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**THE THEORY OF CRISIS AFTER CRISIS**

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**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.*

**Key words:** *Global economic system, world 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. Global economic crisis should be an issue of great importance, because crisis of reality always reveals 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.

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## 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 modern global economic crisis don't have a regular, prevailing cyclical character (at least not for the time being), or it might have lost its primate and became similar to 1929 Great World Crisis<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. 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.

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 factor 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 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).

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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).

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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, DEUTCHE 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 expansion of financial crisis. Institutional modifications of the world stock market and financial capital can, in this case only alleviate crisis, but can not abolish endogenous contradictions. Modifications would only magnify the potential for 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 1960's 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 \$)**

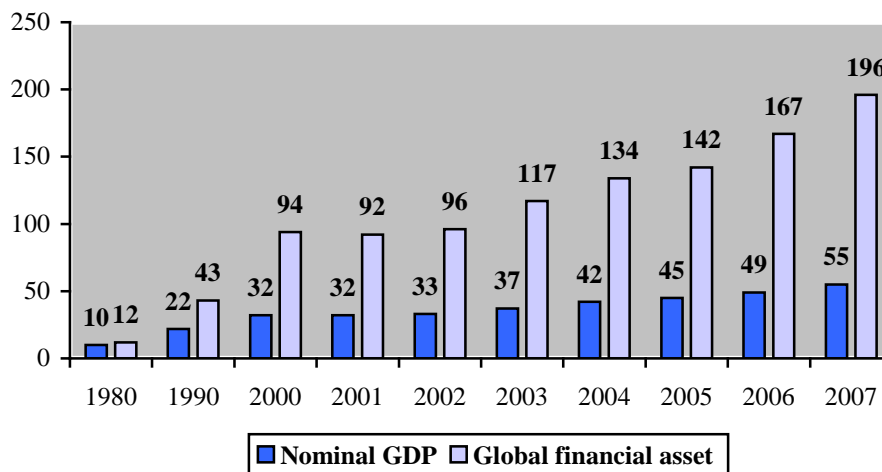
Total amount of derivatives around the world (in nominal terms)	415
Global financial assets	167
Gross World Product (in PPP dollars)	77
Funds of the 1.000 largest banks in the world	74
Management assets around the world (the top 500 managers)	64
Domestic market capitalization (all markets)	52

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., Lavy D., "The Crisis of Neoliberalism", Harvard University Press, 2011.

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 real into financial sector starts; 3) Increase of uneven incomes leads to stagnation of wages. This processes had enormous effects. According to 2006 data, nominal value of global financial assets was 2,1 times bigger than the gross world product, while in relation to the same magnitude, total value of derivative instrument was almost 5,5 times bigger. A clearer picture can be obtained if the same values are compared to gross domestic product (GDP) of some countries. Value of financial asset is 12,6 times bigger than American GDP and 92,7 times bigger than GDP of Africa.

Picture 1. Financial and real asset (in trillions of \$)



Source: McKinsey Global Institute

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Observing American experience, we see that growth of financial sector can be followed through increase of profit in sectors. In other words, a share of financial sector in corporative profit in the USA was doubled in 20 years time. 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 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, increased interest in company capitalization lowers real increase of labor productivity. Capitalization is a criterion for manager performance rating and forming Corporate 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 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 did western countries become rich, why did England lose technological leadership, how can some developing countries become developed and others can not); 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 shared an interesting idea<sup>2</sup>. Namely, he promotes integration of technological and institutional determinism in 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

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<sup>2</sup> To find out more about methodological attitudes of The Institutional Economics read: Dragoslav Kitanović, Dragan Petrović, Ogleđi o metodološkim problemima savremene ekonomske nauke, Faculty of economics, Niš 2010.

(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 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 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's compromise 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, then 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 manifest their limiting function; while in long periods, they enable greater 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. Adaptive 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 theory of economic development represents a significant methodological barrier, both for improving the theory and for its integration.

## References

1. Баффет, М., Кларк Д. (2006) *Баффетология*, Минск: Попурре.
2. Blaug, M. (1992) *The Methodology of Economics or How Economists Explain, second edition*, Cambridge University Press, Cambridge
3. Дементев, В. Е. (2010) Длинные волны технологического развития и экономические кризисы, *Эволюционная экономика и финансы: инновации, конкуренция, экономический рост*, М.: ИЭ РАН.

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4. Eggertsson, T. (2009) Knowledge and the Theory of Institutional Change, *Journal of Institutional Economics*, Vol.5, No 2, p. 137–150.
5. Ferguson N. (2008) *The Ascent of Money: A Financial History of the World*. L.: Allen Lane.
6. Каминикос, А. (2005) *Антикапиталистический манифест*, М. Праксис
7. Kitanović, D. Petrović, D. (2010) *Ogledi o metodološkim problemima savremene ekonomske nauke*, Ekonomski fakultet u Nišu, 2010.
8. Madžar, Lj. (2011) Iskušenje ekonomskih politika u Srbiji, Beograd, Službeni glasnik
9. Minsky H. P. (2008) *Stabilizing an unstable economy*, Mc Graw Hill.
10. Nelson, R.R. (2008) „What Enables Rapid Economic Progress: What are the Needed Institutions“, *Research Policy*, Vol 37. No1.p. 1-11.
11. Норт Д. (2010) *Понимание процесса экономических изменений*, М; изд. дом ГУ ВШЭ.
12. Palley Th. I. (2007) *Financialization: What It Is and Why It Matters*, The Levy Economics Institute, No. 525.
13. Simon, H. A. (1992) *Methods and Bounds of Economics: Methodological Foundations of Economics*, Praxiologies & the Philosophy of Economics, Praxiology.
14. Sornette, D. (2002) *Why Stock Markets Crash: Critical Events in Complex Financial Systems*. Princeton: Princeton University Press.
15. Stiglic, Dž. (2013) *Slobodan pad*, Amerika, slobodna tržišta i slom svetske privrede, Akademska knjiga Novi Sad
16. Solow E. M. (1957) Technical Change and the Aggregate Production Function, *Review of Economics and Statistics*, Vol 39. No3.
17. Vanberg, V. (1994) Rules of Choice vs Adaptive Rule Following, On the Behavioral foundations of the Social Science, In Vanberg, V. (eds.), *Rules and Choice in Economics*, Routledge, London.

## TEORIJA KRIZE POSLE KRIZE

**Rezime:** 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.