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Еволюція і проблеми розуміння сутності інновацій в умовах визначення конкурентоспроможності української економіки

Evolution and challenges of understanding the essence of the innovation in the determination of Ukrainian economic competitiveness

У статті розглянуто проблему еволюції розуміння сутності інновацій в умовах визначення конкурентоспроможності української економіки. Досліджено основні підходи до визначення сутності інновацій та їх еволюцію під впливом різних чинників. Визначено засади взаємодії основних економічних категорій в сфері інноваційної економіки.

The article considers the problem of understanding of the evolution of innovation in determining the competitiveness of the Ukrainian economy. The basic approaches to defining the essence of innovation and evolution under the influence of

various factors are examined. The basic economic principles of interaction categories in the field of innovation economy is defined.

Ключові слова: інновації, інноваційний потенціал, конкурентоспроможність національної економіки.

Keywords: innovation, innovation capacity, competitiveness of the national economy.

The competitiveness of Ukrainian economy today justified deserves criticism, but this criticism should be constructive and not only identify key problem areas, but also cover the basic ways to overcome them. Obvious problems associated with the use of obsolete equipment, lag in the field of organization and management of production processes and the failure to produce competitive high-tech products, require not only immediate solution, but require a revolutionary approach that can provide the result soon. At this time it is necessary to think of the words of businessman J. Trump: "Bad times create great opportunities." And that possibility is lengthening the innovation potential and convert it to a specific end product made in terms of the domestic economy. As to the nature of competitiveness, there is an interesting point of view of Russian colleagues, according to which at last offered understood as a set of competitive relationships arising between business entities to create conditions for increasing the comparative and competitive advantages in order to obtain the best results in the market of goods and Services [21].

Analysis of recent research and publications. Despite the significant importance of innovative research problems of competitiveness, it is not lit and requires systematic study. At the same time, it should be noted recent publications in this area, particularly of scientists: L. Antoniuk, A. Amosha, I. Budnikevycha, V. Heyets, nether M., M. Kozoriz, A. quotes, V. Seminozhenko, and . Schools, which covers aspects of activation of innovative processes at the macro level.

Problem. The study of evolution and problems understanding the importance of innovation in terms of determining the competitiveness of Ukrainian economy.

The main material. Our vision of the problem is not groundbreaking, but the ways to overcome said domestic economists for many years. Thus, according to leading national team of economists who are directly engaged in research innovation and technological progress [6] Innovation is a basis for fundamental economic reforms to build a new economic system. According to the research the main factors that hinder the development of innovations in Ukraine undoubtedly include: budget deficit, lack of long-term financing and lending, lack of own funds and lack of market mechanisms for the implementation of research results [6]. Thus, we can say that, despite the large number of publications and research in this area, the problem of innovation factor, as a condition of building a competitive economy, remains unresolved finally, its relevance and does not cause any doubts.

World economic thought on the issue of economic growth is as renowned researchers as R. Solow, E. Denison, D Yorhenson et al., Defines its dynamism among factors include: capital, labor, education, economies of scale and more. However, the results of theoretical research and practical experience show that the decisive factor for over 50 years leads to economic growth and improve national competitiveness of the world is highly scientific and technical progress [7].

In order to better understand the role of innovation factor we consider more the essence of innovation. In a broad sense, the term "innovation" refers to innovation in engineering, technology, labor and management, based on the use of science and best practices, or, in short - is the end result of innovation [10]. In scientific lexicon, the term first introduced Schumpeter, which literally means "the embodiment of scientific discovery, technological invention, a new technology or a new type of product" [25, P.159]. Besides innovation Schumpeter regarded as a new production function, its new combination.

