



HAS ECONOMICS LOST ITS OWN IDENTITY?

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ABSTRACT

Dealing with economic science from the methodological point of view represents an unusual challenge. Primarily owing to the fact that there is a whole spectrum of opinions on how economics is supposed to be studied. Besides, the very idea of the methodology and the way it evolved over time gave the opportunity to consider direction in which economic science moves.

Deprived of previously analyzed (and until recently neglected) knowledge of the philosophy of science, and prone to bypassing certain economic facts, economics has lost its own identity finding itself in a situation that could be described as “vague”. Although it succeeds (thanks to the insistence on exactness) to sustain imperial status in relation to other social sciences, economic science almost simultaneously has become just a “trophy” for those disciplines being exact a long time ago. Such a positioning of economics constitutes the initial impulse for writing this paper. Certainly, it is illusory to expect that it is feasible to elaborate in detail everything that touches the above-mentioned issues. That is why the claims of this article are far more modest. The aim is to make a review of relevant literature that offers different views comparing to orthodox one which dominates economic science. Since absolute truth is not guaranteed to any science (complete confidence, as a rule, comes from ignorance), we believe that reference to such standpoints (supporting the thesis that economic science does not develop in a constructive way) is desirable because it can initiate a new debate and possibly produce fresh and/or more appropriate ideas on how economics should be further developed.

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Contribution/ Originality

This study contributes to the existing literature of economic methodology. The paper documents why approaches belonging to new economic methodology are more appropriate for further development of economics.

1. INTRODUCTION

Where does the tendency of economists to replicate the methodology of science come from? At a time when economic science began to gain in importance, natural sciences had already been established and succeeded to provide value-neutral explanations of existed laws in these areas. As economics has aspirations to become a scientific discipline, it is expected to incline to the scientific method which dominated in the natural sciences and to deprive of its own past (almost 150 years of close cooperation with the philosophy). Unconditional acceptance of methodology of unrelated disciplines produced certain, somewhat contradictory consequences for the economics itself.

In order to “sustain” status of science, economics was supposed to escape value judgments, as well as to find an accurate way to express more and more complicated theoretical claims. Arguing that the precision, simplicity, rigor and greater generality of mathematical language were necessary for empirical testing, mainstream (neoclassical) economists have adopted the view that formal (mathematical) proofs were fully sufficient to establish the validity of the theory. This form of economics mathematization, accelerated in the second half of the last century, has led to the fact that economics is dealing exclusively with claims that can be quantified (Dow, 2005).

As a result, scientific norms were replaced by mathematical imperatives and formal evidence rather than empirical one was emphasized. In fact, mathematics is used so that theory can obtain “pseudoscientific facade”¹ which allowed economics to keep the neoclassical core (“glue” holding stability of economic profession - (Eichner, 1983), and at the same time gain scientific status and reproduce itself as a social system without any changes.

Compared with other social sciences in this respect, economics proved itself as “special”: as the time passed by, it underlined less interest in its own history and tradition, as well as intolerance with regard to alternatives (which gave it a larger inner “strength” since heterodoxy has almost been completely marginalized). And yet, in spite of the above deficiencies, it promoted itself to be only true, rigorous social science discipline (Fine, 2003).

2. THE HEGEMONY OF ORTHODOXY

Contradictory character of development trends in economics, as well as their repercussions on relations with other disciplines, initiated (more than four decades ago) discussions that touch the problem of the crisis in economics. The prominent economists of the time (Leontief, 1971; Phelps, 1972; Worswick, 1972) were very dissatisfied with the situation in economics and had expressed doubt about its future development. They asserted that the concept of economics (inhibited with unhistorical approach and abstract formalist methodology) provides just a limited understanding of the complexities of economic behavior (Martinas, 2003).

¹ “Bad science starts with technique and change the problem to fit in it; good science starts from the problem for which it selects the appropriate technique” Edmonds, B., 2003. *Against: A priori theory. For: descriptively adequate computational modeling.* in: Fullbrook, E. (Ed), *The crisis in economics.* London: Routledge. pp: 175-180.

