

On Methodological Pluralism in Economics

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Abstract

Author argues that economics, with extensive use of mathematical formalism and statistical techniques, adopted the methodology of natural sciences in order to appease the misunderstanding, theoretical disagreements and rifts between the economists. Neoclassical school consolidated its monopoly position within economics by mainly dictating strict methodological rules. Author believes that methodological normativism reduces the diversity of methodological approaches within economic community. The article highlights that obsession with mathematical and statistical procedure is a consequence of the reductionist understanding of the world as a closed system and economic process within. Misleading picture of the world leads to one best epistemology, one best theory and one best methodology within economics. Methodological monism precludes neoclassical economics from efficiently resolving actual problems and offering practical advice. In this paper author shows that methodological pluralism leads economic science into self-reflexive system with less methodological inertness. Author emphasises the importance of freedom in forming limited and finite range of methodological approaches. Each of them, underlying the particular understanding of the world, cannot persist in the science market without respecting rigorous standards and without adequate demand for its findings from the aspect of resolving actual dilemmas of our time.

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1. Introduction

Economics investigate the functioning of the economy and economic methodology¹ studies the working of economics as science. Economic methodology investigates the nature of assumptions, forms of explanation and specifies criteria based on which we can evaluate economic theories (Boumans, Davis, 2010; Pheby, 1988). I believe that most economists have not been current with the development in the field of economic methodology. Emergence of economic methodology as a separate field within economics encouraged economists to distance themselves from methodologist (Davis, 2003; Dalen, 2007). The changing nature of economics, which leads to a constant state of change and development in economic methodology, additionally drifted both clubs apart. And lastly, theory of science is indispensable for the proper understanding of the economic methodology since the latter is strongly interwoven with former (Burell, Morgan, 1979; Boumans, Davis, 2010).

Economists use all kinds of methodologies to help them comprehend the economic reality. Methodology of the political economists were for example quite different from marginalist one. Political economists believed that socioeconomic reality was too complex to allow empirical investigation in order to create coherent picture of the world. Consequently economic theory boasted

¹ Economic methodology should be distinguished from economic method, though the two terms are often used interchangeably. By contrast economic method attempts to provide answers how questions and tools are used by economists. For example, maximization assumption is tool that is used in economics to explain behaviour.

rich and often controversial views with opposing policy orientations. Marginalists brought revolution into methodology, since economists wanted to obtain less ambiguous results. Economists start to construct models, by using mathematics and statistics, to create a picture of reality.

The economist changed from political economist who drew his expertise in institutional, philosophical and historical context to instrument maker who is an expert in statistic and econometric techniques. Instead of being actively engaged in public discussions economist become a scientist who writes mathematical articles for important, but little read journals. Actual practices of economists changed over time to such an extent they also altered their self-perception as economists. Economists begin to call themselves just “economists”, rather than “political economists”.

The main goal of the article is to point out that methodological approach of the dominant school in economics is consequence of a misleading picture of the real world. Understanding of economy as a closed system leads to one best (positivistic) epistemology, one best (neoclassical) theory and one best (monist) methodology. Subordination to the mainstream school crowds out alternative methodological approaches and leads to the inability of economics to deal with real life problems. In this paper we combine ontological and epistemological issues with science market as the most important selection mechanism in order to determine which methodological approach would be the most appropriate to suit the nature of the problem under investigation. While there exists an extensive literature on the particular issues, explain further on, to my knowledge there were no attempts to tackle these three issues from complementarity point of view (ontology-epistemology- market). The aim of the article is to fill this gap.

I shall argue in the article that neoclassical school consolidated its position within economics mainly by strictly dictating methodological rules in order to appease the dissent and misunderstanding between economists (1). I seek to point out that methodological monism is a consequence of a reductionist understanding of the world as a closed system and economic processes within (2). I believe that methodological monism crowds out alternative approaches and limits the ability of economics to cope with real life problems (3). I strongly point the importance of education for economist and freedom in forming alternative methodological approaches (4). I shall argue that only in the science market the intellectual superiority of particular methodology in resolving actual dilemmas of our time can be proven by (5).

