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JANINA GODŁÓW-LEGIEDŹ*

**Failure of the market, state and economics from the perspective
of the financial crisis**

Abstract

The debate between the advocates of market and interventionist solutions, primarily based on pitting the market against regulation, has escalated as a result of the financial crisis. The objective of the paper is not only to analyze the advantages and drawbacks of alternative regulatory mechanisms in the light of the global economic downturn, but also to evaluate the modern economy from this perspective. The paper focuses on three hypotheses. 1. It is illegitimate to pit the market against regulation. 2. The crisis resulted from the violation of the principles of classical liberalism, which was precipitated both by inadequate policies and by modern economic methodology. 3. Critical analysis of the methodology and logic of the development of 20th century economic thought reveals the existence of a systemic failure of the dominant doctrines in mainstream economics.

1. Introduction

Major economic and political changes tend to significantly affect the methodology of economic studies and have ramifications for socio-economic policies. The Great Depression gave rise to the so-called Keynesian revolution, which in academic terms meant intensified macroeconomic research and a shift of focus from demand to supply factors of economic growth, while in terms of

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economic policies it resulted in the acceptance of an interventionist policy regulating demand and offering increased social transfers. The financial crisis which hit the United States in 2008 once more motivated many economists and politicians to turn to Keynes's theory. An immediate question arises whether this theory and its practical implications could offer the right measures to counter the effects of this downturn. In the heated debate triggered by the crisis, neo-liberalism is often heavily criticized and the current situation in the global economy is hypothesized to have been caused by the crisis of international economic institutions or even by that of capitalism and the market economy as such. The general tone of many publicly voiced opinions as well as some decisions made by the American authorities may suggest that had it not been for the far-going experiment with centrally-planned economy, we might be witnessing attempts to introduce it on an even larger scale right now.

Dynamics and uncertainty are some of the interrelated features of economic activity resulting from the very nature of an economy based on freedom and private property. The extreme volatility and uncertainty of the current situation mainly follow from the fact that the foundations of the market economy are subject to far-reaching changes which were left insufficiently explored by the economists. Taking for granted the classic roles of market economy institutions, even institutional economists fail to fully accommodate the degree to which the foundations of the modern economy have been changing. The endless dispute between the advocates of market and interventionist solutions has its source in the traditional view on the advantages and disadvantages of market and central regulation. The objective of this paper is to analyze the benefits and threats of alternative regulatory mechanisms in the light of the global economic crisis and provide a brief assessment of the modern economy from this perspective. The paper focuses on three hypotheses: 1. It is illegitimate to pit the market against regulation. 2. The crisis resulted from the violation of the principles of classical economics, which was precipitated both by inadequate policies and by modern economic methodology. 3. Critical analysis of the methodology and logic of the development of 20th century economic thought reveals the existence of a systemic failure of the dominant doctrines in mainstream economics.

2. Failure of the market or regulation? - The wrong question

The disputes between the advocates of the market and the proponents of state regulation frequently seem to suggest that regulation precludes and substitutes the free market. The very language of the discussion and the notions

of market, regulation and state failure indicate the existence of such an antinomy. The contradiction between market mechanisms and central regulation is deeply rooted in mentality. Besides, it seems to be fully justified if one contrasts the market economy with central planning. In order to depart from this market-state dichotomy, it is necessary to distinguish two types of central regulation executed by the authorities: direct regulation of production by a central-planning system should not be confused with providing a rule of law in a market economy. The need to regulate business activity in the latter sense is inherent in classical liberalism. Even Adam Smith (1991, p. 578) highlighted the need to regulate the fundamental principles of the market economy, that is, private property and freedom, and stressed the importance of confidence in a just government system:

“Commerce and manufactures can seldom flourish long in any state which does not enjoy a regular administration of justice, in which the people do not feel themselves secure in the possession of their property, in which the faith of contracts is not supported by law, and in which the authority of the state is not supposed to be regularly employed in enforcing the payment of debts from all those who are able to pay. Commerce and manufactures, in short, can seldom flourish in any state in which there is not a certain degree of confidence in the justice of government.”