Diverting of economic profession on track of somehow smug and certainly self-important discipline is treated as a consequence of the hegemony and arrogance of neoclassical orthodoxy seeking to limit the domain of "real economic science" on mechanistic inspired "exact approaches" in the theory of equilibrium. The shortcomings of mainstream economics were indicated not only by heterodox theorists, but also by those studied evolution of the discipline and even by proponents of orthodoxy arguing that the results it achieved were weak (according to its own criteria of explanatory and predictive success).

What was wrong with the use of only one methodological approach for the explanation of economic phenomena? Some authors believe that current theoretical models are irrelevant to the real world events, that empirically based models do not predict well, and that those who study the discipline recognize the existence of a significant disparity between the practice of economics and the methodology it used (Lawson, 1997; Lawson, 2003).

First of all, neoclassical economic theory is "embedded" in almost every syllabus and it is expected to be the only theory in economics students should know about (Beath, 2000). As paradigms define the boundaries of acceptable discourse and practice, orthodoxy claims that any other conception does not meet its academic/scientific standards. Putting emphasis on phrases such as "modern mainstream economics", leading universities have long inclined toward teaching "the single standpoint of economics" (Lee, 2007), which is a confirmation of the widespread view that the broader problems (to which heterodox economics points to) are not essential for what students need to master. This style of teaching is called dogmatic (and considered to be more indoctrinated than educated), because it leaves no room for critical thinking. In fact, the restriction of economics only on neoclassical paradigm brought serious constraints since it has limited coexistence of paradigms. Relative to the beginning of the previous century, economics is nowadays far less concerned with its history, the study of relevant social institutions and so on (Galbraith, 2003; Sapir, 2003; Pagano, 2004).

What is in dispute in this situation is the fact that "to be scientific" is attributed only to axiomatic and/or formalized modeling (Lipsey, 2001; Lawson, 2003; Lewis, 2004), which is often used to disguise the lack of any interest in their operational relevance. What was the reaction of mainstream economists to critical remarks they were addressed to? Usually they ignored objections, using casual argument that what was valid and widely accepted should not be changed. Also, orthodoxy more often insists that its original aim is to preserve the scientific validity of economics based on the following principles: a) the precise identification of concepts characterizing economic activity and outlining of the basic hypotheses; b) formulation of the theory in the form of formalized relations between defined concepts and c) verification of such theories by experience (using of statistics' and econometrics' techniques). What are the consequences of applying this "magic recipe" in economic science?

First, since neoclassical microeconomics was accused of a lack of realism, those defending this concept were often resorted to the following argument: if we use more powerful mathematical techniques and theorems, microeconomics would become more realistic. So, it seems that

economics must use math, and it turns out that it might be inadequate but not excessive use. Insistence on logically consistent evidence became the most important thing, i.e. "Propositions are considered to be true because of being consistent to assumptions, instead of being accurate as they are based on real phenomena" (Weintraub, 1998). That is why new theories become either an ancient idea pronounced with a different vocabulary (Guerrien, 2003) or *ad hoc* hypotheses embedded in the neoclassical hard core (Nightingale, 2003). Anyway, they do not offer better predictions or explanations.

Second, the idea of competing theories in such situation becomes completely superfluous especially in the circumstances where inner strengthening of the dominant paradigm is noticeable. In fact, neoclassical economics has drawn power from the idea of elitist status (Samuels, 2003), trying to eliminate anything that would jeopardize it (any disagreement of different schools of economic thought). This resulted in increasing hierarchy and gradual weakening of the heterogeneity of ideas within the discipline itself.

Third, some actions taken to increase the "scientism" were (in certain extent) forced by the complexity of new tendencies in contemporary circumstances. Constantly evolving needs of corporations in terms of highly qualified labor brought a note of commercialization in the "bastions of knowledge" (Hodgson, 2003). Side effect of this process is a relative decrease in the number of students of economics comparing to business schools (Fine, 2002). In order to maintain its position and prestige, and to prove as useful for business, economics naturally reached for the "feathers" of formalization, and the modeling and statistical techniques simply become mandatory as preconditions of entry into the profession (Devine, 2003).

This situation could be detrimental on several grounds: efficiency of economics is limited by the uncritical application of one method (whose dominance is taken "for granted" in professional framework); economics (as a social science with enormous potential for debate on economic policy) is underrated; a deeper understanding of many important aspects of economic life is neglected since competitive research programs are marginalized; economists who do not study economics on "prescribed" way, get no "space" for their research (Lee *et al.*, 2013).