The article is structured as follows. In section two, methodological normativism of the neoclassical school is presented. Section three points out desire for universal application of such methodology. The aim of section four is to present methodological monism as a result of understanding of economy as closed system which precludes proper understanding of reality and policy making. Section five proceeds with importance of methodological pluralism by allowing range of different methodologies. In section six the importance of freedom in forging new methodological approaches is pointed out. The next section points out methodology standards and science market as selection criteria. Section seven concludes.

2. Neoclassical paradigm and methodological normativism

Paradigm is understood as a set of generally adopted scientific achievements which a scientist can employ to resolve the problems at hand without having to re-establish or clarify the basic assumptions, concepts and methods (Kuhn, 1998). Paradigm members share the system of education that is common to all members of the particular group in a given time. Paradigm cannot exist without consent on

fundamental theoretical and methodological issues. Without such consent, there can only be a multitude of candidates for it.

Economics has strongly favoured internal pluralism from its very beginnings, leading to rich and often controversial history of opposing theoretical and policy advice orientations. In addition to periods when the flow of ideas in economics was not as consistent, there were also periods of strong consent and unity. Economic discipline reached the level of paradigm in certain respective periods of its development, characterized by a high level of internal coherence. We can define four such paradigmatic periods in the history of economic thought: Classical political economy (1776-1890), Marshallian economics (1890-1936), Keynesian economics (1936-1970s) and the New-classical economics (1970s-date). These periods are often identified with publications of the founders of each approach: “The Wealth of Nations” by Adam Smith (1776), “Principles of Economics” by Alfred Marshall (1890), “The General Theory” by John Maynard Keynes (1936) and collection of papers by Thomas Sargent and Robert Lucas published as “Rational Expectations and Econometric Practise” (1981).

Between four paradigmatic periods we have Marginalist, Keynesian and Rational expectations “scientific revolution”. When one paradigm replaces the other one, there is a change in assumptions, methods and concepts (Boumans, Davis, 2010; Kuhn, 1998). For example, the earlier focus on growth, distribution and classes in classical political economy was replaced by marginalist reasoning, rational decision making, price determination and workings of the market. Economic theory developed a fairly straightforward and closed system based on rationality, equilibrium and methodological individualism. The starting point is the individual's rationality from which equilibrium is inferred through deductive logic.

New paradigms frequently do not do away with any link to the old ones as they at least adopt the facts that were explained in a satisfactory manner by the previous ones (Blaug, 1992; Kuhn, 1998). For example, Paul Samuelson integrated Marshall's microeconomics and Keynes's macroeconomics in the 20th century, by forming the neoclassical synthesis. In the field of theory, neoclassical synthesis is not fully consistent as actually combines the Marshall's ideas of equilibrium with the Keynes's ideas of disequilibrium. There are also differences from a methodology standpoint. Marginalists pertain to use of mathematical methods that allowed logical analysis. On the other side Keynes produced plausible stories rather than testable hypothesis and econometric models. Keynes reacted with frontal attack on mathematical-statistical approach (Keynes vs. Tinbergen).

Johnson (1983), Ward (1972) and Dalen (2007) maintain that neoclassical school strongly monopolized the field of science in economics. Neoclassical economics acts as a unifying nexus for newer research approaches in economics such as game theory, new-institutional economics, new-behavioral economics and much of experimental economics. In spite of greater diversity since 1950 this is understood as a continuation of a mainstream. Neoclassical school also succeeded in terms of publication in scholarly journals and through the influence of economists on adoption of key decisions in a society. The unity of introductory economics textbooks and articles in reputable journals illustrate high level of homogeneity. Many economists also adopt the neoclassical school because this makes it easier for them to have their work published. Therefore, the domination of neoclassical paradigm is often asserted in the economic scientific community.

Monopoly of the neoclassical paradigm does not automatically imply absence of other theoretical views within economics. Today's consent within economics is largely based on a political process of

power by rendering individual schools subordinate to the mainstream current. Neoclassical economists often treated other approaches in economics as inferior and unscientific. The main trouble with the dominant paradigm is that the diversity of views is at risk as the standard view – whether it is neoclassical or not – crowds out alternative ones (Dalen, 2007; Kuhn, 1998). Within the economic community relatively separate systems of particular paradigms or core schools could be said to exist (Dow, 2008). In addition to the dominant or mainstream neoclassical school there are also heterodox or dissident types or views as Institutional, Austrian, Radical political economy school and so on... Theoretical pluralism means variety of theories which provide different analysis of the real world, understanding of economy, policies and predicted outcomes.

