## **REVIEW**

## by Valeriia Shcherbak,

Doctor of Economic Sciences, Professor, Professor of the Department of Economics and Entrepreneurship named after I.M. Bryukhovetskyy at Sumy National Agrarian University, on the dissertation of Xu Weidong titled "State support for innovative projects for the development of the social infrastructure of the territories" submitted for the academic degree of Doctor of Philosophy in the field of knowledge 07 "Management and Administration," specializing in 073 "Management."

The relevance of the topic "State Support for Innovative Projects for the Development of Social Infrastructure of Territories" is unquestionable in the context of the contemporary socio-economic environment. Implementing effective innovations in the social infrastructure sphere defines the viability and well-being of territories and their inhabitants. In the face of rapid technological advancement and dynamic shifts in societal needs, state support for innovations becomes a key mechanism for stimulating the implementation of innovative projects in the field of social infrastructure. This includes expanding the range of social services, integrating digital technologies to enhance service quality, personalizing approaches to providing social services, and addressing ecological and sustainable challenges. Ensuring government support for innovative initiatives in the social infrastructure sector not only contributes to improving the quality of life for citizens but also fosters the development of economic stability and competitiveness of territories. Moreover, analyzing and researching the effectiveness of state support in the innovation field of social infrastructure is crucial for determining optimal strategies and mechanisms aimed at achieving maximum societal benefit. This approach facilitates the building of a resilient and progressive society that meets the demands of the present and future generations. From these perspectives, Xu Weidong 's dissertation on the topic "State support for innovative projects for the development of the social infrastructure of the territories" is deemed pertinent and timely. The research delves into the examination of these issues, highlighting their relevance in the current context.

The dissertation research has been conducted in accordance with the thematic focus of the scientific research carried out by the Department of Marketing and Logistics at Sumy National Agrarian University. Specifically, it aligns with the topic "Management of Enterprise Competitiveness based on

Innovative Marketing Principles" (State registration number 0119U100250, 2019-2022). The author has identified theoretical-methodological approach to fostering interaction among key stakeholders is based on defining the degree of involvement of relevant parties actively participating in the planning, development, and implementation of social policies. This can be achieved through applying a responsibility matrix for institutions in shaping the development policies of social infrastructure for territories.

When describing the structure and content of the dissertation, it is important to note that the work consists of an introduction, three main chapters, conclusions, a list of references, and appendices. The abstract provides a brief overview of the main content and research results. The main body of the dissertation spans 170 pages, incorporating 22 tables and 23 figures that complement the author's narrative and visually illustrate the scientific findings. The study draws upon a substantial number of scholarly sources – a total of 213, affirming the justification and reliability of the obtained results.

The introduction to the dissertation work presents the relevance and key components of the scientific research: the objectives, tasks, object, subject, and research methods. The introduction also outlines the scientific results achieved by the author and their practical significance.

The first section of the dissertation focuses on establishing the theoretical and methodological framework for managing the innovation activity of social infrastructure development in territories. The author employs a scholarly approach, utilizing bibliometric analysis with the bibliometrix R-package to map the research landscape in this field. The theoretical foundation underscores the integral connection between territory development and innovation activity, positing that competitiveness is a central goal within this context. It is posited that the competitiveness of territories is gauged by their capacity to attract investments, tourists, businesses, and skilled professionals in comparison to other regions.

Moving on to the second section, the dissertation systematically presents the current state of organizational and economic mechanisms in managing innovation activity, drawing comparisons between Ukraine and China. The analysis reveals the disparities in the innovation processes within the social sector of both countries. The research sheds light on the influence of these disparities on the efficiency of organizational and economic mechanisms. The author explores innovative projects as a targeted approach to managing and

directing innovation activities, examining their role and impact within the broader context of social infrastructure development.

In the third section, the dissertation advances the argument for the improvement of organizational and economic mechanisms to enhance innovation activity in the development of social infrastructure within territories. Three key directions are outlined: the formation of interaction between key stakeholders to ensure effective innovation processes in the social sector, the establishment of a State Partnership for Innovative Development of Territories, and the promotion of the impact of innovation on the overall social development of territories. Each direction is substantiated with a comprehensive analysis and recommendations, contributing to the overarching goal of fostering innovation and sustainable development within territories.