In objecting to state intervention, the advocates of the market economy and liberalism primarily denounced arbitrary measures as well as legal regulations privileging individuals, groups or sectors, rather than legislation designed to establish a universal legal framework for market transactions that would ensure a level playing field for all. This was consistently highlighted by Friedrich von Hayek, famous for his uncompromising criticism of socialism and confidence in the free market. The following statement made by Hayek (1958, p. 110-111) is particularly relevant to the ongoing debate on the regulation of financial markets:

“While it would be an exaggeration, it would not be altogether untrue to say that the interpretation of the fundamental principle of liberalism as absence of state activity rather than as a policy which deliberately adopts competition, the market, and prices as its ordering principle and uses the legal framework enforced by the state in order to make competition as effective and beneficial as possible-and to supplement it where, and only where, it cannot be made effective-is as much responsible for the decline of competition as the active support which governments have given directly and indirectly to the growth of monopoly. (...) Where the traditional discussion becomes so unsatisfactory is where it is suggested that, with the recognition of the principles of private property and freedom of contract, which indeed every liberal must recognize, all

the issues were settled, as if the law of property and contract were given once and for all in its final and most appropriate form, i.e., in the form which will make the market economy work at its best. It is only after we have agreed on these principles that the real problems begin.”

Formal regulations (law) and informal (moral) principles are prerequisite for the market to foster economic efficiency. From this perspective, instead of juxtaposing the market against regulation or examining the distinctive weaknesses of the market and the state, it would be more useful to focus on two problems: how to regulate transactions so that prices would perform information and incentive functions and how to regulate business activity in the public interest and avoid the threats exposed by the public choice theory.

Pitting market failure against regulation failure results from erroneous thinking which Harold Demsetz called the *nirvana fallacy*. Demsetz warned against analyzing and evaluating economic reality by confronting it with an ideal norm. Those who adopt the *nirvana approach* look for differences between reality and an ideal alternative, and if any deviations from the ideal are found, they deem the economic process inefficient (Demsetz 2002, p. 107). While the advocates of state regulation tend to focus on market imperfections and believe that the government is capable of improving the existing conditions, the opponents of interventionism point out public policy weaknesses invoking a “magic market” which could solve all the problems. Instead, it would be more effective to use institutional comparative analysis based on empirical examination of different institutional systems.

3. Price functions from the perspective of the financial crisis

Analysis of the underlying causes of the current financial crisis clearly shows the inherent weaknesses of the price mechanism and leads to the conclusion that financial innovations and the type of regulation (or its lack) are some of the crucial factors influencing the market and, consequently, the information and incentive functions of prices. One of the weaknesses of the price mechanism is the fact that the information function performed by prices drastically decreases in the phases of a dramatic decline or growth in the activity of market actors. This is of particular importance in securities markets. Due to the fact that the objective of stock market actors, which is profit resulting from the difference between the purchase and sale prices, is a function of periodically changing expectations about the stock prices, the financial markets tend to be governed by a speculation paradox accumulating disequilibrium, rather than by the equilibrium-restoring law of demand. Thus, in these markets the information

function of prices is unusual: while signaling the relative scarcity of the traded goods, they primarily reflect the economic sentiment, which often leads to irrational accumulation. If the significance and share of financial markets in the economic system grows, the forces restoring equilibrium tend to decline and the system becomes more prone to disturbances.

The need for a new approach to the role of prices also results from the introduction of derivatives trading and from the scale of financial leverage. Innovations in the financial markets have led to a situation where it is not only the information function of financial instruments but also the prices of strategic goods, including oil, that require a critical assessment. Under the traditional doctrine, the price mechanism is an economical method of conveying information. While developing epistemological argumentation for the market, Hayek stressed that in a market system little knowledge is required for its participants to make the right decisions. The price mechanism makes it possible to extend the use of resources beyond the area controlled by an individual mind, relieves the economic system from the need for close control and creates stimuli that motivate individuals to undertake appropriate action without directing them through issuing orders.

„The marvel is that in a case like that of a scarcity of one raw material, without an order being issued, without more than perhaps a handful of people knowing the cause, tens of thousands of people whose identity could not be ascertained by months of investigation, are made to use the material or its products more sparingly; that is, they move in the right direction. (Hayek 1958, p. 87)“.

However, the volatility of oil prices in the global market in 2008 shows that the information function of prices has diminished and indicates that the market is not an abstract instrument independent of the rules and objectives of human conduct. The functions and effects of the market perceived as a combination of transactions intended to help satisfy people's needs, including profit seeking, may be subject to changes due to the introduction of new trading instruments, such as futures, options and swaps. Paradoxically, these instruments, which were originally developed in response to the substantial volatility of interest and currency rates with a view to reducing risk, are now used for speculative purposes and have contributed to the dramatically elevated risk in terms of the entire system.

