THE ROLE OF INSTITUTIONAL FACTORS IN THE FORMATION OF THE NATIONAL INNOVATIVE ENVIRONMENT IN THE CONDITIONS OF GLOBALIZATION

Ivan Mytsenko, Doctor of Economic Sciences, Professor, Head of Department of International Economics of Kirovohrad National Technical University, Kirovohrad

I.Mytsenko. The role of institutional factors in the formation of the national innovative environment in the conditions of globalization.

On the basis of the research the article defines the preconditions and main factors of the creation and functioning of the global innovative environment. The main directions of transformation of the global innovative environment were defined. The state and the tendencies of the innovative development of Ukraine were assessed and the level of integration of the national economy into the global innovative environment was defined. The objective of the article is to study the tendencies of the functioning of the global innovative environment and development of the methods and practical recommendations concerning the institutional factors of the global innovative development. In the process of research we used the complex approach which foresees a certain distribution of functions to study the object of research including the systematization of results which enables disclosing the peculiarities of the institutional factors of the global innovative development. The generalization of the facts was carried out with the help of interpretation methods, which is dialectic and structural, historical and logical. The research enables defining the peculiarities, trends and tendencies of the functioning of the global innovative environment and development of the theoretical and practical bases of the integration of the national economy.

Миценко І. М. Роль інституційних чинників у формуванні національного інноваційного простору у умовах глобалізації.

На підставі проведенного дослідження у статті визначено передумови та основні фактори утворення і функціонування глобального інноваційного простору. Визначено основні напрями трансформації глобального інноваційного простору. Оцінено стан і тенденції інноваційного розвитку України, визначено рівень інтеграції вітчизняної економіки в глобальній інноваційній просторі. Мета статті пролягає у дослідженні тенденцій та закономірностей функціонування глобального інноваційного простору і розроблення теоретичних положень та практичних рекомендацій щодо визначення інституційних чинників глобального інноваційного розвитку. В процесі дослідження було використано комплексний підхід, який передбачає при одному об’єкті дослідження певний розподіл функцій по його вивченню, систематизацію результатів, що дозволяє розкрити особливості інституційних чинників глобального інноваційного розвитку. Узагальнення фактів і зв’язків здійснювалося за допомогою інтерпретації методів - діалектичного та структурного, а також історико - логічного. Проведене дослідження дало змогу визначити особливості, тенденції і закономірності функціонування глобального інноваційного простору та розробити теоретичні і практичні засади інтеграції в нього національної економіки.

Миценко И. М. Роль институциональных факторов в формировании национального инновационного пространства в условиях глобализации.

На основании проведенного исследования в статье определены предпосылки и основные факторы создания и функционирования глобального инновационного пространства. Определены основные направления трансформации глобального инновационного пространства. Оценено состояние и тенденции инновационного развития Украины, определен уровень интеграции отечественной экономики в глобальный инновационный пространство. Цель статьи заключается в исследовании тенденций и закономерностей функционирования глобального инновационного пространства и разработке теоретических положений и практических рекомендаций по определению институциональных факторов глобального инновационного развития. В процессе исследования были использованы комплексный подход, предусматривающий при совместном объекте исследования определенное разделение функций по его изучению, систематизации результатов, позволяет раскрыть особенности институциональных факторов глобального инновационного развития. Обобщение фактов и связей осуществлялось с помощью интерпретации методов - дилектического и структурного, а также историко-логического. Проведенное исследование позволило определить особенности, тенденции и закономерности функционирования глобального
Relevance of the problem and its connection with important scientific and practical tasks. The transition of the modern world to the fundamental socio-economic transformation goes under the influence of globalization. It is manifested in the increasing economic interdependence of all economic subjects as a result of fast increase in the amount of trans-border transactions of goods, services, capital and broad diffusion of innovative technologies. The basis of the new industrial revolution is the technological leap to the "new" economy and close interrelation of such key technologies as microelectronics, telecommunication, computers, robotechnics, creation of new materials with definite peculiarities and biotechnologies. At the stage of such revolutionary changes the strategy of economic development has to be changed not only on the national level but also on the level of a region, a city, a separate production unit and even everybody working in the new manufacturing conditions. Within a short period of time, due to the Internet, telecommunications, high-speed transport, new technologies are widespread in the business sphere as well as in everyday life. The important modern feature of national economies development in the world of the leading countries is their innovative direction which lays in the systemic changes of the basic constituents defining the level of economic growth on the ground of the permanent and purposeful innovative activities.

