Zuiev, M. (2025). The problem of state support of innovation ecosystems. Management and Entrepreneurship: Trends of Development, 1(31), 105-112. https://doi.org/10.26661/2522-1566/2025-1/31-12

PUBLIC ADMINISTRATION

RECEIVED:
16 December 2024
ACCEPTED:
20 February 2025
RELEASED:
20 March 2025

UDC 35.071

DOI 10.26661/2522-1566/2025-1/31-12

The problem of state support of innovation ecosystems

Mykhailo Zuiev
Lviv Polytechnic National University
Lviv, Ukraine
ORCID 0000-0002-4346-3393

Corresponding author email: miszuiev@gmail.com

Abstract. This work is intended to be a theoretical generalization of key issues commonly faced by state support of innovative environments in Ukraine. To achieve this aim, it was necessary to solve theoretical scientific problems directed at minimizing the negative impact caused by the lack of state support for innovative environments. In the course of the research, the method of analysis, synthesis and systematization within the systemic approach were used. The framework of research was based on the legal regulation of the innovation system, academic and methodological works of domestic and foreign authors. Also, the study incorporated quantitative or analytical data obtained from government documents and magazines.

The gaps and challenges in state support for innovation ecosystems in Ukraine are the focuses of this research. It identifies important problems that include poor funding, lack of coherent legal tender, ambiguous policy framework for support of small innovative business, and limited access to resources for new innovative firms. The absence of a unified regular approach to the legal regulation and the articulated innovation infrastructure, the weak ties between the academic and the business sphere, and insufficient integration of the innovation activities into the national economic development program make it difficult to develop a strong innovation system.

Furthermore, this research demonstrates the lack of efficient technology transfer and technological translation systems, low levels of commercialization of research and development innovations, and meagre state support for startups venturing into the global market. The EU Joint Research Centre proposals suggest that legal changes, rationalization of legislation, higher funding of innovation ventures, and the formation of public-private partnership that can foster innovations transfer and development. These measures are crucial for Ukraine, and it is high time to increase international competitiveness to propel the country to balanced economic development with the help of innovations.

Some findings of this study relevant to the state and aimed to provide recommendations for the development of strategic reforms for the creation of favorable conditions for the development of the innovation landscape of Ukraine.

Key words: innovations; national innovation ecosystem; public governance mechanisms.
JEL Classification: O38, O30, L52, H25.

INTRODUCTION

The goal of the study is to provide a multi-level review and meeting the theoretical presuppositions for state support of the innovation ecosystems in Ukraine. Were these challenges not addressed, they possess potential to increase the detrimental impact of weak state support in encouraging innovation. Insufficient institutional support for innovation ecosystems is responsible for the failure of the country to compete effectively for globalization affecting its economic and technological growth. As a result, this research aims at discovering deficient areas of modern policies and provide recommendations to significantly strengthen the position of state factors as a driver of innovations in development.

LITERATURE REVIEW

The researcher Yuriy Bazhal examined the issue of forming institutions for an innovative ecosystem in the context of the growing role of research universities in structural innovation in Ukraine's economy. According to the author, the main practical issue in defining the place and role of research universities and other scientific and educational organizations in the structural innovation transformation of Ukraine's economy lies in insufficient attention to the practical implementation of basic innovations as a key factor for economic growth. The author proposes prioritizing the establishment of a new generation of higher education institutions (universities) as innovative entrepreneurial universities within the development of Ukraine’s national innovation policy. He emphasizes the importance of fostering the development of universities and scientific centers that demonstrate cumulative human capital, even during the periods of temporary crises [1].

The researchers S. Petran and V. Shamota highlight the challenges and obstacles hindering Ukraine's innovative development. These include insufficient funding for innovation projects, lack of favorable legislation, a low level of skilled specialists, and inadequate infrastructure to support innovative activities [6].

The topic of startups has been explored by the following scholars O.O. Kurchenko, L.I. Mulik, S.O. Solntsev, H.O. Shvets, N.I. Sytnyk, and N.Yu. Podolchak. In the context of European integration processes in Ukraine, the interest in startups is also reflected in the studies of entrepreneurs and experts such as R.I. Babyachok and I.I. Kulchytskyi. The research on public governance and innovation has been conducted by O.I. Bilyk, V.Ya. Karkovska, N.Yu. Podolchak, O.V. Khimych, and others. However, the issues related to state support for innovation ecosystems have been addressed only fragmentarily.