However, before Schumpeter crucial role of innovation and improvement of the production process are understood classical economic theory as Adam Smith, David Ricardo, Marx, E. Bohm-Bawerk. Thus, the decisive factor of growth and welfare Adam Smith calls the progress of consciousness due to the participants of the production process, "the peoples of the civilized and prosperous ... product all the

work society is so great that all are often abundantly provided with it, so that poorer and lower employee discharge ... could use a lot of items needed and convenience compared with any savage " [18, P.17]. In addition, Adam Smith identifies three main factors that, in his opinion, are able to ensure economic growth:

- Firstly, increasing skill of each employee;
- Secondly, saving time, which is usually utrachayetsya the transition from one type of work to another;
- Thirdly, due to the introduction of machines which facilitate and reduce labor and enable one man to do the work of several [18].

D.Rikardo his work shows a remarkable understanding of the impact on employment progress and return on invested capital, "a significant change in the constant rate of return is the result of causes that operate only during certain years, but a change in the amount of labor required to produce goods continually improved . Every improvement in machinery, in tools, in buildings, in the extraction of raw materials and labor retains a significant degree makes it easier for us to manufacture the product, thus changing its value. " [16, P. 26].

Marx meant by innovation any changes in the manufacturing process, releasing capital, as any improvement that allows you to reduce the required working area or extend service life vehicles [11]. E. Bohm-Bawerk believed that technological innovation lead to the extension of the period of production, which can change only when through technology will create new products [25].

Continue to study the influence of NTP on economic processes such as Western economists R. Solow, Schumpeter, D. Saha, E. Denison et al. Unlike classical data economists as an important factor of economic growth not only separate inputs and pay much attention to the study of the direct influence of STP. Accordingly, shifting focus when considering the economic problems of the use of limited resources for the modernization of the production process and finding more sustainable ways of organizing it. In production now has a place not only for factors of production: land, capital and labor, but also to those previously remote as science, technology and management. Despite the fact that the production process is unbroken, it is now

separated innovative process, covering the period since the introduction of novelty to its final implementation in the production process, in other words - commercialization. Indeed, the role of innovation factor should not be underestimated, as the leading Western economists rightly estimate it at least 88% of the main factors in determining growth.

However, despite this significant value, it should be noted that the world still unfinished debate about innovation unambiguous interpretation.

By R. Foster innovation - "a battle between innovators in the market or attacking - those who are trying to make money by changing the order of things - and those who are defending, protecting their current income. Innovation - is the fruit of the efforts of outstanding person, property market undergoes repetition " [22, P. 27-28]. In its definition of R. Foster demonstrates the revolutionary nature of the innovations that have changed the course of things existing and exacerbates conflict between conservatives and innovators, the cause of which is due to purely economic factor - the change in future benefits. However, progress can not be stopped.

However, according to B. Twiss innovation should be tested market: "Innovation - is the offer in the market for something new, for which the consumer is willing to pay. The invention is an innovation if gets success in the market. Innovation - This application is a process in which an invention or idea become economic substance " [20, P.37]. This opinion focuses on the commercial success of new ideas and completely justified from an economic point of view. Any changes if they cause monetary damage is not profitable, and therefore their implementation - irrational. At the same time, purely technically these changes are innovations as the primary definition of responsible innovation proposed by Schumpeter. But the undoubted advantage for understanding innovation B. Twiss is economic rationality implicit in its definition.

Very short and concise definition of innovation provides G. Rihhz: "Innovation - a commercial development of new ideas" [4, P.7]. However, this definition laid very deep meaning. When innovation is understood not any innovation, and is receiving marketing. Obviously, at the time of sale may still be unknown fact how profitable it

will be, but if the idea deserves to be realized, even if its commercial failure in its practical implementation, it can be considered an innovation.

