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INNOVATION DEVELOPMENT: THE THEORETICAL BACKGROUND OF THE CONCEPT

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Abstract. The main approaches to determine the essence of innovation development were analyzed. It is possible to justify the conclusion of the complexity of this modern phenomenon. It was determined that innovation development is a dichotomy that is revealed through the motion of system which is aiming in the proper direction and nature of the impact innovation changes on the processes occurring in this system. Based on the disclosure of the concept of "development" was highlighted theoretical background and the nature of the innovation development was characterized.

Keywords: changes, development, motion, transformation, innovative development.

Problem Statement. Research of deep social and economic phenomena of nature and the functioning of society opens up the possibility of detection and mastering the basics of systemic transformation of the economy, the identification of effective factors for its development in order to improving the living standards and strengthen national strength of the state. Innovative development is nearby the other processes of economic development of society and is in almost the same breath as them. One of its methodological areas lying within sight of innovative development based on the description of the modernization process of social development, others – on the system transformation and institutionalization of economic development. The question is... ‘What is innovation development, its essential features and criteria for identification?’

Analysis of Recent Research and Publications. Among the large variety of scientific publications in the area of innovation processes and their importance for the further development of the economy in addition to the founders of innovative direction such as Schumpeter, J., Tugan–Baranovsky, M. in current research there is a substantial part of the scientific achievements of Ukrainian scientists.

Analysis of the scientific literature suggests to distinguish at least two main approaches to explaining the innovation development:

1) *the processing approach* – within which the innovative development considers as a process of qualitative changes in the economic system directly by means of transformation, so namely it is based on the process of transformation. In particular, this approach is typical for researches of authors such as Antonjuk, L.L., Poruchnik, A.M., Savchuk, V.S. [2, p. 6], Onikiyenko, V.V. [12, p. 31], Fonotov, A. [9, p. 98], and others;

2) *the effective approach*, which focuses on results, provided by large scale entry into circulation of products of intellectual labor as knowledge, technology, R&D etc. It leads to the formation of new features of the system and the improving of existing ones. This understanding of the innovative development is found in scientific papers of Aleksyeyenkovo, E.S. [1, p. 8], Fedulova, L.I. [7, p. 35], Illyashenko, S. [11, p. 20], Krupky, M.I. [14, p. 31], Onishko, S.V. [17, p. 49], and others.

However, the analysis of theoretical approaches reveals about the lack of clear understanding of the definition and mutual coherence between defined concepts to the innovation development as it is a rather common equating it with such concepts as "innovative economy", "innovative type of development", "innovative model of development". So, this similarity of conceptual arsenal of scientific analysis creates the methodological uncertainty in the context of ascertaining the essence of innovative development: there is no a clear understanding that it is better and more important for the national economy: modernization, innovative type, innovative model or innovation development.

But despite the diversity of formulations, scientists are united in recognizing of key role of innovation as a product of creative intellectual work in promoting of development.

However, the innovative development of the national economy is quite complex scientific phenomenon, and despite the significant scientific results, some other issues remain to be controversial and inexhaustible. It should be noted that at present there is no clear definition of the nature of innovation development nor in many legal documents on this subject, either in the scientific literature. Therefore the more urgent is to enhance scientific knowledge of this modern phenomenon. First of all, it is about the definition of innovation development and its perception in modern consciousness, scientific knowledge and practical level of society due to the mainstreaming of globalization, the formation of principles of "Knowledge Economy" and the modern information stage of the development of the society.

The Aim of the Article. Due to the outline, the aim of this research is the identification of the essential features and nature of innovation development.

The Content. To answer the questions: "What is an innovative development of the national economy? What settings is it characterized and determined?", the necessary is a characteristic of economic substance of "the innovative development of the national economy ", which can be carried out in two key areas of scientific research: based on its comparison with close to it definitions such as growth, progress, modernization, evolution, etc. and also by covering various aspects of this process.

Define the concept of "development" in the philosophical tradition can by its relationship with other already known concepts – "change", "motion".

