

## THE THEORY OF CRISIS AFTER CRISIS

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UDC  
338.124.4  
Review paper

**Abstract:** The global economic system and the world crisis are a reality, and hence the challenge for modern economic theory, which is to provide a valid response to its development and overcoming the crisis. The prevailing economic theory and methodology (neo-liberal paradigm) in this field demonstrates serious defects, so this paper attempts to show that the relative nature of economic theory is in expressing the social prejudices of its time. Demystification of the ideological and political foundations of what is today considered "objective knowledge" in the economy, is only possible with the affirmation of a new scientific methodology of economics, i.e. the new philosophy of economics. The aim of the paper is to stimulate thinking and different views on this subject.

Received:  
18.10.2013  
Accepted:  
20.02.2014

**Key words:** global economic system, global crisis, technological determinism, institutional determinism, financialization, methodological paradigm, demystification, methodological individualism, methodological holism, critical approach.

### 1. Introduction

Global economic system is a reality nowadays, so the laws of its functioning became the subject of serious scientific analysis. The global economic crisis should be an issue of great importance, because a crisis of reality always reveals a crisis of its theory. Some economists think that the first world economic crisis was a reflection of the crisis in economics as a science in XX century. When it is hard to draw a clear line between a theory and its method, it is logical to relate the crisis of economics to its methodological paradigm.

## **2. Technological Determinism in the Theory of Crisis**

Previous crisis, though different in scope and nature, marked a turning-point in economics. In such conditions, economics as a rule, makes huge steps forward. It was not before the Great World Crisis, during the 1930s, that Keynes's and socialist's ideas became dominant in regulation of economics and not before "stagflation", during the '70s, that deregulation and standpoints of neoliberal economics took over.

It seems that the modern global economic crisis does not have a regular, prevailingly cyclical character (at least not for the time being), or it might have lost its primate and became similar to the Great World Crisis of 1929<sup>1</sup>. It is a known fact that cyclical character of crisis ("creative destruction") comes from the very nature of economic system and its aim to modify and develop. Modern crisis is primarily systematic, maybe even cyclic. A systematic character results from the fact that nowadays huge and difficult structural problems are typical for the world economic crisis and they go way into the core of functioning of the global economic system, i.e. into the philosophy of its development. Whenever problems are persistent and widespread, as in American financial system, they can only be characterized as systematic. Wall street offers high pecuniary awards and exclusive orientation towards profit, but it lacks morale. However, tackling the problem reveals fundamental cracks in the system. (Stiglic 2013, 15). What makes this crisis different from the rest was the etiquette it gained: "Made in the USA". The last time the USA exported a crisis, according to Stiglic, was during the Great Depression in the 1930's.

The global crisis already shows that technological variant and version of its origin have serious drawbacks. There is a growing doubt concerning the postulate that technological changes (i.e. shift of dominate technological paradigms) are key factors for the development of crisis. Insufficient appreciation of institutions in technological changes is often criticized, likewise, the universal character of the "The Coase theorem" also rise doubts, concerning the features of transitional costs. Representatives of technological determinism appreciate influence of some other factors and their cumulative effect on emergence of crisis, but consider them marginal. (Dementev 2010, 64).

That kind of attitude towards other factors of crisis makes it hard to explain modern relation and bond between real and financial sector. Namely, in the sphere of finance, such institutional innovations happened, that they provided high rate of technological progress and economic growth. When the financial

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<sup>1</sup> Similarity is also visible in the fact that Great World Crisis (the Great Depression) also began with the financial crisis, which grown into economic crisis. Economic crisis caused the social one and the social caused political crisis (arrival of authoritarian regimes in Germany and Italy, World War II and the emergence of the socialist bloc countries).

sphere became independent from the real sphere, its products and institutions led to tremendous crisis, often mentioned in literature. Much was written about the financial sector frantic taking over the risks, about the way financial institutions devastated economy, about fiscal deficits. Very little was written about the “morale deficit”, which was the root of all things and which the crisis revealed. It was even greater than the fiscal deficit and harder to fix. Wild pursuit of profit and one’s own interest may not have led to the expected prosperity, but it led to morale deficit. (Stiglic 2013, 309-310).