Oil prices reveal an upward tendency with large fluctuations. The rising trend may rationally be accounted for by the surging demand for oil due to the dynamic growth of the Chinese and Indian economies. However, these fundamental factors of rising prices cannot account for fluctuations exemplified by average annual prices over the period of several years as well as by abrupt

short-time changes. The year 2008 provided an extremely drastic example, as in the USA the average price of this strategic raw material reached \$128 per barrel in July and then fell to \$36.8 in December (Energy Information Administration). These fluctuations should not be associated with changes in real business conditions but rather in economic sentiment, enhanced by the possibilities provided by futures contracts. The fact that one can take advantage of changes in economic trends to maximize speculative profits without effecting real transactions (*i.e.* without the costs of transport and storage) must influence the frequency of speculative operations. As the development of the derivatives market has made the financial markets detached from real processes and encouraged speculation by decreasing transaction costs, it appears that reduced transaction costs may have negative ramifications. This in turn supports arguments for the taxation of financial transactions.

The debate about the taxation of financial transactions was fueled by James Tobin' tax concept. Prior to that, however, a proposal to introduce a special tax to curb speculative tendencies and stabilize economic trends was put forward by John Maynard Keynes. Some of the observations made by the author of *The General Theory of Employment, Interest and Money* have become particularly topical:

“If I may be allowed to appropriate the term *speculation* for the activity of forecasting the psychology of the market, and the term *enterprise* for the activity of forecasting the prospective yield of assets over their whole life, it is by no means always the case that speculation predominates over enterprise. As the organisation of investment markets improves, the risk of the predominance of speculation does, however, increase. (...) Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done. (...) It is usually agreed that casinos should, in the public interest, be inaccessible and expensive. And perhaps the same is true of stock exchanges. The introduction of a substantial government transfer tax on all transactions might prove the most serviceable reform available, with a view to mitigating the predominance of speculation over enterprise in the United States” (Keynes 2003, p. 104-105).

Speculation influences not only the information function of prices, but also their incentive function, which is equally significant in terms of the ideology of market economy. Therefore, it affects the processes of adjustment and learning new behaviors by businesses, which may either contribute to enhanced productive activity or lead to the appropriation of other individuals' wealth. This was aptly depicted by Douglass North (p. 10):

„The rate of learning determines the speed of economic change; the kind of learning determines the direction of economic change. The kind of learning is a function of the expected pay-offs of different kinds of knowledge and therefore will reflect the mental models of the players and most immediately at the margin, the incentive structure embodied in the institutional matrix (which consists of the framework of interconnected institutions that together make up the formal rules of an economy). If the institutional matrix rewards piracy (or more generally redistributive activities) more than productive activity, then learning will take the form of learning to be better pirates.”

Discussion most often centers around threats resulting from redistribution as a function of taxation and social policy. Prices in the free markets are considered to be an instrument motivating growth of productivity. The crisis reveals that the prices of financial instruments should be subject to critical analysis with regard to their redistributive function. Under “normal circumstances” insufficient attention is paid to redistribution of wealth through the system of modern financial markets.

4. Is liberalism the underlying cause of the crisis?

To decide whether liberal ideology affected in a significant way the decision-making processes which led to the financial crisis, it is first necessary to clarify the meaning of liberalism and liberal economics. If one takes liberalism to imply that freedom of transactions made by profit-oriented individuals ensures sustainable economic growth independently of the quality of the monetary system and the formal rules governing these transactions, the answer to this question should be affirmative. However, this understanding of liberalism is incorrect, even though it may reflect the views of many columnists, politicians and economists, including such influential personages as Alan Greenspan¹.

In attributing blame for the crisis it is necessary to bear in mind that liberalism is a doctrine rooted in classical economics which stresses the following principles and constraints:

- Wealth is generated in the real sphere and not in the monetary sphere.
- Equilibrium between revenues and expenditures is the foundation of rational economy.

¹ A. Greenspan revealed his perception of market economy and liberal ideology in his testimony before the U.S. House Committee on Financial Services.

- Investment requires saving, which consists of reducing current consumption.
- Expectations of high profits entail high risks.
- It is commodities and not money that create demand for other commodities (Say's law). Accordingly, the fundamental function of money is to serve as a medium of exchange and not to boost the economy.