By assuming, there are in addition to the neoclassical school also other schools then the question of comparison arises. How to choose among them? Criteria as simplicity, falsifiability and prediction are often used for choosing among theories within the same paradigm. However, mutual comparison of paradigms is not possible as paradigms are more or less mutually exclusive. Paradigms are incommensurable because they rely on different set of assumptions. Kuhn (1998) believes that one paradigm cannot be the basis for evaluation of another, because there is no neutral theoretical field for their comparison. With incommensurability, there is no clear basis on which to choose one theory over another. It is namely difficult to judge why theoretical achievement of a neoclassical economist is any better than the scientific contribution of an institutionalist.

The solution seems to be in methodology. In certain period economists, due to ever more frequent theoretical disagreements and rifts, turned to methodology. If we can obtain the “right” methodology then economics is more likely to arrive at results that are less ambiguous (Pheby, 1988). Shaping a more uniform methodology appeared sensible, if not requisite at the break of the 19th century, as it contributed to appease the dissent and misunderstanding between political economists. In terms of methodology, the word "marginalist revolution" pertains to the heavily use of mathematical methods that allowed logical analysis and departure from more descriptive approach of the classical political economy in the 18th and 19th century. Since the fundamental goal of economic theory was to develop more objective and exact science, physics was taken as an ideal by the economists.

Especially in the last paradigmatic period economics reached a high level of methodological unity. Neoclassical school has consolidated its monopoly position within economics mainly by strictly dictating methodological rules (methodological normativism). Most economists accept these rules regardless of whether they belong to the mainstream camp or not (McCloskey, 1983). It may be viewed as a paradox that the ideas of the mainstream school, unacceptable to many from the theoretical content, were quite acceptable from the aspect of methodology. McCloskey (1983) defines the predominating methodological approach in modern economic theory as a combination of logical positivism, deductive method, instrumentalism and operationalism.

Due to the need for objectification of knowledge, the economy found itself in the grip of scientific deductivism. Logical conclusions were derived from axioms (rationality) by employing mathematical methodology to maintain consistency. Positivism stresses objectification of knowledge and equated economics with classical physics.

Instrumentalist stresses that economic theory must be verified by the forecasts (Friedman, 1984). The goal is to submit hypotheses that can withstand the harshest possible attempts of rejection. The central test is comparison between forecast and experience; based on this comparison, a theory is either

adopted or rejected. Models are not representations of reality but instruments that predict well or not. Most instrumentalists employ econometric techniques.

Samuelson's operationalism puts forward the notion that it is very difficult to foresee the changes in response variables caused by the effects of the explanatory variables; therefore, econometrics should provide the answer regarding the algebraic sign for each parameter (Caldwell, 1984). A theory is not in the operational sense, if the algebraic signs or parameters are not specified. Operationalization links abstract models to experimental measurements (Blaug, 1992).

Neoclassical methodology is relying on deductive reasoning, induction and bold testing of hypotheses by checking against empirical facts. Such methodology is a consequence of the inconsistency or split between Marshall's microeconomics and Keynes's macroeconomics. Microeconomics is from methodological standpoint essentially deductive, whilst macroeconomics is more inductively inclined (Pheby, 1988). Deductive logic is largely identified with logic, use of mathematics and axioms as rationality for which no proof is required. Inductivism emphasises observation, empirical work and testing of hypothesis. On one side we have an excessive mathematization in microeconomics (theory without measurement) and on the other side instrumentalism with building of the large scale econometric models in macroeconomics, concentrating more on technical matters than on theoretical considerations (measurement without theory). Integration of mathematical economic theory with statistical procedures is the way for economic discipline to prove its scientific character. Such methodological approach is an ideal for the majority of contemporary economists.