Other, similar global economic process was marked as financialization. As it is known, there are several types of markets in the world: commodity market, money market and capital market. Before the crisis, they functioned separately and independently by their own rules and specialized agents. Today, those markets are intertwined, they influence one another, while capital freely circles between them, thus creating brand new business instruments. The consequence of such flows in the stock market was a transformed logic of forming prices for material goods. Logics of economics slowly became twisted. Take oil, for example. From being a typical product of commodity market, it was transformed into an instrument of financial market. The price of oil was no longer determined solely by offer and demand trends, but also by the currency movements (speculation). At the beginning of 2011, DEUTSCHE BORSE and NYSE EURONET merged, and so did LONDON STOCK EXCHANGE GROUP and TMX GROUP. As commercial companies with enormous capital, they are oriented towards maximization of profit, primarily by enlarging the scope of speculative dealings. Therefore, the objectivity of the stock market prices is reasonably doubted. Complex process of forming prices is induced by market-makers (Baffet, Klark 2006, 196). They control concealed institutional mechanisms, through which admission of securities can move up and down, free from economic condition of the companies (Kaminikos, 2005, 37). Financial markets and fictive capital obtained like this are seen as autonomous and natural phenomena (Sornette 2002, 54). Therefore, authors who write about endogenous factors of stock market crisis seem very convincing. Endogenous and exogenous factors (technological factors) in such situations accelerate the expansion of a financial crisis. Institutional modifications of the world stock market and financial capital can, in this case only alleviate the crisis, but can not abolish endogenous contradictions. Modifications would only magnify the potential for a greater and deeper future crisis.

New products of the financial sphere (financial derivatives) begin to function apart from the real sphere, seriously slowing down its growth and becoming major agents of global crisis. This institutional structure was established in the 1960s when significant changes happened in the financial sector, which proved as the main generator of economic uncertainty (Minsky 2008, 320). It was an extremely unstable structure which, from time to time, demanded interventions

of the Central Bank and Cooperative Authorities to overcome periodical financial crisis. The source of such changes, according to Minsky, was potential profit for financial innovators within the given set of institutions. Profit became accessible to innovators both in financial and real sector, which was a significant impulse for capital, along with continual decrease of profit rate and increase of costs in the real sphere. Discovering new financial activities became very lucrative job. Given circumstances, which Minsky uses to explain the changes in financial structure, perfectly match effects of the process which Palieu recognizes as “financialization”. It implies a process by which financial market, financial organizations and financial elite gain greater influence over economic policy and economic outcomes (Palieu 2007, 25).