Analysis of the causes of the crisis leads to the conclusion that the above principles were not respected. It is universally believed that the crisis was triggered by the speculative bubble in the real estate and capital markets and that these processes were linked to an inadequate monetary policy, the lack of regulation of new financial instruments, and deficient supervision of the banking system. The crisis was also precipitated by the huge disequilibrium in international capital flows and the surging indebtedness of the American economy². At the root of the crisis were both insufficient regulation and lax market discipline. While insufficient regulation implies that the state failed to perform its institutional and legal functions, lax market discipline means that businesses participating in market transactions ignored their budgetary constraints and were unable to properly assess the risk attached to their decisions concerning consumption, investment and use of external financing.

The mistakes made by regulatory bodies as well as by banks and their clients resulted from the fact that no-one was able to predict the risk accumulated in the entire economic system due to the inadequate monetary policy, the growing macroeconomic disequilibrium, the development of new financial instruments and the uncontrolled use of financial leverage. The increasing market capitalization sustained consumption by creating an illusion of growing wealth while the generous banking system supplied financing for investments in the real estate and capital markets. Many seemed to act as if the financial sphere could provide permanent foundations for wealth growth and prosperity.

A confrontation of the principles of classical economic liberalism with the causes of the crisis leads to the conclusion that instead of asking whether liberalism was the culprit, it would be better to ask who was more to blame: market actors or regulators, or what mistakes were made by them all.

The basic errors committed by the regulators include an inadequate monetary policy and the lack of regulation of the new markets. It is thought that the bodies responsible for regulation may have been affected by cognitive regulatory capture, which resulted in misjudgment and lack of regulation. On the

² On 28 July, 2010 U.S. public amounted to over 13 259 billion dollars and on average grew by 4.11 billion dollars daily from 28 September, 2007 to 28 July, 2010 (U.S. National Debt Clock).

other hand, the primary mistakes made by the market actors included the wrong evaluation of their own potential and risk, an excessive tendency towards consumption, giving in to a profiteering rush, a short-term decision-making perspective and a poor sense of personal responsibility. The erroneous monetary policy and the lack of regulation fostered market actors' mistakes. That was additionally exacerbated by the prevailing economic ideology, the wrong perception of the market philosophy and the unrestrained drive for consumption due to the influence of Keynesian economics. This last issue entails a long-term disequilibrium between current and future consumption which may distort intergenerational justice. From this perspective, the crisis may be perceived as an opportunity to depart from these dangerous tendencies.

5. Failure of economics

The mistakes underlying the financial crisis should not be considered separately from the condition of economic knowledge and the logic of its development. The current situation provokes a discussion about the methodological foundations of economics and the long-term development tendencies in this field of social sciences. As it has turned out, economics, which used to be considered the most developed of the social sciences, does not provide an adequate theory for these most difficult of times and researchers are left groping for solutions in the dark. This seems to justify the definitive diagnosis of "the systemic failure of the economics profession" (Colander et al. 2009, p. 2).

This failure results from the methodological tendencies pursued in neoclassical economics and formalism. Contrary to what its name implies, the development of neoclassical economics was not very closely tied to classical economics, just as in the case of neo-liberalism, which deviated from the original ideas of classical liberalism. Economics moved away from its classical origins through consistent efforts to make economic analysis more scientific and bring its theoretical and methodological status closer to natural sciences, which led to formalizing the concepts of the market and economic equilibrium. Economics was increasingly perceived in line with Lionel Robbin's definition,

ignoring knowledge, coordination and institution-related problems³. Analysis of interrelations between prices, quantities of goods, and production factors at given resources and institutional solutions replaced the classical analysis of economic development factors, where institutional factors were taken into account. Taking resources as a given resulted in static analysis; while assuming the institutional system as a given detached economic analysis from its historical and social foundations⁴. The new approach to the market began to impinge on the interpretations of the original ideas of Adam Smith. In fact, this led to a situation where orthodox economics disregarded some of the important ideas present in Smithsonian economics. Economic thought became increasingly polarized. Orthodox thinking excluded institutions from its field of research and became more and more ahistorical, while economic heterodoxy held a monopoly on institutional analysis⁵. The main opponents of neoclassical economics were heterodox economists and the Austrian School, which with time veered off the mainstream⁶. The uniqueness of the Austrian approach consisted in emphasizing the issues of knowledge, uncertainty and institution and in perceiving equilibrium as a tendency revealing itself in economic processes and not as an ideal and final state. The conviction that it is impossible to observe or understand these characteristics by means of quantitative methods made the Austrian School wary of these methods and of the increasing formalization of economic theory.

