Efficiency of Innovative Development Management: Interstate Assessment of the Economic Competitiveness in the Context of European Integration and Economic Security

Olga Khodakivska¹, Olena Ribeiro Ramos², Oleksandr Nechyporenko³, Svitlana Tsiutsiupa⁴, Olexander Krasnoshtan⁵, Yaryna Mayovets⁶

<u>q17208@ukr.net</u>

¹ National Scientific Center «Institute of Agrarian Economics», Kyiv, Ukraine
²Luhansk National Agrarian University, Starobilsk, Ukraine
³National Scientific Center «Institute of Agrarian Economics», Kyiv, Ukraine
⁴Open International University of Human Development "Ukraine", Kyiv, Ukraine
⁵National Transport University, Kyiv, Ukraine
⁶Ivan Franko National University of Lviv, Lviv, Ukraine

Summary

The article identifies areas for effective management of innovative development. The competitiveness of the economy in the context of European integration and economic security is assessed. The level of innovative economy of some countries of the world is analyzed. The issue of attracting foreign investors to stimulate innovative production in Ukraine is raised. It is identified the need for the formation of an updated state policy capable of providing innovative development and improving the competitive position of the state in international rankings. Emphasis is placed on the need to form a critical mass of managers-civil servants capable of developing, implementing and monitoring the policy of innovative development of entrepreneurship.

Key words: management, innovative development, competitiveness, European integration, economic security

1. Introduction

The efficiency of innovative development management should be based on the interstate assessment of the competitiveness of the economy, which is especially important in the context of European integration and economic security. This comparison helps to identify problems of further economic development, shortcomings of state regulation and to develop a promising strategy for managing innovative development in the context of European integration and economic security. In addition, it is a well-known fact that the national economy is innovative only when the best level of economic security has been achieved. Innovative economic development is especially important in the context of European integration, due to the presence in such an economy of goods that can compete with dignity in the world market. From other points of view, global turbulence and instability of institutional support require uninterrupted monitoring of the efficiency of innovative development management in the context of interstate assessment. The problems of innovative

Manuscript revised November 20, 2021

https://doi.org/10.22937/IJCSNS.2021.21.11.9

development management have been deeply studied in their works by a significant circle of scientists (Lozhachevska et al., 2021; Gryshchenko et al., 2021; Semenov et al., 2021; Zherdetska et al., 2021; Mykhailichenko et al., 2021). In the article of Sharma et al. (2020), the issue of using artificial intelligence to assess an integrated innovation management system is investigated. Bacon et al. (2020) investigate the method of comparing the depth of knowledge transfer between partners in the implementation of innovative activities in the market. Oktari et al. (2020) offer effective management measures in case of natural disasters and natural cataclysms. The authors propose a wide range of innovative measures aimed at overcoming various disasters. Surana et al. (2020) assess the development of innovative incubators, which are necessary to achieve sustainable development of territories. Researchers propose a strategy for forming a team of managers capable of designing innovative incubators in conditions of instability of market systems. The works of Hnatenko (2018; 2020) are devoted to assessing the effectiveness of innovative development of the national economy. In addition to the macro level, the researcher thoroughly analyzes the micro level of innovative entrepreneurship. The scientist proposes directions for changing the institutional matrix, infrastructural elements and public policy measures, which are extremely important for achieving high innovation at all levels of management of the national economy. Zhong et al. (2021), with the use of artificial intelligence and neural network evaluate the effectiveness of China's banking system; determine its contribution to the innovative development of the country. Hameed et al. (2021) explore the relationship between knowledge, science, domestic innovation and business productivity in Pakistan. The authors propose measures to promote innovative services by Pakistani hotels in order to increase their competitive development. Guertler and Sick (2021) offer a method for

Manuscript received November 5, 2021

determining the effectiveness of innovative projects of small, medium and large enterprises. The authors also identify channels for the dissemination of innovations, which will ensure their openness and increase commercialization. Emphasizing the importance of these scientific papers, we note significant gaps in research to determine the efficiency of innovative development management in the context of interstate assessment of the competitiveness of the economy in terms of European integration and economic security.