**Table 1 The Effects of „Financialization“ (data from 2006 in trillions of \$)**

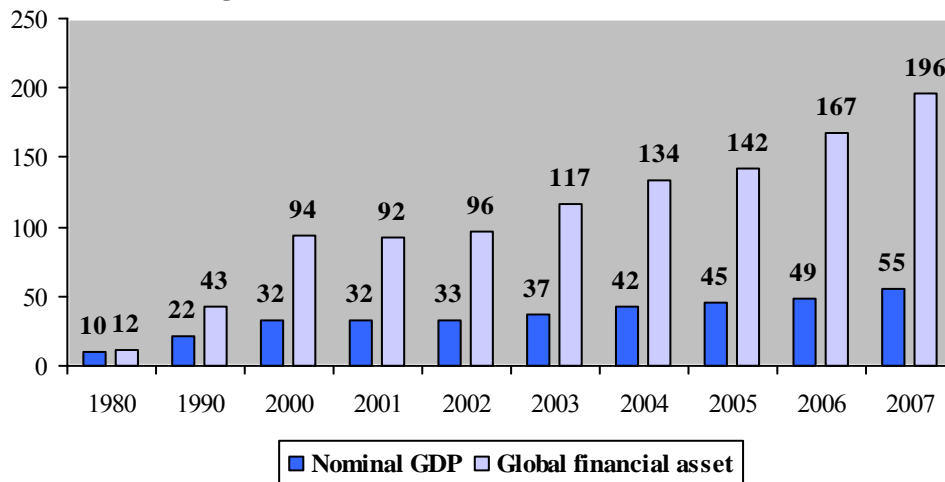
Total amount of derivatives around the world (in nominal terms)	415
Global financial assets	167
Gross World Product (in PPP dollars)	77
Funds of the 1.000 largest banks in the world	74
Management assets around the world (the top 500 managers)	64
Domestic market capitalization (all markets)	52
Financial wealth of individuals (high net worth)	37
Total foreign assets of banks around the world	26,2
Financial assets held by U.S. households	21,8
Assets of U.S. pension and investment funds	18,5
U.S. assets in the rest of the world	14,4
Total liabilities of U.S. households	13,4
Material assets of U.S. non-financial corporations	13,4
U.S. GDP	13,2
Financial assets of U.S. commercial banks	10,2
Gross market value of derivative contracts	9,7
Total liabilities of the U.S. federal government	6,2
Financial wealth of billionaires	3,5
Foreign exchange markets, daily turnover	4,0
Assets of sovereign funds	3,0
Africa's GDP (in PPP dollars)	1,8
Assets under the hedge funds	1,7

*Source:* Dumenil, G., Levy, D. (2011) *The crisis of neoliberalism*, Harvard University Press

Financialization influences the way economic system functions, both the micro and macro plan, whereby: 1) Importance of financial sector overcomes the real sector; 2) Transfer of income from the real into financial sector starts; 3) Increase of uneven incomes leads to stagnation of wages. These processes had

enormous effects. According to 2006 data, the nominal value of global financial assets was 2,1 times bigger than the gross world product, while in relation to the same magnitude, the total value of derivative instrument was almost 5,5 times bigger. A clearer picture can be obtained if the same values are compared to the gross domestic product (GDP) of some countries. The value of financial asset is 12,6 times bigger than American GDP and 92,7 times bigger than GDP of Africa.

**Figure 1 Financial and Real Asset ( in trillions of \$)**



Source: McKinskey Global Institute

Observing the American experience, we see that growth of the financial sector can be followed through increase of profit in the sectors. In other words, a share of the financial sector in corporative profit in the USA was doubled in 20 years. There was a need for strong national intervention and regulations in the financial sphere. So, one new situation emerges: both market mistakes and national mistakes are to blame for extension of the crisis.

Multiple structural problems (imbalance) as a hallmark of crisis can not be explained using only the term of technological determinism. The most important are: imbalance between developed and developing countries, for e.g. USA - China. America is the center of great expenditure and enormous consumption; while China is the country of great economizing (accumulation) and production (Ferguson 2008, 2). Similar to this is the pattern of decentralized capital flow, unlike the reversed pattern noticed 100 years ago.

As an example of structural imbalance, the contradictoriness of the short and long-term company interests was often mentioned in literature. Namely, an increased interest in company capitalization lowers a real increase of labor productivity. Capitalization is a criterion for manager performance rating and

forming corporeal bonus policy; while productivity is a criterion for growth of national well-being (prosperity). These, and many other imbalances, especially in the social sphere, imply that the world financial crisis is only an *artificial phrase* and *manifestation* of all these structural problems and imbalances. A deep level institutional reform of all the sectors is necessary, as well as a new social structure based on the postindustrial technologies.

### 3. Technology vs. Institutions

Neoclassical technological determinism originated from the works of R. Solow. Criticizing the Harrod-Domarov's model (capital is the key factor of growth), Solow proves that technological changes (technological progress) are the key factor of rise and fall of economic activity. Between 1909 and 1949, GDP per capita was doubled in the USA, while 87,5% of the rise was due to technical progress. (Solow 1957, 320).