PAPER OBJECTIVE

The research on the issue of state support for innovation ecosystems is important as insufficient development of such ecosystems could reduce the country's competitiveness in the global market. The subject of this study is the state support for Ukraine's innovation ecosystems, which is particularly relevant in the context of Ukraine's accession to the European Union.

METHODOLOGY

The methods of systemic analysis, synthesis, and systematization were used in the study. The research was based on legislative and regulatory acts governing the innovation ecosystem, as well as theoretical and methodological contributions from domestic and foreign scholars, along with statistical and analytical materials. Data from official publications and periodicals were also utilized.

RESULT AND DISCUSSION

This paper therefore posits that state support for innovation ecosystems is a critical way through which states can catalyse economic and societal development. In connection with globalization and technological advances, the governments of various countries actively facilitate measures to support the innovation processes.

L.S. Franko investigated specific aspects of state support for innovation ecosystems, particularly regarding the adoption of European innovation policy tools in Ukraine's economy. This research emphasizes the importance of adapting European experiences in creating institutional conditions to support innovation, particularly through national innovation systems and regulatory tools [3].

O.A. Yermakova, S.O. Perminova, and M.O. Chupryna focus on the necessity of integrated innovation policies that include support for startups, promotion of research commercialization, and partnerships between the public and private sectors. Their studies underscore the significance of public and private investments in innovation infrastructure for national competitiveness [5, 9].

At the same time, in turn, outlines the primary obstacles and shortcomings of state policies aimed at the development of innovation ecosystems in Ukraine.

The foremost of them is that there is lack of funds for investment for innovators and the resources available are also limited. The research shows that state funding for innovation is usually insufficient to meet the funding demands of startups, and especially in their initial stage. This situation hinders many promising innovation projects from developing to their full capacity while giving them market success.

Additionally, there is an absence of effective state support mechanisms tailored to the diverse needs of small innovative enterprises across different stages of their development [4]. This includes inadequacies in the regulatory framework, financing models, and intellectual property protection. A notable issue is the lack of comprehensive legal regulation for innovation infrastructure. In Ukraine, the legislative framework governing innovation activities is often inconsistent and lacks mechanisms that provide meaningful support [7]. This inconsistency complicates access to financial resources for innovation projects and hinders their implementation. [8].

Another significant concern is the limited financial resources allocated to innovation projects. State support in Ukraine tends to prioritize individual business-backed projects rather than fostering a systemic approach to developing innovation institutions. This focus restricts opportunities for the long-term growth and sustainability of innovation ecosystems [1].

This is made worse by the fact that there is no unified and diversified funding sources available for such purposes. Innovation ecosystems rely on both public money, private capital and support from the global community. While there are many sources of innovative funding some projects in Ukraine largely depend on unpredictable stochastic state grants. For instance, the restricted available venture capital and seed money for startup entrants heavily pull back the commercialization of research and the growth of innovative solutions. Moreover, there is no separate innovation fund, and this means that it is challenging to direct funds specifically and selectively at sectors that have high potential for innovation, for example, artificial intelligence, biotechnology, and renewable energy.

Besides, attention is paid to the financing of individual initiatives without regard for the creation of necessary infrastructures such as technology parks, business incubators, and research centers, without which fostering and supporting innovativeness of startups and SMEs is unlikely to succeed. This short-term oriented view also hinders human capital development, as low investment in education and training the human resources for innovation industry fails to provide sufficient number of qualified staff ready to embrace formidable tasks in innovation development.

This means that a more strategic and efficient procedure for financing should be launched to eliminate these problems. This could include the concept of creating a stable innovation fund

funded or sponsored by both state and private sources for the purpose of providing steady and sustainable capital to early stage ventures along with long term, patient capital expansion initiatives. Moreover, further enhancement of a tax incentive and grants scheme for different private investors can help in increasing the participation of the business section in the financing of innovation.

Furthermore, multi-year funding strategies also improved funding predictability and reliability of state investments, and the development of mechanisms that would protect funding during political turnovers. Increasing the use of partnerships and EU funding programs could also be another factor to consider, to be able to magnet Ukraine connect to international innovative networks and access resources and knowledge.

At the regional level, weak regulatory frameworks and limited engagement from local authorities further impede innovation development. Strengthening the role of regional authorities and establishing mechanisms for public-private partnerships could mitigate these challenges and stimulate regional innovation [2].

