BEHAVIORAL ECONOMICS. THE RESEARCH METHODOLOGY BACKGROUND

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The subject area of economic science becomes more complicated, its behavioral model is being formed gradually. The problem of determining the method, technology, methodology of its development using recommendations of philosophy and conceptual combination of separate results presented in publications becomes urgent. As a methodological basis of the behavioral economic theory it is advisable to choose synthesis of recommendations made by representatives of postpositivism (K. Popper, T. Kuhn, I. Lakatos, P. Feyraubenb) with a focus on two cognitive technologies: epistemology and gnosiology. Specifying the subject of the theory of behavioral economics requires clarifying the essence of the terms «behavior», «behavioral economics», «behavior of the economy» and «the economy of behavior». The content development of the theory of behavioral economics is possible using ideas of cognomics, case studies, culturEdigm, chaos, the golden section, spiral dynamics of consciousness, organizational behavior. Higher school should get involved in training specialists for behavioral economics by means of forming cognitive and research competence of graduates. Globalization processes expand the field of economic science as a whole and of its behavioral model towards the external environment. There arises a problem of social responsibility of the government, civil society, business, citizen, employee, enterprise, science. Human consciousness is becoming a new and complex object of attention for all engaged in the theory of behavioral economics.

Key words: economics, behavior, model, philosophy, methodology, theory, case studies, culturEdigm, golden section, spiral dynamics of consciousness, organizational behavior

Tabl.: 1. Bibl.: 34.

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Доронина М. С. Поведенческа економіка. Методологічні передумови дослідження

Предметна область економічної науки услідковується, поступово формується її поведенческа модель. Актуалізується завдання визначення способу, технології, методоології її розвитку з урахуванням рекомендацій філософії і історичної обумовленості представлених в публікаціях розрахункових результатів. Методологічною основою поведенческої економічної теорії є цілеспрямована діяльність уряду, громадянського суспільства, бізнесу, громадянина, працівника, підприємця. В новий і складний об'єкт уваги всіх, у населення, у суспільство, у бізнес, у громадянства, працівників, підприємств, наук. К до підготови спеціалістів для поведенческої економіки повинна підключитися вища школа через формування пізнавально-дослідницької компетентності випускників. Глобалізаційні процеси розширюють поле економічної науки до соціальної відповідальності уряду, громадянського суспільства, бізнесу, громадянства, працівника, підприємства, наук. У новий і складний об'єкт уваги всіх, у населення, у суспільство, у бізнес, у громадянства, працівників, підприємств, наук.

Ключові слова: економіка, поведінка, модель, філософія, методологія, теорія, кей-стаді, культурдім, золотий перетин, спіральна динаміка, організаційне поведіння

Табл.: 1. Бібл.: 34.

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Introduction. The purpose of science is to provide such positioning of a person in a particular sphere of his or her life that he or she could effectively achieve his or her goals in it. In a mature society science recommends solutions of two interrelated tasks. The first task is to teach a person by what means he or she should study a new unknown situation. The second task is to teach him or her ways to influence the situation in practice.

As the world is continually evolving the subject area of science is changing, most often getting more complicated. In this connection there arises the need to select a way of developing science itself, removing the existing contradictions, which do not allow solving the problems of the subject area by proven methods. There emerges a task to determine the method, technology, methodology of science. Today such situation has developed regarding a new direction of economic science – behavioral one. The main reason for emergence of this direction is failure of traditional models to explain real economic phenomena and processes, which gain increasing uniqueness under the influence of accelerated informatization of life. This uniqueness overloads the human psyche, reduces the time to make decisions, eliminates reliability of the existing relations with the external environment. Business partners behave irrationally, and this irrationality has no theoretical model. In this situation there is a problem of determining the subject of research in the behavioral model of economy. Some scientists propose to find a way out in using intuition, but this source of decision-making can be reliable only under condition of a significant accumulation of knowledge and experience by the user. Other scientists are guided by achievements of Nobel Prize laureates, who complemented the tools of economic science with socio-psychological component [1]. The birth of theory of a behavioral direction in economic science at the intersection of socio-psychological component and economics is of interest. The Western view and presenting some evidence of invalidity of the opposite position of a person in a particular sphere of his or her life. The second task is to teach a person by what means he or she should study a new unknown situation. The first task is to teach him or her ways to influence the situation in practice.