Modern economic mainstream states that only the changes of human and material capital (as autonomous processes) have the key role in progress. Until recently, political systems and institutional infrastructure were seen as imposed and therefore could not significantly influence the growth. However, when certain questions popped up (why Western countries became rich, why England lost technological leadership, how some developing countries can become developed and others cannot); the analysis moved towards institutions (Eggertsson 2009, 132).

The best answers were given by the institutional school of economic thought. Important names in the field were D. North, J. Buchanan, O. Williamson and others. R. R. Nelson shares an interesting idea<sup>2</sup>. Namely, he promotes integration of technological and institutional determinism in the theory of economic growth and crisis. Nelson speculates two types of technology: traditional technology (as a way of producing material goods) and social technology (as a set of economic institutes), with the aim to lower transactional costs (R. R. Nelson, 22). Concerning the methodological plan, there are transformational and transactional technologies, whereby some authors state that the co-evolution of the two makes the basis for technological progress on the global scale of economic development. Essentially, the idea is that technology makes economic institutes. The shift of technological paradigms is substantially a process of *competition among economic institutions*, because each technology needs functionally connected institutions to implement basic technologies. Institutional character of technological growth is shown not only

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<sup>2</sup> To find out more about methodological attitudes of the institutional economics read: Dragoslav Kitanović, Dragan Petrović, *Ogledi o metodološkim problemima savremene ekonomske nauke*, Faculty of economics, Niš 2010.

in creating new technical standards, but also in appearance and development of economic institutions compatible with the mentioned technologies.

Forming a new theory of economic growth and crisis presumes a synthesis of institutional paradigm based on the key role of institutes in the development of transformational and transactional technologies. In conclusion, the basic methodological problem of technological determinism is the replacement of the real content of economic growth with technological changes as means to reach economic evolution and progress.

Nelson compromises technological interpretation of institutions allows for institutions to be comprehended both as *limitations* and *stimulus* for efficient economic conduct. If seen as means of efficient execution of certain activity, than the criterion for efficiency is minimization of transactional costs. The Coase theorem of maximal decrease of transactional costs now causes some problems. Namely, there are efficient institutions, in developmental sense, which make increase of transactional costs. Finally, economic development and prosperity was marked by the increase, not minimization of transactional costs, throughout history. The search for solution began in the field of specific behavior of institutes in different periods of time. When short periods were considered, institutes manifested their limiting function; while in long periods, they enabled grater possibilities for human activities (progress) and creative freedom. Thus, the aiming function of institutes is minimization of transactional costs.

The resulting idea is that institutions have both adaptive and evolutive efficiency. Adoptive efficiency is usually associated to short dealings minimization of transactional costs. Evolutive efficiency shows ability to support development of economic system to a higher level (innovation, cooperation, division of labor, integration, etc.) which leads to increase in transactional costs.

Finally, when we take all features of institutional school in consideration, it seems that most representatives of technology have key role in theory of economic development and crisis. Technological determinism in the theory of economic development represents a significant methodological barrier, both for improving the theory and for its integration.

#### **4. Myths and Instructions of Anti-Crisis Policy**

The hypothesis given in the introduction to this paper and different attitudes towards causes of the global crisis examined here, leads to the conclusion that leading economic mainstream (neoliberal doctrine) and the institutional direction can not give valid answers for the anti-crisis policy. The doctrine of the anti-crisis policy of the developed Western and American countries is very

odd. It is often considered Keynesian<sup>3</sup>, which is incorrect, since the financial sector can only be saved by monetary expansion (Friedman's model). Aside from the monetary expansion, these countries insist upon decreasing public expenditure and demand, which is something Keynes would never do.