Many scholars, moreover, argue about which is the area of implementation of innovations should be considered an innovation. Thus, according to K. Freeman industrial innovation - "is technical, design, production, management and commercial activities, making new (improved) products or the first commercial use of new (improved) processes or equipment" [2, P.38]. At the same time, R. Rothwell and P. Gardner turning their attention to the fact that "innovation - is not only the commercialization of basic improvements in maintenance process (radical innovation), but the use of small-scale changes in the technological skills (or a slight improvement innovation) " [3, P.168]. However, an attempt to unite all the conflicting views about the scope and nature of innovation makes B. Santo, understanding innovation "a social, economic or technical process, through the practical application of ideas and inventions to create better results with properties of products, technologies and if it is on the market can provide additional benefits. Innovation - is a technical and economic cycle in which the use of the results of research and development is directly technical, economic changes affecting the activity of this area " [17, P.24].

Innovation as a kind of empirical research examines P. Drucker, who offers the following definition: "Innovation - a special tool of entrepreneurs, through which they explore the changes that are occurring in the economy and society, in order to use them in business or in different areas of service. Innovation (innovation) is not so much technical as economic or social terms " [9, P.41]. In addition, Mr. Drucker remarked on the fact that innovation should be regarded as purely economic, not a technical phenomenon.

Recognizing the revolutionary nature of the changes resulting innovations R.Nelson and examined under S.Uinter innovation "change of routine," noting note that the effects of such changes are determined by estimates of consumers [13, P.46].

The role of innovation as a factor of competition also supports Porter. He believes innovation - is "an opportunity to gain competitive advantage. Innovation is

characterized by a broad sense, including both new technologies and new ways of working. Innovations are a new product design, the new production process, in a new approach to marketing a new technique or additional training. Innovation is quite simple and small, are based more on the accumulation of minor improvements and achievements than a single large technological breakthroughs " [15, P.171]. Unusual is the fact that Porter expands his vision of the nature of innovation, focusing not only on technical and technological improvements, and looking at the smallest things, can provide a competitive advantage.

"Innovation - the process of converting opportunities into new ideas that are widely implemented in practice" - says the team of authors consisting Tidda D., D. Bessanta and K. Pavitti [5, P.38]. Definition, they emphasize that innovation - is still the idea that there is a rational search for new opportunities and their approbation.

G. Hamel and Prahalad K. focus on what innovations are able to provide significant business benefits to their owners, "Innovations generate maximum profits ahead if other globally" [23, P.216]. Simultaneously, the famous financier George. Soros consider in innovations not only a source of profit, but also a potential threat to financial stability, saying that innovation - is "one of the main advantages of free markets, but innovation in financial markets inevitably give rise to instability. Innovation brings intellectual satisfaction and profit innovators, but priority must be to maintain stability or, more precisely, to prevent the development of undesirable trends in the markets " [19, P.379].

Particularly noteworthy Ukrainian labor economists in recent years. Thus, S. Pokropyvnyy considers innovation as "introduction to business practice of innovation processes" [14, P.24], focusing only on the moment actually commercializing innovative search. Chervanov D. and L. Neykov propose the following definition, which reveal his vision of innovation: "Innovation - the process of bringing scientific ideas or technical invention to the stage of practical use, income, and the related process feasibility and other changes in the social environment " [24, P.34]. A. Datsiy, for forming their own view of the nature of innovation, trying to focus on the fact that innovation does not depend on the application, and therefore include

"changes in engineering, technology, organization, environment, economy and social sphere" [8, P. 28]. Yuri Morozov says understanding the importance of innovation, with an emphasis on innovation and profitability, innovation offers the following insight: "Innovation in the broadest sense - is profitable innovations in the use of new technologies, products and services, organizational, technical and socio-economic decisions manufacturing , financial, commercial, administrative or other measures " [12, P.6].

Trying to combine and summarize all of the above to the essence of innovation, the Law of Ukraine "On innovation activity" proposed the following definition of innovation: "Innovation - newly created (applied) and (or) improved competitive technologies, products and services as well as organizational and technical solutions industrial, administrative, commercial or otherwise, which significantly improve the structure and quality of production and (or) social " [1].

