

THE PRIORITIES OF FORMING AND DEVELOPMENT OF INNOVATIVE-INTEGRATED STRUCTURES IN UKRAINE UNDER THE MODERN CONDITIONS

¹Levchenko Oleksandr, ²Tkachuk Olga, ³Hani Haidoura

¹Doctor of Economics, Professor, Vice-rector for scientific activities. Central Ukrainian National Technical University. (Ukraine)

²PhD of Economics, Associate Professor. Department of Economics, Management and Commercial Activity, Central Ukrainian National Technical University. (Ukraine)

³PhD of Economics, American University of Culture and Education (AUCE), Vice President. (Lebanon)

E-mail: ¹om_levchenko@ukr.net; ²alionatkachuk2017@ukr.net; ³hani.haidoura@gmail.com

ABSTRACT

The acceleration of the pace of innovative development of the economy of Ukraine necessitates the search for effective ways of forming innovative-integrated structures, studying foreign experience of their creation and compliance of regulatory and legal regulation of these issues with the world legislative practice. As the level of socio-economic development of different regions of Ukraine is significantly differentiated, it is advisable to develop and approve a methodology for assessing the readiness of regions to form innovative-integrated structures. The inefficiency of the territorial innovation potential and the stagnation of the socio-economic development of the national economy, which are significant threats to the national security of the state, testify to the need to justify the applied aspects (including organizational, regulatory, logistical, financial, personnel, educational, information support) of creating innovative structures in the regions of the country in accordance with the priorities defined by the National Innovation System and the available resources, defines key performance indicators for their performance.

Keywords: innovation, innovative-integrated structure, innovation activity, cluster development, innovation potential

INTRODUCTION

In the conditions of formation of the innovative model of economy development in Ukraine and the course of European integration chosen by our country, the issues of creation of subjects of economic activity and their associations capable to carry out efficient economic activity and accelerate the pace of innovative development of economy become especially relevant. However, today in Ukraine there is a decrease in the pace of innovation activity, the volume of sales of innovative products in the country and abroad is declining, the level of deterioration of fixed assets in most sectors of the national economy is critical and their updating is extremely slow, which poses a significant threat to the national security of the state. Formation of innovative-integrated structures and their further integration into national and international economic systems are an effective means of solving these problems.

The conducted research has shown the need to develop practical and applied recommendations for the formation and development of innovative-integrated structures in Ukraine as one of the key conditions for ensuring the economic growth of Ukraine in the conditions of unstable socio-economic environment, creating an innovation-friendly environment, providing support to entities implementing innovative activities, depending on the available innovation potential.

Literature review. Various aspects of the formation and functioning of innovative-integrated structures are devoted the scientific researches of many domestic and foreign scientists. In particular, foreign experts thoroughly investigate the role of such structures in ensuring the national security of innovative development of the US economy in the context of global competitiveness [9], the functioning and specificity of managing competitive cluster entities in France [2], perform comparative analysis of German clusters in comparison with other countries [5], investigate the role of economic clusters in spatial planning during periods of planned and market economy in China [11]. Useful practical experience on the formation of innovative clusters, which can be adapted to national realities, includes studies on the importance of clusters in terms of gaining regional economic growth in Romania in the context of post-crisis and globalization processes [8], a comparative description of the prerequisites for cluster formation in Central Europe with emphasis on Poland, the Czech Republic, Slovakia and Austria [1].

At the same time, existing scientific works need to be further deepened and supplemented in order to form a complex system of development of innovative-integrated structures, which would include a set of organizational, managerial, economic, regulatory, personnel, financial aspects of the formation of innovative-integrated structures, methodological bases of security assessment and methodological bases of innovative potential of territories rising.

Purpose of the study. The aim of the paper is to study the practical and applied foundations of the formation and development of innovative-integrated structures as a factor in ensuring national security in an unstable socio-economic environment and the chosen course of European integration of Ukraine.

Results. In the conditions of rapid deployment of innovation processes, all integrated organizations equally faced the problem of active participation in scientific and innovation activities, without which it is impossible to maintain stability and competitiveness in the market environment, to provide a qualitatively new level of reproduction of production processes, as well as the desired profitability [7]. One of the most common forms of innovative-integrated structures are the innovation clusters.

The innovation cluster is a progressive form of establishing a system of cooperative communications of business and research cooperation between business entities with the possibility of involving state structures of different departmental affiliations, the functional basis of which will be a research organization – a participant of the national technology transfer network, technology and technology transfer / or organizational innovation, adapting it to the enterprise, highlighting all the possible related risks and providing full economic rationale for the introduction of appropriate innovative business solutions [3].

