

Dialectics vs. empiricism in economics

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Abstract

The causes of crisis of Economics lie deep on the level of methodology. The mainstream economics does not yet give us an exhaustively clear explanation of how the market economy performs, because it studies economic phenomena, but not the essence of economy. To know the economic reality means to know its essence and, therefore, to know it as the integrity, but not just as a set of various phenomena. The essence has different forms of manifestation. If confined only to the study of phenomena, the knowledge will remain fragmentary, that is incomplete and superficial. Phenomena appear and disappear, generate and destroy each other, but the causal relationships between them, that is, the economic laws by which they interact, remain unchanged. Just they should be learned in order to understand how a decentralized economy functions. The study of essence of economic processes using dialectical method allows to detect relationships between economic phenomena that cannot be detected by the formal logic and mathematical methods and are not directly visible on the level of empirical facts.

Key words: economics, methodology, empiricism, phenomena, dialectic, essence, contradiction.

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At different times in economic science dominated different methodological concepts. But the "hard core" of neoclassical paradigm was mainly formed in the period when in scientific community of economists dominated the ideas of, first positivism, then, logical empiricism, Popper's falsificationism, Samuelson's descriptivism, logical empiricism and instrumentalism in Friedman's interpretation. This means that this "core" was formed when, in matters of methodology, the authors of a paradigm were adhered to, or strongly inclined to the ideas of empiricism. From the 70s, the scientific community of economists is increasingly subject to methodological views of postpositivists, such as T. Kuhn and P. Feyerabend, who deny the necessity of any single methodology at all, and which are called "methodological pluralism." Nevertheless, the dominance of empiricism in the methodology of mainstream economics continues up to this day. In this article, are not considered the details of differences between the various methodological approaches that exist in the orthodox economic theory. On the contrary, the features of those research methods, about which consensus more or less exist, are considered. There are considered the shortcomings of empiricism, as an integral component of intellectual atmosphere, in which the "hard core" of neoclassical theory was created. And also, is argued expediency of application of the dialectical method to analyze the intractable problems of economics.

A characteristic feature of positivism and empiricism is that the sole object of knowledge is considered the facts available to sensations, and the only source of knowledge - experience. Therefore, for it is unacceptable such terms as "law", "reason," "essence," "substance." The concept of "cause" is replaced by the mathematical concept of "function". Positivists do not see the difference between objective and subjective (logical) contradiction. Every contradiction is considered to be inevitable subjective evil, the result of errors and inaccuracies in thinking. The basic method of scientific knowledge is considered to be observation, and the main function of science - a description. But the commitment of neoclassics to such methodology creates a lot of questions. First, it is becoming increasingly clear that without **understanding** of the economy, without the knowledge of causal relationships it's impossible to create appropriate economic models, generate effective economic policy and make rite predictions. Every economic decision is based on an understanding of what reason causes what consequence. In other words life demands from economists to **explain** economic processes, but according to their methodology, neoclassicists are not intended to explain anything, and just try to describe these processes. But the actual result of their research activities is that they can neither explain nor adequately describe. For a description itself, implies one or another interpretation of the process, which is impossible without a more or less clear understanding of causality.

Secondly, neoclassics themselves do not adhere to these principles, and often act even in the opposite way. In particular, many of their theories do not meet the criterion of falsifiability. (Blaug, 1994, 2004) And most important is that neoclassical theory consists from speculative constructs divorced from the reality and just the facts are ignored to such an extent that it even became one of the main reasons that provoked the student movement of protest against the dominance of neoclassical theory in the curriculum.

The failures of mainstream

Economics aims to describe only the external, visible part of the economic reality. But if you do not see essential relationships, it is impossible to give a logically consistent explanation of economic processes. That is why the mainstream is divorced from reality and is full of logical contradictions. Here are a few examples.

1. When explaining the law of diminishing marginal utility a simple empirical observation is presented as "economic law". Is given an explanation that

"the diminishing marginal utility results from the fact that your enjoyment of the good drops off as more and more of it is consumed. The law of diminishing marginal utility states that, as the amount of a good consumed increases, the marginal utility of that good tends to diminish." (Samuelson, 1992, p.84)

These conclusions, concerning the quantity of consumed good, unreasonably extended to the quantity of purchased good (or the quantity in the stock). But, in the first case, the need means decreasing, while in the second - fixed. Neoclassics violate their same methodological principle "ceteris paribus". In the first case decreasing need is projected only on the next unit of consumption good, while in the second - a fixed need is evenly divided over the total quantity of goods in a stock. Accordingly, as the quantity of goods is increasing, in the first case decreases the marginal utility of additional units, while in the second decreases the average utility of all units. Since all items in stock are in the same position and do not have priority. They cannot have different utility. In the case of change of quantity in a stock or quantity demanded, the curves of marginal and average utility coincide. Therefore, if we are talking about the stock or demand, it would not talk about the law of diminishing **marginal** utility but about the law of diminishing **average** utility.

