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Economics in Times of Crisis. In Search of a New Paradigm

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Economics in Times of Crisis. In Search of a New Paradigm

Abstract: The relationship between the development of economics and economic performance is not reducible to any set of simple rules. Among the historians of economic thought there is even a handful of those who perceive the progress in economics mostly as an outcome of the attempts to solve the problems, inconsistencies and paradoxes within economic theory itself. Seen from this perspective, economic reality has minor (or no) importance.

On the other hand, the endeavours to modify a mainstream approach are significantly greater in times of economic downturns. Seeing that economics is in such a state of 'intellectual ferment' nowadays, it is worth reconsidering the connection between economics and the economy. Thus the main aim of the paper is to analyse the current state of economic science in relation to the last economic slump. Although it is of course not possible to predict the future trajectories of economic theorising, taking into consideration the nature of the crisis the most feasible and potentially most fruitful areas are indicated.

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Introduction

It would be difficult to deny that in recent economic history the last economic crisis is one of the most significant episodes. It made a profound impact on economic life and challenged economists and economic advisers. Taking that into consideration, it could be assumed that the worsening of economic performance can lead to some changes in economics. The aim of this paper is to consider the effect of the last economic downturn on contemporary economic thought. The article can be seen as an attempt to answer the question whether a change of the dominant paradigm of economic science may be expected.

In determining the answer to that question, the term 'paradigm' is discussed in the first section of the paper. Later, it refers to the development of economic science and the dominant paradigms that may be pointed out in economics up to our times are outlined. Besides the internal dynamic of scientific research, i.e. the trials to explain some unsolved paradoxes or to eliminate the inconsistencies of the system of thought, external, 'environmental' factors may result in the emergence or rejection of paradigms too. In the case of economics, one of the substantial factors from the latter group seems to be economic performance. For that reason the relationship between economic theory and economic performance is analysed in the second part of the paper. Against such a background the problem of the impact of the last economic slump on economic theorising is considered in the following, third part.

The main thesis of the article is that whereas it is not possible to precisely point out in what direction mainstream economics will turn, the crisis gives strong incentives to revise the leading concepts, raise more general and more fundamental questions about economic life, and choose the proper or just more efficient methods to improve our knowledge of economic aspect of social reality.

1. Paradigms in economic science

The notion of a paradigm is one of the essential concepts in the philosophy of science and sociology of scientific knowledge. It is widely used to discuss the evolution of scientific research, economic in particular. In the Kunhian sense the term refers to 'universally recognised scientific achievements that for a time provide model problems and solutions to a community of practitioners' or, more precisely and fully, 'an accepted model or pattern' of scientific research within a certain area of studies, that lets the scholars 'to define legitimate problems and methods of a research field' and 'a criterion for choosing problems that, while the paradigm is taken for granted, can be assured to have solutions'. When one paradigm is replaced by another, the change is named 'scientific revolution' (Kuhn 1970, viii, 10, 23, 37).

Bearing in mind the relatively short history of economics as a science, with Adam Smith's *Wealth of Nations* published in 1776 commonly noted as a landmark, it may be somewhat surprising how many paradigms and scientific revolutions the historicists of economic thought are able to enumerate. Thus, besides the most famous – the 'marginalist' and 'Keynesian' – we can find the 'imperfect competition', 'monetarist', 'new-classical', 'Lucasian' (Snowdon, Vane 2005, 222, 267), 'rational-expectations', 'statistical' (Blaug 1997) and 'formalist' (Blaug 2003) revolutions (and counter-revolutions) and probably even more. It could be read as a sign that the development of economics occurs very fast or/and evidence that the science is immature or/and as an argument that Kuhn's concept of scientific research is not fully appropriate to analyse the history of economics. Whatever the reason is, when it comes to paradigms we have a comparable variety. Happily, in this case most authors agree at least that the first paradigm established in economics was the classical one. However, in contrast to Kuhn's idea, the emergence of classical political economy was not accompanied by a redefinition of the main question posed previously by the thinkers interested in economic aspects of social life. What could be observed was rather a shift of emphasis – the general problem of what should be done to increase production of (useful) goods remained the same, but in the mercantilist period the answer was given from the point of view of a king and a court, whereas in the second half of the 18th century the perspective began to change gradually to a more social, public one.