The process of rapid self-renewal, which marginalizes all that cannot be fitted into a mathematical expression, also has spread to other social sciences. This relationship is the result of officially proclaimed aspirations of neoclassical economics to reach some imaginary unity of science. At the same time, it was a way to achieve its imperialist demands and benefits due to infiltration in other areas.

Economic reasoning has begun to be applied to the issues and problems that were previously analyzed using the tools of other social disciplines. Neoclassical economics "snuck" on this way in other areas, expanding its field of interest beyond the traditional boundaries (encompassing issues of family, politics, arts, etc.). Owing to improvement of mathematical skills, economists were encouraged to emphasize elitism of economics and its specificity comparing with other disciplines (Devine, 2003). Therefore, the main flow of information went from economics to other social sciences (economists retained their adorable, though unrealistic, assumptions), and the

"colonization" economics performs over the other disciplines became more pronounced (Fine, 2002).

Economic approach "conquered" areas such as law, political science etc., while being at the same time "protected" from the effects of competing methodologies.² Economics is also trying to strengthen itself by incorporation of certain achievements of other social sciences. That's why the need to question orthodoxy intolerance within the discipline, at least temporarily, was relegated to the background. We got, as a result, the paradoxical consequence that very economics in this way is gradually "losing" its own field of study.

From the other side, there is a growing interest of other social science to economics, initiated in some extent by their ignorance of the matter and technical virtuosity of mainstream economics, and partly by healthy skepticism (and sometimes lack of self-confidence) with respect to their own methods and theories. Thanks to the inferiority of other sciences, economics continues to manifest its imperialist aspirations. Mainstream economics consolidates itself by extending use of more complicated models, but the discipline of economics becomes even less tolerant to alternative conceptions (Stiglitz, 2001; Ackerman, 2003; Dow, 2003; Dow, 2005).

Apparently, the changes in the relationship between economics and other social sciences are of such a kind which enables superiority of economics to last long. On one hand, some sort of "sale" of social sciences is perceptible (Fine, 2002). On the other hand, so-called responsive imperialism (referring to export of ideas from other sciences) is not sufficiently strong (Pagano, 2004). The net effect of these moves is manifested as a consolidation and improvement of economic imperialism, which reduces the chances for critical introspection of economics (Fine, 2002).

3. PLEA FOR MORE PLURALISM IN ECONOMICS

Looking at the current state of economic science, it is easy to notice the dominance of mainstream economics, as well as marginalized position of heterodox concepts (Lee *et al.*, 2013) which are arguments in favor of the existence of methodological monism. Moreover, alternative concepts are rather focused on critique of the mainstream (they show methodological intolerance as well) than on building their own identity. Mentioned facts reinforce previous impression that monism still prevails.

It is precisely the "diagnosis" that prompted demands for broadening and deepening field of economic analysis. This would include knowing the strengths and weaknesses of the main schools in economics and the implementation of a multidisciplinary concept in the study of economic phenomena.

Why is it necessary to insist on a change of present state of economics towards "opening" of economic science to diverse pluralistic views? Economics is a complex discipline, whose research is shaped by the values and social purpose, and its results may be controversial. However, it does

² Such economics has become a sort of Methodist (or methodological) "Church", where competitive alternative methodologies were ejected since their "followers" were not members of the church (Pagano, 2004).

not imply that they should be false or that rival conclusions should be contradictory (Raveaud, 2003; Stretton, 2003). If we could have a “value –free” social science, orthodox and heterodox theories would represent different theoretical explanations of certain economic aspects, and would be evaluated according to the criteria of logical consistency and empirical relevance. Since this is not the case, both of them could seem either conservative (if accept *the status quo*) or progressive (if they have critical point of view). Given the fact that each paradigm is value-burden and that is characterized by partial, and certainly not neutral attitude in analyzing particular economic problem, it would be desirable to present alternative views and/or engage in the synthesis of competing theories.

In addition, the hope that some consistent theory will provide an uniform basis for all economic questions and explanations, so far proved not only to be too optimistic, but rather detrimental to future development of economics. The extreme complexity of the society and its dynamics, poor quality of empirical data and difficulties in experimenting make every attempt to achieve a high level of exactness futile (if someone has broad objectives than construction of logical models).