In this regard, the aim of this article is improving knowledge of the behavioral model of economy analyzing possible ways and means of building scientific support for its creation and effective use.

As a methodological support of research there chosen dialectical, system-synergetic, a multidiscipline approach, analysis and synthesis of theoretical postulates of philosophy, sociology, social and economic psychology, organizational behavior, management theory and other sciences related to studying human activity.


Recently papers on important aspects of behavioral economics appeared in Russia and Belarus in connection with the development of market relations. Among them are R. Kapel'ushnikova [12] P. Lemeschenko [13]. But, unfortunately, variants of the complete theory of behavioral economics have not yet been presented in literature. In works on the methodology and history of economics, even well-known scientists (such as V. Avtonomov, V. Polterovich, S. Mochnyj, Yu. Gal'chinskij [14–16]) spare them no more than 3–5% of their works. At the same time they more or less agree, that this theory belongs to the class of emerging positive sciences. However, there are scientists, who clearly introduced behavior into the subject of economic theory. For example, O. Anan' in [17] supporting the opinion of I. Robbins [18] believes that economic science studies in particular human behavior as the relation between objectives and limited resources having alternative use.

Results of the research. If we take the term “behavior” as a basis for creating a new direction of economic science and admit the need for multidisciplinary approach to determining its essence, content, forms of manifestation, it should be accepted that this form of human activity has broad horizons of research. Practically, behavior has become the object of attention of many traditional human sciences, including the principally new science, called “organizational behavior”, aimed at eliminating inaccuracies of linear models of management by activity of people in the economic system. In organizational behavior there were developed many tools of cognition and transformation of methods to influence labor activity of an individual person, collective or organization. It makes sense to find, adapt, or at least to consider and master the technologies for substantiation of its recommendations in studying the problems of behavioral economics.

To build reliable tools for a new branch of science it is common to refer to a related science being at a higher level of abstraction. Most often in this case scientists analyze recommendations of philosophy. It is assumed, that it has the least number of contradictions. Sometimes it is even perceived as “the science of sciences”. But a closer acquaintance with philosophy shows that it is not devoid of internal problems itself. For a long time their character was determined by choosing the initial point of forming a worldview (materialism or idealism). Now more and more often their synthesis – dualism is considered constructive. But there is a problem: in what combination, in what proportion it is appropriate to orient towards materialism and idealism. Quite a lot of time the attention of supporters of each direction was aimed at justifying their point of view and presenting some evidence of invalidity of the opposite one. In this context the fact of separating the ways of the world cognition into Western and Eastern is of interest. The Western way is more oriented towards materialism and achieved good
results of its realization in applied sciences, studying the nature surrounding the human material world. The Eastern one is oriented towards idealism and achieved high results in cognition of the unique spiritual nature of human and the ways of ensuring his or her spiritual harmony.

It is advisable to choose dualism as the methodological basis of the behavioral economic theory. It should be noted that the philosophers recognizing dualism clearly distinguish two technologies of cognition: epistemology and gnoseology. Epistemology perceives the world and renders the results of this perception through precise, clear formulations, logical proofs. Its rules qualitatively work in studying the interaction “man – unanimated object of the world”. Gnoseology is productive for studying the world in the coordinates “man – other person connected with the material and social world”. It takes into account the real fact that a person not only learns but also perceives (feels) the situation, i.e., there is such perception of the world by man, which can not be first expressed in words clearly. Practice testifies that a person is saved from uncertainty not only by knowledge, but also by intuition (obtained heritably in genes, the pressed for centuries in his or her mind expediency not expressed in words). Gnoseology is certainly useful for cognition and solving problems in the sciences studying man as a unique phenomenon of the universe able to manage its activity. Its peculiarity lies in the fact that it covers not only the object of study (man), but also his surroundings, the nature of their interaction. The relationship between man and the environment are regulated by norms represented by myths, religion, culture. But without a logic technology of rendering his feelings in words, the man can not organize his interaction with others. That is, only the rational synthesis of knowledge (logic) and faith (intuition) is able to create working technologies to organize and transform the subject of socio-humanitarian sciences, which also include the theory of behavioral economics.