In conclusion, the dissertation not only provides a thorough theoretical foundation but also offers practical insights into the strategic dimensions of The first section of the dissertation focuses on establishing the theoretical and methodological framework for managing the innovation activity of social infrastructure development in territories. The author employs a scholarly approach, utilizing bibliometric analysis with the bibliometrix R-package to map the research landscape in this field. The theoretical foundation underscores the integral connection between territory development and innovation activity, positing that competitiveness is a central goal within this context. It is posited that the competitiveness of territories is gauged by their capacity to attract investments, tourists, businesses, and skilled professionals in comparison to other regions.

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stakeholders to ensure effective innovation processes in the social sector, the establishment of a State Partnership for Innovative Development of Territories, and the promotion of the impact of innovation on the overall social development of territories. Each direction is substantiated with a comprehensive analysis and recommendations, contributing to the overarching goal of fostering innovation and sustainable development within territories. By exploring the intersections of economic development, innovation, and sustainability, the research contributes to the broader discourse on effective territorial management strategies in the dynamic global landscape.

The language and style of the dissertation adhere to the requirements of scientific discourse.

The primary objective of the dissertation is to develop theoretical, methodological, and applied principles for the organizational and economic foundations of managing territorial competitive advantages.

The following tasks were addressed:

- Develop and articulate a comprehensive conceptual apparatus for understanding innovation activity in the context of social infrastructure development.
- Trace and document the historical evolution of organizational and economic mechanisms employed by the state to stimulate innovation activity in both Ukraine and China.
- Investigate and analyze the institutional, organizational, and economic factors that serve as prerequisites for the development of social infrastructure within territories.
- Conduct a thorough examination of the current state of innovation processes within the social sector of Ukraine.
- Undertake a comprehensive study to understand the current state of innovation processes within the social sector of China.
- Highlight significant trends, advancements, and challenges in China's innovation landscape within the context of social infrastructure development.
- Analyse case studies or examples to illustrate how innovative projects contribute to targeted management of innovation activity.
- Highlight the importance of collaboration and communication in ensuring the success of innovation initiatives.
- Define and outline specific directions for establishing a State
  Partnership dedicated to fostering innovative development within territories.

The dissertation's objectives encompass a comprehensive exploration of both the theoretical foundations and practical applications, contributing to the broader understanding of effective territorial management strategies.

The primary scientific outcomes of the research are as follows:

- proposed organizational and economic mechanisms for managing innovative activities in the development of the social infrastructure of territories represent a transformation of the influence of the external environment as the primary source of innovative changes within the functioning of an innovation cluster. Simultaneously, this cluster acts as a source of resources utilized by social infrastructure as an open system for achieving the expected results. The methodological basis of state regulation in the spheres of social infrastructure involves forms of public-private partnership as a universal toolkit, along with corresponding principles. Adherence to these principles must be a mandatory condition for making regulatory decisions regarding the implementation of innovative changes.
- the theoretical and methodological approach to forming the interaction of key stakeholders based on the determined degree of involvement of relevant interested parties actively participating in the planning, development, and implementation of social policies can be realized through the application of a responsibility map of institutions in shaping the development policy of the social infrastructure of territories.
- the study of the state of innovative processes in the social sector of China is based on the country's positions in the Global Innovation Index and an analysis of statistical indicators of social infrastructure. In contrast to existing methods, this approach allows for proposing a matrix of recommendations to enhance the inclusivity of China's social infrastructure in the following structural elements: healthcare, education, public services, public transport, and the ecological sustainability of cities and regions.
- the methodical approach to assessing the level of development of social infrastructure territories, unique in its wide range of stakeholders (government and local authorities, business communities, and the public), can be used to evaluate regional development proportionality and avoid disparities in the development of specific areas of social infrastructure. This approach serves to conduct a comparative assessment of the development level of territories and the effectiveness of investments during the implementation of public-private partnership projects and to make strategic decisions for state social policies.

the justification of the interaction of key stakeholders to ensure the efficiency of innovative processes in the social sector is based on a four-tier model of interaction. Key stakeholders include the government, private partners, investors (sponsors), specialized agencies, innovation clusters, and end consumers (the country's population). Each level of interaction has its specific features and corresponding impact on the efficiency of innovative processes, achievable only by meeting the relevant requirements and criteria.

In her dissertation, Xu Weidong demonstrated a high level of theoretical expertise in understanding the conceptual foundations of managing organizational and economic principles in constructing mechanisms for managing territorial competitive advantages. An analysis of the plagiarism check report revealed no similarities with other texts, affirming the academic integrity of the dissertation author. The scientific ideas and positions underpinning the dissertation work are appropriately referenced.