We consider, that the main components of the formation and development of innovative-integrated structures are [6]:

1. Educational component – defining the role of vocational education institutions and educational component in the formation of innovation ecosystems, functions and ways of improving the activity of the research sector of universities during the generation of innovations, the implementation of an integrated assessment of the competitiveness of higher education in terms of transition to an innovative model of the economy, characteristics quality management systems for higher education institutions and approaches to optimizing higher education funding while training specialists for higher education need of innovative-integrated structures.
2. Professional development – development of proposals for introduction of the system of "lifelong learning" of staff of innovative-integrated structures and definition of its economic advantages in the conditions of formation of innovative model of economy development taking into account foreign experience, determination of influence of professional development on the quality of human capital of innovative-integrated structures analysis of the state and tendencies of human resources development in measuring international comparisons.
3. Human resources – analysis of the adequacy of the human resources of the regions to the needs of the innovative economy, the state of human capital development in the measurement of the formation of innovative-integrated structures at the present stage.
4. Organizational and regulatory impact – determination of strategic directions of increasing the competitiveness of the national economy and priorities of development of regions in terms of modern innovation dynamics, practical aspects of improving the evaluation of the efficiency of the modern public procurement system in Ukraine in the context of improving the process of regulating the activities of innovation and integrated approach, directions of activization of activity of territorial communities in maintenance of development of innovative-integrated structures.
5. Financial analysis, audit and information support – developing an approach to the fundamental analysis of exchange rates as a factor of sustainable functioning of innovative-integrated structures under the influence of political and economic events in the conditions of socio-economic instability, determining the role of historical financial information as a criterion for audit classification, auditing and other tasks to provide confidence to business entities, ways to develop the market for audit services for innovative-integrated structures in Ukraine and in the world, identification of information needs of participants of innovative-integrated structures as users of audit results.
6. Tax regulation – determining priorities for improving the taxation system for innovative products producers and ensuring their state support, taking into account regional and sectoral priorities, assessing the possibilities of developing innovatively integrated business structures within the existing tax system in Ukraine, reviewing tax instruments to stimulate innovation activities management.
7. Investment support – substantiation of ways of increasing the investment attractiveness of domestic producers of innovative products by types of economic activity in the conditions of strengthening globalization processes in the world, directions of state financial support for the development of innovative activity in Ukraine.
8. Social development – defining the directions of formation of social capital of a regional research and production innovation cluster, in particular, on the basis of higher education institutions.
9. Encouragement of entrepreneurial activity – identification of problems and prospects of development of innovative entrepreneurship, in particular, of venture business in Ukraine.
10. Ensuring national security – defining the peculiarities of functioning of innovative-integrated structures as a factor of national security of the state.

The rating of some European countries and Ukraine by the indicator "State of cluster development" in 2019 is presented at the Fig. 1.

