

Petro A. Ovchar¹, Natalia M. Kraus², Galyna S. Ivanyshyna³, Stepan M. Holubka⁴
**FACTORS OF THE DEVELOPMENT OF INNOVATIVE ECONOMY IN
CONDITIONS OF INSTITUTIONAL CHANGES**

The necessity of a theoretical analysis of the institutional features of forming the national innovation system is substantiated. An attempt to uncover the institutional factors of forming and strategic priorities of development of the innovation economy, including institutional vacuum and improperly development of separate institutions and subsystems, which reduces the efficiency of the economic system as a whole.

Ukraine needs to go through the development of innovative, this will give businesses a competitive edge for obtaining economic profit. Going through innovative enterprises will receive economic benefits as a special form of production capacity, reduce the physical costs of production (less resource consumption) per unit compared to other producers in the area, or releasing products with features that are not in competition. The specified path is based on the creation of a businessperson technical, technological, and organizational advantage over other producers. In this case, the source of income that it receives, it is a temporary monopoly innovator.

Only institutional transformation at the stage of the innovation model of economic development will enable Ukraine to adapt it to the requirements of the global information society and the world to continuously improve the economic behavior of economic agents and the mechanisms of market self-production- industrial complex of Ukraine, Small and Medium Enterprises.

Keywords: innovation economy; institutional vacuum; institute; innovative space; institutional mechanism; innovative market.

Lit. 16.

DOI 10.32752/1993-6788-2019-1-219-51-58

Peer-reviewed, approved and placed: 02.09.2019.

Петр А. Овчар, Наталия М. Краус, Галина С. Іванишина, Степан М. Голубка
**ФАКТОРИ РОЗВИТКУ ІННОВАЦІЙНОЇ ЕКОНОМІКИ В УМОВАХ
ІНСТИТУЦІОНАЛЬНИХ ЗМІН**

Обгрунтовано необхідність теоретичного аналізу інституціональних особливостей формування національної інноваційної системи. Зроблена спроба аналізу інституційних чинників, їх впливу на формування стратегічних пріоритетів розвитку інноваційної економіки, включаючи інституціональне середовище та той вакуум, що утворюється при неналежному функціонуванні окремих інститутів та підсистем, що знижує ефективність поступу національної економічної системи в цілому. Проведений аналіз дав змогу визначити пріоритетності "перезавантаження" державних фінансів для структурної та інноваційної перебудови економіки, а також напрями розвитку венчурного бізнесу та просування високотехнологічної конкурентоспроможної продукції, що є дуже актуальним.

Звернено увагу на те, що ефективне функціонування вітчизняної інноваційної системи залежить від того, наскільки ефективно взаємодіють учасники інноваційного процесу як елементи колективної системи створення знань та їх використання для технологічного прогресу та забезпечення конкурентоспроможності вітчизняної економіки.

Зазначено, що Україні потрібно пройти розвиток інноваційних технологій, це дасть бізнесу конкурентоспроможну перевагу для отримання економічного прибутку.

¹ National University of Life and Environmental Sciences of Ukraine. Ukraine.

² Borys Grinchenko Kyiv University. Kyiv. Ukraine

³ National Academy of Management. Kyiv. Ukraine.

⁴ Accounting Chamber of Ukraine. Ukraine.

Досліджено, що в умовах інтеграційних викликів актуалізуються питання інституціональної трансформації, яка на етапі інноваційної моделі економічного розвитку дозволить Україні адаптувати її до потреб світового інформаційного суспільства та світу для постійного вдосконалення економічної поведінки економічних агентів та механізмів ринкового самовиробничо-промислового комплексу України, малих та середніх підприємств.

Ключові слова: національна економіка; інноваційний розвиток; інститут; інституціональне середовище; інноваційний простір; інституційний механізм; інноваційний ринок.

Петр А. Овчар, Наталия Н. Краус, Галина С. Иванишина, Степан М. Голубка
ФАКТОРЫ РАЗВИТИЯ ИННОВАЦИОННОЙ ЭКОНОМИКИ
В УСЛОВИЯХ ИНСТИТУЦИОНАЛЬНЫХ ИЗМЕНЕНИЙ

Обоснована необходимость теоретического анализа институциональных особенностей формирования национальной инновационной системы. Предпринята попытка анализа институциональных факторов, их влияния на формирование стратегических приоритетов развития инновационной экономики, включая институциональную среду и тот вакуум, который образуется при ненадлежащем функционировании отдельных институтов и подсистем, снижает эффективность продвижения национальной экономической системы в целом. Проведенный анализ позволил определить приоритетности "перезагрузки" государственных финансов для структурной и инновационной перестройки экономики, а также направления развития венчурного бизнеса и продвижения высокотехнологической конкурентоспособной продукции, что является на сегодня очень актуальным.

