

**Process of changing economic paradigms as a condition of understanding the new global economic realities**

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**Abstract.** This article researches the theoretical basis of modern economic theory. It is shown that all known theories became coexisting in parallel with each other, the image of economic science changed, knowledge had become limited and fragmented. The main achievement of economic science of the twentieth century, and the problems and the necessity of changing paradigm in the economic theory are also analyzed in this paper.

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**Introduction**

We entered a new century with a clear understanding that the fundamental changes taking place in the economic reality, but also we have a regret about the absents of modern theoretical framework for explaining these changes.

But nowadays, all known theories became coexisting in parallel with each other. It began changing the image of economic science, and the unified entity of knowledge was transformed into a pluralistic world of limited and fragmentary knowledge. Different scientists use different analogies when they determine the current stage of economic science. Some scientists call it "post-modern", the others - a stage of "philosophy of hundred flowers", "theoretical chaos". Most economists recognize the existence of hard classified diversity of theories.

Every science has its particular field of research. Until the end of the 1980s the economic science had its harmonious system of basic concepts, theories, own concept, and methodological techniques. Nowadays, we have to move forward in a responsible historical stage of development of the economy, changing our theoretical approaches, rejecting methodological basis, we build walls and a roof of this entity without putting a new foundation and creating anything new, it is especially actual for Russian economic science.

**Main achievements of the economic science in the twentieth century**

The dominant paradigm of the economic theory in the last century was the concept of general equilibrium concerning markets in their relationships. The contribution of general equilibrium theory consists of its appliance both for researching the closed economy (without international trade), and the open economy with developed international trade.

Most numbers of the Nobel Prize Rewards in Economics were awarded for researching the relationship of markets: an correlating analysis of markets (J. Hicks [1] and Paul A. Samuelson [2,3]), the existence of relation (K.J. Arrow and J. Debreu [4]), its linear representation (L.V. Kantorovich [5,6]), its increasing (S. Kuznets [7,8]).

The Nobel Prizes in Economics in 1977 were awarded to B. Ohlin and J.E. Meade for innovative research of international trade. Later, in 1999, the Nobel Prize was awarded to R.A. Mundell for the research of monetary and fiscal policies impact in condition of alternative exchange rate systems and the research of optimum currency areas.

The important achievement is the public sector's research. For example, U. Baumol includes in his list of achievements of the twenties century the development of complicated parameters of econometric analysis and the wide applicability of the theory and the econometrics for the development of government policy [9].

The fundamental achievement of the last century is the development of economic dynamics method in which research of the process of transition from a stage of disequilibrium to equilibrium.

In the last quarter of the twenties century it was also focused greatly on the problem of the market failure (R. Cornes and T. Sandler, 1996 [10]), which was firstly proposed in 1920 in the papers of A. Pigou "Welfare economics theory."

Another revolutionary breakthrough was associated with increased values of endogenous factors (P. Aghion and P. Howitt, 1998 [11]). Before now, any variable quantity was taken as a given one, but now, it is considered in shape of the model.

There is another notable phenomenon which shows the breaking with the old economic traditions, it is the development of methods for testing theories by the actual materials. Finally, it is necessary to

allocate another revolutionary development of economic thought in the twentieth century – they began notice in economic theories such factors as period of time and place (A. Faden, 1977 [12]).

Nowadays, it is examined with great interest the role and place of information in economic systems. In classical economic science this issue is not given enough attention, because it was assumed that all agents of economic relations should be well informed.

The important achievement of the last century is the awareness of the necessity of macroeconomic problems' analysis. Whereas, in the papers of Alfred Marshall "Principles of Economics", which was firstly published in 1890, the main focus was on microeconomics, however, macroeconomics was mentioned in connection with the summation of industrial demand and demand curves.

### Signals of necessity to change the paradigm of economic theory

For economic theory the necessity to change the paradigm is a very painful process. There is some example. Russian economic science has taken the path of synthesis of Political Economy and Economics. Is it possible? I think no. As we can see on practice, nothing good would happen and could not happen, because it cannot be combined into one theory the concepts, which based on different initial ideas, on different axioms. It is fundamentally different scientific approaches.

Moreover, for some reasons, nobody has comprehended the attitude of Western scholars to Economics. The first problem began in the 1930s, but in the 1970s there was no one of prestigious magazine, «American Economic Review», «Economic Journal», «Journal of Economic Literature», which had not published the articles of leading scholars who said about the critical stage of economic theory. If the amount of criticism was enough to establish a major scientific achievement, it would already happen in the early 1970s.

