Received: 2 July 2009; Accepted: 19 September 2009.

DOI: 10.2298/PAN1001085K Original scientific paper

Hatice Karaçay Çakmak

Hacettepe University, Turkey

hatice@hacettepe.edu.tr

Can the Capability Approach be Evaluated within the Frame of Mainstream Economics? A Methodological Analysis

Summary: The aim of this article is to examine the capability approach of Amartya Sen and mainstream economic theory in terms of their epistemological, methodological and philosophical/cultural aspects. The reason for undertaking this analysis is the belief that Sen's capability approach, contrary to some economists' claim, is uncongenial to mainstream economic views on epistemology and methodology (not on ontologically). However, while some social scientists regard that Sen, on the whole, is a mainstream economist, his own approach strongly criticizes both the theory and practice of mainstream economics.

Key words: Amartya Sen, Mainstream economics, Methodological individualism

JEL: B4, O1.

There is a considerable amount of literature about Amartya Sen's capability approach. Since, as Sen himself and many theoreticians have stated, the capability approach is incomplete (Sen 1993), many scholars have analysed, improved or expanded this approach within different dimensions. Some scholars have examined and extended the capability approach under traditions such as Smithian, Marxist, Hegelian, Kantian, Aristotelian or Spinozan, others have analysed the central points of this approach (such as freedom, universality, capability), while still others have discussed its methodological, epistemelogical or ontological aspects. These numerous studies indicate a growing concern about whether Sen's capability approach can be evaluated within mainstream economics and/or whether Sen himself can be consiredered as a mainstream scholar. Actually there exists no single definition of mainstream economics. Although Sen has spoken of himself as a "mainstream" economist, he has added that, for him, mainstream economics is in the tradition of Robinson, Marx, Kaldor and so forth. For Ingrid Robeyns (2002, p. 2), when Sen calls himself a mainstream economist, he is trying to rescue economics from the narrow-minded, imperialist discipline that it has become. On the other hand, it could also be claimed that all of these traditions which are labeled as mainstream by Sen have a common character; they are methodologically and ontologically based on the modernist paradigm.

As stated above, there is no consensus about whether Sen is a mainstream economist or not. Roughly, and setting aside nuances and inconsistencies over what he should or should not have got it for, there are two classifications. While some social scientists (Ben Fine 2001; Toru Yamamori 2003; Robeyns 2002, 2003) claim that Sen really goes beyond mainstream approach, others (Bharat Jhunjhunwalla 2000; Emmanuelle Benicourt 2002; Bernard Guerrian 2002) argue that there is no important difference between mainstream economics and the capability approach. For example, Fine (2001) emphasized that there are several important signs which indicate that Sen cannot be placed in the mainstream. The journey from Social Choice to Development as Freedom is long, complex and non-mainstream. It involves the incorporation of new themes – to formal ethics are added inequality, famine, capabilities and freedom (Fine 2001, p. 4). Similarly Robeyns (2002) claims that Sen has written scores of articles that are definitely non-mainstream. According to her, a firm distinction should be made between an economist who is a traditional mainstream economist, and those who, including Sen, use neoclassical mainstream tools from time to time.

On the other hand, as stated above, some scholars are definitely assert that Sen could not go beyond mainstream paradigm. For example, Guerrian (2002) says that Sen, as an economist, is a standard micro economist; only the vocabulary that he uses (capabilities, functionings, etc.) is different. Or, Benicourt (2002) argues that when Sen explicitly describes his system (particularly in Commodities and Capabilities 1985b), it becomes clear that it is just a variation of the mainstream economic theory. According to Benicourt, instead of reasoning in terms of an n-dimensional space composed of "commodities", Sen proposes a space of "functionings". Similarly, Jhunjhunwalla (2000), who also appreciates Sen as a mainstream economist, strongly suggests that the capability approach cannot make a difference with western mainstream economic analysis. He claims that Sen's thinking is ahistorical. Because Sen's vision is that of a healthy, educated and perpetually poor people of the developing countries slogging for the MNCs of the West. He has also added that Sen is a well meaning person who was deeply moved by deprivation that he saw in his early years, but Sen has gone astray in bad company. Thus, he cannot be excused (Jhunjhunwalla 2000, p. 13).

There are also some important facts to justify why Sen and his analyses have been introduced within the context of mainstream economics. Firstly, since the 1990s, the term "human development" has frequently been used by (neo-) liberal international institutions (i.e. IBRD, UNDP and so on). Sen's capability approach gained importance when the central concepts and policy implications of his approach were taken into account in various reports: World Development Reports, Human Development Reports or even the IFSs. Secondly, over two decades, in studies done by many scholars, the capability approach has been recently associated with Martha Nussbaum, a famous liberal feminist writer. Stating that the neo-Aristotelian extension of the capability approach developed by Nussbaum (1992) has remained faithful to the original, Sen (1993) gets himself closer to a liberal discourse.

Before analysing whether the capability approach can be evaluated within the frame of mainstream economics or not, the meaning of the study should be clearly

stated. In other words, the importance of the issue and the appropriateness of the approach for the liberal or another discourse should be clearly manifested. There are several factors which explain the importance of the issue. Firstly, as stated before, the capability approach has been heavily linked first to Aristotle and then to Libertarianism, but it also has been referred to Marx and recently to Kant. This provides researchers with the opportunity (or the disadvantage) to take a focused view on the methodological/epistemological possibilities (or limitations) of thoughts. On the other hand, to engage in any thought burdens a certain set of philosophical/ methodological/ epistemological ground, some or all of which might enter the analysis: what factors should be selected for the evaluation of freedom; how can we measure basic needs; how can we appreciate happiness; what is the origin of "good"; what kind of reasoning explain the real world; what is the crucial role of mathematics in understanding social life, and so on.