³ According to Buchanan, Robbins' definition made economists focus on calculating and optimizing and transformed economics into applied mathematics. Academics began to primarily study abstract human behavior, while human behaviors are always institutionally conditioned (Marciano 2007). On the other hand, Schotter (2008, p.5) notices that Robbins' definition fails to take into account the importance of people's ability to establish institutions and leads to the false conclusion that competitive markets offer the only mechanism of coordination.

⁴ Neither the initial assumption made by the creators of marginalism about the permanence of resources nor the famous definition of economics by Robbins imply that neoclassical economists did not study economic dynamics, as is exemplified by neoclassical growth theories. The problem is that neoclassical dynamics was based on static theory tools (Hicks 1978).

⁵ Richard Nelson is right in saying that focusing on the hypothetical state of equilibrium and eliminating institutional aspects and development problems reflects a narrow intellectual perspective of economics and a departure from the approach characteristic of not only Smith and Marx, but also of Marshall (Nelson 2002).

⁶ The differences between the Austrian School developing Menger's views and general equilibrium theoreticians developing Walras's model became manifest in the light of the famous dispute about the rationality of socialist economy. In some respects these differences were found to be greater than those between classical and neoclassical economics (Makowski, Ostroy 2001; Godłów-Legiędź 2005).

The above tendency in the development of economics deepened in the 1950s and 1960s resulting in changes known as the formalist revolution (Blaug 2003), its basic features being a high degree of abstraction, logical rigor of deductive reasoning, the application of mathematics and the general predominance of form over content in economic analysis. Formalist economists do not use mathematics merely as a tool, but apply it as a model of scientific cognition and adopt mathematical criteria for evaluation of economic research. Consequently, research material is selected with a view to its usefulness in formalist modeling while empirical evidence loses its significance. Of primary importance in the formalization of economic theory was the paper by Kenneth Arrow and Gerard Debreu *Existence of an Equilibrium for Competitive Economy* (1954) which provided proof for the existence of a solution of the Walrasian general equilibrium model (Blaug 2003, p.145). The formalist revolution meant that mainstream economics ceased to use natural language and relatively uncomplicated statistical techniques and became a science where rigorous deductive thinking and sophisticated mathematical methods impart scientific value to research. Mark Blaug (1997, p. 3) is the author of one of the most critical opinions on this revolution:

„If we can date the onset of the illness at all, it is the publication in 1954 of a famous paper by Nobel Laureates Kenneth Arrow and Gerard Debreu; it is this paper that marks the beginning of what has since become a cancerous growth in the very centre of microeconomics.”

To the same degree, formalism affected macroeconomics, which was dynamically developing in the wake of the Keynesian revolution. Although Keynes himself highlighted the nature of economics as a social science, was skeptical of econometrics, and focused on disequilibrium-related problems, macroeconomics inspired by his theory became dominated by the formalist-model approach exemplified by the IS-LM model and the so-called neoclassical synthesis⁷.

⁷ The IS-LM Model proved the usefulness of the Walrasian model of general equilibrium and allowed for the application of mathematical modeling in research and education. Keynes's interpretation of economics in the form of the IS-LM Model resulted in the marginalization of those Keynesian ideas which corresponded to institutional thought, or even to Austrian economic thought, and paved the way for the triumph of the formalist revolution, while at the same time made it possible to preserve the foundations of neoclassical economics.

The 1970s saw a significant ideological change: a departure from Keynesian interventionism (while methodological tendencies remained unchanged). The formalist approach became the basis for the free-market ideology with the rational expectations hypothesis being the foundation of new classical macroeconomics. According to this hypothesis, individuals undertaking economic decisions are able to draw conclusions from their errors and learn, that is, to use their intellectual potential to comprehend the manner in which economy functions, and adjust their decisions to its changing rules. Given the current situation in the global economy and the manifest unreliability of economic forecasts, it is worth recalling Muth's thesis, which became the point of departure for Lucas and Sargent's HRO: *as expectations are information-based forecasts of future events, they are in fact equivalent to forecasts generated by a relevant economic theory.* (Snowdon, Vane, Wynarczyk, p. 200). The financial crisis and global uncertainty have led us to believe that both individual decisions and economic forecasts are prone to systemic errors⁸.