2. The "law" of diminishing marginal utility is made the basis of the theory of consumer choice. According to this theory:

"A consumer with a fixed income and facing given market prices of goods will achieve maximum satisfaction or utility when the marginal utility of the last dollar spent on each good is exactly the same as the marginal utility of the last dollar spent on any other good . . ." (Samuelson, 1992, p.86-87).

This is explained by the fact, that if on the last dollar spent on various goods, accounted the different marginal utilities, then consumer will benefit from the redistribution of money as long as there will be established the equality of marginal utilities, after which any redistribution will lose any sense.

But does the consumer tend to the optimal use of only the last dollars spent on various products? Of course not. He seeks to make optimal use of all of his income, all the dollars spent on goods. However, since all products have a different elasticity of utility, then the equality of marginal utilities means inequality of average utility for each dollar spent on purchases of various commodities.

Therefore, according to the very same theory, the consumers must reallocate their expenditures so that the average (not marginal) utility per dollar spent on all kinds of goods will be equal. Accordingly, the condition of consumer equilibrium should be a proportionality of the average (not marginal) utilities to the relative prices. Similar arguments are valid also for the producers' cost minimization rule.

3. According to the law of diminishing returns, marginal costs do not always have a tendency to increase, but at first they decrease and only after that they do increase. In other words it has a U-shaped curve. At that, according to the paradigm, the firm's supply curve in the short run is stipulated by the right half of the U-shaped curve. But it would have been correct if all the enterprises had usually worked under overload of the productive capacity, under the conditions of surplus of variable costs over the fixed costs. In reality, the enterprises, as a rule, have the reserved productive potential, the surplus of fixed costs over those which are variable. Consequently, the increasing of variable costs, when production is increasing, leads to the improvement of technological proportions between the fixed and variable costs. Thus, with the increase of production in the enterprises, marginal costs do not increase but, on the contrary, decrease. And from this point of view, the basis of firm's supply curve must be not the right, but the left half of the U-shaped curve. (This is nonsense of course.) (See, Leishvily, 1996, p. 14)

Interpretation of the law of diminishing returns is based on the banal idea that in process of a deviation from technologically optimal proportions of inputs, return will decrease, and losses will increase. But the violation of technology cannot be the basis of economic law. This is not a law, but empirical observation. The laws express an essential causality, but not the trivial

observations. But if nevertheless take it for law, it is more likely the law of technology, but not economy.

4. The neoclassical theory of price cannot explain the formation of prices and runs into a logical "vicious circle". On the one hand, argued that the market prices of commodities depend on the decisions of individual sellers and buyers, on the other hand, argued that their individual decisions themselves depend on the system of market prices. It remains unclear how the pricing happens.² General statement that each price is in the functional relationship with all other prices, while it is true, but is not sufficient for understanding the mechanism of price formation and constructing the models.

I gave a few examples showing the disparity of neoclassical theory with the facts, its deviation from the declared methodological principles, logical contradictions and inconsistencies. Such "failures" of this theory are numerous.³

Reasons for failure of mainstream

According to the positivism the scientific concepts are developed based on the generalization of certain facts and phenomena. Of the many phenomena of some kind the scientist identifies their common features, abstracting from their specific characteristics. Because really there exist only single phenomena, and scientific concepts like abstraction, can exist only in the mind of man. So are created scientific concepts (production, consumption, demand, commodity, etc.). Then are distinguished repetitive forms of relationships between phenomena and are called the "laws" ("diminishing marginal utility," "increasing marginal costs", etc.). From such abstract "concepts" and "laws" deductively is erected hierarchically organized system of terms, concepts, is created a scientific theory.

But in order to find a common feature of all phenomena of some kind, you must first define the set, which makes this kind. But you need to have a criterion for the selection of this set, i.e. know that most common feature, which we want to find. But how do the authors of neoclassical theory solve this old problem? Many of the primary phenomena for subsequent generalizations they outline not based on any scientific principles, but based on the "common sense", i.e. already existing common, non-scientific, abstract and vague, intuitive notions.