Kuhn also indicated that the emergence of the new paradigm 'requires a new and more rigid definition of the field' (1970, 19). In the case of economics, the problem is that the first more rigid and, at the same time, widely accepted definition of economics or political economy seems to be created evolutionary. It was the outcome of some discussions taking place on the pages of economic treatises written by the second and the third generation of classical economists – Senior (1836, 1852), J.S. Mill (1844) and Cairnes (1875, 1973). However, it should be noticed that the process of delimitation of the scope of economics occurred within the classical paradigm and may be seen more as a step towards greater coherence of this paradigm, not as a proposal of a new one. The changes of the key problems investigated by the economists took place much more frequently than changes in the definitions of the subject matter of economics presented *expressis verbis*. The most significant transformation of this kind happened in the 1930s, yet it was not related to the (in)famous Keynesian revolution of that decade – the source of the definition, that is still frequently used today, is not Keynes' *General Theory*, but Robbins' *Essay on the Nature and Significance of Economic Science* (1946).

Whether economics deserves for the name of 'a mature science', it should be indicated that the problem is still debatable. As far as some formal, easily visible signs of maturity are considered, one can assess that economics gained maturity in the last quarter of 19th century, the period of its professionalization – the emergence of professional associations, the establishment of separate faculties with rights to confer academic degrees in economics and the formation of professional journals dedicated mainly to the specialists. The product of the latter was due to the fact that, in the next century, the new contributions to economic theory came to be presented more and more in the form of articles, not treatises nor books. On the other hand, the unexpectedly adequate description of the current state of economics may be found in Kuhn's words (1970, 17) about the early stages of development of the science with 'different men confronting the same range of phenomena, but not usually all the same particular phenomena, describe and interpret them in different ways'. It would be very difficult to disclaim that contemporary economics is far from this kind of phase now.

However, leaving aside the problem of the maturity of economics and passing to the influence of the last economic turmoil, we can ask which of those diverse schools can provide the best diagnosis of the last downturn in global economy. Or perhaps the question should be modified into asking who will be able to explain the last economic crisis in the most convincing way and offer a new synthesis that can attract the majority of economists? Can we expect the emergence of a new paradigm?

2. Economics and economic performance

In considering the development of economics and other social sciences, the factors determining the shifts and changes in the dominant paradigms are divided into two broad categories: those which are perceived as internal, coming from the self-dynamic of a discipline, and those which are somehow external to it. When the accent is put on the former set of factors, the analysis is conducted in accordance with the absolutist approach. If the emphasis is placed on the latter, i.e. political, historical or/and institutional, the perspective is called the relativist (Blaug 1997, 2-7; Landreth, Colander 2002, 4-5).

Being aware of the presence of those two potential sources of the evolution of economics, the question suggests itself: is there any correspondence between the state of economic theorising and economic performance? On the one hand, the economy undeniably constitutes the subject matter of economic science, a strong link, thus, may be expected. During periods of booms and busts some minor or major changes obviously take place in economic life, which means that the subject matter evolves. Hence some (parallel?) changes in economic science might be required. But on the other hand, the evolution of economic institutions, methods of production, consumer tastes and preferences and further economic variables occurs all the time, and it is the main goal of economic science to point out the universal elements, some general principles possible to trace in it. Therefore, the question still remains how deep the impact of economic downturn on economics may be. Is an economic crisis enough to lead towards a scientific revolution?

It seems clear that there is no direct link or any kind of a universal mechanism. The relationship is much more subtle. Nevertheless, the collation of knowledge on the development of economic thought with the knowledge on economic history allows us to notice some interplay between economic performance and the development of economic thought visible from the last quarter of 19th century till nowadays. It looks as if in times of prosperity the majority of scholars are focused on strengthening the dominant approach or at least working within its boundaries. Obviously, it is always possible to find researchers gainsaying the orthodox paradigm (or some components of it), but their impact on the field is considerably smaller than in times when the economy slows down. On the contrary, the worsening of economic performance leads to the growing tendency to search for some new concepts or even some unorthodox, broader visions of economic activity.