The role of new financial instruments in triggering the crisis seems to support the thesis that defining rationality as maximization and underestimating institutional and coordination issues in conjunction with the fascination with the idea of control and belief in the potential of mathematical tools are the sources of thinking and action which could be defined as a new type of social engineering. A direct manifestation of this approach is the development of mathematical risk assessment methods and their application as if financial mathematics could somehow preclude the rule that hopes for high profits usually come encumbered with running high risks. The belief in mathematical rigor of risk assessment tools for financial instruments and in financial scores provided by the rating agencies led to the widespread illusion that everything was under control, while subsequent events showed that derivatives actually contributed to the increased risk in the economic system⁹.

⁸ Although the concept of rationality prevailing in mainstream economics deserves criticism, it should be admitted that the general conclusion of the creators of new classical macroeconomics to the effect that discretionary policies result in inflation and increase uncertainty in business processes ought to be seriously considered given the situation of the global economy.

⁹ Innovations in the financial markets promising reduced risk actually led to its increase in two ways. Firstly, the use of the new financial instruments enhanced the development of new ties in the economic system and thus the system became more vulnerable to any changes and to the accumulation of disequilibrium. Secondly, the belief that new solutions helped to reduce risk promoted risky behaviors, lower economic discipline and disregard for budgetary constraints.

Myron S. Scholes and Robert C. Merton, awarded the 1997 Nobel Prize for the development of a derivatives valuation model, provided a spectacular example of an unreliable approach to economic problems. They claimed that derivatives contribute to overcoming the problem of information asymmetry and that thanks to the unregulated market for these instruments clients could get better financial services at a lower cost. This is what Scholes said in his lecture:

“Investment banks no longer merely structure and advise in transactions but instead have moved to a more packaged, integrated convenient financial-solution approach, directed at solving the complex problems of their clients around the world. The many advances in financial theory have enabled financial services firms to meet those complex needs more effectively and at a lower cost than was possible previously. The marriage of business school and economic department graduates engineers, mathematicians, physicists and computer scientists has led to more efficient and lower-cost financial engineering solutions to client problems” (Scholes 1997, p. 141).

The use of financial engineering and its consequences are also significant arguments in the discussion about the applicative value of economic theories. The role of derivatives in the crisis suggests that the proponents of abstract mathematical models fail to sufficiently disclose the underlying assumptions of their models and, consequently, the constraints on their application. The classical Black-Scholes-Merton option pricing formula requires meeting several strict conditions such as zero transaction costs, lack of time correlations, and Gaussian-type fluctuations. As none of these conditions is met in the financial markets, a risk avoidance strategy based on this model is prone to failure (Burda 2006, p. 119).

Economics is responsible for the crisis not only due to its propensity to formalism, but also due to the prevailing economic growth ideology and belief

in the reliability of stabilization policies¹⁰. The conviction that growth expressed as gross domestic product is the ultimate goal and that adequate policies make it possible to avoid periods of slowdown are the main reasons why governments tend to stimulate the economy throughout the whole cycle using methods recommended by Keynes only for the time of crisis. While referring to the Keynesian theory, it is necessary to take into account not only the inevitability of discretionary policies during crises, but also the impact of his ideas on pursuing expansive monetary and fiscal policies over periods of slowdown, the development of consumptive attitudes and a dangerous decline in the saving rates.

Back in the early 1980s, Knut Borchardt provided an accurate diagnosis concerning the tendency dominating the economic thinking of academics, politicians and ordinary people in the second half of the 20th century. He noticed that the desire to avoid crises and the promise of stable growth dangerously alter the private and public morality and the behavior of all participants in economic life. "Stability was perceived as a "public good" which could be used by everybody free of charge. ... Similarly, entrepreneurs increasingly shed fears in