So, the Encyclopedia of Philosophy interprets the development as irreversible, directed, change of material and ideal objects, stressing the fact that only the simultaneous presence of all these features provides development among other changes [6].

Development is a more difficult process than a change or a set of changes. Therefore, development should not be considered as the simple synonym of change

or equate it to motion. It should be noted that not all qualitative changes will be equal to the development. The definition of the development selects from the general quantity of changes only that which are related to a system upgrade, with its internal structural and functional changes, transformation into something new and different. Thus, the simultaneous presence of certain features shows the systemic character of these changes.

So, the development has such characteristics: controllability in time; irreversibility of process, it means that phenomena that are changing is unique in their own terms; the emergence of a new course of development, which did not exist before; natural character of development, its subordination to certain laws. These key features distinguish the development from motion and change.

Development is not always accompanied by extremely positive changes. The development may coincide with forward motion to more advanced and sophisticated or with motion in the opposite direction. In this sense, the development may have a regressive direction, downlink. As one of the dialectical laws of development is the law of unity and struggle of opposites, the basis of development is a conflict, active engagement parties of object, one of which is progressing while the other regresses.

The issue of criteria of progress is regarded as one of the hardest in the historical development of society and, above all, is considered within the social sciences. Some researchers believe that there is no criterion of progress, since progress is understood as the improvement of life [13, p.7, 10]. However, all possible types of social changes is impractical to mean as a progress, regress and one-level shift, since there are cases in the history of moving forward from the old to the new, which were characterized by marked deterioration of situation from any applicable criteria of progress [13, p.12]. On the other hand, the increase level of development suggests that progress is not only associated with better life as a result of complications of labor of the population. Accordingly, if more difficult labor, the higher

Following to this logic, appropriate to be seen the position of an American researcher in Management Ben Jones, who argues that maintaining the progress becomes more difficult with the development of society because it requires increased spending on research and development, and the continued growth of employment in this field. First, it binds difficulty in keeping progress with complication of the same problems which are faced by humanity in connection with an array of knowledge accumulated by now. As a result, potential inventors need to spend more time on education to learn these skills and thus new openings requires more time and more effort to solve complex problems [21].

It is recognized that the development can be implemented in two interrelated forms – evolution and revolution. Thus the development can be worn as evolutionary, gradual, as abrupt character.

Current understanding of the revolutionary changes in economic systems associated with its fundamental change through gradual dissolution as a jump bifurcation. Proponents of this approach to the explanation of causes of the development believe that the transition criteria are qualitative changes which with its destructive nature offers the prospect of progress. Admittedly, firstly the idea of revolution about explaining the problems of social development was put forward by Marx and it was based on the dialectical law of transition from quantitative to qualitative changes. In this sense the accumulation of evolutionary changes in society which were caused by technological progress and improvement of productive forces to their critical level will inevitably lead to a qualitative leap, resulting in changing the entire social order. In this case, the continuity inevitably disrupted. Examples of such changes are present in science (changing of scientific paradigms), and in historical development. In particular, a prime example of this is the development of the economy of Finland, where 70% of exports in the 60-ies of XX century consisted of wood processing products, and today more than 50% provided by high technology products.

The evolutionary development of the same, by contrast, involves the motion from homogeneous to heterogeneous, the unity of differentiation and integration,

the desire to achieve balance in the process of adaptation to internal and external changes. And in this context the term "evolution" is revealed as a spontaneous process of self-development, which indicates a direction whose outcome depends on various factors and circumstances, while "the development" reflects internal changes and processes that lead to changes in the functioning of objects and their components [8, p. 31].

Changes in the economy is an integral feature of its existence and are determined as the past development, and also as the possibility of conscious choice of alternatives for the future. However, the development is characterized by cyclic trajectories, wave-like dynamics, repetition of some periods and the types of economic systems. Eventually it was found that such periods of development takes place within a certain period of time and also features a wave-like dynamics when the phase of the cycle leads to changes in the economy. This period nonequilibrium state, according to the idea of Y. Shumpetera, is a necessary environment for early reorganization of the system structure by business group interaction, which leads to the formation of effective forms of limited resources [19, p.159–160].

