

Microeconomics and Methodology: A New Heterodox Perspective

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“This leaves an important matter undiscussed. The reason for not discussing it is that I have nothing to say. Certainly macroeconomics serves as a good “simple” model, which many economists feel is what we need...But how one is to give it a theoretical foundation I do not know”.

It is necessary that Economics be engaged into a new paradigm (Eichner, 1978). Most textbooks are based on a biased perspective of Economics: the Neoclassical Perspective. It is necessary to offer a more holistic and methodological viewpoint, which would lead to a more critical and healthy state of knowledge in Economics⁴. Thus, the goal of this paper is to describe the shaky foundations -both methodological and theoretical- of the modern theory of Microeconomics

Methodology is amongst other things an enquiry about the validity of the assumptions in which a given science is based. On the other hand, the falsification of the application issues of any body of science allows the assessment of relevant contributions in a given field. These purposes are achieved by means of the description of the relevant Scientific Research Programmes (SRPs). Hence, the description of useful concepts in Philosophy of Science and SRPs is conducted in Section I.

This is only an introductory -interdisciplinary- step. A methodological analysis of SRPs is undertaken in Section II for the case of the main assumptions and results of Microeconomics, by analysing such assumptions as perfect competition and rationality, in the footsteps of Blaug (1980) in terms of its practical implications. Specifically, a methodological analysis of the SRPs of the main orthodox schools of Microeconomics: the Classical and the Neoclassical. In the process, they are contrasted with some insights of the heterodox viewpoint of Microeconomics.

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³ “Keynesian Economics and General Equilibrium Theory: Reflections on Some Current Debates”, pp. 363-65.

⁴ As Pressman & Holt (2003) state, most programmes in bachelors’ degree teach that the market is the most efficient organisational form. This may generate confusion in students.

Finally, the validity of Orthodox Microeconomics is further tested in Section III by assessing the relevance of the links between Microeconomics and Macroeconomics from a heterodox perspective. The purpose is to answer the question whether macroeconomic analysis must necessarily be based on microeconomic foundations, as most orthodox economists believe. This analysis also compares the empirical relevance of Microeconomics against that of Macroeconomics.

Conclusions about the scientific status of Microeconomics drawn from Sections II and III as well as references close this paper.

Keywords: Methodology, Theory of Knowledge, Microeconomics, Paradigms, Scientific Research Programmes, assumptions.

I. Basic concepts of Philosophy of Science

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This paper links philosophical and economic issues in order to discuss the methodology of orthodox microeconomics from a heterodox viewpoint.

Knowledge is the awareness of something new about the causes, interrelations and consequences of a previously unknown phenomenon. The forms of knowledge are oral tradition, beliefs, faith or superstition, practical experience and science. The latter is the supreme form of knowledge, as it is clear, objective, rational, real, systematic and communicable about a field, which has been empirically tested vis-à-vis reality, and hence possesses a dynamic character.

The goals of science are both explanation and prediction (Machlup, 1978). However, science departs from description of facts and ends with the suggestion of guidelines. The instrument of science is the scientific method, which is embedded in all stages of scientific research (De Gortari, 1978). These stages are:

Identification of the field and the problem ⇒ Description ⇒ Laws, Theories ⇒ Hypotheses ⇒ Empirical test ⇒ Assessment ⇒ Conclusions ⇒ Suggestions for policy

Theories are comprised by laws, concepts, definitions, hypotheses, assumptions and axioms, amongst other elements (De Gortari, 1978). Hypotheses are low-reach theories,

which guide research (Tamayo, 1997) and link the theoretical framework to its empirical test. They are full-of-sense questions or proposals. Laws describe the interrelations within and among phenomena.

Assumptions are intellectual cores lacking initial test and hence they are relevant for Microeconomics, as it will be stated later. Both Apriorism and Ultraempiricism are epistemological extreme strands which allow the understanding of the wide spectrum covered by Philosophy of Science. According to Apriorism, both science and the formulation of hypotheses are solely based on mental construction. In other words, the abstraction of processes is the most relevant constituent of knowledge. According to Ultraempiricism, both the hypotheses and problem identification depart from observation. In other words, operational concepts are the most relevant constituent of knowledge.