¹⁰ Some tension is observed among the economists between the growing awareness that it is impossible to forecast the future or to pursue long-term economic management and the belief in the power of stabilization policies. A good example here may be the publications by Aleksander Jakimowicz. He writes that in spite of the possibility to process enormous quantities of data thanks to the development of computer technology, the usefulness of forecasts is very limited. He also admits that according to chaos theory predicting the future is not viable which translates into a fiasco of long-term economic management and thus into undermining a significant part of previous economic research (Jakimowicz 2003, p. 380, 403). Despite this, in his opinion it is the free market which poses a particular threat. While he understands that traditional cognitive methods in economics fail, at the same time he seems to accept the assumption of the rational behavior of business entities ("The fundamental thesis of this book is that due to the rational behavior of business entities market structures aim at a state called the edge of chaos" (Jakimowicz 2010, p. 258)). Moreover, he claims that "the effectiveness of traditional methods of influencing economic processes is limited by Ashby's Law of Requisite Variety, according to which the controller should be at least as complex as the system being controlled" (Jakimowicz 2010, pp. 258-259). At the same time, Jakimowicz one-sidedly associates the point of departure for complexity economics with Lange's ideas, ignoring Hayek's arguments in the dispute about the rationality of socialist economy (Jakimowicz 2010, s. 244). It was Hayek and not Lange who emphasized the complexity and dynamics of economic processes and stressed the problems of access to knowledge and coordination of economic activities. Undoubtedly, markets require regulation, that is, determination of the boundaries of individual and group behavior. However, it is also necessary to realize the risks related to expansive monetary and fiscal policies pursued under the pressure of public opinion and political rivals in a democratic environment. However, given the human-induced growing complexity of the world, it is no longer safe to believe in the invisible hand of the market or in the visible hand of the central regulator.

their investments plans. As a global crisis was supposed never to come again, the risk of investing capital seemed to be lower. Thus, why not accept higher debt levels? The belief bankruptcies similar to those from the early 1930s were never going to recur became a near certainty for the banks, as the central investment bank would certainly serve as a *lender of last resort*. Thus, why not gradually reduce the share of ownership equity?" (Borchardt 1990, p. 126).

6. Conclusion

Discussing methodological errors and ideological tendencies in economics from the perspective of the current crisis, one may hope that in the end it will have a positive impact on the evolution of social institutions and economics. Perhaps, as the crisis revealed not only the inadequacy of allocation decisions, but also the failure of regulation and the incorrectness of our beliefs, it may lead to improving the current social system. As regards economics, the crisis may result in abandoning the model of science developed in the 17th century under the influence of Newton's mechanics and based on the assumption that "the world is simple and is governed by time-reversible fundamental laws" (Prigogine, Stengers, p. 22). This vision of the world corresponds to the pattern of scientific thinking developed by the mathematicians and is at the root of neoclassical economics, formalization, and a dichotomous understanding of economic and ethical values. Paradoxically, economics, which vowed to always closely follow the model of physics, still continues to adhere the "hard" scientific paradigm at a time when quantum theory has changed the physicists' point of view showing the wealth of reality and proving that it is impossible to describe it with a single logical structure because on all levels reality implies an essential element of conceptualization¹¹.

The new understanding of the nature of the world proposed by the natural sciences coupled with the largely unexpected state of uncertainty in the global economy clearly indicate that changes are indispensable also in the economics profession. Regardless of the opportunities offered by the developments in experimental economics and chaos theory, the changes should consist of expanding the spectrum of studied issues and adopting greater methodological openness. Due to the limited cognitive and practical results of mathematical

¹¹ Ibidem, p. 242. Heisenberg's uncertainty principle and its extension in Bohr's theory of complementarity make it necessary to depart from the classical understanding of determinism and objectivity. The dependence of the description of a quantum system on the measurement system reveals the lack of access to the real subject of study.

economics, it seems that economics should resort to the methodological approach of Alfred Marshall, who saw room in economics for a variety of research methods. Until new possibilities of formal analysis are available to encompass the complexity of social life, in order for economic studies to advance smoothly a better balance between formal analysis, institutional approach and experimental methods is required. And it is the lack of coordination between these three modes of economic cognition that seems to be the most serious malady of the economics profession.