2. Methodology and Results

Agreeing with the opinion of Hnatenko (2020), we note that the course for building an innovative economy in Ukraine was set in 1991, when regulations were adopted in the scientific and technical sphere. They laid the foundation of state regulation, allowed to implement practical measures to improve the efficiency of innovation in business. At present, a national innovation system has and a number of

large research and production structures have been formed, and conditions for the realization of innovation potential have been provided, although not perfect. As a result of systematic work carried out in recent years to optimize the management system of scientific, technical and innovative activities, domestic science has acquired a pronounced applied orientation in the direction of determining the most relevant ways of innovative economic development. At the same time, Ukraine's innovative development is currently characterized by significant problems. If we compare the position of Ukraine among other countries, it should be noted the unsatisfactory state of its innovative development, competitiveness, opportunities for business implementation, etc. According to the data shown in Fig. 1, it is possible to observe decrease in positions of Ukraine on almost all ratings.

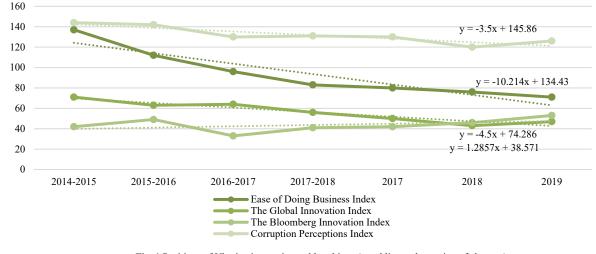


Fig. 1 Positions of Ukraine in certain world rankings (trend line and equation of changes)

Source: calculated by the authors

The main obstacles to Ukraine's decline in these rankings are administrative barriers to doing business, political instability, tax pressure on innovative enterprises, low levels of industrial development, and inconsistencies in the state institutional matrix. If we evaluate the position of Ukraine in the rating "The Global Innovation Index", it should be noted a decrease in individual indices in this rating (Fig. 2).

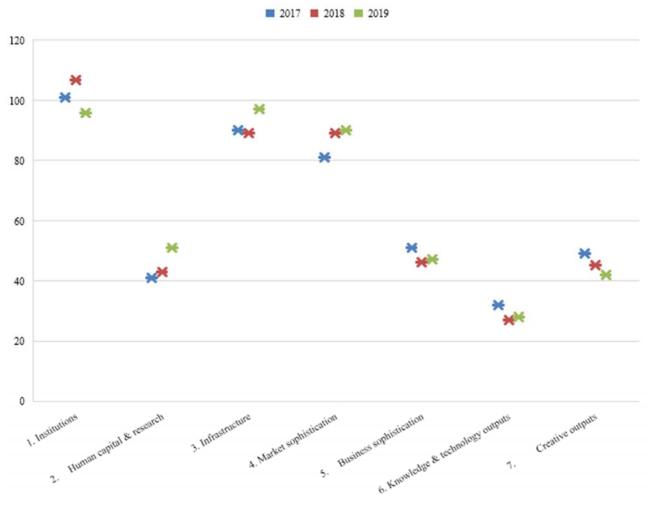


Fig. 2 Detailing of Ukraine's positions according to the components of "The Global Innovation Index" Source: calculated by the authors

As it can be seen from Fig. 2, in 2019 the best indicator of the components of "The Global Innovation Index" is the place of Ukraine in the application of knowledge and technology (28th position), and the lowest indicator is in the development of institutions that provide innovation. As Hnatenko (2020) rightly defines, modern innovative entrepreneurship is a complex socio-economic institution that includes a set of economic entities that carry out active innovative activities aimed at increasing the value of equity, as well as meeting the needs of society. Cyclical and unstable economic development has a negative impact on the effectiveness of entrepreneurship, which leads to job losses, reduced investment in human development, increased unemployment and exacerbation of other socioeconomic problems. Adverse external threats, which also affect the national security of the state, have a negative impact on the development of innovation, profitability of large, small and medium-sized businesses; reduce the adaptive capacity of entrepreneurship, which causes a multiplier effect on the national economy as a whole. Thus, improving the competitiveness of the national economy should be based on stimulating innovation and the business sector.

In 2016-2019, the leaders of innovative development were almost always such countries as: Switzerland, Sweden, USA, the Netherlands, Great Britain. It is in these countries that the best level of innovation development was observed. The undisputed leader for the period under study is Switzerland, which has developed institutional conditions for the development of innovation, which increases the competitiveness of the economy. In addition, public authorities constantly monitor the activity of innovative entrepreneurship and respond quickly to problems that arise in this sector of the economy. Switzerland is characterized by standardized legislation on patenting, licensing and protection of intellectual property. In the Alpine Valley, cooperation between the state, business and science is encouraged, as well as the creation of innovation clusters within such interaction. In order to support domestic producers, Switzerland restricts imports, while creating fair conditions for the sale of domestic products abroad. In Fig. 3, it is shown a dozen countries that have won the championship in "The Global Innovation Index".