Обращено внимание на то, что эффективное функционирование отечественной инновационной системы зависит от того, насколько эффективно взаимодействуют участники инновационного процесса как элементы коллективной системы создания знаний и их использования для технологического прогресса и обеспечения конкурентоспособности отечественной экономики.

Отмечено, что Украине нужно пройти развитие инновационных технологий, это даст бизнесу конкурентоспособное преимущество для получения экономической прибыли.

Доказано, что в условиях интеграционных вызовов актуализируются вопросы институциональной трансформации, которая на этапе инновационной модели экономического развития позволит Украине адаптировать ее к потребностям мирового информационного общества для постоянного совершенствования экономического поведения экономических агентов и механизмов рыночного развития хозяйственного комплекса Украины, малых и средних предприятий.

Ключевые слова: национальная экономика; инновационное развитие; институт; институциональная среда; инновационное пространство; институциональный механизм; инновационный рынок.

Introduction. The institutional environment of Ukraine's economy is characterized by a high level of instability and uncertainty. This is caused by a special, very incorrect, in some cases even "shock" strategy to move the domestic economy from administrative-command to market form, and therefore fundamental changes in the institutional structure. The main causative mechanism of the development of all kinds of innovation is market competition. To achieve stable economic growth, the state must provide a balance of competition policy. The perspective competitiveness is ensured only by active innovation policy.

Innovative capacity and technological availability are integral components of the competitiveness of the national economy in terms of institutional changes. The role of innovation in ensuring competitiveness will increase, because the structure of world industrial production will change in favor of high-tech industries, particularly under the influence of the rapid development of nanotechnology, genetic engineering will appear new production, at the same time ecological, and climate threats will cause the activation of ecologically caring industry [1, p. 105].

Competitiveness interpret as the ability to attract and use intellectual capital. The stimulation of the development of innovative entrepreneurship and science and education supporting the experts of EU chose as the most important directions of improvement of the quality of economic growth of its grouping. In most cases, taking into account the national features, these should become the foundation for the construction of a new Ukrainian competitive economy [2, p. 38].

Analysis of recent research and publications. A comprehensive study of institutional support of innovative economy is partially represented in the works of D. Bell, J. Schumpeter, J. Galbraith, U. Rostov. The most important research the problem of institutional structures and thesis of the institutional evolution theory are scientific works of such scholars, as J. Buchanan, T. Veblen, D. North, J. Stiglitz, and I. Tynberhen. Researching of general aspects of restructuring in transition economies and questions of reforming of the institutional structure of the economy are connected the names of V. Heytsya, E. Panchenko, S. Pakhomov, Y. Pakhomov, A. Poruchnik, A. Rumyantsev, A. Filipenko, A. Chukhno.

In the area of institutional theory, Ukrainian and Russian scientists are successfully cooperating and create institutional model considering the economic conditions and the features that are typical for former Soviet countries. In the works of V. Dementieva. M. Zveryakova, R. Nurzeyeva, A. Oleinika, A. Tkacha, V. Tarasevicha, V. Yakubenko, E. Yasina and others, through the application of a multidisciplinary approach, scientific research of geopolitical, historical, ethnical, moral, psychological and cultural factors of institutional transformation of the domestic economy is carried. Pleiad of scientists are identified two approaches, on which scientific economic basics of innovative are based: nationwide level of innovation area (B. Lundvall, R. Nelson, C. Freeman, A. Dynkin, N. Ivanova); regional level of innovative area (well developed in works of P. Linholma, I. Meyer, S. Tatsuno, A. Granberg and other scientists). However, a significant number of problems associated with institutional determinants of forming and development of competitive innovative economy are not disclosed and justified now.

The aim of the article is to investigate institutional factors, influencing to the forming of a competitive innovative economy of Ukraine and to justify factors of the effective functioning of the domestic innovative system.