3. Methodological monism and economics as queen of social science

A methodological "revolution" started in 1871 with the breakthrough of the marginalists school (Jevons, Menger, Walras) no longer studied the social system as a whole, but rather diverted their attention to the relation of an individual to a good and to allocation of factors of production through the market. Reasons for moving from more descriptive approach in the 18th and 19th century of classical political economy period to more formal modelling that strongly dominated after 1950s onwards were frequent disagreements in theory and lack of objectivity. The arrival of computer additionally stimulated development of economics as a "box of instruments or tools", with focus more and more on mathematical methods and statistical-econometric tools (Groenewegen, 2007).

With extensive use of mathematical formalism and statistical techniques economics adopted the methodology of natural sciences (methodological monism) (Blaug, 1992; Caldwell, 1984; Hassard, 1993). Rodrik (2015), Dow (2007), Worswick (1972) and Pheby (1988) go so far as to submit that economics has become indiscernible from mathematics, a discipline that represents the apex of scientific purity. The key ingredients of mainstream methodology are logical positivism, scientific deductivism and empirical testing. Logical conclusions are achieved by employing mathematical methodology to maintain consistency. Theory is deductively built on the axioms of rational behaviour and empirical work is based on testing as the main vehicles to prove scientific character.

High level of methodological unity within economics also affects the formation of methodological approaches in other social sciences. Kuhn (1998) conceives of normal science as science within a paradigm and a tripartite structure: significant facts, matches of facts with theory, and proliferation of paradigm to other fields. If the purpose of normal science is not novelty, then the only sensible direction is research in other fields, which is also characteristic of the neoclassical paradigm. Neoclassical theory argues that rationality can be applied to all fields of human life where scarce

resources and problems of choice appear. Becker (1974, 1976) advocates application of rationality to the study of family, fertility, human capital, and criminal. Radnitzky and Bernholz (1987) champion economic analysis of history, democracy and autocracy. Stigler (1984) pointed out economic analysis of politics, sociological structures, history and law. Application of rationality to new fields has led many to recognize in economics the universal science (Eichner, 1983; Fukuyama, 1995). It has been also dubbed the "queen" of social sciences.

Economic imperialism of the neoclassical school is manifest internally within the economic community and externally in its drive to conquer other social sciences (Johnson, 1983; Ward, 1972; Dalen, 2007; Lazear, 2000; Mäki, 2008). With its methodological apparatus neoclassical economics reduces the diversity of methodological approaches and opinions within economic theory. On the other hand its uncompromising forays into other fields impedes it a better cooperation with other scientific communities. Stigler (1984) believes that the push of economics to other areas was a violent gesture as economics received no "invitation".

I believe that rigorous methodology renders both, internal pluralism within economic scientific community and external pluralism in the sense of more intense cooperation with other social sciences. I am convinced that failure to better cooperate within its own and with other scientific disciplines renders the neoclassical school for a profound understanding of complex problems. Mainstream economic theory lost the capacity of an anthropocentric view of the world and as a result it falls short in its attempts to respond to the contemporary challenges and policy advices. Lack of realism is addressed in more details below.

4. Economy as a closed system and lack of realism

Particular understanding of the world and economic process within leads to decision about the used methodology. The nature of the subject determines the way we make knowledge about it. In ontological way this refers to whether reality consists of many substances or one. Methodology is a consequence and a conscious choice derived from a particular understanding of the nature of the real world (Burrell, Morgan, 1979; Dow, 2007; Lawson, 1997).

I believe that methodological monism of the mainstream economics is a consequence of a misleading picture of the world. Economic models generally portrayed economy as a closed system by sharing the same causal structure of the world (Turner, Pearce, Bateman, 1994; Rodrik, 2015; Mäki, 2018; Lawson, 2017). In the closed system all relevant variables can be identified in model and relationships between variables are knowable and unchanging. Since the real world is understood as one substance and closed system than only one methodological approach is appropriate. In this sense neoclassical methodological approach is reductionist. It fails to recognise that economy is only one part of the whole environment. Such a methodological approach has restricted the ability of mainstream economics to deal with many challenges. Many authors point out this deficiency of the neoclassical approach:

- Mises (1962), Goodwin (2008), Leontief (1971) and Lawson (1997, 2017) maintain that the main problem of neoclassical economics is in its uncritical and a-priori use of models which cause it to neglect reality.
- Pheby (1988) believes that neoclassical methodology is becoming a purpose unto itself as it mostly deals with its own deductive logic, rationality and unrealistic models.