1. Such procedure of scientific concepts formation does not take into account one very important circumstance. There is not in the world fully isolated, out of universal connection existing phenomena. Any thing or process is an element of a system of interacting things, processes and relationships. Every single economic phenomenon always appears and disappears within a regularly evolving system of economic phenomena, in the bosom of a given integrity. Moreover, each thing is what it is, thanks to its relations with other things. Outside of these relations, apart from the whole, a part of which it is, it ceases to be what it is.⁴

At the same time necessary and stable causal relationships between phenomena of the system are laws, which determine the origin, evolution and death of the individual phenomena within this system. But the set of these laws just is the essence of this system of phenomena.⁵

² "Edgeworth ... saw the logical flaw or circular reasoning ... that you find in all microeconomic (or "price theory", or "economics") textbooks, ... which consists in deducing supply and demand curves (functions) from the behavior of price-taking agents and then explaining that the prices they take are determined by these supply and demand curves" (Guerrien, 2002).

³ Especially characteristic is the fact that the orthodox theory as the whole is "torn apart" into pieces, because there is an unbridgeable gap at all between the micro and macro economics, as is evidenced by the conclusions from the Sonnenschein-Mantel-Debreu theorem and by many other arguments. This means that the "neoclassical synthesis" appeared to be not a synthesis, but only a compilation of two theories.

⁴ "The single members of the body are what they are only by and in relation to their unity. A hand e.g. when hewn off from the body is, as Aristotle has observed, a hand in name only, not in fact." (Hegel, p. 405-406).

⁵ Essence - is what is constant in a variety of phenomena, is the foundation of any phenomenon and manifests itself only through the phenomenon, but it itself is hidden from direct observation of researcher. For example, a fall of stone, the ebb and flow of the sea, the movement of planets and other phenomena we can observe directly. But is it

Empirically observed phenomena appear and disappear, but the system itself, elements of which they are, and the laws by which the system operates remain as a constant, stable base, as the essence of transient phenomena. Each phenomenon is caused by this entity. Of course, except for necessary and sustainable relationships between phenomena, in the system appear also the occasional and transient relationships. However, for the knowledge they are not essential. The essence, the laws is that universal, which is manifested in a variety of single facts. To know the truth means to know a universal.

However, universal as the essence, differs from the general, which empirics isolate from the some set of homogeneous phenomena as "common features". There are two different understandings of the general:

1) the general, as something that is a part of each of some objects, and determines their similarity on the "common ground" (what the empirics isolated as a common feature when they form the scientific concepts and laws).

2) the general, as something that exists independently, irrespective of objects under consideration (such as a common ancestor, common property, etc.). Just in this sense, the laws constitute that common basis or essence, in the bosom of which there are formed, evolve and disappear various phenomena. However, these phenomena may have opposite, or even mutually exclusive features. Moreover, just their dissimilarity is the condition that all they perform different functions and complement each other as necessary elements of a single system.⁶

In addition, in the process of learning a sequence of analysis of scientific categories and of linking them with each other is determined by the historical process of system's formation. In the process of learning, a part of the whole must be picked out for investigation in the order in which they occurred historically.⁷ A more complex category can be developed only after, and on the base of simple one. And every act of analysis should be a step in the way of identifying the relationship between parts of a whole. But when positivist outlines the group of phenomena, from which he abstracts common features for formation of scientific concepts, or when he studies this or that element of it, first, does not recognize the necessity to adhere to a "logic of the historical process" and second, he is pulling out facts from that system of relations, elements of which they are.⁸

At such way of researching the scientist breaks the relationships of investigated phenomenon with other phenomena of the system. But outside of these relationships thing ceases to be what it is inside the functioning system. There broke the essential relationships of the whole and a part, of causality, of interaction. So it turns out that in the course of study of an object outside the attention remained just those of its features through which it performs a definite function in the system. The researcher cannot see those most essential features, which make this object as a part of a system, within which it "lives" and out of which it is "dead." And just these relationships between the elements of a system, "unseen at the beginning" suddenly come out afterwards in the form of logical "vicious circles" or inconsistency with the facts that discredit the theory as a whole.

possible to see directly the law of gravity? Of course not. But the law of gravity is the essence of all these phenomena which seemingly have nothing in common with each other. The gravity, i.e. essence, can be detected only through the thinking, cognition. The same is true for the essence of economic phenomena.

⁶ "In general, interaction proves to be strong if an object finds in another object a complement of itself, something, that it is lacking as such." (Ilyenkov, 1982). "This unity (or "community") is created rather by that "feature" that one individual possesses, but the other - no. And is the absence of known feature ties one individual to another much more stronger, than the same its presence at both ..." (Ilyenkov, 1991, p.324).

⁷ "And its nature [of the world] is much more easily conceived if one thus watches its gradual origin than if one considers it as ready made." - (Descartes, p. 292).

⁸ "... The definition of whole in principle cannot be obtained ... through the fixation of those "common features", which possesses each separately considered part of the whole, each of its constituent elements, just as the idea about the form of house can't be made from those features, which possesses each single brick." (Ilyenkov, 1991, p.282).