In modern Western philosophy the problem of growth and development of knowledge is central. It was especially actively developed by the supporters of postpositivism – K. Popper, T. Kuhn, I. Lakatos, P. Feyerabend. Let us consistently present the results of generalization of studying every school of philosophy of science, and determine a possibility of their use for building the behavioral theory of economics [19; 20]. An Austrian and British philosopher and sociologist Karl Popper focused his teaching on demarcation of science and non-science. He believed that truth is objective, knowledge has conjectural character, can be misleading and should be constantly reviewed. Can we ignore the philosophical ideas of Popper? His first original principle is that there exist no final solutions in science. We can agree with him, but we also have to accept his following argument: it is not validating the results of the study that should be assessed, but checking a possibility of falsification – identification of problems in science, which can not be solved with the help of the concept variant suggested by the author. Thus, Popper considers science as progressing from one problem to another (but not from the theory to theory) – from a less complex problem to more complex one. He writes: “Theories are our own inventions, our own ideas; they are not forced upon us, but are our self-made instruments of thought... our discoveries are directed by our theories, and the theories are not the result of our “observation-based” discoveries. This technology for presentation of scientific results is chosen as a norm by many magazines. In accordance with their requirement, at the beginning of the article the author presents the idea and its complete argumentation, at the end – recommendations to readers on what work should be performed to develop the idea. And it is quite possibly can be accepted at developing the theory of behavioral economics.

An American historian and philosopher of science T. Kuhn offered an opinion that scientific knowledge develops step-wise through scientific revolutions changing paradigms – historically formed systems of the world views. In his most famous work “The Structure of Scientific Revolutions” the author presents arguments for the need to perceive science not as a gradually developing and accumulating knowledge sphere of human activity towards the truth, but as a phenomenon passing through periodic revolutions called in his terminology “paradigm change”. Currently the development of economics belonging to the class of socio-humanitarian sciences is implemented, monitored and qualified in Ukraine according to Kuhn’s philosophy. Candidate dissertations clearly follow this philosophical concept. Referring to the existing paradigm, using ideas of the predecessors, authors of candidate dissertations improve and develop it. Sometimes they are not recommended to use the paragraph novel at presenting novelty of their research. Doctoral dissertations do include the paragraph novel. In the context of this paragraph, candidates for a doctor’s degree give some conceptual schemes, methodological backgrounds but do not represent the result as a holistic new paradigm according to all rules of its structure description. That is, identifying the main idea, the list of confirmed hypotheses clarifying the main idea, the principles to be followed in order to achieve confidence in the conclusions, methods allowing to dissect the problem constructively and synthesize results in the form of conclusive evidence, a separate list of concepts and categories with disclosure of their specific interpretation in the context of nature of the object, to describe which it is used.

Acceptable at first sight traditional for the domestic science character of the model for its development according to the philosophy of Kuhn, in which he focuses on jumps-revolutions in cognition, in fact, is only apparent. Modern researchers of economic problems are working within a particular paradigm (scientific school) or at the junction of paradigms. But do not embody revolution in science anyhow. At least, none of them talk or write about it radically. Neither their opponents present such arguments. They are certainly mark some original ideas of the applicant in their reviews, but not the entire originality, to be more exact — the complete uniqueness of his technology of searching the truth. If we adhere to this philosophy, it is necessary to require from the applicant to necessarily give a clear and logical justification of what makes his method of cognition significantly radical, i.e. adequate to the context “scientific revolution”. The problem of satisfying this requirement is as follows. The scientific revolution according to Kuhn presents a paradigm change and therefore the transition from one “normal science” to another. This transition is described by a pair of concepts “paradigm – community”. That is, the applicant must submit the opponents and reviewers the information that he has his own school, the community working on the technology of a new single paradigm.