Nicholas Kaldor wrote about the irrelevance of equilibrium economics: on the one hand, it is more and more recognized that abstract mathematical model leads to nothing. On the other hand, it is also recognized that economic model leads to nowhere [13]. Oskar Morgenstern listed 13 critical remarks to modern economic theory, E.N. Phelps Brown outlined the situation of weak development of theory (contemporary issues involves the use of a permanent assumptions in economic behavior), G.D.N Worswick raised the question "if it possible to have a progress in economic science?" and expressed his regret that economists focused on the points which he called "abstract games of little relevant" and "flashy skills";

Joan Robinson wrote about the second crisis in economic theory, and Gunnar Myrdal paid special attention in his papers to the weaknesses of scientific development.

O. Morgenstern and John von Neumann improved the application of game theory in economics, and they added the most detailed list of claims relating to all phases of economic theory.

1. Representatives of economy rarely control the variables, which are manipulated by them in the process of finding the optimal situations.

2. Discovered preferences show no preferences of wealthy persons.

3. Optimal Pareto doesn't optimal for people who resents when they are overtaken by someone who has rising income.

4. Walras's tatonnements can produce conspiracy or cooperate more efficient than creating the competitive balance.

5. People interact better than respond to the new settings, as it was permitted in the general equilibrium of Walras.

6. The market cannot be just the tool, which is useful for better use of resources.

7. Items can be substitutes, but its cost can be distinguished depending on their uselessness as additional products.

8. Indifference curve is a very "poor" tool that it is disappeared from the economy in the next generation.

9. Theory of firm is more applicable to the production of actual productivity than the services, which currently make up 60 % of GDP.

10. Analysis in the form of aggregate indexes, is a step back than a step forward.

11. Distribution theory, based on the concept of marginal productivity, is not taken into account as a force, an operation, a transaction etc. [13].

O. Morgenstern concluded that the content of many economic theories inappropriate. It is indicated that economic theory is aimed at a concentration on the research of the market's behavior, which has only a weak counterpart in the real world.

There were some complaints of scientists about the apparent inability of economic theory to solve the problem of inflation, stagnation or stagflation, unreliable econometric forecasting, as well as about options for useless of many mathematical exercises in economics and econometrics.

### Are the nowadays concepts working?

J. Keynes considered only the general price level, abstracting from the problem of relative prices of different commodity groups. For our current economy the problem of relative prices is one of the most important. Further, all interest rates J. Keynes

reduced to one - the rate on the bonds. We should explain that for us this assumption is unacceptable, because the government bonds are not associated with investments, interest rates on government bonds and loans to non-financial sector diverge sharply. The same thing can be said about admitting by J. Keynes the abstracting differences between investments in "physical capital" and investments in bonds.

As you know, during the life of D. Ricardo the development of economic science was suspended by problems which found in his theoretical system. Firstly, it was not clear how to reconcile the fact of capitalist exploitation of the working, assuming unequal exchange between them, with the labor theory of value, which is a prerequisite for equivalence. Secondly, it remained unclear how to combine fact of equal profits into equal capitals, having different organic structure, with a thesis on labor as the sole source of value. Some time the epigones of D. Ricardo tried to avoid the contradictions identified by him, but their efforts only disrupted the harmony of the former structure. The Classical School was at an impasse. Its crisis was sluggish until the 1970s of the XIX century. While the marginalists indicated the way out of it.

J. Stigler, defending the uniqueness interpretation of D. Ricardo's position, writes: "In our days, his theory was subjected to relatively great distortions than it was in his time" [14].

The vividly expressed illustration of the above mentioned facts is the fate of such phenomenon as long wave conditions. Economists paid attention to it for a long time. They engaged W. Jevons, M. Tugan-Baranovsky, K. Wicksell, Y. Schumpeter and, of course, N. Kondratiev, whose name it was called. Nevertheless, according to some scholars' opinion, a one solution has not been found here yet, a long waves exist for those who want to see them, and do not visible for opponent scientists.

The example of M. Friedman in this respect is very illustrative. When Keynesian-monetarist debate was in full swing, there is a need to check whether the connection between the dynamics of money and national income is so strong, as the monetary concept showed. Numerous statistical studies had shown that this relationship was not well traced. Milton Friedman did not ignore the new data, but he didn't also refuse from his theory. We should pay attention to the fact that M. Friedman, justifying his findings, based on data for nearly century-long period, including a number of cycles. Many countries do not have a continuous secular capitalist development. M. Friedman "expected income" represents the average amount of income for a number of prior periods as a psychological phenomenon does not exist in many countries, in reality, without collapsing the entire structure the stable demand for

money, elaborated by M. Friedman. Consequently, it is obvious, that not all theories can be appropriate to many transitional countries.

The Phillips curve correctly described the relationship between inflation and unemployment in the UK before the World War II and in the U.S. during the 1950s - 1960s. But in the 1970s, in the period of stagflation, statistics data of the U.S. was not submitted to the Phillips curve. Some time before it happened, M. Friedman and E. Fells noticed that the inflation rate should be determined not only by the level of unemployment, but also the inflation expectations. During this period, after the sharp oil price changes, it became clear that the change of supply also affects the rate of inflation. However, this regularity does not cease to set out in the textbooks, but the curve is no longer used in modern models.