The probable reasons lying behind this interdependence are not difficult to find. To begin with, in periods of economic stabilisation or growth the incentives to look for an explanation of the would-be economic problems that may happen in the unforeseeable future are significantly weaker. As working within the framework of a dominant paradigm facilitates the process of initial acceptance and proliferation of presented contributions, the trials to solve the puzzles or to eliminate the inconsistencies of the dominant theory may be perceived by many as much more promising. The awareness of the amount of time and effort that must be devoted to establish and to popularise an utterly different approach may effectively deter many academics from making attempts. When the economic situation deteriorates, and especially when some new problems arise that are difficult to solve by tools of standard analysis, it weakens the firmness of its foundations and enfeebles the dogmas of the orthodox economics. It does not necessarily mean that all of the representatives of the dominant approach would be ready for a quick and open recantation of all their former beliefs. Actually, among scholars there are always those whose faith remains unshaken, regardless of any possible economic calamities (Backhouse 2010; Nelson 2001). Nevertheless, the willingness to look beyond the mainstream is greater in times of crisis, than in times of prosperity. The crisis does not always result in the emergence of a new paradigm, yet it seems that a shrinking economy generates prerequisites for fundamental changes in economic science.

A further component may be added to this picture, namely, economic policy and the influence of economic theory exerted on it. As there is no strict cause-and-effect relationship between economic performance and economic science, there is no direct link nor any automatic transposition of economic theorising on economic policy. It should be mentioned here that even at the very early stages of the development of economics as a separate science we can find an approach which not only undermines the reliance on economic policy on economic theories, but also substantially diminishes the role of economists as economic advisers (Cairnes 1875; Robbins 1946). For example, as early as the mid-19th century Cairnes argued that political economics ‘has nothing to do with laissez-faire any more than with communism’, and even that political economy ‘pronounces no judgment on the worthiness or desirableness of the ends aimed at in such systems’ (1973, 255-256). Statements in a similar vein were presented by Robbins (1946), the work that still has a profound impact on the way the economists see their field. Despite this line of reasoning, it would be difficult to deny that economic theory exerts an influence on economic policy, no matter how indirect and not easy to grasp would it be. Even if one agrees with Robbins’ vision of economic adviser as a perfectly neutral specialist, who can do no more that to point out which of the potential means may lead to ends chosen by a politician, one has to admit that those means would be evaluated on the basis of the model of economic reality the economist accepts. It signifies that in all those societies wherein economic advisers are asked for their opinions on economic problems (which the vast majority of modern developed societies seems to be), economic theory has its impact on economic policy.

Furthermore, in practice economic advisors are expected to do much more than to classify what is possible and what is not, which was rightly indicated by Blaug (1992), Nelson (2001) or recently emphasized by Sedláček (2011), who has been working as an economic-advisor himself. Actually, the advice-givers are asked to determine which solutions are better and which are worse. As aptly stated by Blaug: ‘[u]nfortunately, economic advice is typically sought, not just to elucidate the possibility function, but also the preference function. The decision maker seeks advice on both ends and means. (...) In other words, decision makers do not try to get what they want; rather they learn to want by appraising what they get’ (Blaug 1992, 129-130). If so, the impact of economic performance on economic science may be strengthened by positive and negative opinions about economic policy that is seen as the offspring of certain theoretical models or theories. It is understandable that in times of economic turbulence economic policy is criticised, which we have just witnessed over the last couple of years. In contemporary democracies, where the force of mass media is tremendous and public opinion matters a lot, economic problems are hotly and openly debated. The criticism is levelled mostly at the school that is perceived (or portrayed) as a provider of the theoretical background for the policy realised before the economic breakdown. In consequence, recession can quickly knock the economic advisors (and to some extent economic science as well) off their pedestals right onto the stake. As the prestige of the profession is shaken, it is rather difficult for economists to totally separate themselves from the criticism. This gives a strong motivation to answer and to reconsider the underpinnings of the previously taken approach. By so acting, the crisis makes the mainstream researchers' openness to unorthodox concepts considerably greater. Some good illustrations of such an impact may be found in the development of macroeconomics. For instance, the emergence and relatively fast popularisation of the macroeconomic approach is commonly presented as an outcome of the Great Depression of the 1930s (Snowdon, Vane 2005, 13-15). Another well-known example is the collapse of Keynesian economics accompanied by the triumph of monetarism and new classical economics four decades later, which in turn is seen as the result of the crisis of the 1970s. (Landreth, Colander 2002; Snowdon, Vane 2005, 18-21).