Incommensurability of paradigms makes a crucial feature of Kuhn’s model of scientific revolution opposing his model to the model of “objective knowledge” by Popper. However, in attempts to create the behavioral theory of economics for a
while it makes sense to focus on the philosophy of Kuhn. First, because it is customary for the Ukrainian scientific community. And, secondly, it involves the following stages of the science development: the pre-paradigm stage, stage of normal science and scientific revolution stage. The behavioral theory of economy is obviously at the pre-paradigm stage now. It is reasonable to make an attempt to create the prerequisites for forming the first concept of a paradigm based on the requirement of Kuhn: compulsory formation of the scientific community. Attention should be paid to peculiarities of the pre-paradigm stage, which is often defined as the phenomenological one. The rules of effective implementation of this stage should be worked out. It is appropriate to previously present confirmations of presence of anomalies in economics. It’s not complicated to do referring to the evidence presented in many publications of well-known scientists (for example, [12; 13; 15, etc.]).

A philosopher, methodologist of science P. Feyerabend became known for his assertion, that there are no universal methodological rules in science. This scientist has more radical views on the revolutionary path of science development than Kuhn does. If the latter is at least refers to the paradigm logic, scientific community, Feyerabend actively postulates and protects the “thesis of the incommensurability of theories”, claiming that there is no specific unambiguous logical and empirical criteria for objective evaluation of competing theories. According to him, the only principle not interfering with the progress of science is the principle “anything goes”. The basis of P. Feyerabend’s concept, which he called “epistemological anarchism”, is the principle of proliferation (propagation) of theories, which states that scientists should strive to develop theories that are incompatible with existing and recognized ones and compete with each other. The weakness of this thesis is in allowing the author of a new idea not to give an explanation of how he got the results of the study. But such a principle contradicts the reasonable requirement to a scientist — to transfer the knowledge gained to the followers so that they could develop the knowledge of the world further. Absence of such logical explanations of revolutionary ideas by potential Nobel laureates results in the fact that the humanity delays in recognition of their genius, and, hence, in practical development of their recommendations on an average by 15 and sometimes 40 years. Efficiency of orientation towards Feyerabend’s philosophy at developing the theory of behavioral economics will depend on the scientist’s ability to protect the principles of his model in discussions at scientific conferences (preferably international ones), not only with representatives of economics, but also of other areas, having human activity as the object of study.

An English philosopher and historian of science I. Lakatos is the author of famous works on methodology of scientific knowledge. Following K. Popper, he believes that the principle of criticism should become the basis of the theory of scientific rationality. However, according to this scientist, "rational criticism" should not be confined to the requirement of a ruthless falsification.

Anomalies should not encourage scientists to part with their theories; they should develop them not stopping after some unsuccessful attempts, if this movement promises some new progress. I. Lakatos compares and evaluates not two theories like K. Popper, but their complex, each of them defined as a research program. Another feature of the concept of I. Lakatos is integration of philosophy and history of science. In this regard he formulates an important principle: “Philosophy of science without history of science is empty; history of science without philosophy of science is blind”. A scientific and research program synthesizes theories developing on the basis of common research and methodological principles. A research program offered by scientists consists of a rigid core and safety belt. The core can be taken as the main load-bearing structure of some Kuhn’s paradigm, and the safety belt — as attempts to remove the paradigm restrictions in specific situations. Practically, at studying a behavioral model of the economy, each of their new plans will present improvements of the program — “hard core” permitting to consolidate, harmonize the essence of scientific problems and their solutions obtained by different researchers. In this case, the responsibility for the research result quality is determined by constructability of the “core”, which should be formed according to the rules of creation of ontological and gnoseological pictures of the world specially developed for the subject under study. Examples of such approach can be found in modern researches of ways to strengthen the management influence of collective leaders on their subordinates’ activity [21]. Specifying the subject of behavioral economics requires clarification of the term “behavior".

Table 1 shows the results of comparing two variants of human activity in the economic environment [21].

In scientific environment there recognized the fact that the theory is an authentic knowledge about a particular subject or a strictly defined, organically related group of phenomena. Organizing knowledge into the theory is determined by its subject. In the light of the material presented in Table 1, there is a need to clarify the meaning of the term “behavioral economics” taking into account that the essence of the concepts of “behavior of the economy” and “the economy of behavior” are not identical. The members of a scientific community, who want to solve problems of a new scientific field, should decide on answering the following questions: behavioral economics should be conceived as a) the economy having a non-standard activity, for its processes are non-standard or b) as the economy forming a non-standard activity of economic entities with limited resources especially for the creation of competitive uniqueness.