Thus, the development is determined by the nature of the transformation processes that are inherent in the socio-economic system, as changes and transformation represent some aspects of the overall concept of development.

Explaining the concept of the transformation processes in the scientific literature it differs the view that transformation is not only adapting of the system to the new conditions of management, but also the replacement of the previous economic system to qualitatively new, since a significant change in the existing economic system, resulting in the emergence and existence of the new economic mechanism [5 , p.58]. Feature transformation is in progress radical changes in the political, economic, social and legal relations. Thus, transformation refers to the changing of all entire system of economic relations, its deep essence under the influence of internal and external factors, or a combination thereof. However, according to the idea of L. Balcerowicz, the notion of transformation is a simple

transition from one stable state to another, uncertain and deprived of their patterns and characteristics of state [3, p.116–123].

However, in contrast to the development, allowing the profound changes transformation is characterized by heredity, suggesting the possibility of a theoretical perspective of the returning to a previous state.

Exploring economic development, Y. Schumpeter argued that economic development characterizes the transition of the economy from foreclosure for every moment of time of the center to the other. He stressed that economic growth can not be identified with the process of development, provided that the increase does not result in the emergence of new qualitative phenomena [19, p.154–157].

The character of economic development largely depends on national circumstances, but there are general parameters that characterize this process and parameters used to estimate the level of economic development. They allow to compare the countries. General methodology of this assessment is based on the research of the Committee for the Promotion of the Organisation for Economic Cooperation and Development (OECD DAC), and includes a set of indicators such as GDP and GNP per capita; the quality and standard of living; competitiveness of the economy; productivity and other indicators of economic efficiency; value terms of human capital, its quality and productivity; the level of corruption; position in the leading world ratings; industry structure, etc.

Research of issue of economic development in the scientific literature is inextricably linked with the discussions about the economic growth. Famous American economist and Nobel laureate S. Kuznets rightly stated that, "economic growth might be defined as a long-term increase in capacity to supply to the population all the diverse of economical products and this growing capacity is based on the technologies, and also on institutional and ideological changes that accompany directly these processes" [15, p. 247]. Thus, only that economic growth which takes place simultaneously with the process of economic development should be considered qualitative and one that reflects the positive dynamics of the evolutionary development of the national economy. Thus, in an epistemological

vacuum on the study of development and growth it is reasonably considered the view of R. Brinkman that the economic growth requires structural changes, which is the process of technological and economic development [4, p. 11], and therefore draws attention to the change of process parameters of its software. However, the experience shows that the current economic policy aims to solve the economic problems notably by reallocation of resources between sectors and regions. But it is need to understand that one of the characteristic features of economic development is a process of structural changes based on the recognition of qualitative changes of technical and technological parameters, ie the criterion of innovation.

So, the concept of economic development and economic growth is closely linked with modernization as a transition from a traditional to a modern society. It should agree with the view that it covers that part of the transformation which is associated with the increase of functional properties of updating of the traditional socioeconomic development forms and the development of new structures which are adequate to the new demands of time, and causes the systemic transformation of society [10, p.169–170].

From the standpoint of the theory of transformation, the technology field (technological innovation) is relatively independent of other fields of social actions (economic, political, etc.), as it fundamentally differs from them. Thus, the direct source of technological modernization logically is considered the transformational changes that initiate the structural changes of other types – resource, organizational– behavior and, of course, institutional. The results of these interrelated developments reflect the nature of modernization reforms beyond the technological field. In particular, the technological modernization in the economic field rightly regarded as a transformational process that is influenced by technological change in the current economic environment and accompanying institutional and other changes. In fact, this process is an integral part of the process of economic transformation and needs "modernization breakthrough" [16, p.21]. A similar view is shared by Ukrainian researchers, explaining the

relationship of technological modernization with the course of structural transformations in industry of Ukraine. The development of technologies is the feature of the technological development over the next twenty years. They provide technological breakthroughs or create advanced scientific and technological groundwork for the development of new types of materials, products that show previously unknown opportunities and also technologies that are formed at the intersection of different subject areas [20, p.32].