3. How far we are from a revolution in economic theory?

In such a context it would be difficult not to ponder on the last economic recession and its bearing on economic theory. It is all the more worth doing since the present situation is untypical in some ways. On the one hand, in many sources the crisis is depicted as a product of neoliberal economic policy rooted in neoclassical economics. Alan Greenspan's public repentance before the US Congress, Paul Krugman's widely read articles (Krugman 2009) and Skidelsky's (2012) prophecies on the necessity of the master's return – all declarations of this kind may be treated as a firm justification of that stance. But from the other side, the attacked one, we can hear many equally eminent voices pointing out that the economic policy realised before the crisis had actually very little in common with both liberal values and the precepts of neoclassical economic thought (Becker, Myerson and Scholes 2009; Boettke, Smith and Snow 2011; Cochrane 2011). From such a viewpoint, the slump should not be treated in any way as a consequence of liberalisation or the implementation of the indications stemming from neoclassical economics, but rather the repercussions of the subordination of economic policy to political, mostly short-term, goals.

The essence of this controversy may be simplified so as to express it in terms of the never-ending discussion about the relative significance of market versus government failures. Surprisingly, on analysing the current state of this debate one might get the impression that both standpoints have come out of the crisis equally strong (or rather equally weak). At any rate, in contrast to the situation after the previous 20th century's downturns, this time the balance has not been considerably tipped in favour of any side. A probable explanation for this may be embedded in some deeper methodological problems shared by all the mainstream approaches in contemporary economics. As McCloskey (1989; 2002) remarked, economics has never learned the lesson stemming from the discussion taking place in 20th century's philosophy of science and is notoriously reluctant to face the consequences of the contradictions in logical positivism. In particular, most economists still have faith in the model of scientific research grounded on the presumption that the ultimate gauge of validity of a theory is its confirmation by facts. The high role of empirical evidence arises from the belief that the facts are something completely independent of the theory, so they can and should be regarded as the last resort. The works in psychology and sociology of science, however, show that the way we perceive facts depends critically on the system of notions, the preconceptions, we already have (Fleck 2006). Bearing that in mind and returning to the issue of economists' reaction to the last crisis, we can agree with Scheuer (2013a), whose analysis of the famous debate between Krugman (2009) and Cochrane (2011), the distinguished representatives of the neo-keynesian (Krugman) and neoclassical (Cochrane) approach, ends with the conclusion that each of the opponents sees the facts through the lenses of his own vision of economic life and interpret them in favour of the model he believes in. They both are right within the limits of their theories, but not able to persuade each other. Scheuer sees the major figures in contemporary economics as entrenching themselves on the solid ground of their before-crisis theoretical models of economic reality, and not willing to look for anything that might undermine it. He deems it is as a sign that no serious shift, no changes of paradigm in economics should be expected due to the last crisis (Scheuer 2013b).

It could be argued, however, that the crisis has come as a surprise for the vast majority of economists and despite the attempts to explain its roots within the framework of previously held beliefs, it caused a discomfort that the framework was not good enough to predict it. Of course, it does not mean that all economists collectively reject the former orthodoxy. Yet this experience gives a stimulus to rethink the first principles. For some, let us call them the more sensitive (or the younger), this failure can be a motivation to think deeper, perhaps even so deep as to re-establish the methodological foundations of their own approach and ultimately – the mainstream methodology of economic science; to reconsider not only the content of economic theory but also the accepted methods of testing hypotheses, the relation between economic theory and economic life and the role of economists in society.

