# **Ontological Problems of Economics**

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**Abstract.** This paper develops some results of a study of philosophical and methodological prerequisites of economic knowledge, held by several researchers of Lomonosov Moscow State University in 2015-2017. This study was partly published in 2017 in the first Russian textbook for postgraduates of Lomonosov Moscow State University, "Philosophy and methodology of economics". The paper aims to light up some interesting and serious problems of economic ontology.

**Keywords.** Economic ontology, philosophy and methodology of economics, ontological problems of economics.

#### 1. Introduction

Firstly, there is a need to define the central notion of the paper – economic ontology. Philosophically, ontology is a doctrine of the objective reality in whole. But it is only one definition; the second one treats ontology as a theoretical construct of the explored reality. The first understanding of ontology connected with the notion of substance, while the second one implies the role of subject and language in the process of cognition. These interpretations are equal for analysis of ontology and ontological problems in any science.

In economics, also, these two interpretations are also applied. Economic ontology is a notion of the part (or aspect) of reality, analyzing by economists, or a notion designating economic view on the reality. Besides the view itself, the last aspect of economic ontology also includes prerequisites of this view. Both of these aspects are studied in the field of philosophy of economics [1].

Thus, economic ontology is, in one hand, the picture of economic reality, and, in the other hand, subjective and objective prerequisites of this picture. By the way, using the notion "picture" nowadays is not quite appropriate for this term reflects the opposition of the subject and object, formed in the works of Descartes. But this opposition is more specific for the classical science. In our opinion, it is better to use term "theoretical construct" to emphasize this aspect of the notion "economic ontology".

In modern economic science there are two mainstream ontologies: behavioral and institutional. The notion of economic reality can be defined as "the sphere of human activity within which the decisions connected with creation and use of the benefits satisfying human wants are made and carried out" [2]. This definition is obviously behavioral, and to cover other aspects of economic reality it is needed to add into this notion nature and society. Staying inside the neoclassical — behavioral — economic ontology, we often use models to create "logically possible worlds" [3]. It may move us

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away from reality, and thus, from fundamental science which observes the economic reality as whole. Economic science becomes a mere set of different, and even contradictory, theories. This is the other view on economic science, for example the view of D. Rodrik [4]. He writes that economic science is in progress when there is a constant increment of the various models and theories. This position reminds us the one of P. Feyerabend, because he wrote that theories might coexist, and not compete [5], and of course can be regarded as interesting way to answer on the question of the nature of economics and economic reality. Nevertheless, there is a problem in the relationship between theory and practice in economics, and it is still not resolved. We think the solution can be found on the border of economics and other sciences.

Bearing all this in mind, we would like to emphasize the following ontological problems of economics.

# 2. Ontological Problems of Economics.

#### 2.1. Ontological Bases of the Scope and Method of Economic Science.

Here, ontological bases are the reality which economics studies. There are several questions we should answer in this section: a) ontological status of economic objects, whether they exists or not, and why; b) structure of economic actuality, or how the objects of economics are connected, and if there is an order of their appearance in different economic theories and in economic science at all; c) which is the vision of the economic reality in the certain economic theory, and how this vision can influence on the way certain scientist studies scientific problems; d) how is the economic reality connected with the models economists use in their theories; e) which are the goals of economic policy and economic science and how they influence on the ways economists achieve them; f) which are the processes taking place in the economic reality, and how they are connected with institutes, laws and mores.

# 2.2. Space and Time in Economic Science.

These are two terms which came in economics from philosophy, and they have specified value in economic science. Any kind of reality has its structure, and there is space and time structure in economic reality. Which are the elements of this kind of reality? There are individuals, companies, multinational corporations, states, i.e. economic agents. Are there also institutes, social processes? Is there any sense to study the history of economic reality, and if it is, how can it be useful today? What about the future of economic reality, what can we say about trends, future problems and risks, and what is the prediction term? Or maybe it is not the purpose of economic science, to predict anything? There are also less philosophical questions, for example, how to allocate resources effectively, or what should we do to make the infrastructure work better? These kinds of questions are usually studied by spatial economics, logistics and so on.

## 2.3. The Language of Economic Science.

It may seem it is not the ontological problem at all. But we use language to express our knowledge about reality, so we could say language is the "place" where subject and

objects are tussle and come to compromise. It is significant that the language of economic science is not a totally artificial one, but there is a huge influence of natural language. The last one is a living tissue of economic science, and the first one helps us to reflect especially economic aspects of our reality. In economics, there are also the notions from other sciences, for example, from philosophy, law, physics, biology etc. This fact can be taken as a condition of possible interdisciplinary correlation between these sciences and economics, i.e. of the common ground for future cooperation.

To be such a fruitful space, economic language should be equal to the following requirements: precision and clarity of its notions, forms, and sentences; a balance between abstractness and haecceity; ability to change itself when it is necessary, for example when the reality has changed.