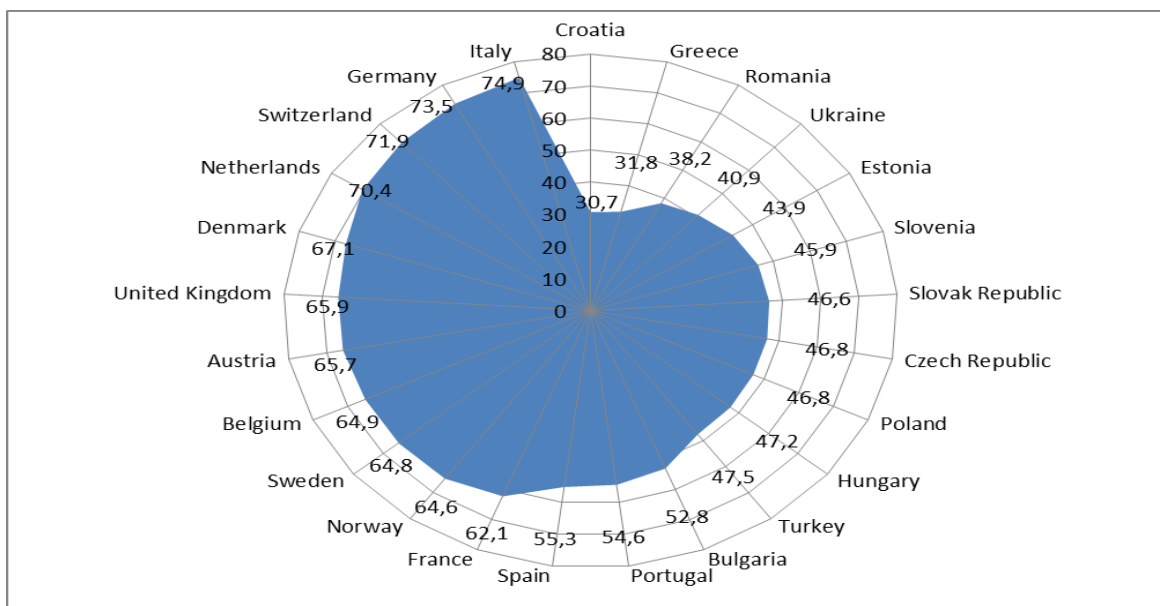


Figure 1. The rating of some European countries and Ukraine by the state of cluster development (according to Global Competitiveness Index 4.0, 2019, meanings from 0 to 100)

Source: formed by the authors at the base of international statistics [10].

As we can see, the difference between the most developed European countries and others is rather significant. Very high is the state of cluster development in Italy (74.9), Germany (73.5), Switzerland (71.9), Netherlands (70.4), Denmark (67.1), while in Ukraine – only 40.9. That's why, there is a considerable scope for enhancing cluster development potential, which should be involved.

The priorities of innovative-integrated structures development in Ukraine in future should include:

- defining the theoretical foundations for the functioning of innovative ecosystems, including principles, factors, benefits and threats;
- identification of advantages and disadvantages of the process of decentralization of regulation of economy in Ukraine;
- conducting an analysis of the best domestic experience in the field of efficient functioning of the amalgamated hromadas, as well as leading foreign practices of decentralization reforms;
- carrying out an analysis of the status and tendencies of functioning of the amalgamated hromadas by regions of Ukraine;
- development of a comprehensive methodology and assessment of the quantitative and qualitative parameters of socio-economic status and innovative potential of the territories;
- substantiation of mechanisms improvement directions in the sphere of educational potential and research institutions as an integral part of innovative clusters of territories, creation of innovation centers as a prerequisite for development of innovative potential of the region through successful functioning of territorial innovation ecosystems;
- development of proposals for improvement of regulation of personnel, educational, scientific, financial-investment, information-analytical, tax, ecological and other components of territorial innovation ecosystems;
- developing measures to enhance the interaction of key stakeholders within territorial innovation ecosystems (the Quadruple Helix Model);
- development and implementation of measures to enhance the professional competence of the amalgamated hromadas managers and employees by acquiring the modern organizational, managerial, analytical and other skills necessary to ensure integrated, effective, innovation-oriented development of territorial associations in the context of decentralization;
- development of proposals for ensuring the functioning of the model of vertical and horizontal knowledge transformation within territorial innovation ecosystems;
- development of practical recommendations for ensuring local economic development, taking into account the particularities of activities in the context of decentralization.

So, nowadays the organizational support for the implementation of strategic priorities of state regulation of innovative development of the research sector of higher educational institutions (RS of HEIs) in Ukraine under the conditions of global localization of the innovation-network economy, formation of practical bases for the formation of innovative ecosystems becomes very important (Fig. 2).