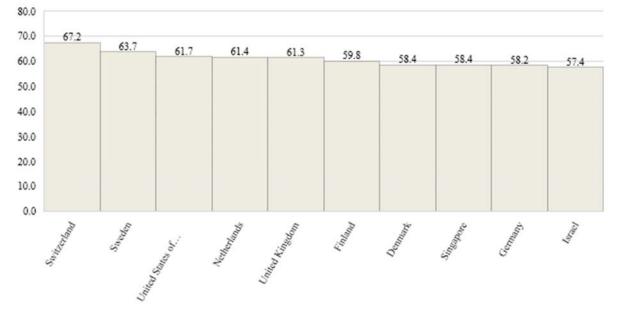


Fig. 3 Leading states in the effective management of innovative development in 2019

Source: calculated by the authors

Switzerland is also a leader due to the active promotion of venture entrepreneurship and the implementation of the state Concept for the development of small and medium-sized businesses. The innovative development of the country ensures the competitiveness of the national economy. If we analyze this indicator in the overall ranking, we should note the unstable places of Ukraine in the ranking of countries according to "The Global Competitiveness Index". In particular, in 2018-2019, Ukraine's position in the mentioned rating decreased by 4 places. The loss of positions was due to reduced efficiency of such segments as: "Macroeconomic environment", "Health and primary education", "Higher education and training", "Financial market development". There was a slight improvement in the segments like "Labor market efficiency", "Commodity market efficiency", "Business development", "Technological readiness", "Innovation". Achievement and retention of competitive advantages is possible if there is a strong qualified public administration and, accordingly, a professional team of civil servants. The intellectual strategic abilities of managers should not only recognize, but above all provide for trends in the domestic market, which contributes to the achievement of advantages over competitors. In the context of globalization and in order to increase economic security, an important factor in the formation of a highly competitive state is the use of such

management decisions that are aimed at reducing transaction and transformation costs at different stages of the production process. A popular solution among the countries leading innovative development is outsourcing development strategies aimed at fulfilling the tasks necessary for entrepreneurs. This allows increasing the country's competitiveness, reduce the cost of innovative production, improve product quality and expand consumer markets, as well as optimizing the distribution of financial resources in the context of European integration and economic security. It is especially important in the context of providing competitive products to form a solid and effective marketing strategy that can accommodate the marketing mix of events. It is the states with powerful marketing strategies to promote their own brand (manufacturer, human resources, goods, services) have the best chance to achieve a high level of socio-economic security. According to the data shown in Fig. 4, Ukraine is not a leader in terms of economic competitiveness. As an example, among 141 countries of the world, in 2018-2019 Ukraine ranked 85th, in the previous period – 81st among 137 countries, respectively.

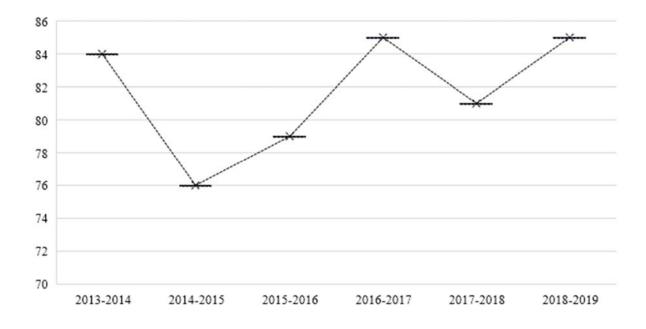


Fig. 4 Trend of Ukraine's positions in the ranking of countries according to "The Global Competitiveness Index" Source: calculated by the authors

In our view, a key aspect of innovative development management is strategic interstate European integration, which is able to create a fair competitive space. It is also necessary to point out the adaptation of state regulation measures, which can be an important source of obtaining a sustainable competitive advantage and economic security. In the conditions of the dominance of traditional production, not aimed at innovative development, the competitiveness of manufacturers was based on goods with low added value. At the same time, in the context of European integration, improving the competitive position of industry should not be limited to traditional means of producing goods or services. There is a need to master new foreign technologies, know-how, creative techniques that will provide a strong production base and industrial sector on an innovative basis. To strengthen competition, there is a need to attract foreign investment and actively direct it to the needs of economic modernization.