- Blaug (1992) asserts that neoclassical economics has relatively weak forecasting power and that has failed most conspicuously when attempting to provide practical advice.
- Coase (1998) characterised mainstream economics as “blackboard economics” with hardly any relation to reality since something cannot be true just because you write (and prove) it.
- Mayhew (2008) points out that orthodox economics is inadequate to account for the lives of the vast majority of people.
- Blinder (2010), Helbing&Baliotti (2010), Kowalski&Shachmurove (2011), Gunn (2011) and Maas (2014) pointed out that since 2007 the global financial and economic crisis has significantly intensified controversy about the status of mainstream economics.

Summing up the findings of the said authors, it could be maintained that obsession with rigorous approaches preclude neoclassical economics from efficiently resolving certain problems and offering practical policy advice. Monist methodology, as a consequence of the reductionist understanding of the world as a closed system, brought together economists and reconciled to a certain point differences in their opinions. However, I believe that such a methodological approach has become the paramount source of inflexibility and obstacle for deeper understanding of reality and of solving complex problems.

5. Economy as an open system and pluralism in education

Methodological monism of the mainstream economics is a consequence of looking at economy as a closed system. Socio-economic reality is just not like that, since it is an open system (Lawson, 1997, 2017). In economy as an open system, which is able to function due to the support of its ecological foundations, there is no one best way of theorizing about. Economy extracts, process from and discard large amounts of physical materials into environment. Thus, in the open system external boundaries of the system are fluid and not knowable. Relationships between variables cannot be identified in advance since “*ceteris paribus*” does not apply in the real world.

Since the nature of social reality is understood as plural so can knowledge system be understood as a structured plurality, allowing a range of methodologies (Dow, 2007; Mäki, 2018, Negru, 2017). The diversity of methodologies in economics is the necessary counterpart to the plurality of the social world. Methodological pluralism is thus a conscious choice which includes a number of methods derived from particular understanding of the real world. Methodologies used by researchers should be tailored to suit the nature of the problem under examination (Rodrik, 2015; Lawson, 1997, 2017). Thus, several methodological approaches can coexists together in economics and this is in stark opposition to methodological monism defined by universal regularities. Different economic schools of thought, such as Austrians or Marxian economics, have developed different methodologies to help them comprehend the plural economic reality. Their methodologies focus on different types of models and levels of analysis (e.g. individual, class, institution). Methodological pluralism helps us be aware which methodology is appropriate for the particular subject-matter under investigation and to understand how far a chosen methodology is till preferable.

The question of methodological pluralism is in relation to education of economists as well (Raveaud, 2010; Dow, 2007; Dalen, 2007). Methodological awareness is a consequence of how economics is taught in the schools. Economic education is mainly dominated by the monist methodology and majority of undergraduate students are never exposed to methodological perspectives beyond mainstream. The pledge for a change in curriculum and education system of economists has been addressed on one hand by scholars (Komlos, 2019; Barone, 1991; Goodvin, 2008; Negru, 2017) and

on the other hand by students (Post-autistic movement, Rethinking Economics, Cambridge Society for Economic Pluralism). Both explicitly ask for methodological (and theoretical) pluralism in economics in order to obtain the anthropocentric view of the world. After Big Recession (2008) very little has changed in the practical realm, although the literature on pluralism in education has mushroomed.

I am deeply convinced that in the curriculum more attention should be given to different methodologies. Understanding of economy demands not only technical expertise, empirical work and testing, but also solid understanding of history of economic thought, economic history and economic philosophy. Students (and later policy makers) should be methodologically aware of different approaches, their limitations, sensitivity on a changing reality and the opportunity costs of alternative approaches. Methodological pluralism enables students in economics to get the highest forms of knowledge and simultaneously prevents the mainstream from taking over the spirit of the programme and education.