The distinction between these two approaches will allow the methodological assessment of the perspectives from which hypothesis formulation arises in the cases of both Classical and Neoclassical Microeconomics.

Methodology as a criterion of scientificness

Methodology analyses the source and validity of scientific knowledge, hence it is a constituent of Philosophy of Science, as it deals with the achievement of knowledge. Methodology is the 'study of logical principles useful for determining if certain proposals are accepted or rejected as valid constituents of the structure of scientific knowledge' (Machlup, 1978, p. 490). According to Popper (1974), Methodology is the theory about the rules of scientific knowledge. Thus, Methodology also allows the assessment of the extent of progress of theories.

Verificationism is the main criterion for the assessment of the consistency between a theory and reality, which in turn determines the scientific status of theories. There are however, dissenting perspectives. According to Blaug (2002, p. 349), 'The main problem of Popper in *The Logic of Scientific Discovery* was to find a demarcation logical rule for distinguishing between science and non-science'. Popper states that Verification is an incomplete and inconclusive criterion since it leaves open a wide spectrum of possibilities (Popper, 1965). Hence he replaces it for **Falsificationism**, in

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which a theory must be continuously tested, and discarded -at least some of its parts- in the event of not being able to stand refutations.

Hence, Falsificationism may be the main determinant of progress in science. In this context, according to Popper (1974) a theory may be rejected in terms of many factors, but especially in terms of its practical results, which is the pragmatic criterion par excellence. The next step is choosing a functional criterion for assessing the validity of orthodox microeconomic theories, regarding their core assumptions and their relation with Macroeconomics.

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Lakatos and Scientific Research Programmes

If theories are to be assessed in terms of Falsificationism, their structure must be firstly defined. The underlying organising principle of theories is interrelated systems. For this purpose, Thomas Kuhn (1965) suggests the methodology of Paradigms, whereas Imre Lakatos (1963-64; 1974) suggests that of Scientific Research Programmes (SRPs).

These two concepts analyse individual theories and contrast interrelated systems of theories, which overcoming brings about the use of better systems of theories, thereby generating scientific progress. Paradigms are dramatic changes in current scientific thought in terms of problems and their solutions. In contrast SRPs analyse theories in terms of its gradual advance. As Falsificationism requires continuity in refutations as the leading factor for the achievement of scientific knowledge, the Lakatosian methodology is chosen here for the purposes of this paper. SRPs are also an explicit criterion for the comparison of rival theories due to the taxonomy and extent of detail of its structure, which is also necessary for the present purposes.

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According to Lakatos (Lakatos, 1974), SRPs are comprised by 3 key elements, ranked according to its level of depth. The first constituent is the Core or central hypothesis, which is no subject to Falsificationism by methodological principle. The second one is Positive or Negative Heuristics, which is a series of guidelines for the explanation and implementation of theories and is used throughout the research. The third constituent is the Protective Belt, which is comprised by the auxiliary assumptions of theories, which vary with respect to either time or place and are oftentimes expressed as parameters.

SRPs are a dynamic assessment criterion of scientific evolutions and revolutions. There are both progressive and degenerative SRPs according to the success of replacement of its constituents, particularly of the Core, that is they must be chosen if its new contributions contain new either theoretical or empirical prescriptions. The replacement of the core of a theory means that the latter is not useful anymore, except for historical analysis. The replacement of Heuristics means that the essence of that theory has not been modified at all, although the theory itself may reappear under explanatory disguise. Finally, the replacement of a Protective Belt only widens the extent of application of that theory, but may serve as an artificial defence of a given theory.

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The Internal History of Science is the rational reconstruction of the meaning of the interconnected theories which comprise a given SRP. The External History of Science is the description of empirical facts within the field of research of a given science. Both epistemological issues, consistency and refutation, are the main criteria for accepting a SRP (Blaug, 1980).

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If differences between 2 schools arise only from their cores, both schools are independent SRPs. If the differentiation only arises from specific parts of their cores, both schools are independent subSRPs stemming from an original PIC. If deviations from an original SRP on the part of any school do not stem from their cores, these schools are only Scientific Movements away from the original SRP. In this case, the original SRP is still alive: Nevertheless, it does not necessarily mean that the alive SRP predicts or explains either novel or even current facts.