In any case, in discussions on creating a new branch of science, first, there should be carried out generalization of the requirements for building economic theories, their structure, functions. There should be performed the analysis of their evolution related to the introduction into the economic system not so much as physical but intellectual, emotional resources of a human. It is necessary to study or develop the ways to capitalize these resources on mutually beneficial conditions for the carrier of these resources and for the owner of the workplace where the employee realizes his unique abilities. As it is known, positive sciences (and it is in this version that the behavioral theory of economics arose) are focused on description of situations in the subject area, but by no means on their forecasting. The development of the theory of behavioral economics in this direction is possible using the principles of cognometrics [22], case studies [23], culturel digma [24], chaos [25], the golden section [26], spiral dynamics of consciousness [27], organizational behavior [28], yet hesitantly penetrating into the study of an economic scientist.

Higher school should get involved in training specialists for behavioral economics. It has not yet introduced the
cognitive research skill to the arsenal of the formed students’ competences [29], although (almost unconsciously) is already using the number of the student’s publications as a criterion for evaluating his competence. But the scientific value of these publications still remains at the level of retellings the sources read on the topic. It would be desirable to achieve at least the level of creative works, in which there was formulated a practical problem and partly ways of its solutions using modern technologies of cognition.

A weak point in the conventional economic theories is the need for considerable time to be spent on collecting information about a critical situation and choosing the optimal variant of its solution. Synthesis of cognitive psychology studying the laws of man’s cognition of the world and economic theory provides a basis for forming the experience of intuitive solutions using a minimum amount of structural information. In this regard, it is advisable to master technologies for developing intuition [30].

Globalization processes expand the field of economic science as a whole, and of its behavioral model towards the external environment (social, political, ecological, informational, etc.). There arises a problem: to what extent the subject making the decision (rational or irrational one) should respond to the external environment. Where are the boundaries of the social responsibility of the government, civil society, business, citizen, employee, enterprise, science [31]? What are the ways to compensate social irresponsibility? Is it possible to strengthen the social component of property and what measures can help it [32]? The process of production can be restored as the object of attention of economists, politicians and governmental authorities [33]. But how to persuade the oligarchs, who became rich during the distribution of public property in the privatization process, in the need to maintain the vitality of those, who create and does not distribute wealth and means of decent living?

Of course, human consciousness is transforming into a new and sophisticated object of attention for all, who involved in the theory of behavioral economics [34]. To what extent can it be used through manipulation to correct behavior without the consent of the carrier? What level of its development do different segments of the population have?

There are no explicit ways out of the crisis for economic science. But the discussion of the above issues will contribute to their finding. This hope is the main argument in favor of continuing research on the topic.

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Conclusions. In order to create a model of behavioral economics theory corresponding to the new realities, it is necessary:

1. To clarify the concept of "economic science", its subject matter in the context of its behavioral paradigm.
2. To identify contradictions in the structure of the traditional economic theories, compare their paradigms and move to a new theory which, would contribute to expanding its capacity to explain new phenomena of a complex nature.
3. To formulate the main idea of the new theory and reveal its hypothesis.
4. To answer the question, whether the new theory belongs to the class of normative, positive, phenomenological ones.
5. To determine the economic model of scientific philosophy and the list of disciplines studying individual issues of its subject.
6. To develop ontological and gnosceological picture of the world with the necessary and sufficient hierarchical list of elements (on the level of: general, special, specific).
7. To analyze paradigms of related sciences and choose the components, which are close to the main idea of the new model of economic science.
8. To create a multidisciplinary system of concepts, categories, terms, multidisciplinary system of the principles of studying and the principles of transforming the subject of economic science, multidisciplinary system of methods for collecting and processing information.
9. To create rules for building qualitative and quantitative assessments of the subject area of the behavioral economics theory.
10. To determine a specific mechanisms for adaptation of the world picture to a unique situation in practice.
11. To build a model of permanently updated information database for studying behavioral economics.

**ЛІТЕРАТУРА**


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