Among the concepts or the components of the dominant paradigm that have been touched by the crisis the most is the idea of *homo economicus*/*economic man*. It needs to be noted that the idea was coined by J.S. Mill to justify the *raison d'être* of political economy as a separate science. He presented the concept for the first time in one of his *Essays on Some Unsettled Questions of Political Economy* (1844), although the term economic man/*homo economicus* was introduced by Ingram and Pareto about half of a century later (Persky 1995). In pondering the reasons to distinguish this special field from philosophy, Mill, who was convinced that political economy must be a deductive science, proposed an abstract model of man to be a point of departure in theorising on economic issues. The model was based on the supposition that 'man is a being who is determined, by the necessity of his nature, to prefer a greater portion of wealth to a smaller in all cases, without any other exception than that constituted by the two other counter-motives', namely 'aversion to labour, and desire of the present enjoyment of costly indulgences' (Mill 1844). It should be emphasised here that Mill was perfectly aware of the abstractness of such a vision. Yet he was, also convinced that in economic life those motives, which constitute his ideal type, were the most common and the most important. In the last quarter of 19th century Mill's concept earned its place at the core of neoclassical thought. However, in a slightly modified or, to call it by its correct name, simplified version. *Homo economicus* became a rational maximiser of utility/profit, the aversion to labour was replaced by labour's negative utility (or disutility), and 'costly indulgences' were packed into the bottomless box with all other goods and services useful to people in any (unspecified) way (Jevons 1965). Despite some unfavourable voices coming from – what is worth mentioning – the representatives of mainstream economics too, the concept turned out to be unusually applicable. In the second half of the last century *homo economicus* became a key part of the so-called economic (or economics) imperialism (Lazear 2000; cf. Mäki 2009). In other words, it was used to analyse many areas of human life lying beyond the traditionally defined scope of economic research (Becker 1976; Downs 1957). The roots of such success and the high tolerance to criticism seem to lie both in its simplicity and in the impression that thanks to it we are able to create a model of human behaviour that lets us predict which path will be taken when a person makes a choice.

Despite its attractiveness, *homo economicus* has been sharply criticised almost from the very beginning. To indicate the most important problems, we can enumerate the lack of realism, which negatively affects all the deductions based on that model (Veblen 1899-1990), the consequences of implicit assumption of rationality (Simon 1957; Smith 2013) or the tautological character of the whole concept of utility maximisation (McCloskey 2002; Sedlàček 2011). The additional problem, which fully revealed itself during the last crisis, was the concept's impact on the practical dimension of economic activity. As it seems that in the last century the abstract model of *homo economicus* has grown into a role model for entrepreneurs. For many years on the pages of economic textbooks the pursuit of profits has been presented as the main motive of entrepreneurs' behaviour sufficient to guarantee the most efficient allocation of scarce resources by market allocation mechanism. Seen from this perspective, the entrepreneurs should be focused on maximising their profits, and nothing else is needed to be taken into consideration. The last crisis showed that in the contemporary economies the process of the transformation of private vices into public benefits is actually slightly more complicated and the negative results of sheer concentration on the profit maximisation are difficult to push aside.

It is observable that the crisis has provided a fresh impetus to both the criticism of *homo economicus* and the research on the economic actors' behaviour. A good example of this may be the renewed interest in the Keynesian 'animal spirits' seen as a major force governing economic life (Ackerlof, Shiller 2010). And one of the most hopeful trends worth mentioning here is the fast development and growing interest in behavioural economics, the modus vivendi of which is to investigate the patterns of people's behaviour in economic life, to treat them as a subject of research, not as a dimension limited by the a priori assumption. Strong support could also be expected from experimental economics (Smith 2013) and neuroeconomics, a relatively fresh field thriving thanks to new advances in neurobiological research techniques (Cramerer, Loewenstein and Prelec 2005; Zaleśkiewicz 2011, 416-447).

The second element of the orthodox paradigm undermined due to the recent economic turbulence is the idea of economics as pure, positive, utterly value-free science. It can be assumed that such a vision is deeply rooted in the 19th century methodological treaties by English scholars. Their proposal to clearly distinguish the science from the art of political economy was a measure to solve the problem of the (too) close link between economics and policy. They aimed to prove that political economy fully deserved to be named 'a science'. The problem was uneasy, since economics actually stemmed from the attempts to solve problems of economic policy. It is, moreover, remarkable that during the first one hundred years the science's name was political economy, not economics (the latter label was popularised not earlier than at the end of 19th century by Marshall (1920; Dzionek-Kozłowska 2007,). Therefore, the economists were trying to somehow separate the science (economic theory) from the art (economic policy). The main steps were taken by Senior (1836, 1952), Cairnes (1875, 1973), J.N. Keynes (1891) and further by the proponents of logical positivism as a model of scientific research (Robbins 1946). The latter was seen as being the most appropriate for economics in accordance with the belief that the closer to it economics got, the more scientific it would be.