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Does orthodox Microeconomics predict novel facts in the XXI Century? The scientific status of current Microeconomics is immediately assessed by using the concept of Internal History of Science, after defining Methodology and its relation to Economics.

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Methodology and Economics

According to John Neville Keynes there are 3 types of Science: positive -about what is; normative -about what it should be; and an art or set of techniques directed to the

achievement of and end (J. N. Keynes, 1917). This distinction will be very helpful in the scientific assessment of disciplines.

Methodology is of practical interest for economists, since beauty in theoretical frameworks must be a luxury and what matters is their survival after their contrastation to reality. In Economics the introductor of Falsificationism was Hutchinson in the 1930s (Blaug, 1980), whereas Latsis applied SRPs to Economics for the first time in the 1970s, according to Machlup (Machlup, 1978). The scenario for assessing the core and relevance of Microeconomics is now conducted in Sections II and III.

II. A heterodox analysis of the main assumptions of the SRP of Orthodox Microeconomics

Orthodox Microeconomics or conventional price theory is based on 3 main pillars: rationality, perfect competition and perfect information. Clearly perfect competition is a benchmark, an issue relative to normative science, although the other 2 pillars of the Classical-Neoclassical core are highly controversial, but ultimately subjected to empirical test.

The Heuristics of the orthodox school arises from the theories of the Clasiical economists (Smith, Ricardo, Mill, Say) and may be mathematically based on the theory of General Equilibrium (Walras, circa 1870), supplemented by the approach of Partial Equilibrium (Marshall, circa 1890). The elements of these SRPs are now described in order to identify their structure and scope and to contrast them with alternative SRPs.

The Classical SRP

Core

The world and human beings follow a natural order. Economics is focused on the explanation of the behaviour of production, (namely Adam Smith, 1776). Other classical economists focus on distribution (namely David Ricardo, 1817). However distribution is for other economists determined by institutions (namely John Stuart Mill, 1848). The scientific methods used are either Inductive (Smith) or Deductive (Ricardo; Mill).

Core assumptions:

- Rationality arising from Cartesian rationalism.

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- Perfect Competition.
- Perfect Information.
- Permanent equilibrium, where disequilibrium is a temporary exception.
- Free markets: The invisible hand and its by-products: market power in transactions, division of labour, free trade, homus oeconomicus (through time and across geographical regions).
- Long-term perspective
- A world full of scarcity (a contradiction?).

Positive Heuristics

- Consider that economic development is linear. Progress is a straight line in Capitalism.
- Consider that the units of analysis in Microeconomics are producers: firms, sectors and inputs in the analysis of Supply, and consumers in the analysis of Demand.
- Consider that the only motivation of business is profit maximisation, whereas consumers maximise their utilities.
- Consider that instantaneous market clearance is the main adjustment mechanism for economic events, and full employment is the rule in economic systems.
- Consider that price movements lead and quantity movements lag in the process of market clearing through the interaction of demand and supply forces.
- Base the analyses of both production and income distribution on the causes, interactions and effects of productive factors: land, labour and capital and their prices.
- Base the analyses of consumption on the causes, interactions and effects of utility and expenditure.
- Consider the relevance of market size and the division of labour and analyse their extent in economic systems.

Protective Belt

- The payments to productive factors determine the structure of social classes.
- Capital is the only self-reproductive factor.
- Landlords is the privileged social class.

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- Both producers and consumers are continuous optimisers (either maximisers of profits and utility, or minimisers of costs).
- There are only 2 types of employment: voluntary and frictional, which are the consequence of the core assumptions of full employment and temporary disequilibria.
- No significant institutional impediments exist for the functioning of the price system.

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The Protective Belt is the immediate consequence of the Core. On the other hand, the Protective Belt vary among Classical economists.

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The Neoclassical SRP

Core

The natural order experiences exceptions. Economics studies how to allocate scarce resources to alternative ends (Robbins, 1931). The basic core is the same as that in the Classical SRP, although microeconomic analysis in the Neoclassical period is wider as it is also based on demand, and market equilibrium considers both demand and supply conditions (The Marshallian scissors, circa 1890).