Therefore, a key point to solving these problems is the reinforcement of the role of the region's authorities. Local governments are best placed to understand current needs and assets in their jurisdictions, meaning that they can develop strategies for innovation that will exploit existing strengths while avoiding barriers. The processes that might bring increased engagement of regional authorities could involve devolving more decision making power to regions, as well as allocating the requisite financial and human resources to support region-based innovation initiatives.

Another important area would be creating preconditions for the PPPs at the regional level. Such partnerships are useful for Local Government, business, Universities and research institutions with a view of creating a synergy working environment. For example, subnational governments can play a role in providing specific support to startups and growth actors such as innovation centers, incubators, and accelerators using the private sector and by identifying EU or international funding sources. These hubs could further provide a platform for learning, sharing the knowledge in field-specifics, technologies and innovations, as well as for commercialisation of innovations developed within a field.

Moreover, the promotion of specific business investment programmes to promote innovation in regions outside of large cities has a potential of contributing to the growth of economic activity and the development of high-tech business sectors. For example, tax incentives for those corporations that invest in scientific work or setting up factories in underdeveloped areas could give a correct distribution of innovational intensity in regions and territories and prevent the concentration of innovation activity in large cities.

It has also introduced constraint through covering inadequate educational and training programs that promote innovative development in the region. This way, through cooperation with local universities and technical schools regional authorities can launch programs that prepare the working population for the skills that will be in great demand when the new industries are established. This approach is not only to fill the above-mentioned skills gap but also has the advantage that local people are directly affected by the economic benefits resulting from innovative development.

The results of the study received from the Report on the Results of the Study of the Innovation Ecosystem and Technology Transfer of Ukraine by the Joint Research Centre of the EU illustrate that there is a need for legislative changes that will make the regulation of innovation and technology transfer less stringent. These reforms are directed to remove all the bureaucratic procedures that may hamper the emergence of innovative projects, and to build complementarity with the legal framework to meet the contemporary needs of technological advancements worldwide. The recommendations are to develop sustained governmental measures aimed at the reduction of regulation, the processes of which will be beneficial for innovative people, enterprises and startups in combination with the technological companies. Furthermore, the needs for developing proper strategies focused on the implementation of the wide-scope reforms stimulating technology transfer are indicated in the report. This would include institutionalizing new specialized

technology transfer offices, offering incentives for commercialisation activities and incorporating technology transfer within national innovation policies. Building cooperation between the academic sector, industry, and the government is highlighted as one of the major strategies for putting the gap between the two sectors. These would be strategic alliances which make better use of investment resources, research capacity and tangible assets of all the stakeholders for the creation of sustainable innovation systems. Currently, the expansion of legal guarantees of innovations, including the strengthening of IPR and the creation of separate IPR courts, is advisable to attract domestic and foreign investments in the fields of high-tech production. It will be found helpful to create an endowment coalition with funds earmarked to support projects at TRLs in an ongoing fashion to scale up innovations. This could be followed by tax incentives for private investors and ways of attracting venture capital for this fund [10].

It is also necessary to promote cooperation between the universities with other enterprises. Key recommendations of the report include encouraging the development of the applied research agendas that would tackle the needs of various sectors, supporting internships and skill development programs which shall intended to cultivate, talent ready to work in sectors, and formation of centre of excellence with academic researchers as well as sector representatives for collaboration on research and development activities. Furthermore, the report suggests introducing the strategies based on the specifics of regional innovation requirements because the absence of the balanced innovation capacity within the regions restrains overall ecosystem development. The creation of clusters of innovations in industrially less developed regions and focused support of regional start-ups would also help a more balanced economic development. Thus, the analysis in the report emphasizes that legislative work, raising the budget, and positioning collaboration between the public and private sectors are critical components Ukraine needs to establish a sound innovation environment. At the same time it will increase the general technological competitiveness in the country, and boost the economy, and ultimately bring sustainable development [10].

A critical gap lies in the insufficient connection between academia, research institutions, and businesses, the main reason being the weak cooperation between academic institutions, research organizations, and companies. Currently, universities and research centers have difficulties with the process of technology commercialization, and direct technology transfer to businesses is not seen. Most universities are unaware of the bundle of opportunities available in the world and are more focused on the fundamental research than applied research that’s fundamentally reduces the level of commercialization and technology transfer. The mismatch combined with lack of capacity at converting the research outputs into market solutions hinders innovation growth.

Furthermore, innovation activities are poorly aligned within the overall development plan of the country. The issues with state policy demonstrate the fact that innovation is not a priority for state initiatives, and the responsibility for innovation is not confined to just one ministry, making the development of the clear innovation strategy problematic. Outdated rules of the National regulation acts as well as the failure to upgrade them regularly hinder the introduction of innovations, especially in such spheres as FinTech, biotechnologies, and artificial intelligence.