References

- Blaug M. (1997), *Ugly Currents in Modern Economics*, 'Policy Options', September
- Blaug M. (2003), *The Formalist Revolution of the 1950s*, 'Journal of the History of Economic Thought', no 2
- Borchardt K. (1990), *Przemiany w myśleniu o kryzysach gospodarczych*, [in:] *O kryzysie. Rozmowy w Castel Gandolfo*, Instytut Nauk o Człowieku w Wiedniu, Res Publica, Warsaw
- Burda Z. (2006), *Fizyka i zarządzanie ryzykiem finansowym*, 'Postępy Fizyki', z. 3
- Colander D. et al. (2009), *The Financial Crisis and Systematic Failure of Academic Economic*, 'Critical Review' no 2-3, Routledge
- Demsetz H. (2002), *Information and efficiency: another viewpoint*, [in:] T. Cowen, E. Crampton (eds.) *Market Failure or Success. The New Debate*, Edward Elgar, Cheltenham-Northampton
- Energy Information Administration. Official Energy Statistics from the US Government*, http://www.eia.doe.gov/pub/oil_gas/petroleum/data_publications/petroleum_marketing_annual/historical/2008/pdf/pmata1.pdf [access: July 2010]
- Godłów-Legiędź J. (2005), *Model socjalizmu rynkowego Oskara Langego a spór o paradygmat ekonomii*, [in:] Z. Sadowski (eds.) *Oskar Lange a współczesność*, Wydawnictwo PTE, Warsaw
- Hayek F.A. (1958), *Individualism and Economic Order*, The University of Chicago Press, Chicago
- Hicks J.R. (1978), *Kapitał i wzrost*, PWN, Warsaw
- Jakimowicz A. (2003), *Od Keynesa do teorii chaosu*, Wydawnictwo Naukowe PWN, Warsaw
- Jakimowicz A. (2010), *Źródła niestabilności struktur rynkowych*, Wydawnictwo Naukowe PWN, Warsaw
- Keynes J. M. (2003), *General Theory of Employment, Interest and Money*, Project Gutenberg of Australia, eBook No.: 0300071h.html
- Kowalik T. (2009), *Kapitalizm kasyna*, [in:] *Kryzys. Przewodnik Krytyki Politycznej. Przyczyny, analizy prognozy*, Wydawnictwo Krytyki Politycznej, Warsaw

- Marciano A. (2007), *Value and Exchange in Law and Economics: Buchanan versus Posner*, 'Review Austrian Economics', no 2-3
- Makowski L., J. Ostroy J., Perfect Competition and the Creativity of the Market, 'Journal of Economic Literature' 2001 no 2
- Nelson R. R.(2002), *Bringing institutions into evolutionary growth theory*, 'Journal of Evolutionary Economics', no 12
- North D. C. (1996), *Institutions, Organizations and Market Competition*, <http://129.3.20.41/eps/eh/papers/9612/9612005.pdf> [access: September 2009]
- Prigogine I., Stengers I (1990), *Z chaosu ku porządkowi. Nowy dialog człowieka z przyrodą*, Państwowy Instytut Wydawniczy, Warsaw
- A. Smith (1991), *Wealth of Nations*, Great Minds Series, Prometheus Books, Amherst - New York
- Schotter A. (2008), *The Economic Theory of Social Institutions*, Cambridge University Press, Cambridge
- Snowdon B., Vane H., Wynarczyk P. (1998), *Współczesne nurty teorii makroekonomii*, Wydawnictwo Naukowe PWN, Warsaw
- Scholes M.S. (1997), *Derivatives in a Dynamic Environment*, Nobel Lecture, December 9, 1997, p. 141. http://nobelprize.org/nobel_prizes/economics/laureates/1997/scholes-lecture.pdf [access: October 2009]
- U.S. National Debt Clock http://www.brillig.com/debt_clock/ (access: 28 July 2010)

Streszczenie

ZAWODNOŚĆ RYNKU, PAŃSTWA I EKONOMII Z PERSPEKTYWY KRYZYSU FINANSOWEGO

Spór między zwolennikami rozwiązań rynkowych i interwencjonistycznych, oparty zazwyczaj na przeciwstawianiu rynku i regulacji, uległ zaostreniu wskutek kryzysu finansowego. Celem artykułu jest nie tylko analiza zalet i zagrożeń alternatywnych mechanizmów regulacji z perspektywy kryzysu w gospodarce światowej, ale także próba oceny z tej perspektywy współczesnej ekonomii. Rozważania skoncentrowane są wokół trzech hipotez. Po pierwsze, błędne jest przeciwstawianie systemu rynkowego i regulacji. Po drugie, u podstaw kryzysu leży pogwałcenie zasad klasycznego liberalizmu, które ma źródła zarówno w polityce, jak i metodologii współczesnej ekonomii. Po trzecie, krytyczna analiza metodologii i logiki rozwoju myśli ekonomicznej w XX wieku może uzasadniać tezę o systematycznym błędzie doktryn, który zdominowały główny nurt ekonomii.