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Core assumptions and object of study:

- The hypothesis of rationality
- The hypothesis of methodological individualism (Machlup, 1970)
- Marginalism (in both consumption and production), which is in turn based on the Law of Decreasing Returns.

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Positive Heuristics

- Explain Demand and its origins such as the theory of consumer utility. Explain Supply and its sources such as the theories of production and costs, in terms of marginal -as opposed to total- variables.
- Explain the mechanics and meaning of the following approaches: Partial Equilibrium (Marshall, 1890), General Equilibrium (Walras, 1870), distribution and marginal productivity.

- Use the method of comparative statics for analysing deviations from market equilibrium.
- Use the curves of both Demand and Supply, to explain the functioning of the price system and especially the causes and effects of price changes by means of the abovementioned method.
- Analyse the impact of shocks (taxes, tastes or any unpredicted -economic or noneconomic- events and the like) on market equilibrium as shifts from either the Supply or the Demand curves. Changes in either prices or quantities are represented as movements along the curves.
- Use indifference curves (isoquants) and budget lines to determine consumer (producer) equilibria
- Identify cost structures.
- Consider that microunits are consumers on the part of Demand and producers or firms, products, inputs and sectors on the part of Supply.
- Explain other market structures such as imperfect competition, monopoly, duopoly and oligopoly.
- Analyse firm behaviour on the basis of three time periods (short, medium and long) if only as a differentiation method.
- Use the analyses of elasticities in both Demand and Supply to measure the impact of changes in either prices or quantities on economic sectors.
- Consider that distribution is automatic as well as an efficient result of production. A latter development is that distribution is the result of the relation between marginal productivities and factors payments.
- Consider men as pleasure machines.
- Use game theory to explain and predict the interactions among economic agents and their results.

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Protective Belt

- Market equilibrium is instantaneous and permanent through re-changes.
- Consumers are as relevant and large in numbers as producers.
- Other market structures exist only as an exception.
- The composition of unities exists, that is, aggregation only requires of the sum of individual units ($2 + 2 = 4$).

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- Private and social objectives are identical.
- In the approach of General Equilibrium there is an auctioneer and hence the mechanics of tatonnement and automatic economic selfadjustment rule.
- In the approach of General Equilibrium, n markets clear instantaneously. All of them are identical in terms of their intrinsic characteristics, even tough the $n-1$ market is the labour market and the n market is the money market.
- Neither scarcity nor abundance exists in market equilibrium.
- Money is a veil in the economy.
- Demand determines equilibrium in the short term and Supply in the long term.
- The substitution effect dominates the income effect in Demand.

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Is this valid only for industrial economies? None of these 2 SRPs is based on an interdisciplinary approach (they are both ahistorical and ageographical). In addition, both of them take certainty and rationality for granted. Further, some of its variables are impossible to be measured, for example utility and hence they are not able to be falsified. No typology or dichotomy amongst either agents or markets is considered.

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A simple conclusion of this study a-là-Lakatos is that the Neoclassical SRP is a mere continuation of the Classical SRP, as it only widens its explanatory power (Neoclassicals belonged to a larger economic world). The former is based on the same philosophical (core) principles. Arguably, Neoclassical economists insisted in placing elements of the both the Positive Heuristics and the Protective Belt in the Core in order to distinguish themselves from the Classics, for example their inclusion of Demand issues.

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In other words, Neoclassicals do not break the Classical core, as it is arguably the case of both the Marxian and the Keynesian SRPs, because the latter possess objectives, philosophical bases and methods which differ from those in the Neoclassical-Classical SRP. This suggests that a certain extent of sclerosis exists in orthodox Microeconomics. This statement is strengthened by the fact that Microeconomics lack empirical refutations (Sourbeck, 1978) starting from measurement problems. Measurements of utility are at best approximations to reality, especially because men is not 100% economicus in regards to his mentality and actions.

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According to Blaug (1980) the mentioned cores strengthen the explanatory power of the Classical SRP, although they. are the cause of its scarce empirical content.. After all Microeconomics is based on the concept of scarcity!

It can be concluded from the former methodological analysis that Microeconomics is not useful for choosing appropriate theories according to their informational (empirical) content.