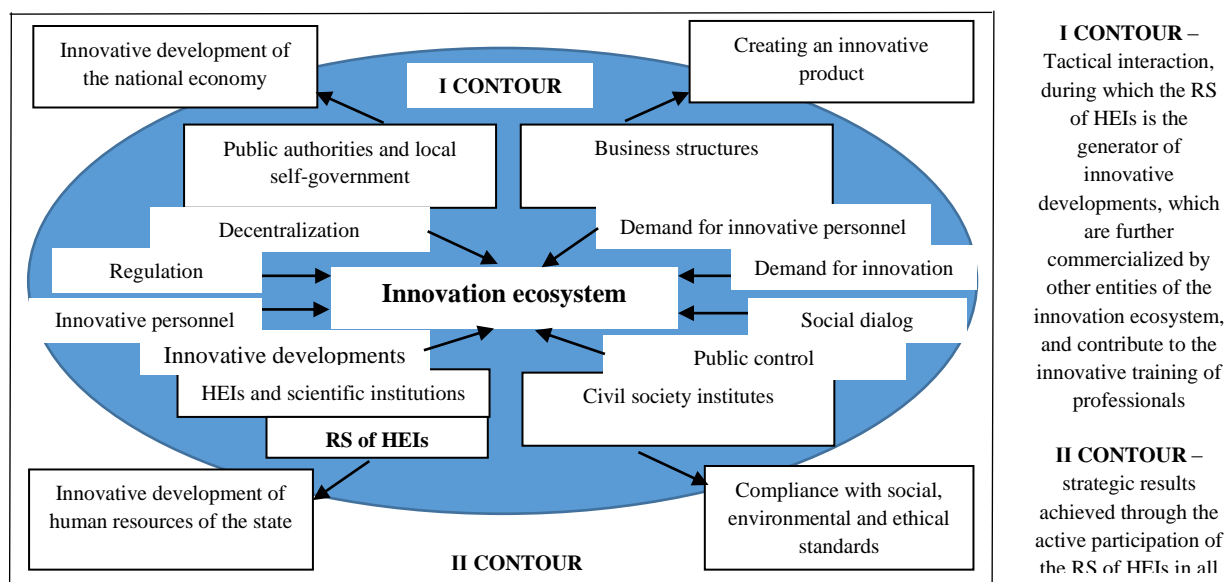


Figure 2. The role of the research sector of higher educational institutions at the innovation ecosystem development
 Source: formed by the authors according to [4]

It can provide the following benefits:

- will facilitate their development taking into account the tendencies of internationalization of research activity, decentralization of financial processes of regional cluster network structures;
- update promotion format, organizational and informational support executive bodies of modernization processes as full participants in venture capital schemes, effectively combining their activities in the functions of government regulation and public sector research HEIs internationally, national and regional economy and the level of individual HEI.

Conclusions and prospects for further research. The application of effective tools, levers and methods of managing the process of development of innovative associations, the formation of territorial innovation ecosystems, the introduction of smart-approach to the organization of management will help to increase the competitiveness of territories and their investment attractiveness by creating high-quality new jobs, ensuring a high level of added value and decent value remuneration of specialists, and consequently the preservation and development of human resources, overcoming negative migration processes in Ukraine.

The prospect of further research is to work out proposals for the implementation of effective mechanisms for ensuring the effective functioning of territorial associations, the creation of innovation centers, the establishment of cooperation of all stakeholders (state and local government, business structures, scientific and educational institutions, the public), which will significantly increase the level of competitiveness both at the level of regions and the state as a whole.

REFERENCES

1. Bialic-Davendra M., Pavelková D., & Vejmelková E. (2014). The Clusters Phenomenon in the Selected Central European Countries. Cambridge Scholars Publishing, 2014. 220 p. [in English].
2. Chabault D., & Martineau R. (2013). L'encadrement des pôles de compétitivité par l'État: entre stratégie émergente et injonctions étatiques. Politiques and management public, 2013, Volume 30/3, pp. 413-432. [in French].
3. Farat O.V. (2014). The essence and types of development of innovative clusters. Scientific Bulletin of Kherson State University. Series: Economic Sciences. Vol. 9(7). P. 67-71. [in Ukrainian].
4. Haidoura H.M. (2018). State regulation of innovative development of the research sector of higher education institutions of Ukraine. Thesis for obtaining of Candidate of Economic Sciences Degree. Central Ukrainian National Technical University Ministry of Education and Science of Ukraine, Kropyvnytskyi. 20 p.
5. Hantsch S., Kergel H., & Lämmer-Gamp T. (2013). Cluster management excellence in Germany: German clusters in comparison with European peers. European Secretariat for Cluster Analysis (ESCA), Berlin, March 2013. 26 p. [in English].

6. Levchenko O., & Tkachuk O. (2018). Organizational-economic principles of creation of innovative-integrated structures in conditions of socio-economic instability. Central Ukrainian Scientific Bulletin. Economic sciences. Vol. 1(34). P. 9-20. [in Ukrainian].
7. Marchuk L.P. (2012). Features of functioning of integrated structures in conditions of innovative development. Economy and region. №1. P. 189-194. [in Ukrainian].
8. Vlasceanu C., & Vorovenci I. (2014). The role of clusters and cluster development tools in the European Union in regional economic development, in the context of post-crisis economy and globalization. Studies in Business and Economics. 2014, vol. 9, issue 1, pp. 148-155. [in English].
9. Weisbrod G.A., Cutler D., & Duncan C. (2013). The Role of Transit in Support of High Growth Business Clusters in the U.S. American Public Transportation Association, December 2013. 84 p. [in English].
10. World Economic Forum. 2019. The Global Competitiveness Report 2019: Switzerland. Access mode: www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf [in English].
11. Zhenshan Y., Pu H., & Jianming C.C. (2015). Economic clusters: A bridge between economic and spatial policies in the case of Beijing. Cities, Volume 42, Part B, February 2015, Pages 171-185. [in English].