6. Freedom leads to methodological pluralism

Economists have forgotten that, as witnessed by the history of science, major leaps or scientific revolutions were only made when certain methodological rules were abandoned and others allowed. I believe that the importance of freedom in forming methodologies should be particularly emphasized in order to departure from methodological monism of the neoclassical school.

Economics adopted the methods of positivism in order to free itself from the medieval dogma, superstition, and everyday experience. Economist facing the urge to publish and the desire for recognition is compelled to communicate predominantly within its own paradigm or academic community. Institutional environment determines and restricts his research work. In turn scientists provide a feedback to further consolidate the position of a (neoclassical) paradigm. This might lead to ideological conduct of economist who defends a particular theory longer than necessary because of his convictions. By employing mathematical formalism and model approach, economics rules out any possibility of "exceedingly free" formation of methodological approaches. Commitment and silent consensus in the community are key characteristics of any paradigm. Exclusive membership in neoclassical one leads to lack of self-reflection, inability to express dissent and precludes freedom of research. Many authors stress deficiency of neoclassical methodology from the aspect of freedom.

McCloskey (1983) maintains that neoclassical methodology leads scientists into "intellectual imbecility". Eichner (1983) and Calas&Smircich (1999) contend that neoclassical school forms a scientific language that curbs the diversity of opinion and forces scientists into "intellectual slavery". Caldwell (1984) and Ovsenik (1999) contend that neoclassical school cannot and should not monopolize the field of science with its normativism. Kristensen (2001) believes that through the dominance of the neoclassical paradigm scientists were deprived of their freedom to a point where they have become "free slaves".

I believe that understanding of complex problems requires a broader insight based on different methodological approaches. Only more freedom leads to methodological pluralism, meaning there is more than one best methodology. Without freedom there could be no scientific progress. Freedom to form one's own methodological approach is at the very "heart of science". All social scientists, economists included, approach the study of particular phenomena (in)directly, (un)willingly, or (un)knowingly through methodological approaches that are deeply rooted in the theory of science.

Methodology issues cannot be understood without deeper insight into the theory of science which is indispensable for understanding of the former (Burrell, Morgan, 1979; Boumans, Davis, 2010). Not surprisingly, the neoclassical theory rejects any epistemological questions because this debate could seriously threaten its imperial position (Eichner, 1983; Dow, 2007).

I believe that the economic scientific discipline, by promoting positivism and membership within the neoclassical paradigm, strongly underestimated the importance of freedom in forming diverse methodological approaches. Kuhn allows greater plurality in economics than positivism, as there can be a greater number of competitive approaches. Nevertheless, I contend that the attention being paid to the importance of freedom in the formation of methodological approaches is still inadequate, due to commitment and silent consensus within the mainstream paradigm. On the other hand, Feyerabend's pluralism certainly allows the most intellectually free model of understanding of knowledge at the epistemological level. Feyerabend's (1999) slogan "anything goes" means that scientist is free to form such methodology approach that will, in one's own belief, be best suited for correct understanding of the particular problem. Freedom is important in formation of various methodological approaches however the choice of the best one should still be resolved.

7. Problem of choice and methodological standards in the science market

We need stronger emphasis on freedom to form appropriate methodological approaches in economics. However, methodological pluralism is criticized extensively by many authors. Parker (1994) maintains that it is difficult to agree with the "anything goes" principle since it may lead to intellectual nihilism. Hassard (1993), Calas&Smircich (1999) and McKinley&Mone (1999) argue that it is impossible to have all the answers as claimed by monism however this also does not require a poorly defined pluralism. Authors point out that deviation in the direction of pluralism means less clarity and more complexity. The most common reproof is that it leads to relativism.

The problem of choice of the most appropriate methodological approach also exists. Methodological pluralism means a "range of toolbox" out of which a proper one should be selected. I believe that, in the absence of any absolute agreed criteria upon carrying research in economics, we should focus on anti-mismatch stand, methodological standards and science market with supply of different methodological approaches and demand for their findings.