Tax exemption or monetary incentives for private investor is still a missing factor that restricts the flow of private capital for innovation projects and slows down the growth of the ecosystem. These issues are compounding by the absence of support for innovation in Ukraine, both absolute and per capita, shortage of business incubators, accelerations, and co-working spaces, which tend to disadvantage startups situated in regions.

The lack of proper IP protection, the lack of specialized IP courts, and the lack of educational programmes in high-tech disciplines worsens the situation with the shortage of professionals and the lack of technologies for innovative development in Ukraine.

The last but not the least, the absence of state support for startups in entering international markets checks organizational competitiveness and impedes access to offshore investment along with joint ventures. All these challenges acting simultaneously hinder the formation and

development of the Ukrainian innovation ecosystems and require integrated approaches to introduce mechanisms that will ensure rapid and sustainable growth of innovative activities.

CONCLUSION

The investigation raised theoretical questions on the support of the state with regard to innovative clusters, which are necessary for analyzing sustainable economic growth. Some of these challenges include variation in legal framework, lack of adequate funding, and lack of adequate structures or support.

Fundamental systematic state support can become the basis for the formation of prerequisites for the further development of the innovative model for economic growth. It is the key point that the process of building an innovation ecosystem can hardly be short-term and without a clear vision and many stakeholders' involvement of governments, businesses, academic institutions and international organizations.

These problems will be better solved by putting collective efforts across sectors and thus would be appropriate to respond to the issues that may arise. The research proposes the insights that future studies should consider examining the ways of making state support for innovation ecosystems more balanced.

REFERENCES

Bazhal, Y. M. (2022). The innovation ecosystem as a factor in ensuring progressive structural changes in the economy. *Scientific Notes of NaUKMA. Economic Sciences, 7*(1), 3–9. https://doi.org/10.18523/2519-4739.2022.7.1.3-9 [in Ukrainian].

Blahoi, V., & Pakulina, A. (2023). Increasing the efficiency of state regulation of innovative activities at the regional level. *Economic Bulletin of Ukrainian State Chemical-Technological University, 1*(17), 88–97. https://doi.org/10.32434/2415-3974

Franko, L. S. (2024). State innovation policy in the context of enhancing the competitiveness of Ukraine's economy [Manuscript]. Sumy State University, Sumy. [in Ukrainian].

Iskakova, M., & Akhunova, D. (2020). Bases of state support of innovative entrepreneurship. *Journal Name*, 124–129. https://doi.org/10.32014/2020.2518-1483.99

Perminova, S., & Chuprina, M. (2022). Development of the national innovation ecosystem in the context of interaction between science and business entities. *Economy and Society, 38*. https://doi.org/10.32782/2524-0072/2022-38-29 [in Ukrainian].

Petran, S., & Shamota, V. (2023). The role of innovations in restoring Ukraine's economy after the war. In *Challenges of wartime: Abstracts of the XIV International Business Forum* (Kyiv, March 23, 2023, p. 49) / A. A. Mazaraki (Ed.), 197. Kyiv: State Trade and Economic University. https://doi.org/10.31617/k.knute.2023-03-23 [in Ukrainian].

Podrez-Ryapolova, I. (2024). Problems of ensuring the systematic legal regulation of innovation infrastructure functioning. *Law and Innovations*, *3*(47), 7–13. https://doi.org/10.37772/2518-1718-2024-3(47)-1 [in Ukrainian].

Vysotskyi, D. (2024). Legal support for state support of innovation activities. *Law and Innovations, 2*(42), 108–114. https://doi.org/10.37772/2518-1718-2023-2(42)-14 [in Ukrainian].

Yermakova, O. A. (2016). Instruments of Ukraine's state innovation policy in the context of adopting European experience. *Mechanism of Economic Regulation, 1*, 85–96. [in Ukrainian].