Summarizing the above, we can form a conclusion that a common vision about the nature of innovation does not exist. This is evidenced by the fact that the essence of the term intuitively clear to all, however, due to the dynamic development of innovation and intensification of scientific and technological progress of recent years, a clear and definitive line that would completely cover the essence of innovation today is not found possible.

Many scientists and economists consider changing innovations in only a few areas, such as engineering or manufacturing technology and those views we identify with a narrow approach. At the same time, a broad approach to understanding proposes to go beyond the scope of innovation and, in addition, includes all phases of play, not only focusing on production.

We can see that the breadth of perception has international character and only indicates the scope of the assignment at baseline by various scholars.

Obviously, the breadth of perception reflects the essence of innovation, not all aspects of understanding. An important criterion is also the scale and innovation are the views of scientists can also be divided. Although innovations by P. Drucker, and regarded as an economic phenomenon, but the zoom macro and micro level may

distort the perception of their essence. Macro and micro economic processes rather poorly correlated with scientific and technological inventions, because the process of individual search for truth, as evidenced by the thought of the great Russian writer Boris Pasternak: "Truth seeking only single and broke with all who love her enough." However, despite the individual nature of the search for new ideas, the results of their implementation can have a significant impact on a wide range of counterparties.

Having reviewed the main approaches to understanding the nature of innovation, we can move to form conclusions about the role of innovation factor in terms of building a competitive economy. Obviously, under an innovative competitive ability of subjects to be understood actively pursue innovation and improve quality of life [7]. Important so, pay attention to the homogeneity of the innovation process and its ability to meet its goals.

According to Russian scientists [21] innovation process is not uniform, and has a dual nature and, accordingly, is divided into the process, the result of which should be research and development, and process directly implementing scientific developments into practice in the form of new products, technology, labor, production, marketing and more. Accordingly, it is obvious impact not only the availability of opportunities for actual innovation, but also the presence of potential to develop them.

Under the innovative potential, in particular, offered the opportunity to understand and willingness to implement effective regional innovation [7]. In particular, the author clarifies the nature of the possible - the availability and capacity balancing structure and readily understood by the adequacy of capacity and available resources for effective innovation. By continuing your research AL Antonjuk offers us a separate component of the innovation potential such as "innovative auspiciousness", which refers to the actual level of innovation and commercialization of new features quickly and create the necessary conditions for this [7].

Is a widely held belief that the development of innovative potential to improve the competitiveness of innovation must perform the following steps:

1. Stimulate innovative activity entities at all levels;

2. Change management innovation policy at the regional level by adopting program and economic methods;

3. The creation of an effective national system of regional innovation centers;

4. The establishment of an efficient system of innovation funding involving all sources;

5. Promotion of regional innovation infrastructure;

6. Comprehensive support of regional cooperation in the field of scientific and technical activities;

7. Focus on calculations and synthesis of innovation capability at the stage of industrial consumption, to study the impact of innovation processes in socio-economic development, defined parameters that characterize the region's competitiveness.

At the same time, spreading the idea of the existence of "innovation paradox" - the phenomenon by which is considered "increased spending on innovation in depressed regions and relatively less opportunity to attract public money and private funding sources compared to economically developed regions" [7, P. 37]. The existence of this paradox demonstrates the efforts lengthening lost innovative capacity. It is obvious that the preservation and support stable dynamics are less costly compared with the efforts necessary to quickly overcome the pull-down events.

Conclusions. Thus, considering all of the above, we can conclude the necessity of a comprehensive examination of the problem of providing the necessary conditions for the development of innovative factor in terms of the domestic economy. The actual problem is that accumulation of innovation potential, including its important component - innovation by creating favorable conditions for the proper innovation. At the same time, it is necessary to pay attention more to explore the issue of innovation paradox. However, only focus on the problem of accumulation of innovative potential is short-sighted, because the greatest benefit any innovation brings not under development, but only under conditions of direct marketing.

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