Nowadays, the names of R. Frish, Ya. Tinbergen, V. Leontiev and many others no longer appear in the studies papers of modern economists. Mentioning the theory of J.M. Keynes appear in such modified form that actually it is quite the other theories. However, it should finally understand that at one time even J.M. Keynes did not consider his theory as something fundamental and eternal: he created his concept for a specific task - saving the capitalist society of the sample of the 1930s - 1950s of the repeating of the "Great Depression", considering that his recipes would be enough for twenty years and in economies with powerful transnational corporations, strong trade unions and "large" governments his model will not work.

The well-known thesis of the neoclassical school, about the impact of competition on the reduction of price, is not supported by any statistical data and any life events [15].

A. Smith's famous "invisible hand", which was at some time only a metaphor, because of complexity of social relations and interactions, and through the influence of a rather powerful modern information flow distorts the already extremely weakened for a given level of social development tool for learning economics. "... There is no section of political economy, - wrote in the 1950s J. Fourastié, - which would not have to be reviewed from the standpoint of technical progress" [16, p.25].

The vast and ever-increasing number of economic theories and models indicate that all of them are private and do not have the versatility.

Mathematisation is one of the signs of complication factors of the study's object. Much attention is currently research paid to economic research methods for its testing. It is observed the rapid development of mathematical apparatus: theory of extreme problems, econometrics, fixed-point theorems, differential topology, stability theory,

functional analysis, theory of stochastic processes, etc. We have no branch of mathematics, which would not have any applications in the economy. It is fashionable to reinforce the main points or justification model or econometric testing on empirical material. F. Hayek is absolutely right saying that any borrowing economists methods only on the grounds that they have had success in other sciences, is unacceptable.

We can say that not theory predicts the behavior of objects, but the modifying objects determine the changing of theory. The question of scientific and unscientific points for many economists reduced to empirical testing (although not all economists consider it is necessary) . "But the evidence - M. Friedman writes, - be able to show whether the category of "analytical system ordering" meaningful empirical counterpart, that is, whether they are useful in the analysis of a certain class of specific problems. Otherwise, economic theory will be formulated into a simple system of tautologies and become the disguised mathematics" [17].

It is interesting to analyze the reaction of J. Keynes on mathematical economics and econometrics. He questioned the arrogance of new approaches and rejected the transformation of the economy in not-natural science. Despite its own reasons for the practice of mathematical economics, he criticized in "General Theory" "symbolism of non-mathematical methods, which makes a formal system of economic analysis ... that allows the author to lose the vision and the complexities of relationships in the real world and helpless confusion pretentious characters".

Real sector of economy was faced with a virtual economy. The financial space (the shell of the real world), otherwise it is impossible to determine, it was divorced from the real economy. By the end of the twentieth century, it was formed the independent space of monetary operations, which became managing the real economy. All financial crises began to be managed by the financial relations. It was changed the methodological approach to the interpretation of economic processes - all objects have been considered through the financial prism.

In the twentieth century economic science begins focusing on the following areas of globalization: the functioning of financial markets, the global information networks established and emerging multinationals regionalization of the economy, the intensification of world trade through electronic forms of communication and types of calculations, the trend towards convergence. The process of cognition has emerged as an innovative core of the new economy, and it requires the research ideas within the radical transformation of economic theory.

P. Ekins wrote: "... Economics deadlocked, its tools were blunted ... it is required a new start, the development of the economic approach, which would be consistent with science, technology, values and attitudes of the late twentieth century" [18].

## Conclusion

The end of the twentieth century has clearly demonstrated the problem of choosing a vector for development in all countries. Balance of world economic system, as never before, in the 1980s the end of the last century, has been violated.

According to the figurative expression of Z. Bjezinski, nowadays, countries entered into a stage of "global disorder and catastrophe" [19]. L. Thurow called the modern world conditions "Rift" [20] and George Soros praised it as "global crisis of capitalism" [21].

For economists, it became obvious that predicting or explaining the changes of economic processes in terms of existing theoretical context is impossible - the end of the twentieth century declared about the outdated theoretical approaches and models of existing practices, about the necessity of elaboration of a new methodology and axioms.

M. Blaug writes: "By limiting the subject of economic theory, neoclassical economists admitted of their incompetence beyond their stated boundaries and thus excluded not only a number of conclusions on the level of common sense, but also some valuable ideas ... inescapable methodological sin consisted in neoclassical theory that it used micro-statistics theorems which were derived from the "timeless" models, in which there were no technical progress and increasing of the resources which is available for the prediction of the course of events in the real world" [22].