Summarizing mutual compliance between the concepts of "change", "motion", "transformation", "development", the relationship between them seen fit to represented as follows (Fig. 1):.

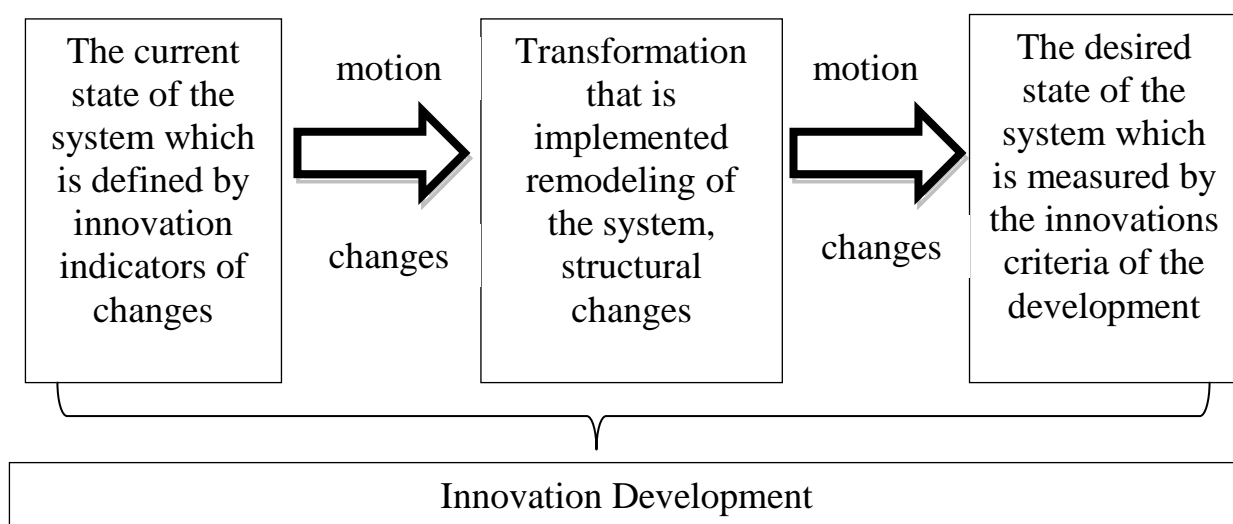


Fig. 1. The nature of the "innovation development"

However, unlike the modernization which is providing the proof of the main elements of the system to a certain "ideal state" by their perfection and complication, the development leads to such complications in the functioning of the economic system depending on the direction of the economic system. So, modernization should be considered as the epitome of practical measures which are aimed at ensuring the development.

Conclusions. The concept and nature of innovative development is a complex and ambiguous phenomenon, which covers various areas of the functioning of the society. Investigation of the deep essence of this phenomenon

in the economy associated with such concepts as development, transformation, modernization which outlined the direction of motion and the impact of changes to the functioning of the economic system.

So, we can focus our attention on the fact that the basis of innovative development is the criterion of innovation, and this innovative development is provided by internal factors. They provide the motion of the economy in the appropriate direction while entering into conflict with each other and overcoming them. Critical analysis of these approaches to its interpretation leads to the conclusion that almost all researchers in this context to some extent have the same position.

Given the basic terminological diversity in clarifying its essence and nature, the innovative development of the national economy should be understood irreversible, purposeful natural motion towards gradual qualitative and structural improvements in the long run period through the creation, application and dissemination in various areas of life and consciousness (education, science, economy, culture, politics, society, etc.) of new knowledge, new technology, human potential, the concentration of capital in innovative activities that are shaped by the contradictions of the economic system, needs and interests. The main criteria of innovative development of the national economy should be considered: 1) increasing of investments in human capital (education, science, medicine, quality of life), 2) building of the innovation capacity, and 3) increasing of the share of products with high added value, and 4) position in the leading international ratings.

This understanding of innovative development meets the challenges of the modern globalized environment and explains the features of innovative activity at different levels of the economy, and also meets the requirements of modern innovation theory.

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