The extent of the world crisis is enormous, but it cannot be explained, because financial interventions of developed countries are not visible. The causes of crisis are neither in the financial sector, nor in enormous public expenditure, as often stated. They have more systematic and structural character and can be found in the sphere of distribution. They are in disharmony between production and expenditure. To be more precise, in disharmony between social productivity of labor and expenditure. When it is hard to prove that the key factor of crisis is with the supply (technological determinism), but also with the demand (decreased public expenditure) it is logical that scientific attention has shifted to the mismatch between production and consumption. The global economy, i.e. it's growth, requires ever-rising consumption, marked by increasing income and profit in general. "The richest country in the world has lived beyond its means, and that sort of life depended on the strength of the global and U.S. economy. For the economic growth of global economy, the growing consumption was needed. But how can this continuity be obtained when the incomes of many Americans have stagnated for so long? Americans came up with a brilliant idea: borrow and spend as if their incomes increase. And they are spending. The average savings rate dropped to zero - and many wealthy Americans who used to hold significant amounts of savings, which meant that poor Americans have a large negative savings rate. In other words, they were in debt. The situation could make them feel happy, as well as their lenders: they were able to continue their spending frenzy and not face reality characterized by stagnation and decline in incomes, and lenders are able to enjoy in profits that were based on the constant increase of commission." (Stiglic 2013, 32).

Based on methodological individualism and equilibrium modeling, the neoclassical paradigm seeks to provide a precise mathematical apparatus, i.e. build accurate, universal methodological rules and guidelines valid for economics, and use them to analyze the development and crisis of economic activity. The equilibrium model (in theory known as Walras model) was the basis of modern economic theory that can assess the efficiency of the market economy. The ruling mainstream is seriously brought into question precisely because this model is its core, which shows mathematically beautiful, but

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<sup>3</sup> On this occasion, one prominent Serbian economist wrote: „At the moment of the crisis outbreak everybody becomes Keynesians and expects to be saved by the state, regardless of which side of economic discourse and theory they took before. When the crisis is coming to an end, everyone is back to its old position and forgets about the previous experience and factography of the crisis. Facts are the largest and the most accurate enemy of the doctrine, especially the neoliberal one.“ (N. Katić: [www.standard.rs](http://www.standard.rs))



artificial, virtual world, that has almost no connections with reality. Economic science has, as a consequence, burdened with apriorism, theoretical abstractions and mathematical formalization, experienced its “ontological dislocation” and has walked away from economic reality (Madžar 2011, 127).

What is often, in the field of new neoclassical synthesis procedures, subjected to criticism is the notion of “rational agent.” The whole national economy has been reduced to “him/her” and “his/her expectations”. Rational agent has all the information and he is “incredibly predictable”. Individual agents are often identified with rational agents, forgetting that it is just a representative example which is used as an instrument in scientific analysis, nothing more than a theoretical abstraction. Characteristics of individual agents are inductively being attributed to the entire market, without taking into account those who are newly created from the mutual interactions, and that could be of crucial importance. Rational postulate of neoclassical theory is linked to the individual and his/her set of incentives. On the other hand, it is indisputable that economic theory should penetrate into the behavior of all economic participants, including different market conditions. That brings us to the key question: Is the rationality a universal guideline for all economic participants, i.e. equal characteristic for all economic activities?

Through this problem neoclassical mainstream exceeds “tacitly”, assuming that all individuals are alike in their efforts to maximize their own utility function. This means that the neoclassical theory starts from the assumption of “representative individual” or “representative firm” and then, in the process of aggregation, comes to the elements and information which are necessary for research of individuals and their decision-making procedure (Simon 1992, 41). However, the behavioral theory questions the abovementioned assumptions of neoclassicists. It is sufficient to take into account the fact that individuals are not similar either in terms of preferences, or in terms of features, and out of it should be concluded that the explanation of economic behavior needs something more than the very postulate of rationality (Blaug 1992, 232). That means that the notion of rationality cannot be viewed separately from the others, rather abstract assumptions, such as those on homogeneity of market participants, total awareness, the general market equilibrium, the existence of perfect competition and the like. The question is whether it is logically sustainable concurrent use of these numerous assumptions, all in order to promote rational behavior model. As a typical example of a logical unsustainability, authors singled out two groups of incompatible assumptions. The first group concerns the relationship between the assumption about naturally determined individual preferences and, accordingly, consistent respect of the rules, on the one hand, and freedom of economic choice, on the other. The second logical inconsistency could be noticed when the assumption about limited resources confront the assumption