European Experience. (2021). *Mechanism of Economic Regulation* [Electronic Resource]. Retrieved from https://mon.gov.ua/static-objects/mon/sites/1/innovatsii-transfer-tehnologiy/2021/09/15/JRC.TT.in.Ukraine.en-15.09.pdf

Zuiev, M. (2025). The problem of state support of innovation ecosystems. Management and Entrepreneurship: Trends of Development, 1(31), 105-112. https://doi.org/10.26661/2522-1566/2025-1/31-12

СПИСОК ВИКОРИСТАНИХ ДЖЕРЕЛ

1. Бажал Ю. М. Інноваційна екосистема як чинник забезпечення прогресивних структурних змін в економіці. *Наукові записки НаУКМА. Економічні науки*, 2022, 7(1), 3–9. https://doi.org/10.18523/2519-4739.2022.7.1.3-9
2. Blahoi V., Pakulina A. Increasing the efficiency of state regulation of innovative activities at the regional level. *Економічний вісник ДВНЗ «Український державний хіміко-технологічний університет»*, 2023, 1(17), p. 88-97. https://doi.org/10.32434/2415-3974
3. Франко Л. С. Державна інноваційна політика у контексті підвищення конкурентоспроможності економіки України : автореф. дис. ... канд. екон. наук : 08.00.03. Суми, 2024. 20 с.
4. Iskakova M., Akhunova D. Bases of state support of innovative entrepreneurship. *Journal Name*, 2020, p.124-129. https://doi.org/10.32014/2020.2518-1483.99
5. Пермінова С., Чупріна М. Розвиток національної інноваційної екосистеми в контексті взаємодії суб'єктів науки і бізнесу. *Економіка та суспільство*, 2020, (38). https://doi.org/10.32782/2524-0072/2022-38-29
6. Петрань С., Шамота В. Роль інновацій у відновленні економіки України після війни. В *Проблеми та перспективи розвитку інноваційної діяльності в Україні: виклики воєнного часу* (тези доп. XIV Міжнар. бізнес-форуму, Київ, 23 берез. 2023 р.), 2023, 49 с. https://doi.org/10.31617/k.knute.2023-03-23
7. Подрез-Ряполова І. Проблеми забезпечення системності правової регламентації функціонування інноваційної інфраструктури. *Право та інновації*, 2024, 3(47), с. 7–13. https://doi.org/10.37772/2518-1718-2024-3(47)-1
8. Висоцький Д. Правове забезпечення державної підтримки інноваційної діяльності. *Право та інновації*, 2024, 2(42), 108–114 с. https://doi.org/10.37772/2518-1718-2023-2(42)-14
9. Єрмакова О. А. Інструменти державної інноваційної політики України в контексті впровадження європейського досвіду. *Mechanism of Economic Regulation*, 2016, 1, 85-96 с.
10. European Experience. *Mechanism of Economic Regulation* [Електронний ресурс]. Retrieved from https://mon.gov.ua/static-objects/mon/sites/1/innovatsii-transfer-tehnologiy/2021/09/15/JRC.TT.in.Ukraine.en-15.09.pdf (дата звернення: 15.11.2024).

Проблематика державної підтримки інноваційних екосистем

Зуєв Михайло Ігорович
здобувач третього (освітньо-наукового) рівня вищої освіти
Національний університет «Львівська політехніка»
м. Львів, Україна

Мета дослідження полягає в теоретичному узагальнені проблем державної підтримки інноваційних екосистем України. Дана мета обумовила потребу у вирішенні теоретичних наукових завдань, спрямованих на зменшення негативних наслідків, що виникають через відсутність державної підтримки інноваційних екосистем. Під час дослідження використовувалися методи системного аналізу, синтезу та систематизації. Інформаційною основою слугували законодавчі та нормативні акти, які регулюють інноваційну екосистему, а також теоретичні та методологічні напрацювання вітчизняних і закордонних науковців, статистичні та аналітичні матеріали. У роботі було використано дані з офіційних публікацій та періодичних видань. Дослідження порушило теоретичні питання щодо підтримки державою інноваційних кластерів, які необхідні для аналізу сталого економічного зростання. Деякі з цих проблем включають відмінності в законодавчій базі, відсутність належного фінансування та відсутність відповідних структур чи підтримки. Фундаментальна системна

державна підтримка може стати основою для формування передумов для подальшого розвитку інноваційної моделі економічного зростання. Ключовим моментом є те, що процес побудови інноваційної екосистеми навряд чи може бути короткостроковим і без чіткого бачення та залучення багатьох зацікавлених сторін: урядів, бізнесу, наукових установ і міжнародних організацій. Ці проблеми краще розв'язувати, доклавши спільних зусиль між секторами, і, таким чином, було б доцільно реагувати на проблеми, які можуть виникнути. Дослідження пропонує ідеї, які слід розглянути в майбутніх дослідженнях для вивчення способів зробити державну підтримку інноваційних екосистем більш збалансованою.

Ключові слова: інновації; національна інноваційна екосистема; механізми публічного управління.