Intuitively, we formulate such fundamental changes in the basic terminology: neo-economics, based on the global financial capital, which forms special economic relations in which the relations of production are converted into economic ties; information revolution, knowledge economy, etc.

The necessity of rethinking the theoretical framework of economic theory has become obvious for everyone.

At the expense of human capital, and knowledge it is a huge increase in the capitalization of high-tech corporations, Internet companies: the market value of their shares in hundreds of times greater than the annual profits. The source of virtualization is also compressed to limited production of highly-developed countries, which is one of the factors of global domination of fictitious financial capital over the real capital of the production sphere.

Thus, against this change, it is equally important the changing process in the structure of the produced wealth – on its top appears the socio-cultural or human aspects.

The problem of changing economic paradigm defined by the necessity to explain the nature of the processes in the economy: cycles, crises, etc., and install new basing cost ratio in the composition of the added value.

July 31, 2012 the U.S., according to the "System of National Accounts" (SNA) - the new international standard for the calculation of the national economy, published by the United Nations and other international organizations, the newly revised their GDP data, including that in GDP it were recalculated the costs of research and development (R&D), the costs of entertainment, literature and artistic originals as capital assets.

A new form of GDP calculation was determined to the following circumstances. The current system does not take into consideration for counting a number of the changes that exist and will exist in the future. Nowadays, the world system requires to considerate the new parameters for estimating of GDP, which connecting with the intellectualization of activities, depending on the future economic growth in the world from the development of intellectual activities. The most important changes will be connecting with registration of investment the companies' spending on research and development (R&D).

In modern conditions it is obvious to carry out the interdisciplinary researching. Y. Schumpeter wrote about this statement many years ago. M. Allais introduces the unusual for economists some concepts which doesn't have even analogues in literature "psychological rate of interest", "forgetting rate and reaction time," "psychological factor expansion," "psychological time".

Today we should talk not about the national political economy with well-known problems and subject, but we should talk about the international political economy and geo-economics.

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#### References

1. Hicks, J.R., 1939, 2nd ed. 1946. Value and Capital: An Inquiry into Some Fundamental Principles of Economic Theory. Oxford: Clarendon Press, pp: 349.
2. Samuelson, P., 1961. Foundations of Economic Analysis, Harvard University Press, pp: 447.
3. Samuelson, P., 1947. Foundations of Economic Analysis. Cambr., pp: 220.
4. Arrow, K. J. and Debreu, J., 1954. Existence of an equilibrium of the competitive economy. *Econometrica*, # 22, pp: 265-290.
5. Kantorovich, L.V., 1960. Mathematical Methods of Organizing and Planning Production. *Management Science*, 6(4):366-422.
6. Kantorovich, L.V., 1965. The Best Use of Economic Resources. Harvard University Press.
7. Kuznets, S., 1953. Economic Growth and Income Inequality. *American Economic Review*, 45(1): 1-28.
8. Kuznets, S., 1930. Secular Movements in Production and Prices: Their Nature and Their Bearing Upon Cyclical Fluctuations. Houghton Mifflin, pp. 536.
9. Baumol, U., 2001. What things A. Marshall didn't know: the contribution of the XX century in economic science. *The Problems of Economics*, #2: 73-106.
10. Cornes, R. and T. Sandler, 1996. The Theory of Externalities, Public Goods, and Club Goods, 2 nd ed. Cambridge: Cambridge University Press
11. Aghion, P. and P. Howitt, 1998. Endogenous Growth Theory. Cambridge, MA: MIT Press.
12. Faden, A., 1977. Economics of Space and Time: The Measure-Theoretic Foundations of Social Science. Ames, IA: Iowa State University Press.
13. Kuznetsova, N.V., 2003. The crisis of economic theory. *The Proceedings of Oriental Studies Institute*. # 7: 3-28.
14. Stigler, J. and D. Ricardo, 1999. Milestones of economic thoughts: 3 books. St. Petersburg, pp. 324.
15. Leontiev, V., 1997. Intersectional Economics. Moscow: Economy, pp: 490.
16. Fourastié, J., 1958. Le grand espoir du 20ème siècle. Paris, pp: 450.
17. Friedman, M., 1994. Methodology of Positive Economics. *THESIS*, 2(4), pp: 127.
18. Ekins, P., 1986. The Living Economy. A New Economics in the Making. New York, 1986.
19. Bjezinski, Z., 1994. Global disorder at the beginning of twenty first century. The USA: Economy, Politics and Ideology, # 4-5.
20. Thurow, L., 1999. The future of Capitalism. Moscow.
21. Soros, J., 1999. The crisis of global capitalism. Translation from English by S. K. Umrihina. Moscow, INFA-M, pp: 262
22. Blaug, M., 1992. The methodology of economics. Cambridge (Mass), pp: 156.