III. A heterodox analysis of the links between Microeconomics and Macroeconomics

In contrast to orthodox Microeconomics, the Keynesian analysis (Keynes, 1936) generated a new science: Macroeconomics, which is based on a novel view about the role of Money in economic systems, uncertainty, transition to equilibrium and the lack of an automatic selfadjustment mechanism. Not surprisingly its main result is that full employment is an exception. This is relevant as this section analyses the methodological characteristics of both Microeconomics and Macroeconomics and the relation between them, which may be an additional indicator of the scientific status of the former as a science.

The typical view of Neoclassical economists is that Keynesian economics is nothing new under the Sun, except in the sense that Keynes assumes that investors and savers are of different nature and that wages are downward sticky. This is a Neoclassical interpretation of a non-Neoclassical theory. There is something more, however. In orthodox Microeconomics the adjustment mechanism is price movements, and the SRP possesses a long-term perspective. In contrast Macroeconomics formally introduces the existence of underequilibrium and involuntary employment as a rule, in an uncertain world with certain markets which rarely clear: In addition, the economy as a whole clears due to quantity movements (fluctuations in national income) rather than to price movements.

Even more importantly, the Keynesian concept of man is different. The Great Depression of 1929 changed the views on man and prosperity. This topic is discussed in Blaug (Blaug, 1980) and in Heilbroner (1954). In summary, Keynes considers that both

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According to Howitt (1985), the great innovations in macro theory have been the methods for using such concepts as micro theory, equilibrium and rational choice in order to explain the most elusive phenomenon in micro: involuntary unemployment. [A further controversy is based on the answer of the following question: Is the money market a normal market? For Keynes, money is not a veil in the economy.](#) However, actually the main innovation of Keynes (1936) is the development of an alternative concept of equilibrium which allows the modification of the analysis of [Supply and Demand](#) to be applied to macroeconomic issues without assuming an ideal state of coordination. [At least this is the view of New Keynesians. All of this is useful for assessing the value of orthodox Microeconomics.](#)

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Since the seminal essay of Hicks (1937) up to the 1960s, the main development in macro theory is [rationalisation \(The New Classical School\)](#) and [certainty \(from the Classical core\)](#) and the modification of the relations of [aggregate behaviour](#) as postulated by Keynes, by means of the application of the [optimisation principle \(the Neoclassical Synthesis\)](#). Modigliani (1944) was one of the pioneers in the strand called the Neoclassical Synthesis by showing that the Keynesian results could be derived from a Classical model. This was however seriously challenged by Clower (1965) who assessed the [logical consistency of these links in the tradition of the school of General Disequilibrium](#).

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Clower stated that the Keynesian [consumption function](#) was [not compatible with the general Walrasian analysis or even with the standard microeconomic theory](#). Clower himself (1965) answered that Keynesian effective demand could be transmitted by agents in a Walrasian world which was however away from equilibrium. These ideas were further developed by Barro and Gordon (1971), who initiated the strand of microfounded⁷ models inspired in the Neoclassical tradition. Nevertheless the problem of microfoundations is one of the weakest issues in orthodox [Microeconomics, especially regarding](#) the mechanism of [tatónnement](#) (see the Neoclassical SRP). This problem was studied without success during the 1960s and the 1970s (Ackerman, 2004;

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⁷ According to Da Silva (2003) microeconomic foundations are implemented in 2 stages: 1) the inter-temporary maximisation of firms' returns and 2) the use of macro equations for policy implementation.

Benetti et.al., 2004). We can repeat in this context that Keynes is Walras without an auctioneer (see Snowdon et. al., 1994).

Both the existence and stability of general equilibrium (Neoclassical core) were weakly proved, as many arguable restrictions were simply imposed for artificially supporting this proof (perhaps by means of a defensive Protective Belt). The results about the Falsification of stability are even worse. An example is the exercise proposed and solved by Scarff (1960) of 3 persons and 3 economies of commodities with permanent instability of dynamic prices.