So from the beginning empirics do not consider an object under study as part of the whole in composition of the whole. Especially it is difficult to see a whole when talking about the economy. To make it would not be so difficult if it was a separate company or mechanical device.

"When we deal with the fact of mutual dependence of parts within easily foreseeable whole - whether it's clock mechanism, or a small team of working people, which have divided responsibilities in a common effort ... here it is clear that some details are dependent on each other, and tracing step by step the all amount of dependencies between different parts, we understand the whole." (Ilyenkov, 1991, p.282).

But in the case of a market economy in a certain entity are linked seemingly independent people and things, which are not directly dependent on each other. The economic system seems to be result of interaction of originally independent elements (people, things, processes), rather than a cause, which itself determines the way of their interacting and in general determines their origin, function, and death. "Methodological individualism" of neoclassics is just a manifestation of such understanding of reality. However, this methodology cannot be successful. In itself, the knowledge of those "parts" which make up the object under study, can't lead to an understanding of why these "parts" are linked in one way rather than in another.

2. According to empiricism as source of knowledge are recognized only empirically perceived facts. But what is a fact? Regardless of subject, exist only concrete objects and processes of their transformation into each other according to the objective laws of nature (physical, chemical, biological and other processes). But whether this or that fact is perceived as a fact of economic, political, moral, religious, aesthetic or any other activity, all this depends on the subject's attitude to these facts, and accordingly, on their interpretation. Indeed, the facts themselves are not **economic** facts. It all depends on the goals, needs, which provoked them. Consequently, the subjects differently perceive one and the same objective facts. That for some is an economic fact, for others it may be a fact belonging to another sphere of activity.

And even within the very economic activity facts are perceived differently. For example, the production or consumption, as such, does not exist objectively. As it was noted objectively there exists only a transformation of one object into other according to the laws of nature. But whether man will name them the production or consumption - it depends on his attitude towards this process. Accordingly, he will be called producer or consumer. From this also depends whether this or other objects for him will be products, or resources, and will treat them as the embodiment of costs or the embodiment of utilities. Etc. etc. Similarly, all other economic categories - they are relative and exist only in the mind of man.

"Economics is not about things and tangible material objects; it is about men, their meanings and actions. Goods, commodities, and wealth and all the other notions of conduct are not elements of nature; they are elements of human meaning and conduct. He who wants to deal with them must not look at the external world; he must search for them in the meaning of acting men." (Mises, 1996, p.92) Also: "Production is not something physical, material, and external; it is a spiritual and intellectual phenomenon." (Ibid, p.141)

In other words to be a producer, consumer, product, resource, etc. - all this is not an inherent property of objects or subjects, but the functions, which they perform. A person produces not because he is producer. On the contrary, he is producer because he produces, because he performs this function. At that, the various functions performed by subjects and objects are interrelated, changing all the time, transformed into each other, appear and disappear. Just these are the invisible "threads" that bind all economic phenomena, processes, objects and subjects to each other, forming an integrity, which we call the economy.

If we want not only to describe but also to understand how the economy operates, we must perceive economy as a single organism, as a system. It means that also the concepts, reflecting these phenomena and processes, must be a uniform system. That is, the economic categories should be as fluid and flexible, transforming into each other, organically interrelated with each

other (but not "frozen" categories, artificially tied to each other), as are economic phenomena and processes. But to identify and understand these relationships is possible only through the dialectical method, only by analysis of essence.

Relations, which "are not seen" by the orthodox

Since the methodology of mainstream economics does not recognize the existence of essence as such, it does not investigate it, and therefore cannot see these relationships. These relationships are not visible externally, at the level of phenomena. Even on the contrary, at direct observation certain phenomena may seem not only independent from each other, but also the opposite, even mutually exclusive. Therefore, neoclassical theory is not aware of a deep inner connection between the seemingly separate and opposing categories - production and consumption, supply and demand, utility and cost, profit and saving, etc. Production is investigated separately from consumption, utility - separately from cost, demand - separately from supply, etc. Such method does not allow to see the inner unity of these opposites. Therefore, the theory of production is not related organically to the theory of consumption, demand theory - to the theory of supply, utility theory - to the theory of cost, etc. Here are examples of some of those essential relationships which neoclassical theory cannot see because of false methodology, because of inability and unwillingness to investigate the essence of economic processes and the inability to see the economy as integrity:

1. The neoclassical theory does not take into account the deep inner link between production and consumption in general.⁹ But they are inextricably linked. The process of production of products itself is the process of consumption of resources, and the consumption of resources - is production of products. That is, in essence, these are two aspects of one and the same process of transformation of some goods into others. In a market economy, where the goods have the form of commodities, this process takes the form of "transformations of some commodities into others."