Therefore, more tolerant and more open dialogue between theories and disciplines is proposed as a way out of present (unenviable) situation. And a release from methodological prescriptions is a key prerequisite for the "birth" of new theories. Essentially, the monistic idea of a best mode (in theory or scientific practice) this way is given up and the plurality of criteria and concepts converging with each other is promoted (Caldwell, 1982).

Of course, the insistence on methodological pluralism is not an argument for using any framework of analysis. Although logical positivism proved to be inadequate, the use of its arguments can be justified in certain circumstances, i.e. we should be able to work within its limits, simultaneously developing methodologies and theories more appropriate to the nature of economics (Norgaard, 1989). Under these conditions, coexisting of different concepts in economics is possible, but none of them could be legitimized as a generally valid (Dow, 2005).

Sheila Dow goes even further, arguing that synthesis of economic paradigms is feasible, although it is not clear what results it could produce. She also urges on the methodological tolerance (so-called moderate pluralism, the middle "path" between monism and postmodern pluralism), i.e. believes that allowing different approaches to mature will be productive under the circumstances of the emergence of new challenges in this area (Dow, 2005). This is similar to Lawson (2003) request for opening up economics, in the sense of combining high standards of research and many different available methods.

Why would pluralism in methodology and economics have to be inevitable? Sheila Dow defends this standpoint out of economic reasons - the benefits of this approach are greater than the costs - namely, when classical logic does not provide answers, it is appropriate to resort to situational logic which requires different methodologies depending on the context of application. Conception of reality - our perception of it, as well as the way of thinking will affect the judgment, argument, opting for a particular methodology, but also the ability to communicate with others.

4. NEW TREND IN METHODOLOGY – CRITICAL REALISM

Advocating for a pluralistic approach does not refer only to “recognizing” the existence of viewpoints conflicting to dominant paradigm in economics, but it insists on establishing appropriate relationships with the philosophy, history and other social sciences. That’s why Lawson supports the idea that economics (being appropriately re-oriented) should represent a part of larger corpus (of social sciences) and not a separate and autonomous discipline (Lawson, 2003).

Indeed, around the middle of the eighties occurred renaissance when it comes to the interaction of philosophy and economics: ethics and ontology return back, and economics is deepening cooperation with the sociology of science (Mirowski, 2002; Weintraub, 2002), the rhetoric of science (McCloskey, 1985; 1998) and etc. The intellectual dynamic in this way regained characteristics of bilateral trade, and methodological debates in economics were diverted.

In fact, due to dissatisfaction with (prescriptive) methodology in the twentieth century (so-called Methodology), which was “wandering” in attempts to find criteria for the evaluation of theories, at the end of the last century, “fresh”, different, descriptive approach to methodology (methodology with a “little m”) appeared (Dow, 2005). In contrast to methodological debates in economics during 70's and 80 's, focused on epistemological issues associated with constructing and evaluating theoretical claims, over 90's we witnessed so-called “ontological reversal" (Lewis, 2004). As a result of this reversal, the concept of critical realism was created. It asserts that the study of socio - economic life will be the most fruitful if economists use the tools that suit the nature of the research material (Lawson, 1997).

The neglect of ontological issues in orthodox concept prompted critical realists to claim that transferring of “resources” from modeling to the heterodox approaches would provide more chances to achieve the goal - generating knowledge about the socio-economic world (Lawson, 1999).

Lawson has raised objections to orthodox economic theory insisting on the fact that valid approach to economics must be increasingly holistic and system-oriented, as opposed to deductive one. The subject of observation - open system (economy) – is managed by different causal mechanisms of variable direction of influence. That’s why economics needs abstractions in the form of simplification, not idealization, and out of this reason the theory must go further and deeper beyond the level of observation (Lawson, 1997).

Critical realism, in fact, suggests that people's knowledge of (non-empirical) social structures (social rules and institutions), provided information and guided their actions. In other words, the research of the socio-economic world should be based on ontological structures and mechanisms which are important for governing changes in actual events (Lewis, 2004).