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Microfoundations also face a methodological problem (Bresser Pereira & Tadeu Lima, 1996). Microeconomics is essentially logical-deductive, whereas macroeconomics is basically inductive and historical. The problem is not microfounding macroeconomics or even macrofounding microeconomics as Hahn (2003)⁸ states. The actual problem lies in the assumptions of individual maximisation; choice under restrictions and ultimately the Neoclassical core. Hence microfoundations must not necessarily be based on the theory of individual economic behaviour. The real issue is to investigate how microbehaviour affects macrobehaviour (Bresser Pereira & Tadeu Lima, 1996).

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A further criticism is made by Colander (1992). For Colander applied economics lacks an “art”, since Economics mistakenly uses the methodology of positive sciences. Colander (1992) states that when economists think about an applied research, they are thinking of objective analyses. This is arguably wrong since all economic analyses - positive, normative and art- must be objective. Thus, the methodology of the “art of economics” -in the case of orthodox Microeconomics- must be wider, more inclusive and less technique. It must be more human and result-oriented. The knowledge of institutions, social phenomena, political and historical and the right use of data are useful for a serious discussion of these topics in the real world (Colander, 1992, p.196).

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If this is the -limited- scope of the Core of orthodox Microeconomics (where Macroeconomics was used as a benchmark for assessing the SRp of Microeconomics), students may need some alternatives for understanding the functioning of economic

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⁸ Hahn (2003) attempts to circumspect the low sense of the representative agent, which has a growing presence in conventional macroeconomics. Macro data are relevant in agents’ decisions.

[agents and sectors](#). Orthodox microtheory explains the problems of both inflation and unemployment by means of the lack of perfectly competitive markets. Consistently, the remedy for these ills is removing those market imperfections, say minimum wages, unions and employment insurance subsidies. For the Postkeynesians the problem of [unemployment](#) is not [due to](#) market imperfections or even institutions but an insufficient aggregate demand (King, 2001). The Postkeynesian theory also challenges the theory of marginal productivity in the field of distribution.

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Related Issues

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From a real-world perspective the problem is [that](#) micro myths (or are they benchmarks?) may lead to wrong-oriented economic policies. The [New Keynesians](#) also consider [aggregate](#) prices as determined mainly by the monopoly of power and by firms' needs for additional resources. If [New Keynesianism](#) is realistic in terms of explanatory power, then the Neoclassical core must be expanded. An alternative is the use of heterodox [Microeconomics](#) because of its realism and multidisciplinary (see Lee, 2005). Heterodox [Microeconomics](#) neglects scarcity and rationality, and accepts the role of other [if measurable- concepts arising from such sciences](#) as sociology, [philosophy](#) and psychology, for explaining micro-behaviour (see Lee, 2005).

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[A methodological shortcoming](#) of [Mainstream Microeconomics](#) (to be read as [Neoclassical Microeconomics](#)) is to attempt to "provide intellectual rigour" to science by means of the use of models which make an abstraction of the characteristics and interactions of the real world⁹. [Macroeconomics](#) has [at some extent](#) the same problem. However a specific criticism to [Mainstream Economics](#) is that if [it](#) assumes that the objective of Economics is the rational allocation of such scarce resources as land, labour and capital, then [why](#) does unemployment exist? Unemployment is an abundance of labour [and labour is either a good or an input, although unemployed men may alternatively be seen as a burden.](#) [This is only an example of logical inconsistency in Mainstream Economics.](#)

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According to Pressman [and](#) Holt (2003), this type of logical inconsistencies is due to [that](#) the acceptance of inconsistencies [provides](#) protection from a set of beliefs which are

⁹ A fundamental principle in teaching is making students believe that Economics is the study of rational choices on the part of individuals in an environment of scarcity.

actually false (the use of a spurious but not modified Protective Belt). These types of beliefs would also protect economists (as well as voters and politicians!) from learning about both social and institutional facts embedded in economic problems. Heterodox economics also provides room for institutional, historical or event dissenting -more complete- explanations of microphenomena.

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IV. Conclusions

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The teaching of Microeconomics either positive or normative must help students to reflect on -rather than to evade from- reality. Robinson (1932) was a harsh critique of the teaching of economic axioms which are “weakly founded” but universally accepted. Finally, Ahistoricity in Neoclassical methodology was labelled by Robinson as the “parable of the operation of modern economics”. This is not the case of such heterodox views as the Marxist paradigm.