Due to this circumstance inseparably are connected also production and consumption sectors. The point is that the primary resources for production are not production factors themselves (labor, land and capital), but their services. Accordingly, owners of production factors sell to entrepreneurs not the production factors themselves, but either their "services" or "rights to use services." Because the selling of these "services" or "rights" and keeping them as a permanent source of income, they can only due to the fact, that they do not sell production factors themselves. In any case, the reproduction of primary resources ("services" and "rights") as commodities, is reduced to the reproduction of life of owners of production factors. And that means - is reduced to consumption of final products by these owners. From this it follows that the sector of consumption of final products is the sector of reproduction of primary resources, and the sector of production of final products is the sector of consumption of primary resources. Each of these sectors produces goods that are consumed by the opposite sector. Therefore what is a "resource" for one side is a "product" for the other side. Just because of this contradiction, they are necessary for each other, they are necessary parts of a single whole. Just this whole dictates the proportions of social production and consumption. This whole is market economy "producing commodities by means of commodities." But the contradiction between production and consumption, as the parts of a whole, is solved through the market exchange.

⁹ "The product, therefore, of individual consumption, is the consumer himself; the result of productive consumption, is a product distinct from the consumer." (Marx, 1996, p. 193). "Production is also immediately consumption.... Production as directly identical with consumption, and consumption as directly coincident with production, is termed by them *productive consumption*. ... Consumption is also immediately production, It is clear that in taking in food, for example, which is a form of consumption, the human being produces his own body. Consumptive production. Production, then, is also immediately consumption, consumption is also immediately production. Each is immediately its opposite." (Marx, 1986, p. 30)

But since the neoclassics investigate the production and consumption in isolation from each other, they lose sight of properly economic context. It remains to focus on non-economic aspects of these processes. The result is a "technologism" of production theory and "psychologism" of consumption theory and the total absence of understanding of economic essence of these processes.

2. Supply and demand are seemingly opposite phenomena. Demand is desire to buy, supply is the desire to sell. But a desire to buy commodity itself is a desire to "sell" money, and a desire to sell commodity - is a desire to "buy" money. That is, in essence, both are a desire to exchange some economic goods for others. And in this sense they are identical. Since it is impossible to wish to buy good and do not wish to sell other good, then also the subject cannot be a buyer, without being a seller. Each party in exchanging act is a buyer and seller at the same time. Demand cannot be without supply, and supply - without demand, the buying - without selling and selling - without buying, etc. Because of this, though these processes are mutually opposites, but they complement each other and together form a wholeness, just which is the market.

"The exchange value is a property of certain things, which consists in the fact that they can not be obtained or concede free of charge but can be bought and sold, received and given in a certain quantitative proportion in exchange for other things. The buyer of one thing is the seller of that one, which he gives in return. The seller of one thing is the buyer of that one, which he gets in return." (Walras, p. 35)

3. Utility and cost are the opposite phenomena but they also have the same essence. Both are teleological attitude of subject to objects through the prism of his needs (satisfied or unsatisfied). Economic utility - is the ability to satisfy the economic needs, and as a result of this satisfaction, it is transformed into economic cost. Economic cost is utility, sacrificed for the satisfaction of needs. That is, utility correlates with unsatisfied need, and cost - with satisfied need. If as a result of consumption of utility needs are not satisfied, and if the utility does not transform into a cost, it means that it turns into a loss. Utility - is a future cost and cost is a past utility. And as a result of these costs will be created a new utility. In the process of activity, they are transformed into each other parallel to the process of satisfaction and emergence of needs. Economic utility and costs are internally interconnected and together form a single whole - economic value, manifestation of which just is a price. Without understanding of economic value as a unity of utility and costs is impossible to understand - how prices are formed and how the market self-regulation performs. Still Wieser pointed to the relationship between utility and cost:

"... The theorist must cover all economic phenomena in their interrelation caused by the unity of economy. Concepts of utility and costs are also ultimately related to each other, and their deeper meaning can be learned only when is understood their inner relationship." (Wieser, 2011)¹⁰

4. It is also intrinsically interconnected profit and saving. In fact the alternation of incomes and expenditures takes place as in production sector, as well in consumption sector. Incomes of producers are expenditures for consumers, and expenditures of producers are incomes for consumers. Accordingly, the difference between incomes and expenditures takes for them mirror opposite forms - profit and saving. That is precisely why the gross profit and gross saving are inwardly interconnected. As soon as incomes of ones are expenditures for others, and vice versa, the profits and saving cannot be independent magnitudes. The changing of relative prices of primary resources and final products in a market economy, in opposite way is reflected on the

¹⁰ Market price, in which economic value is manifested, also is the unity of demand price (in which utility is manifested) and supply price (in which the costs are manifested). At that, as well as utility, the cost is not a thing, but the attitude of subject to the things involved in economic activity

magnitude of gross profit and gross saving. And in conditions of equilibrium (optimal) prices gross profit and gross saving are equal.