of unlimited computational and analytical abilities in processing complex information (Vanberg, V. 1994, 11-24).

Steady state of the economy, economic theory interprets as the internal stability of the market system, that is, its ability to block the effect of external factors in order to maintain the balance. It means that macroeconomic indicators of economic activity of independent economic subjects in the long-term, objectively (legitimately) tend to equilibrium, even when such a movement is threatened by the effects of external factors.

The question of a methodological character is raised here: What is the role of exogenous factors? Do they limit movement towards equilibrium, that is, do they prevent the fluctuations that generate non-equilibrium conditions? Namely, the dynamics of macroeconomic aggregates can be interpreted as lawful movement of the whole economic system to an equilibrium state, but can be understood as well as a result of the action of external factors. With verification method and analysis of empirical fact, the theory of equilibrium cannot be defended but cannot be challenged as well.

In recent years, there are serious reserves when it comes to the theory of general equilibrium, and they are primarily associated with methodological individualism, and its particular *assumptions*. They are connected to the attitude of Mises "if a term or assertion is assumed *a priori*, any of its denial is nonsense". Given all this, the claim that the stability of the market system is actually maintained by cyclic shifts of exogenous factors cannot be dismissed as an absurd. For a while, it seemed that the game theory is a possible solution to the problems faced by the theory of general equilibrium.

Hopes were placed in approach that was launched by this theory which deals with the strategic interactions between individuals. However, it seems that it is not enough as the game theory, equally as the theory of general economic equilibrium, is derived from the assumption of methodological individualism. Although they cultivate methodological holism, and institutional and neoinstitutional school is trapped by technological determinism, so on the methodological level, consciously or not, it is in favor of the contemporary mainstream.

Methodological assumptions and hypotheses in economics are preanalytical act and therefore, not subject to advance scientific doubt. However, these assumptions and hypotheses must not make us forget the fact that transience, i.e. relative nature of economics means that it expresses the social prejudices of its time. Demystification of the ideological and political foundations of what is now considered "objective knowledge" is only the affirmation of a new scientific methodology. New methodological approach to economics, in addition to pluralism of methodological apparatus must have historical and critical approach. Without it, there is no demystification of the ideology and politics in economics.

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## TEORIJA KRIZE POSLE KRIZE

**Apstrakt:** Globalni ekonomski sistem i svetska kriza su realnost, a otud i izazov za savremenu ekonomsku nauku koja treba da pruži valjan odgovor na njegov razvoj i izlazak iz krize. Vladajuća ekonomska teorija i metodologija (neoliberalna paradigma) na ovom planu pokazuje ozbiljne defekte, pa se u radu nastoji da pokaže da je relativna priroda ekonomske nauke u tome što iskazuje društvene predrasude svoga vremena. Demistifikacija ideoloških i političkih temelja onoga što se danas u ekonomiji smatra „objektivnim znanjem“ moguće je samo afirmacijom nove naučne metodologije ekonomske nauke, tj. nove filozofije ekonomije. Cilj rada je da se podstaknu razmišljanja i različiti pogledi na ovu temu.

**Ključne reči:** globalni ekonomski sistem, svetska kriza, tehnološki determinizam, institucionalni determinizam, finansijalizacija, metodološka paradigma, demistifikacija, metodološki individualizam, metodološki holizam, kritički pristup.