Globalization, which quickly changes the configuration of the modern world economy and is based on the innovative potential development, is certainly objectively conditioned. Innovative development contributed to the changes and differentiation of the goods nomenclature which resulted in the substitution of the traditional price competition by the competition of the goods quality of the competitive models and trademarks. The present day situation in the country requires that the regions and the companies should take definite places on the global market depending upon the variety of produced goods but not upon the competitive prices on them. At the current stage of globalization institutional factors for most developing countries have not lost their importance and remain the significant regulator of innovative development.

Analysis of the latest scientific research. The problems of the global innovative activity were studied by the national scholars such as: V. Aleksandrova, L. Antonyuk, A. Hahchinskyy, V. Heyets, E. Zavhorodnya, S. Zanheeva, A. Rumyantsev, I. Kornilova, D. Chervanyov, O. Zhylinska, I. Netreba [1 - 8] and others. There search of the above-mentioned scholars discussed the differences of the innovative systems of different countries and enhanced methodological approaches towards the definition and assessment of the global innovative process. But there search of the institutional factors of the global innovative development needs further detailed study.

The objective of the article is to study the tendencies of the functioning of the global innovative environment and elaboration of the oretical statements and practical recommendations concerning definition of the institutional factors of the global innovative development.

Presentation of the principal research data. Regulatory functions of the state are closely connected with the institutional factors which form the innovative environment, namely economic, technological, legal, political, social and ecological. Moreover, every country has to define the degree of national influence on the strategy of economic development considering general tendencies of the global innovative development.

In terms of economic transformations there is a simultaneous process of formation and vast expansion of the world's economy institutions. The world practice proves the intensity of economic transformations to be followed by the processes of economic instability which result in the deviations of the economic activities. Obviously it depends upon the dynamics of innovative model of economic development. It should be mentioned that before 1960-s the hierarchic model of the production management was the leading one, whereas in 1970-80-s up to the mid of 1990-s the matrix model prevailed, and at the beginning of the XXI century the innovative model of the development became the principal one. It is manifested in the differentiation of the methods
of increasing systems of management based on the active participation of government in the creation of tools of reaction on the world transformation processes.

Recently, the concept of "innovative-investing nature" of globalization has been widely discussed. Whereas the economic development is closely connected with the scientific and technical progress, and the late provides transition to the new quantitative and qualitative levels of development of both economic and financial systems which are closely connected, and the scientific progress allows attracting investments as its quantitative factor, while qualitative factor of scientific and technical progress is innovations characterizing its temporal aspect, so innovative-investing part of economic growth is the leading element of economic evolution on the micro- as well as on the macro- and global levels [9].

The globalization of the world economy sets up preconditions to form new type of innovative activity of the nanolevel - the activity of a person. On the one hand, global networks extend the opportunities of getting new knowledge and forming the staff capable to generate innovations, on the other hand, there appears a considerable segment of consumers on the global market of high-tech products who are able to invest much in the scientific sphere by means of purchasing innovative goods and services necessary for welfare and satisfying their needs [10].

The formation of the nanolevel innovative potential is influenced by the innovative processes on the upper economic levels via the mechanism of forming new knowledge, information sphere, the usage of new goods and services, etc. Thus, the changes in the innovative activities of the nanolevel go over the national limits and acquire the features of international activity in the global economy.

So, the ability of the state to gain the world technological dominance depends upon the national strategies of innovative development based on the unity of some factors defining the common features of the modern evolutional process in the post-industrial development of the economy. The basic constituents of such development are mentality, information, and resources which define the imperatives of innovative development (introducing innovations, creativity, development and tolerance of cultures, environment protection, human rights to information access, etc.).

At the same time, the efficiency of innovations, their generating and use, determining the appearance of certain strategies and creation of innovative-institutional and manufacturing environment, depend upon the national policy, the policy of educational and scientific development, etc. The highlighting of the prominent role of the innovative institutions in the process of technological changes is an important conclusion of the mentioned paradigm.

The concept of technical-economic paradigm is based on the fact that changes of the technological structure are closely connected with the changes in the management on the macro level: the extension of new technologies contributes to the changes in the institutional structure of the state.

The approved special programs of the innovative development provide for both, direct and subsidiary institutional factors of incitement on innovation activity in which the role of subsidiary (indirect) methods grows. They include intellectual property protection; regulatory framework and reduction of managerial requirements; education and professional training; the orientation of scientific research programs towards innovations.