5. As the reverse side of current production is the current consumption, as well the other side of investment is the consumption in debt. If one person invests, it means that someone else consumes in debt. One is impossible without the other. They represent two aspects of one and the same process of redistribution of production and consumption possibilities over time. Moreover, the subject itself carries out such redistribution in order to optimize economic activity. And on the subject depends, whether he refers to the current consumption as to expenditures for the sake of future benefits, or as to the current benefits at the expense of future benefits, i.e. whether he refers to it as to the investment or as to the consumption in debt. They mean withdrawal of excessive economic benefits (opportunities) from one time interval and involving them into another time interval.

Is it possible to look "beyond" the facts?

Someone can seem that all this is only a "dialectical rhetoric" and "play of words", which has no sense from a scientific point of view. But it is not the case. These transitions of opposite categories into each other reflect the "real life" of economic processes. And through the dialectical thinking can be obtained such "new knowledge", which cannot be obtained either by direct observations of empirical facts, or by the syllogisms of formal logic, or by mathematical methods.

For example, according to above noted, it appeared that all subjects simultaneously are producers and consumers, buyers and sellers. As such, they do not differ from each other and together form a set of identical subjects. At the same time, it appears that each of them produces what the other consumes and consumes what the other produce. In this way, the subjects are "tied" to each other. The set appeared as integrity, a closed system of relationships, just what the economic organism of society is.¹¹ In such a way each subject turns out a part of that integrity. This means that not only the actions of individuals cause the operation of economic organism, but also the functioning of this organism as a whole determines the actions of individuals. Not only individuals "create" society, but also society "creates" individuals. As member of society individual becomes a part of it. For it turns out that the individual's needs are part of social needs, individual's production possibilities are part of society's production possibility, individual supply and demand are part of social supply and demand, etc. Hence it is clear that the seemingly independent individuals are dependent on each other as well as elements of a single system.¹²

This system is self-sufficient, contains all the necessary elements, and does not need anything else. For in the system itself is produced all, that is consumed, and consumed all, that is produced. Some produce the final or intermediate products, others - reproduce the primary resources. However, as was shown earlier, such distinction between products and resources is conditional. These are the relative concepts. All of goods are both "products" for their producers, and "resources" for their consumers, all of them have economic value, which is perceived as costs for producers, and as utility - for consumers, etc. Because each subject must produce for others, and all others must produce for him, then there exists a necessity of sectoral structuring of social production in accordance with the structure of social needs. The total volume of production of any goods shall conform to the total volume of consumption of that good. If we

¹¹ In order to understand how the open economy operates, we must first understand how operates a closed economy.

¹² And since society's capacities are limited (by the available resources and technologies), then, if one consumes more, then someone else should consume less, if one consumes in debt, someone has to invest. In addition, anyone who consumes in debt today, in the future will be forced to limit consumption, and the one who invests today (reduces current consumption), in the future will be able to expand consumption, etc. If in general the society today invests more than it consumes in debt, then tomorrow it will be able to increase consumption. Conversely, if it consumes in debt more than invests (waste the stocks of resources), then tomorrow it would have to reduce consumption. That is, appear fluctuations of economic activity.

combine all the producers of similar goods, and hence also the consumers of similar goods (because their production requires the same consumed goods), we obtain a sectors of economy. Each of sectors transforms a set of consumed goods into produced good.

From the said above we can conclude that, in a certain interval of time, the optimal is condition in which the value of "product" of some sector, consumed in other sectors, equal to the value of "products" of other sectors, consumed in a given sector. This is a state of general equilibrium, at which does not occur deficits and surpluses, are established the optimal proportions of goods exchange (equilibrium prices), supply and demand reflect production and consumption and, hence, also are in balance, etc.

In essence - it is a law of general equilibrium which forms the optimal proportions of goods' production and consumption in conditions of perfect competition. It does not matter absolute volume of production and consumption, it implies only their proportions. At the same time, this law is such not in the sense of repeatability (i.e. not in the interpretation of positivists), but in the sense of necessity. For, in the case of compliance with this law, the economy necessarily is in equilibrium, and in it are established such proportions of goods exchange (i.e. prices), in which all that produced is consumed, and all that consumed is produced. But if these proportions are violated, then necessarily will happen the deviation from equilibrium and the integrity of economy will be disturbed, will arise deficits and surpluses.