Results. According to the Law of Ukraine “On the innovative activity”, innovative infrastructure is a “set of enterprises, organizations, institutions, its unions, associations of any form of property, which provide services to support innovative activity” (financial, consulting, legal, educational, etc.) [3].

The definition of innovative infrastructure of T. Ismailova is interesting, because it offers to understand innovative infrastructure as a set of interrelated, complementary industrial and technical systems, organizations, firms and relevant organizational and management systems, necessary for realization of innovative activity and implementation of innovations [4, p. 46].

Proceeding from the existing definitions of innovative infrastructure, we can conclude, that undeniably important is the process of institutionalization of the innovative economy in stage of its formation and clarification factors of forming the competitiveness of domestic innovation infrastructure.

Ukrainian scientist L. Mikhailov considers the structure of innovative economy through the prism of types of markets and identifies two components:

- the market of innovations that form the scientific organizations, universities, scientific associations and other entities. On this market the key commodity is a product of intellectual activity that is subject of copyrights, which are decorated in accordance with applicable international, national, corporate and other legislative and normative acts;

- capital market (investments). This market is a sphere rotation of capital, where, on the one hand, organizations and individuals engaged in the scientific field, and on the other hand – organizations and individuals who invest are the subjects [5, p. 15–16]. The main influence on the market of investments exert macroeconomic policy of the state, legislation, securities market, information provision.

However, in our opinion, no full is the consideration of the structure of innovative economy through the prism of types of markets without market of goods and services. This market gives the answer, by sales of innovative products, to the question: “Was innovative activity successful?”. In the market of goods and services, failure can befall even the product that has high scientific and practical value, but does not meet interests of the buyer. For example, it may be high price on innovative product.

An important trend in the creation of innovative products/services is the convergence of new products. Convergence (from the Latin “Convergo” – “rapprochement”, “ascent”) is seen as rapprochement, assimilation of economies, their economic (institutional) mechanisms and economic structures, and is the inevitable consequence of a glut of product markets of innovations and large variety of product offering of innovations.

Under the influence of institutionalization of innovative economy and the convergence of new products in the market of innovations are forming:

- Novelties that combine products and technology;
- Grocery platforms;
- Co-branding novelties;
- Wellness-products;
- Novelties that bear innovation value or forgotten old;
- Innovations of business models that based on convergence of products, technologies and services [6, p. 89].

The frequency of “exit” on the market with small innovations promotes accumulation of information about consumer preferences, which is a source of knowledge for the next upgrade. However, individual consumer is not socially isolated person. His behavior is explained not only desires and needs.

Firstly, needs are always institutionally indirect. Secondly, there are clear folded “chains” of interconnections of goods through technological processes and market agents, which is difficult to track mutual benefits for their individual consumers.

Thirdly, the market of innovations is a complex structure that cannot be reduced only to negotiate between sellers and buyers. When there are a number of producers

and consumers appear no-exchange institutional relations. This is so called “horizontal relationships” between different buyers and sellers that are either in a state of competition or in secret collusion. This also confirms that the market of innovations is characterized by exchange and competition processes [7, p. 135].

Institutional conditions of raising the competitiveness of Ukraine economy at the expense of innovative factors should be considered as a set of necessary institutions that directly or indirectly contribute to revitalization of innovation processes in the country. As the institutional conditions of forming Ukrainian, innovative economy has not provided yet, so we can understand the institutional changes during the process of transformation of some institutes or transition of institutional system from one state to another.

Determinants, which caused the need for institutional changes during the formation of competitive innovative economy, are:

- improper development of some institutions and subsystems, which reduces the efficiency of the economic system as a whole;
- institutional vacuum, that is the absence of some formal institutions, that should promote innovative development and ensure competitiveness.

Competition does not have to be perfect in a theoretical sense, sufficient that it would produce the necessary incentives and be more effectively as a bureaucracy that is not difficult. However, of course, today the competition should be enhanced in order to keep acceptable for market economy trends of concentration and monopolization [8, p. 11].

Experience of leading enterprises in the market shows, that innovations are inevitable. A small number of companies are capable to implement radical innovations. The competitiveness of most enterprises is provided with the help of imitation, modification, implementation of existing and those that have proven themselves in the market of innovations. Last theses testify data, gotby scientists as Booz, Allen and Hamilton during researching of 700 firms and 1300 new industrial and consumer products (only 10 % of innovations has a world novelty, while most of them 70 % – additions to the range of existing products or their modifications) [2, p. 39].