At least, we cannot ignore the theory of D. McCloskey, interpreting economic science as a complex of rhetoric instruments [6]. If she is right, then we should understand which instruments we use, and why. One of the most interesting problems here is the question about how these rhetoric instruments can help of block our intention to find a truth about economic reality.

#### 2.4. Correlation Between Economic Ontology and Economic Reality.

But what is the economic reality and how it differs from the economic actuality? We can define economic reality as a sphere of human activity in which we provide processes of production, consumption, exchange, allocation of different resources, goods and service activities. While economic actuality is a certain spatiotemporal characteristic of economic reality, i.e. concrete conditions of economic processes, its instantiation. Thus, we can say, ontology could be viewed as a treatment of both.

#### 2.5. Correlation Between Economic Ontology and Ethics.

Ethical problems of economics in this scope connected with the division of economic science in the positive and normative aspects. Positive economics don't deal with ethical questions, studying just what exists, while normative one is about what our economic reality should (and could) be like. Usually, normative economics is all about goals of economic policy. In neoclassical economics, there is a strong lack of ethical understanding of human behavior, though this behavior is in the scope of neoclassical economic theory. But today there are more and more researches of ethical aspects of human behavior. There are at least three themes of such a study: a) normative aspect of economic knowledge; b) ethics of economic publications; c) professional ethics of an economist. For example, there is a very interesting research at the Global Priorities Institute in London, UK. According to its agenda, scientists of this Institute study "theoretical issues that arise for actors who wish to use some of their scarce resources to do as much good as possible" [7], i.e. there are prioritization problem, cross-cutting considerations, and the problem of effective altruism. As we think, all these themes can be understood as a scope of normative economics.

It is interesting, how T. Lawson defines scientific and philosophical ontology: he actually connects scientific ontology and positive economics, and philosophical ontology and normative economics. He is also known as one of founders of social ontology, which he defines as "1) the study of what is, or what exists, in the social domain; the study of social entities or social things; and 2) the study of what all the social entities or things that are have in common" [8]. We suppose this line of research could be considered as

an important connection between philosophy and economics, because it gives them a chance to find a common ground for the explanation of social processes. Very fruitful discussion on these questions can be found in [9].

## 2.6. Human Model in Economics.

Human being is the part of reality. Today there are different ways of studying human, for example, as a person, or as an individuum, as a completely social being, or as an animal. One of the most discussing approach here is sociobiology [10]. Today this approach has a lot of in common with neuroeconomics, that is why it again brings up a question of the place of human being in reality. In the modern economic science, especially in neoclassical economics, individuum is like A and W. But the principle of methodological individualism is often called into question today. Aiming to understand human behavior, we ought to ask ourselves, which are the limits of economic view on it. It is no doubt that economic understanding of human behavior based on the certain philosophical views on human nature. We have to reveal these views and realize how they influence on the economic way of thinking of human being. Here we can search for answer with the help of sociology and, particularly, economic sociology. In our opinion, natural sciences can also help us in this question, but we should know they are as positive as modern economics tries to be, and what we need to resolve this problem, is to include normative topics in our study of human behavior.

The most prospective scopes of research in this field are: a) neuroeconomics; b) economic psychology; c) economic sociology. We believe a lot of new ideas will come from the research of artificial intelligence, because it could completely change our knowledge about human being.

Maybe the most important problem here to resolve is the problem of ontological prerequisites of new economic approaches to human behavior.

### 2.7. Philosophical and economic ontologies.

The key difference between the two kinds of ontology is that economic ontology belongs to the class of scientific ones, and science deals with physical world, which should be accessible to observation. That is why economic study of human behavior in neoclassical economics based on behaviorism theory, and that is why economics feels itself so close to the neuroscience.

Philosophical ontologies are less connected to the formalization of our knowledge and to the observation of reality.

#### Conclusion

The questions about ontological problems of economics are very important in any time. But nowadays, there is a strong need to arise them because of the problematic status of the modern economic science itself. Today, mainstream economics make an accent on the modeling processes, creating a wide variety of possible situations taking place in economy. Nevertheless, the most of these situations are happen just once and are reflected in ad hoc models. There is a problem of connecting such models with reality. And of course, we need to produce an integrated representation of the economic reality to develop our knowledge of economic problems.

Studying of ontological problems of economics could help us to systematize our ideas about different aspects of economic reality. And it is important to understand that this systematization can be done just with the support of other sciences — both natural and social, especially philosophy. Studying economic ontology and its problems assumes understanding of how diverse and complex the reality is, including the economic one.

We believe studying of economic ontology as a very prospective scope in modern economic science also because of such new and breathtaking fields of research as artificial intelligence, digital economics, neuroeconomics, and bioeconomics. And it is obviously an interdisciplinary field of research. Philosophy and methodology of economics has an advantage in studying of all these fields, because it allows to provide a holistic approach to them.

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