And the matter is not a question if such an ideal state of economy really exists. Of course does not exist as, by the way, does not exist a perfect competition. And what is most important, does not exist because here is not taken into account the existence of profit (P), saving (S), investment (I) and consumption in debt (D).¹³ (Say nothing of the government, foreign trade, etc.). Regarding this issue, without going into details, we can only note the following. By the inability to know the essence it is caused that the neoclassical theory, although fixes the relationship between saving and investment, but is not aware of interdependence between saving and profit, also, between investment and consumption in debt. Therefore, is unaware the connection between all the above mentioned categories (saving, profit, investment and consumption in debt), which exists within the framework of a closed economic system. But without this it is also impossible to understand how a general-equilibrium is configured, how economic cycles appear. (See, Leishvily, 2011, 2012).

Nevertheless, the above described ideal construct is necessary for understanding of what is a general economic equilibrium. And only after that we can understand what means the deviation from equilibrium, how happens self-regulation of sectoral structure and of economic activity (business cycles), what happens when monopoly, government intervention, foreign trade, etc. take place. In this paper, we do not consider these issues. We want only to show that the study of essence of economic processes using the dialectical method allows to detect something that is not seen directly at the level of empirical facts and phenomena that cannot be detected through formal logic or by mathematical methods. Because this "something" is not an empirical fact or phenomenon. That "something" is located on the other side of phenomena and is the universal and necessary causal relationships between them, i.e. are laws, as stable and unchanging basis of all changing world of transient economic phenomena. Phenomena themselves and the individual facts appear and disappear, generate and destroy each other, but the causal relationships between them, that is, the economic laws by which they interact, remain unchanged. Just they should be learned in order to understand how a decentralized economy functions.

Economics reflects only external, visible part of the economic reality. But such superficial, partial reflection of reality does not allow even adequately to describe it, and certainly does not allow to understand it. Mainstream cannot understand the economic processes in their unity and interdependence. But without an understanding of how the market economy functions, it is

¹³ The system's functioning is structured not only by sectors but also over time. If we consider the structuring of time intervals (conditionally - past, present and future), you should take into account the P, S, I and D. At that, along with the exchange relations there emerge credit relations, as well as the factors of risk, insurance and necessity to its compensation. Accordingly, the equilibrium condition will slightly change.

impossible to create appropriate economic models. Therefore, modern economic models, including the equilibrium models (DSGE model), also do not reflect reality, as it is evidenced by the failure of economists to predict and prevent the global economic crisis.¹⁴

Conclusion

1. As a result of so long dominance of positivism in the academic community of economists has arisen a kind of "genetic code" of self-preservation of these ideas. These ideas are "embedded" in the system of economic education, worldview of political elite, in public consciousness in general. There is created an atmosphere of total rejection of all that threatens the monopoly domination of these over decades established ideas. In this context, behind the facade of scientific debate between neopositivists' verification and Popper's falsifiability, Samuelson's descriptivism and Friedman's instrumentalism (and subsequent discussions about Lakatos's scientific research programs, Kuhn's paradigms, Feyerabend's methodological pluralism) looks through not so much neoclassicists' striving to improve the methods of obtaining of new knowledge, as to the post factum justification of their theories. Mathematisation of science is also a means to isolate themselves from criticism. Today, the neoclassical theory is in state which resembles the state of Marxist political economists in Soviet society. It is a condition in which the desire to know the truth is replaced by the desire to preserve its monopoly in science, with all its attendant privileges in society. This led to the loss of the ability to perceive unbiased scientific novelty.¹⁵

It is also appropriate to especially point out enormous impact that the Popper's scientific authority has had on the outlook of scientific community in the XX century. Under his influence, many economists formed prejudice and false attitude towards the dialectic, historicism and to all, to what Popper treated negatively.¹⁶ Popper's aversion to the dialectic, Hegel, Marx, is so strong that after reading his works, the reader has no longer any desire to become better acquainted with their works, with the dialectic at all. (See, Popper 1992,1963). (All the more to read the texts of Hegel, by itself, are "not easy" occupation). But acquaintance with dialectic in the interpretation of positivists, neopositivists, postpositivists and especially of Popper, gives a distorted view of it, and accordingly, the dismissive attitude to it. All this prevents any serious relation to any attempt to revive interest to dialectic. Just this prevents to overcome methodological problems and the crisis of economic science.

As Blaug pointed to defeat the old theory, is not enough to subject to devastating criticism its premises or to collect new evidence - it is necessary to suggest a new theory. (Blaug. 1994, p. 659). But if in addition the matter is not only a new theory, but the new paradigm, it is obvious that the new paradigm cannot be based on the old methodology. Dialectical methods of investigation are based on dialectical logic which differs fundamentally from the formal or mathematical logic, which completely dominate in economics. An attempt to reconsider the fundamental categories and all scientific tools of Economics on the basis of dialectical method will allow to take a fresh look at the economic realities and discover in them that cannot be discovered by other methods.