Target interests of innovative development create the basis for subjective innovations which support the involvement of the competitive elements motivating and stimulating them to innovative activities, fig.1.

The transition to the innovative development requires not only the optimization of resources and mobilization of backlog but also systemic transformation of the institutional structure of economy. The transformation of the economic system is an opportunity to implement the innovative potential in the production. Thus, it is necessary to change the system using the interaction with the human resources capable to use new technologies and improve the old ones, to imply them in industry purposefully and effectively. At the same time, as the Academician A.Chukhno mentions, the most important factor in this process is the development
of a person. A person plays the key role in the innovative progress [11]. Besides, the level of economic competitiveness depends upon such factors as scientific and technical level and degree of production enhancement, the use of the latest inventions, as well as the ability to quickly set the commercial production of new goods going, to increase their output but for all that cutting the spending on the high-quality goods.

Fig. 1. Institutional factors of innovative development

Source: developed by the author

At the same time, the development and efficiency of innovative system is not possible without the feedback from the leading elements, their effectiveness and factors of competitive benefits influence. It is determined by the changeable inner and outer environment of the enterprise where the innovative activity is being held.

This process is accomplished by the general interaction with the competitive sphere subjects capable to guarantee the presence of innovative factors via continuous self-resumption of the national economic system.

Moreover, today's harsh competitiveness makes great demands of the quality of goods because in the system of the market economy the enterprise is fully responsible for the results of its activity, despite the influence of objective exogenous factors.

Therefore, neglecting the realities of the market conditions and not considering the competitive benefits on the basis of innovative development while planning can make the company not only non-competitive or detrimental, but also a bankrupt.
The institutional environment is determined by the legal and administrative infrastructure in terms of which national enterprises and entrepreneurs as well as the companies and the government interact aiming at creation of a stable economic system. The importance of favorable and fair institutional environment has become more evident in terms of the latest financial crisis. These are just the conditions when the institutional environment is extremely important for maintaining and intensification of the stable economic growth, considering that the state plays the more vital role on the international level for the economies of many countries.

For carrying out the proper estimation of innovative consistence it is necessary to make up the criteria characterizing relative parameters. In particular, economic parameters determine the level of manufacturing expenditure and the consumption price via the costs of purchase and implementation. Legal parameters characterize the degree of products correspondence with the established requirements, norms, standards defined by the appropriate legal documents.

In Ukraine the state authorities have taken some steps towards the development of the scientific potential and stimulation of the participants of innovative processes which is reflected in the corresponding Laws and Government Regulations [13, 14, 15,16].

But the absence of the active national innovative system of development and the shortcoming of the legal mechanism have prevented from succeeding in the innovative leap.

Due to the imperfection of the national legal system as well as the economic and political instability there are limits in the access to the financial resources slowing down the innovative processes. Meanwhile, high rate of corruption, vulnerability of investors’ rights and intellectual property rights create the negative investment climate for involvement of foreign capital. A foreign investor, possessing the latest technologies and introducing his business to the other country for making profit, is known to create the innovative logistics which enables him to involve local resources in the activation, innovations, Scientific Research and Development Work (SRDW) and the production of the competitive products.

It should be mentioned that one of the key elements providing the innovative development is the activity of the SRDW sphere. This very sphere is capable to create favorable investment climate, fast introduction of innovations and to transform the structural changes. On the basis of these facts, the EU countries annually spend more than 200 bl. euros or 1,83% of the GDP on SRDW, while 3/5 of this money is provided by the entrepreneur sector [17].

In Ukraine this kind of activity doesn't go beyond one per cent of the GDP. As a result of such national policy, scientific research and development have only cognitive function. National business is not extremely interested in the domestic science because of the irregularity of existing laws and the objectivity of following them. That is why it would be right for the authorities to stimulate large-scale business in Ukraine for supporting domestic science financially. It is necessary to increase the technological level of production, to transmit to higher technological structures, and encourage those ways of technological development which are favourable for high technical mode, as well as capable to actively develop it.

Nowadays, the world economy in developed countries is actively forming a new paradigm of scientific and technical development, the main features of which are: growing interrelation between the capital markets and new technologies, fast development of "the economy of knowledge", the enhancement of social adaptation of modern technologies, global character of the creation and use of knowledge, technologies, goods and services. Giving preference to the promotion of high-tech products, the world companies increased financing of the scientific research and development of such branches as programming and computer services - 11%, automobile production - 8,9%, technological equipment - 8,8%. The most distinctive characteristic of the innovative activity efficiency is the rate of competitiveness of the world countries. It is a peculiar indicator showing strengths and weaknesses of the countries' competitiveness and defining the priorities of those spheres which form the policy of economic development. For each of 144 countries under consideration there are particular proposals for the development of the national economy.