Economists can use all kinds of methodologies to help them comprehend the economic reality. I strongly believe that different methodological approaches should live together under the umbrella of economics, each of them underlying the particular understanding of the complex world. For example, institutionalist could opt and accept mathematics and econometrics as tools if could be justified by the subject under investigation. Methodological pluralism helps us be aware which methodology is appropriate for the particular problem in order to avoid using the wrong tool. However, economists do not possess capacity or ability to choose proper approach since they are constrained by time, energy and possessed knowledge (Mäki, 2018). I believe rigorous standards are needed in assessing our methodological work in order not to come at the cost of a less rigorous type of analysis and to help us avoid the mismatch problem.

I believe we should strive for limited and finite range of methodological approaches for particular subject-matter under investigation with constructive communication among them. Methodology involves besides methods of argumentation also communication by which economist seeks to persuade one another (McCloskey, 1983). Methodological pluralism, as a rhetorical practise, should

foster proliferation of mutually competitive approaches in a science market. I believe that criteria cannot be based on exclusion of other methodological approaches by monism but only in struggle and selection of the best one. In competitive clashes methodologies progress both internally and relative to others by gaining importance and significance. It is a paradox that economic scientific community with a strong emphasis on market, as the most important selection mechanism, has failed to consider such mechanism in the field of ideas (Pfeffer, 1995; Kešeljević, 2014). Especially for economists, it would make sense to use (science) market as the key criterion of choice.

It is difficult to establish whether neoclassical methodological approach has any advantage over the institutionalists one in case when both of them fulfil certain standards. We do not have an absolute set of appraisal criteria by which to choose the best methodology. Pluralism means that no methodology could be said to be the best. I am also convinced that no methodological platform can persist in the long run without adequate demand in the professional and lay public for its findings. Science market does not depend only on the supply side, where we are dealing with different methodological approaches, but also on the demand for their findings. Demand side shows how successful a particular methodology is in resolving actual dilemmas and needs of our time.

I am deeply convinced that economic science must become an attractor of different methodological approaches. In education of today's economists more attention should be given to different methodological approaches. Methodological awareness enables economists to decide which methodologies are the most appropriate for the particular problem. However, only in the science market with rigorous standards can the intellectual superiority or inferiority of particular methodological approach be proven. The most appropriate approach in economics should be chosen through the struggle for customers in the science market. Science market as final mechanism of selection should reveal which methodological approach in economics has competitive advantages over others from the aspect of resolving problems and dilemmas of our time.

8. Conclusion

Economic theory has a rich and often controversial history of opposing theoretical orientations from its very beginnings. Variety of theories understands economy differently, suggest different policies and predict different outcomes. Due to incommensurability problem, there is no clear basis on which to choose one theory over another. Due to ever more frequent theoretical disagreements the economists turned to methodology in search of a solution.

Integration of mathematical economic theory with statistical procedures is the way in economics to prove its scientific character, similar as those in natural sciences. Such a methodological approach has become an ideal for the majority of contemporary economists. By strictly dictating methodological rules neoclassical school consolidated its monopoly position within economics. Consent within economics is based on a political process of power by rendering individual schools subordinate to the mainstream current. Rigorous neoclassical methodology renders both, internal pluralism within its own scientific community and external in the sense of more intense cooperation with other scientific disciplines. Neoclassical methodological approach is a consequence of the reductionist understanding of the world as a closed system and economic process within. Economics lost the capacity of an anthropocentric view of the world. Obsession with methodology precludes neoclassical economics from efficiently resolving problems and offering practical advice.

I strongly believe that, in the education of today's economists, more attention should be given to diverse methodologies. Understanding economy as an open system leads to methodological pluralism, as a conscious choice, and a finite number of methods can be derived from it. I believe that freedom in forming proper methodological approach is at the very heart of every science since without freedom there could be no scientific progress.

Economics must become an open society, free of methodological normativism and monism. We should strive for limited and finite range of methodological approaches, each of them underlying the particular understanding of the world, with meaningful standards in assessing methodology work. Only a market for science as a mechanism of selection can be a final criterion of which methodology approach has, in the spirit of Ricardo, a competitive edge over the others. One methodology has to refute a competing one in order to be able to assert its own through persuasion of potential buyers from the aspect of solving problems. Especially for economists it would make sense to use market as the key criterion of choice since no approach can persist in the long run without adequate demand for its findings. Economics would only in this case become loyal to its own fundamental ideas and principles.

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