¹⁴ Failure of neoclassical economists to create an adequate model of equilibrium leads to discredit the idea of general economic equilibrium. However, false is not an idea of economic equilibrium, but the assumptions on which the equilibrium models are built .

¹⁵ "Scientists are usually more afraid to go down the wrong way rather than erroneously reject the truth; ... This position can be condemned ... as a typical unwillingness of people whose welfare is associated with generally accepted doctrines, to support new ideas." (Blaug. p.68).

¹⁶ "Hegel never enjoyed a good reputation in the Anglo-Saxon world, where he was called a reactionary apologist of the Prussian monarchy, the forerunner of totalitarianism of the twentieth century and what is worst of all from the English point of view, difficult in reading metaphysician. This bias to Hegel did not allow to see his role as a founder of modern philosophy. Whether we want to acknowledge or not, but we owe the debt to Hegel by the most fundamental aspects of today's social consciousness." (Fukuyama, 2005, p. 107-108).

2. The economic activity is a form of human activity in general. But human activity is expedient activity. The underestimation of this truth generates many misunderstandings in the theory. Market economy is only one form of manifestation of economic activity, which can be manifested as well in the form of natural and regulated economy. And to understand the essence of economic activity, it is necessary to investigate the expedient activity in general.¹⁷ Economic activity is a teleological process, activity in accordance with a pre-set goals. This is one of the fundamental provisions, which should penetrate the whole body of this science.¹⁸ Instead, in the mainstream the processes are analyzed from the standpoint of psychologism, technologism, methodological individualism. This leads to inadequate reflection of real economic processes. Enrichment of teleological approach to studying of economic activity by dialectical analysis and investigation of economic activity in historically- logical context will allow to receive principally new understanding of fundamental economic categories and the relationships between them, as well as a new understanding of market mechanisms of formation of general economic equilibrium, business cycles and economic growth.

3. The causes of crisis of Economics lie deep on the level of methodology. In the framework of applied by it methodology the logical contradiction of neoclassical theory can not be solved. To know the economic reality means to know its essence and, therefore, to know it as the integrity, but not just as a set of various phenomena. If confined only by the study of phenomena, the knowledge will remain fragmentary and superficial. Because without the knowledge of essence, will not be understood the inner, deep connections, interdependence of these phenomena, will not be understood those laws and forces which bind these phenomena into a single economic organism, and turn them into a part of whole. But to learn the essence of economic activity is possible only on the basis of dialectical methods of investigation.

4. At present the mainstream is a compilation from the various theories developed by different authors in different times and reflecting the different fragments of economic reality. Theories of demand, supply, money, equilibrium, competition, consumer choice, production factors, etc., are artificially spliced between each other. They lack internal unity. Therefore, the mainstream is more like a "dead" construction, composed by independent "blocks" than on a single system of organically interconnected categories and laws reflecting the "life" of economic organism. Therefore, there arise inconsistencies and logical contradictions between these "blocks." If we want not only to describe, but also to understand how the economy operates, then the concepts also should be the same flexible, transforming into each other, organically interconnected into a single system as the phenomena and processes, which they reflect.

5. The contradictions between production and consumption, supply and demand, utility and costs, etc. exist objectively and "to get rid" of them is impossible. If we "do not note" them, because of this, they will not cease to exist, but necessarily "stuck out head" in the form of subjective (logical) contradictions either inside the theory or between the theories and facts. Just this is confirmed by the abundance of such contradictions in neoclassical theory. The theory, should reflect the objectively existing contradictions.

6. Economic theory still does not give us an exhaustively clear explanation of how the market economy performs, because we study economic phenomena, but know not well the essence of economy. Of course, in such circumstances, the effective regulation of the economy is impossible. As soon as we learn the essence of economy, it will appear a real opportunity of effective regulation without crises, which so painfully affect the welfare of society. The spirit of pluralism, as proclaimed in the WEA, gives hope that the clash of opposing points of view, will

¹⁷ If a phenomenon under investigation cannot be explained, it is necessary to consider it in terms of a broader system of coordinates, as part of a larger system. It deepens the understanding of essence of this phenomenon.

¹⁸ Now classical fundamental treatise of Mises "Human Action" is based on a teleological understanding of economic activity ("praxeology" in Mises's interpretation). This allowed him to come closer to understanding the essence of economic activity, but he was unable to learn it fully, for, like neoclassics, he did not accept dialectic and strictly adhered to the methodological individualism

generate new ideas, which will open our eyes to essence of economic reality, and "breathe life" into frozen, lifeless categories of the "dismal science."

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