Regarding the dissertation's subject, one chapter has been published in a collective monograph, along with four articles in specialized scientific journals in Ukraine. The conference proceedings, comprising four publications, based on the dissertation materials, ensure the proper validation of the research results. Scientific publications adequately elucidate the content of the obtained research outcomes and the dissertation's essence.

The main scientific works include:

- 1. Tretyak, V., & Weidong, S. (2021). Formation of effective cooperation between key stakeholders of rural areas on the basis of public-private partnership. *Problems and Prospects of Entrepreneurship Development*, (27), 103-115.
- 2. Weidong, S. (2023). The place of organizational and economic mechanisms in the implementation of an innovative model of development: bibliometric analysis. *Economy & Society*, (57)
- 3. Danko, Y., & Weidong, S. (2023). Formation of interaction of key stakeholders to ensure the effectiveness of innovative processes in the social sector. *Bulletin of Sumy National Agrarian University*, (4 (96), 65-69.
- 4. Xu Weidong (2023) Research on the state of innovation processes in china's social sector. Scientific works of the Interregional Academy of Personnel Management. *Economic Sciences*. № 5 (72). P. 78-87.

The research findings underwent appropriate validation, being presented and discussed at international scientific conferences in Ukraine, including the conference for teachers and graduate students at Sumy National Agrarian University (Sumy, Ukraine, 2022-2023), Kharkiv Innovation Forum (Kharkiv, 2020), Skills for Smart Specialization – Foresight Session in Kharkiv Region "High-Value-Added Engineering" (Kharkiv, 2021), and "European Cluster Collaboration Platform: Opportunities for Ukrainian Business" (Kharkiv, 2021).

While evaluating the dissertation positively, it is necessary to note certain points of discussion:

- 1) In the dissertation, it would be advisable to provide a detailed analysis of potential advantages and disadvantages, considering the diversity of social innovations. Additionally, explain how the proposed organizational and economic mechanisms can effectively address the task of stimulating innovative processes in the social infrastructure of territories.
- 2) Additional clarification is needed regarding the key aspects of social infrastructure that can be identified in the context of our research as components of the material base of the social complex of territories. The question arises: how do these structures in the social sphere impact the organization of society's life? Furthermore, which societal and quasi-public spaces fall within the scope of our investigation, and what roles do they play in sustaining social cohesion through the provision of quality social services?
- 3) The author emphasizes the use of multiple regression coefficients to determine the prioritization of innovative projects in social infrastructure. This approach involves utilizing coefficients to identify the sector of social infrastructure that requires the most significant innovative transformations, along with the creation of an 'Efficiency/Reliability' matrix. It would be beneficial to provide more detailed explanations of the specific considerations involved
- 4) In Figure 3.2 of the dissertation, the 'Organizational and Economic Mechanisms of Managing Innovative Activities in the Development of Social Infrastructure in Territories' is presented. However, this mechanism lacks a marketing component. We cannot agree with this, as in the context of intensified competitiveness, the role of marketing becomes particularly crucial.
- 5) It would be advisable to pay more attention to the analysis of the research subject in the context of artificial intelligence development. We believe that when discussing infrastructure development, issues related to artificial intelligence are particularly distinctive and practically significant, especially for China.
- 6) The thesis contains editorial errors, most likely attributed to the challenges of translating from Chinese to English.

However, these comments don't lessen the overall high assessment of the research conducted by Xu Weidong. After carefully reviewing Xu Weidong's dissertation and scientific publications, it's important to note her scientific maturity and ability to conduct independent research at a high scientific level. The reviewed dissertation is a completed, independently conducted scientific work characterized by integrity and significant theoretical and applied value.

Xu Weidong's dissertation on the topic "State support for innovative projects for the development of the social infrastructure of the territories" aligns completely with the specialty 073 "Management" and meets the requirements outlined in point 6 of the Cabinet of Ministers of Ukraine Resolution "On approving the procedure for awarding the degree of Doctor of Philosophy and cancelling the decision of a one-time specialized academic council of a higher education institution, scientific institution on awarding the degree of Doctor of Philosophy dated January 12, 2022, No. 44, and the Requirements for the preparation of a dissertation approved by the order of the Ministry of Education and Science of Ukraine dated January 12, 2017, No. 40. Therefore, the dissertation can be recommended for consideration at the meeting of a one-time specialized academic council, and its author, Xu Weidong, for the award of the degree of Doctor of Philosophy in the specialty 073 "Management."

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