A by-product of this tendency to the greater scientificity was a much more complicated relation between economic theory and economic policy. The difficulties with agreement of the claims to be scientific and at the same time useful to the society as economic advisers pushed the economists to search for some solid, objective, value-free analytical tools to assess decisions taken by economic politicians. Such attempts were made, for example, by Marshall who had been trying to reach it by his consumers' rent concept which eventually led to the establishment of welfare economics. Later that goal was openly declared by the representatives of the new welfare economics. Unfortunately, all of them were unsuccessful. Yet, economics had to pay the price, i.e. the total elimination of ethical aspects from orthodox economics. Despite all those measures, the problem was not really solved. It has turned out that it is just not possible to eradicate the ideas, values and beliefs with which a researcher is entering into the field and the problem seems to be especially important in the case of the social sciences.

The whole concept about liberating economics from value judgements by cutting off the discussions on values and the ethical sides of the economic problem may be assessed as rather naïve, or as McCloskey stated, even preposterous. In *The Secret Sins of Economics* she expressed it by saying that 'it's hard to believe, but most economists really do think that the positive/normative distinction lets them out of any reflection on ethics' (2002, 32-33). What is more, the model of economic as a positive science is far from the way economics is practised and the last crisis revealed how far from reality the vision is (cf. Dzionek-Kozłowska 2013). Returning, for instance, to the Krugman-Cochrane discussion, one may claim that it has turned out to be inconclusive just because of the differences in the opponents' backgrounds, their world-views, the deeply rooted beliefs and values, that affect the way they perceive the phenomena, and the processes occurring in economic life. If so, it means that values are important both for economic actors and for scholars, who analyse their behaviour. And once again, in looking for the most promising point of departure to change the paradigm dominant in economic science, we can turn to the behavioural and experimental economics and the framework of new institutional economics or/and evolutionary economics (Godłów-Legiędź 2010).

Another revealed weakness of the mainstream economics is the faith that economists possess the tools to make reliable forecasts. The crisis has left the faith shaken, or maybe even destroyed, which seems to be the most painful for the profession. The crisis significantly enfeebled their high prestige as qualified (economic) fortune tellers. The organised methods of forecasting at our disposal have turned out to be insufficient to protect the global economy from the slump. In spite of the great development of econometrics and the advances in gathering statistical data, there is still a lot of truth in Knight's (1921) claim that uncertainty is an immanent part of economic life or in Hayek's diagnosis on the pretence of knowledge presented in his Nobel Prize Lecture (1974). This line of reasoning has been supported by McCloskey (2002), Sedláček (2011) and Taleb (2013), whose opinions on the techniques used by economists and the profession as a whole were, and still are, not very favourable. It seems, however, that to change or replace those techniques would be extremely difficult, perhaps much more difficult than to replace the dominant model of human being or to make the economists aware they are not able to free themselves from value judgements. The problem twofold. Firstly, it is a well-established practice, and secondly, those tools are used not only to predict the future course of economic events but also to verify economic theories. Thus they are deeply embedded into the economic paradigm (broadly defined). What can be done with a greater ease is perhaps to promote more a modest approach to the outcomes it is possible to provide by the quantitative models. The results obtained in such a manner have to find their place in economic science and economic policy, although the last crisis has cast serious doubts on the validity of keeping them longer in the central position.

4. Conclusions

From the above it may be concluded that the recent turbulence in world economy have opened the window of opportunity for a change of the dominant paradigm, nevertheless the question whether the scientific revolution will take place remains unsealed.

However, with the benefit of hindsight it is possible now to point out some components of the mainstream paradigm that have suffered the most from the ferment caused by the crisis. Among them, at least three areas should be mentioned: (1) the model of human being, *homo economicus*, (2) the idea of economics as a positive, value-free science and (3) the conviction that economists possess the tools and data to provide reliable forecasts. It seems that a new paradigm, or a renewal of the old needs to be formed in such a manner to solve, replace or eliminate those preconceptions.

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