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An exercise of Internal History of Science, was hereby conducted as the aim of this paper was to investigate how scientific and realistic has the long-term preference on the part of economists for orthodox Microeconomics been, especially the Neoclassical SRP.

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On the basis on the analyses undertaken in Sections I and II it can be concluded that the Neoclassical or orthodox SRP may be degenerative as it does not contribute new theoretical content or new elements for its empirical testing. For example, the directions of the changes of Demand and Supply quantities is an issue that is usually corroborated in reality. However no alternative approaches are considered and the path to equilibrium is not appropriately explained. Paths -not only ends- are important in life. Unemployment or other disequilibria as well as regulation in certain markets have proven to be permanent.

In contrast, the Heterodox SRP is progressive as it contributes a more comprehensive and interdisciplinary viewpoint of Microeconomics by including historical, sociological, philosophical and obviously heterodox explanations¹⁰. The Heterodox SRP also departs from more realistic and general assumptions, as it does not necessarily follow an

¹⁰ See Lee (2005) for a description of the heterodox school of Microeconomics.

aprioristic concept of rationality and order and emphasises the use of variables that can be easily measured (see Lee, 2005). In these last respects, Keynesianism (for instance) is also more realistic¹¹. Reality demonstrates that firms' and consumers' behaviours cannot be reduced to optimisation (Lee, 2005), so that other explanations are required to explain and predict facts. For example, the Marxist theory of exploitation is important to explain the behaviour of profits (see Lee, 2005)

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On the brighter side, Neoclassical economists and their modern adherents, for example the Monetarists, are focused on the role of prediction in Economics, but the Positive Heuristics is also relevant in any science as its also reflects its extent of progress. In this respect, Mainstream Microeconomics is advanced.

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Macroeconomics may not need anything from Microeconomics. In fact they differ in methods and objectives. Macroeconomics was born from the breaking of the core of orthodox Microeconomics, the so called science of equilibrium. Hence the former may not need Neoclassical foundations for its approval, especially since the logical consistency and empirical verification of the orthodox SRP is not beyond doubt.

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Innovations in Macroeconomics lie in the breaking of the Neoclassical core, especially regarding the consideration that equilibrium is a special case of reality, in an uncertain and irrational world. If these issues are in the Keynes' s core -or are explained by means of interdisciplinarity in the Heterodox core, neglecting them would simply mean the return to past times.

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If downward stick wages exist, the Heterodox view is more consistent with reality. The last great Heterodox -Keynesian- statement is that investors differ from savers¹². This means that both a dichotomy of motivations and a typology of markets exist. Although this fact is obviously neglected by Mainstream Microeconomics, if true it demonstrates that Microeconomics and Macroeconomics are intrinsically different in terms of their cores. The obvious implication is that it may not be necessary to deepen in the foundations of orthodox Microeconomics. Diversity must be valued. For instance, the General Disequilibrium subSRP departs from the Keynesian -heterodox- core.

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¹¹ See Blaug (1980) or Muñoz (2004) for a description of the Keynes' SRP in Macroeconomics.

¹² Now an orthodox statement after the Keynesian Revolution.

Finally, if Methodology is the relation between the object and the subject of knowledge, then the objectives of science depend upon the subject. In this sense, persons belong to different social classes, geographical regions and historical stages. This means that there is not a *homo economicus* or a universal optimiser. If different societies (men or social classes for that matter) are concerned about different problems and theories operate under heterogeneous circumstances, then orthodox Microeconomics is based on Apriorisms rather than on empirical Falsificationism. Is Microeconomics only a mental construction?

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Microeconomics is at best a normative science, but ruled by the standards of universal rationality and cosmic order. Will there eventually be a Microeconomics Revolution?

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a taxonomy of their respective SRPs is now conducted		
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. The Classical economists focused on either production		
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, where supply is a direct function of prices, whereas		
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Consider that the units of analysis in Microeconomics are producers: firms, sectors and inputs in the analysis of Supply, and consumers on the side of Demand.		
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Interests

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Marx	Micro-supply
Neoclassicals	Micro-demand
Keynes	Macro-demand
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Theorists

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Mundell

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III. Conclusions

We conducted hereby a