For the recent six years the leading positions in the rate have been taken by the West European countries and the USA. At the top of this rate is the economy of Switzerland, the second
place is taken by Singapore, the third one by the USA which remain the leader in the providing innovative goods and services. The forth place is taken by Finland, the fifth one by Germany. There follow: Japan (6th place), Hong Kong (7), the Netherlands (8), Great Britain (9) and Sweden (10). The analysis of these countries proves that the separation in the competitiveness among the European countries holds true while strengthening of the EU positions in the solving of the European macroeconomic problems.

While the countries of the Northern and Western Europe have strong competitive positions, the countries of Southern Europe, such as Spain (35th place), Italy (49), Portugal (36), and especially Greece (81) being mostly influenced by the economic crisis and macroeconomic decrease are still under the influence of those consequences though achieved some success in the strengthening their competitiveness last year.

The position of Ukraine in this rate became worse in comparison with the previous years. According to the report in 2012-2013, among 144 countries Ukraine held the 73rd place as compared to the 82th in 2011-2012, and in 2011-2012 - only the 89th place among 133 countries as compared to the 82th in 2009-2010 [18]. In other words, the most favorable in this aspect was 2013, but in 2014 Ukraine went three positions down taking the 76th place.

It is necessary to point out that among main reasons of the decrease in competitiveness is the low level of innovative development, according to which the economy of the country is on the 81th place. Though among our nearest neighbors, the Czech Republic in particular, taking the 37th place, Poland is the 43th one, and Russia, Bulgaria and Romania are on the 53th, 54th, 59th places accordingly [19]. Such statistics proves that leading countries succeed in achieving the fifth- and the sixth- levels technologies, while Ukraine stays in the primitive raw materials based economy, metallurgy and chemistry, which is characteristic of "the third world" countries: most of the products in the Ukrainian export are of mid and low technologies -78,2%, which cannot compete on the world market, especially in the periods of economic crises.

The fact, that Ukraine is losing its competitive strengths and has low innovative activity, is proved by the results of this year's report. During the last year in the rate of the global competitiveness Ukraine went 11 positions down, getting the indicator 4,05 out of 7 possible, and took the 63th place, table. 1, Fig.2.

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Global index of innovations is made up of 80 different variables reflecting the innovative possibilities of the countries, the amount of innovations, their results and the development of innovative infrastructure of the participant countries, possessing the levels of economic development.
Conclusions. The solving of the problem of innovative infrastructure development and rise of the high-tech products competitiveness involves a lot of efforts from private enterprises as well as the realization of the national policy in this direction. Moreover, as a result of recent events in the east of the country, there decreased the export potential giving the opportunity to draw foreign investments to the innovative projects. So, the specific amount of exported products in 2014 decreased by 13.5%, as compared to 2013. This year the situation has been getting worse: in comparison with the January, 2014, the export decreased by 31.2%. In January, 2015 the amount of export to the EU countries was more than 1 billion US dollars, which is 31% less than a year before [20]. But under the clearly defined national innovative policy with the limited financial resources, there is a problem to choose the industrial branches and sub-branches which are worth of national support. Consequently, the system of the criteria for priorities of such enterprises should be worked out. Such criteria defining the top precedence of manufacture and separate types of innovative products should include: 1) the degree of products science linkage (innovative factor), the dynamics of demand on the world market and competitiveness of national products; 2) the protection of the internal market from the ill-natured competition of foreign companies; 3) the creation of favorable conditions for domestic production expansion and restriction of the capital coming-out; 4) multiplicative effect of the competitiveness of exported products manufacturing; 5) economic effectiveness of these products. Undoubtedly, the last criterion in this process is crucial.

Thus, the development of innovative activity and providing for the functioning of the institutional factors mechanism as regulating process is achieved by means of interrelated integral quality specified by the synergetic interconnection of innovative and integral competitive advantages in general correlation with the subjects of innovative environment which is able to provide the functioning of these factors via constant self-resumption of innovative national economic system.

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Список використаних джерел:
Ключові слова: інституційні чинники, інноваційна політика, інноваційний розвиток, соціально-економічний розвиток, інноваційна трансформація.

Ключові слова: інституціональні фактори, інноваційна політика, інноваційне розвиття, соціально-економічне розвиття, інноваційна трансформація.