условиях глобализации и междунаро дных ограничений. Новосибирск, 2019. 264 с.
- 28. Bolognesi T., Nahrath S. Environmental Governance Dynamics: Some Micro Foundations of Macro Failures // Ecological Economics. 2020. Vol. 170. 106555.
- 29. Kangas J., Ollikainen M. Economic Insights in Ecological Compensations: Market Analysis with an Empirical Application to the Finnish Economy // Ecological Economics. 2019. Vol. 159. P. 54-67.
- 30. Tardieu L., Tuffery L. From supply to demand factors: What are the determinants of attractiveness for outdoor recreation? // Ecological Economics. 2019. Vol. 161. P. 163-175.
- 31. Tong Q., Qiu F. Population growth and land development: Investigating the bi-directional interactions // Ecological Economics. 2020. Vol. 169. 106505.