3. Conclusions

Thus, the effectiveness of the management of innovative development and ensuring the competitiveness of the economy in the context of European integration and economic security requires a balanced public policy and creative public managers. An important role in the formation of competitive advantages is played by the professionalism of public officials, who are able to implement the necessary measures in the market and respond in a timely manner to changing market changes. Stimulating innovation and their diffusion throughout the life cycle of the enterprise is of conceptual importance. These measures will create competitive advantages of the national economy in international markets and ensure Ukraine's high position in the rankings of innovation and competitiveness. The state policy of attracting foreign investors capable of supporting domestic startups and small businesses is effective.

References

- Bacon, E., Williams, M. D., & Davies, G. (2020). Coopetition in innovation ecosystems: A comparative analysis of knowledge transfer configurations. Journal of Business Research, 115, 307-316.
- [2] Gryshchenko, I., Ganushchak–Efimenko, L., Shcherbak, V., Nifatova, O., Zos-Kior, M., Hnatenko, I., ... & Martynov, A. (2021). Making Use of Competitive Advantages of a University Education Innovation Cluster in the Educational Services Market. European Journal of Sustainable Development, 10(2), 336-336.
- [3] Guertler, M. R., & Sick, N. (2021). Exploring the enabling effects of project management for SMEs in adopting open innovation–A framework for partner search and selection in open innovation projects. International Journal of Project Management, 39(2), 102-114.
- [4] Hameed, W. U., Nisar, Q. A., & Wu, H. C. (2021). Relationships between external knowledge, internal innovation, firms' open innovation performance, service innovation and business performance in the Pakistani hotel industry. International Journal of Hospitality Management, 92, 102745.

- [5] Hnatenko, I. (2018). Conceptual approaches to small business management in terms of the criteria of economic security and an enterprise life cycle. Bulletin of the Kyiv National University of Technologies and Design. Series: Economic sciences, 123(3), 47-56.
- [6] Hnatenko, I. Formation of state priorities of business development in the conditions of innovative economy. (2020). Manuscript. Dissertation for the degree of a Doctor in Economics in specialty 08.00.03 – Economics and management of the national economy. Kyiv: National University of Technologies and Design, National Academy of Management, 516.
- [7] Lozhachevska, O., Navrotska, T., Melnyk, O., Kapinus, L., Zos-Kior, M., & Hnatenko, I. (2021). Management of logistics and marketing behavior of innovation clusters in territorial communities in the context of digitalization of society and the online market. Laplage em Revista, 7(3), 315-323.
- [8] Mykhailichenko, M., Lozhachevska, O., Smagin, V., Krasnoshtan, O., Zos-Kior, M., & Hnatenko, I. (2021). Competitive Strategies of Personnel Management in Business Processes of Agricultural Enterprises Focused on Digitalization. Management Theory and Studies for Rural Business and Infrastructure Development, 43(3), 403-414.
- [9] Oktari, R. S., Munadi, K., Idroes, R., & Sofyan, H. (2020). Knowledge management practices in disaster management: Systematic review. International Journal of Disaster Risk Reduction, 51, 101881.
- [10] Semenov, A., Kuksa, I., Hnatenko, I., Sazonova, T., Babiy, L., & Rubezhanska, V. (2021). Management of Energy and Resource-Saving Innovation Projects at Agri-Food Enterprises. TEM Journal, 10 (2), 751-756.
- [11] Sharma, G. D., Yadav, A., & Chopra, R. (2020). Artificial intelligence and effective governance: A review, critique and research agenda. Sustainable Futures, 2, 100004.
- [12] Surana, K., Singh, A., & Sagar, A. D. (2020). Strengthening science, technology, and innovation-based incubators to help achieve Sustainable Development Goals: Lessons from India. Technological Forecasting and Social Change, 157, 120057.
- [13] Zherdetska, L., Diatlova, Y., Diatlova, V., Derkach, J., Goncharenko, A., & Zos-Kior, M. (2021). Digital banking in the marketing mix and human resource management: improving the approach to the assessment as an innovative component. Laplage em Revista, 7(3A), 111-119.
- [14] Zhong, K., Wang, Y., Pei, J., Tang, S., & Han, Z. (2021). Super efficiency SBM-DEA and neural network for performance evaluation. Information Processing & Management, 58(6), 102728.

72