It is obvious that the Lawson’s concept, which has no roots in the philosophy of science, and does not address the epistemological issues concerning the acceptance or rejection of the theory, differs from others in the field of economic methodology. Lawson's ideas essentially represent an attempt to shift the methodological debate in economics. He criticizes results of the philosophy of positivism, arguing that if the process of learning is seen as monistic there is no place for scientific

or philosophical criticism - *the status quo* is kept, and we have a conservative ideology which serves to rationalize the orthodox practice (Lawson, 1997).

Critical realism is consistent with recent developments in economic methodology and post-positivist philosophy of science, and there are some important features common to this course and other methodological literature:

- Critical realism does not deal with the methodological prescriptions - that scientists should follow the proper rules (as independent of social context or pragmatic issues) in order to produce a legitimate scientific knowledge;
- Critical realism is not *a priori* interested in the philosophy of science; it is trying to be based on both scientific theory and actual practice, and asserts that borrowed philosophical ideas should be reconfigured so that they could meet specific needs of economics.

Out of these reasons, Hands (2004) ranked critical realism to the group of concepts belonging to “new economic methodology”, a collection of approaches that have emerged during last two decades in response to widely observed limitations of positivist approach to the methodology of economics. The positivists used a rational reconstruction of the history of science as a basis for prescriptions about the way social science should be developed. Critical realism diverges from the aforementioned ideas for two reasons: first, although this concept has a normative dimension, it does not offer a set of rules for detecting epistemologically justified knowledge; second, critical realists systematically reconfigure their approach to ensure that it is designed to meet the demands of researchers in the socio – economic field.

On the other hand, it appears that critical realists seek to replace mainstream with some of the alternative conceptions that are committed to adequate social ontology. They come from the ranks of heterodox economists, do not address the question of whether their studies are consistent with economic methodology, and they are rather interested in fundamental transformation than in philosophical “friendly chat” (Hands, 2004).

In fact, if critical realism wants to offer a way to achieve coherence among various heterodox opinions, then there is a chance it becomes the new orthodoxy. The key question is whether heterodoxy aims to become the new orthodoxy like the existing one, or it advocates for substantial “shift” that encourages continuing debate between pluralist views (Hargreaves Heap, 2004).

5. CONCLUSION

Economic science is an exciting field full of diverse puzzles touching a host of unknowns especially about methods able to help economists to learn more. As a result, the economic methodology has the potential of living and interesting topic full of debates on fundamental issues.

There is no consensus in the literature on the usefulness of various methodological discussions conducted with the intention to direct economic science in a proper way. The only thing that is certain and agreed is the existence of a number of limitations theorists are facing with (Hands, 1990; Hands, 2004). They can be summed up as follows: a) economic phenomena are complex and difficult for empirical testing; b) abstract, formalist methodology provides limited understanding of

the abovementioned phenomena; c) inadequate/excessive use of math in economics does not facilitate empirical testing of theories.

All in all, the search for clear methodological rules to guide economic science was assessed as a failure (Hands, 2001). Yet, the renunciation of traditional view on economic methodology does not necessarily mean the rejection of all philosophical ideas of science, but a refusal to accept a situation in which the existence of economic methodology is understood as repackaging of ideas from the philosophy of natural sciences and their application in economics.

The least what is expected from now on is the deepening of those changes brought about by last significant methodological shift, since its impact on the state of economic science is still shy. In this sense, the idea of the necessity of so-called Second Humboldt's Revolution sounds perfectly reasonable (Hodgson, 2003). This involves efforts to stimulate economic methodology to seek inspiration elsewhere - in the sociology of scientific knowledge, rhetoric of science, economic theory itself and so on.

Both the scientific community and economics seem to be willing to accept realism, although it is still quite uncertain in which direction things will go ((Beaulier and Boettke, 2004) However, there are at least two reasons to be optimistic about the return of realism: 1) economists finally express doubts about results achieved by economics so far and again are interested in history and other disciplines; 2) economic profession requires changing of focus - from abstract theorizing to empirical problems.

Potentials of the new economic methodology (involvement of pluralism at different levels of analysis) are undoubtedly necessary for above mentioned moves. On the one hand, this means that methodologists should evaluate different schools, not on the basis of universal criteria of best practice, but by the standards of their methodology. On the other hand, it requires pluralism in research methods – adoption of different methods of analysis, depending on the specifics of the research problem.

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