Innovative activity is the main source of the process of expanded reproduction. Innovative activity is primarily directed to overcome technological backwardness, reorientation of production potential for creating competitive industrial enterprises, whose development depends on the susceptibility enterprises to innovations [9, p. 68].

Competition creates incentives for innovations in order to upgrade products, to increase productivity and reduce costs that allow getting revenue some time, until it increases the attractiveness of the market and do not attract competitors. Equal conditions of competition has basic value, that it was impossible to gain a competitive advantages by other methods, than the implementation of the most effective innovations, that their selection was carried out, not because of connections and privilege, but only on economic criteria [8, p. 11].

Experience shows, that small enterprises are considered more innovative for three reasons: lack of entrenched bureaucracy, more competitive markets and stronger personal incentives to entrepreneurs, who are also owners of firms. In the current economy, small enterprises play an important role as innovators and often they are technology leaders. Enterprises can implement technological and organiza-

tional innovations through to strategies, chosen by management, and be critical to the success of modern innovation-oriented economy [10, p. 111].

Implementation of innovative technologies in Ukraine enterprises plays very crucial value in economic development of the country, in its competitiveness in the global innovative space. The means to create a competitive economy are close cooperation between scientific advances and using of new technologies of production. Today the dominant way of development has to be the way, which based on the using of strategies to increasing innovative capacity, predefined state priority areas of science and technology progress [11, p. 3]. Innovative activity of enterprises has a significant positive impact on their economic outcomes. Thanks to the growing volume of production and sales, profitability and competitiveness are increasing, and acceleration of market providing qualitatively new kinds of products. Enterprises, that implement innovations can increase product, improve competitiveness and expand markets [9, p. 67].

For the forming strategy of entrepreneurship development need to define the basic framework of economic activity and the determinants of entrepreneurial behavior, that are determined by society, because the three aspects, that form the "golden triangle", which is needed to create a business strategy are prediction or intuition and social processes [12, p. 20–21].

In general, the effective functioning of domestic innovative system depends on how effectively participants of the innovative process interact as elements of a collective system of knowledge creation and their use for technological progress and providing competitiveness of the domestic economy. In international practice, different indicators of efficiency of functioning of innovative economy are used. Summing up the experience of the world theory and practice Z. Varnaliy and O. Garmashova consider, that the effective indicators of a national innovative system may be the volume of innovative products, on which these determinants of development of competitiveness of innovative economy affect: availability of financial security of innovative processes, that is the ability to attract investments in process of providing innovations in production; scientific and technical potential of the country, the result of which is fundamental, applied researches – innovations; development of innovative infrastructure, that contributes to formalization of relationships between science and production and completeness of the innovative process [1, p. 139, 143].

In this connection, there is a need for a practical application of some tools from the complex of institutional changes, needed to improve the competitiveness of domestic innovative economy. Among them are development and implementation of programs of modernization of domestic production; setting priorities and introduction of mechanisms to encourage innovative activity; optimization of system of management in the innovative economy through the creation of the Ministry of Education, Science and Innovations of Ukraine [13; 14].

In the context of this study, such publication is noteworthy (Dykha et al. (2017)) [16]. In the framework of implementation of the investment and innovation development strategy elaborated by the authors, on the one hand, fundamental and applied research will be carried out, new products and technologies will be developed, system of accumulation and hunting for innovative ideas will work, and, on the other hand, fundraising, project bidding and implementation will take place. Authors' suggestions

on prioritization of public finances “re-loading” for structural and innovation restructuring of the economy, as well as directions of development of venture business and promotion of high-tech, competitive products are very relevant.

In general, systematic approach to ensuring competitiveness, sustainable economic growth through implementation of state influence on socio-economic processes, including through economic reform, rational use of resources is described by Dykha (2016), including justification of components of economic mechanism of socio-economic development of the state [15].

Conclusion. The reorientation to an innovative way of ensuring the competitiveness of the Ukrainian economy will require significant institutional changes in different spheres of social life. Particular attention should be paid to improve the institutions that are involved in innovative processes. An open economy will also contribute the competition, the maximum reduction of program barriers. Only institutional transformation at the making of the innovation model of economic development in Ukraine will enable adaption to the requirements of the global information world society and continuously improve the economic behavior of economic entities and the mechanisms of market self-production production and industrial complex of Ukraine, small and medium enterprises.

This can be achieved by creating an effective institutional framework defined hierarchy of values of the dominant traditions and laws (formal and informal rules) and moral standards. These aspects of the psychology entrepreneurial structures must be based on practices creation, study and formal restructuring, including economic institutions. Good institutional hierarchical system allows for effective governance and regulation of innovative entrepreneurship, social functions and public institutions, providing communication between subjects of by risk enterprise, government, business and society.

1. *Varnaliy Z. S.* Competitiveness of the national economy: problems and priorities of innovative software / Z. S. Varnaliy, O. P. Garmashova. K. : Knowledge of Ukraine, 2013. P. 382.

2. *Innovative policy: study guide* / by general editorship of B. M. Andrushkiv. Ternopil : "Ternopil-Ear", 2012. 484 p.

3. *On innovation activity: The Law of Ukraine № 40-IV of 4.07.2002* : official publication / Parliament of Ukraine // Information of Parliament of Ukraine. 2002. № 36. Clause 266.

4. *Ismailov T. A.* Innovative economy – strategic direction of Russia in XXI century / T. A. Ismailov, H. S. Hamidov // Innovations. 2003. № 1. P. 46.

5. *Mykhailova, L.I. and Turchin, S. H.* (2007), *Innovative Management*, Center of educational literature, Kyiv, Ukraine, p. 248.

6. *Markova, V. D.* (2010), *Convergence of novelties, Innovations*, no 3 (137), pp. 89-91.

7. *Apatova, N. V.* (2004), *Institutional nature of the market in the information economy*, Scientific works of DonNTU. Series of economics, issue 82, pp. 134-138.

8. *Yasin E.* Terms of innovative development and necessary institutional changes / E. Yasin // Problems of the theory and practice of management: From 2006 issued 12 times during year. 2007. № 7. P. 8-20.

9. *Kasich A. O.* Innovative products as a basis for improving the competitiveness of enterprises in Ukraine / A. O. Kasich, M. V. Nazarova, T. A. Klimovich // State and Regional : magazine. 2008. № 2. P. 66-69.

10. *Isakov N. B.* Different scales of enterprises in economy and in innovative development of Ukraine / N. B. Isakov // Science and the science of science. 2011. № 4. P. 106-115.

11. *Onipko T.* Problems of innovative development of enterprises in Ukraine and government policy for their overcoming / T. Onipko // NEWS of CUCSU. Business Issue. 08/07/2011. P. 1-3.

12. *Govorin A. A.* Modern entrepreneurship and innovative development of economy / A. A. Govorin // Bulletin of the Russian Economic University named by H. V. Plekhanov. 2012. № 3. P. 14-21.

13. *Kraus, N. M.* (2017). Instytutstionalizatsiia innovatsiinoi ekonomiky: hlobalni ta natsionalni tendentsii [Institutionalization of Innovative Economy: Global and National Trends]. Extended abstract of Doctor's thesis. Kyiv: Znannia [in Ukrainian].

14. *Kryvoruchko, O. S., Kraus, N. M. & Kraus, K. M.* (2017). Innovatsiinyi landshaft u koordynatakh svit-ekonomiky ["Innovative landscape" in coordinates of world economy]. Hlobalni ta natsionalni problem ekonomiky – Global and national problems of the economy, 16. Retrieved from <http://www.global-national.in.ua/issue-16-2017> (Accessed 28 Apr 2017) [in Ukrainian].

15. *Dykha, M. V.* Economic mechanism toolkit for state regulation of socioeconomic processes (2016). Actual Problems of Economics, 5 (179), 20-29. Retrieved from <http://elar.khnu.km.ua/jspui/handle/123456789/5395?mode=simple>

16. *Dykha, M. V., Tanasiienko, N. P., & Kolisnyk, G. M.* (2017). Ensuring of labor productivity growth in the context of investment and innovation activity intensification. Problems and Perspectives in Management, 15 (4), 197-208. Retrieved from [http://dx.doi.org/10.21511/ppm.15\(4-1\).2017.04](http://dx.doi.org/10.21511/ppm.15(4-1).2017.04)