Thirdly and more importantly, the methodological/epistemological background of the approach will have important extensions relating to its prospective applications. For example, when someone advocates a view about ecosystems, local institutions, human rights, gender issues, vulnerability, minority rights, or other considerations, his/her stance on this issue will be determined by the methodological and epistemological background of the approach.

Hence, to evaluate the prospective applications of the capability approach by considering their backgrounds and to evaluate their limits and/or possibilities, the epistemological/methodological grounds of the approach need to be analyzed.

Parallel with these stances, the aim of this article is to examine the capability approach and mainstream economics in terms of their epistemological, methodological and philosophical/cultural aspects. The main argument of the study is that Sen's capability approach, contrary to what some economists' claim, is uncongenial to mainstream economic views on epistemology and methodology (not on ontologically). To this end, we analyze the main methodological/philosophical differences between CA and mainstream economics under several headings such as formalism, reductionism or universalism. But before that, we first examine the general framework of Sen's capability approach.

1. General Framework of Sen's Capability Approach

Sen's capability approach has often been criticized as being "too indefinite" or "insufficiently specified". The scope of the capability approach has been improved and expanded even in Sen's own studies. By re-examining these studies and his own studies, Sen more systematically expanded some points of his own approach in the light of these studies.

Sen proposed his capability approach as an alternative to standard liberal utilitarian approaches that focus on resources, per capita income or Rawlsian social primary goods. The main aim of his earlier studies was to show that social scientists cannot explain "development" within the framework of quantitative indicators only. He argued that, in order to realize development, people's capabilities should be focused on. To discuss people's capabilities and hence to explain the development

process, one has to take normative evaluations into account (inequality, capability, happiness, poverty, democracy, political participation, etc.).

Since Sen essentially emphasizes the importance of normative evaluations, he proposes ethical prescriptions of the development process. Although, especially after the 1990's, Sen himself expanded and more systematically explained his approach from different dimensions and also emphasized the ontological description of his concepts within these studies (eg. what is meant by freedom or what is meant by capability), the main reason of these efforts is also to emphasize the importance of ethical evaluations. Hence, it could be easily stated that although Sen aims to portray the ontological descriptions of his own concepts to eliminate any complexity in his approach, he always focuses on the ethical prescriptions of the development process in all his studies. Sen's core argument is that while within the standard liberal utilitarian approaches the focuse is on utilitarian evaluation, his own approach also focuses on normative evaluations. In other words, in explaining the development process, the focus should be on human capabilities that show what people are able to be and do, not on what they can purchase, gain or consume.

Sen has been against an utility-based evaluation of individual well-being, because such an evaluation might hide important dimensions of development process and also lead to misleading interpersonal or intertemporal comparisons. For him, an utilitarian evaluation will only assess his/her satisfaction and will not differentiate between a happy and well-conditioned person and an equally happy, but unhealthy and badly conditioned person who has mentally adapted to his/her situation.

From a parallel point of view, the core argument of the capability approach is that the concepts of well-being and capability are two completely distinct concepts and well-being is not important in itself in explaining development, but what is important is "capability". Capabilities reflect the alternative combinations of "functionings" that are feasible for a person to achieve. Functionings are "beings and doings" such as being sheltered, being educated or receiving necessary nutrition. Functionings also involve more sophisticated activities such as being able to take part in community life and having self-respect. Sen also describes the "capability set" in terms of functionings. He defines "capability set" as a mathematical set of alternative functioning vectors a person can choose from. In all his studies (especially the latter ones), he emphasizes potential functionings, instead of actual functioning. Briefly, Sen distinguishes between commodities, human functioning/capability and utility as follows (David Clark 2007, p. 2): Commodity \rightarrow Capability (to function) \rightarrow Functioning \rightarrow Utility (e.g. happiness).

The framework of Sen's analysis is based on three key concepts. Freedom is the other important concept, in addition to "capability" and "functioning". The concept of "freedom" is closely related with the concept of "capability". In order to explain the link between these two concepts, the concept of "capability" has to be explained in a more detail. Capability refers to a situation in which the individual is able to use her/his possibilities and her/his power to the degree and in the ways s/he chooses (Sen 1993, p. 31). These capabilities are classified as; (1) obtaining welfare, (2) obtaining other aims other than welfare, (3) freedom of welfare, (4) freedom of pursuing aims other than welfare. According to Sen's capability approach, the

individual's set of capabilities needs to be considered not as the actualized aims shown in items (1) and (2), but mainly as a choice between the opportunities shown in items (3) and (4) (Wulf Gaertner 1993, p. 64). Hence, Sen himself consistently regards the concept of freedom as the other central concept in his analyses. In fact, this concept typically replaces "capability" in his 1999 book *Development as Freedom*.

Sen (1999) notes that freedom should be viewed as both "the primary end" and the "principal means" of development. Although Sen deals with freedom as the central category of his analysis, he criticizes the usage of a purely negative conception of freedom within a wider critique of mainstream economics. He emphasizes positive freedom to mean the ability to attain desired ends. Sen stated: "I have found it more useful to see 'positive freedom' as the person's ability to do the things in question taking everything into account (including external restraints as well as internal limitations)" (Sen 2002, p. 586).

Sen (1999) points out five instruments of human development:

- Political freedoms: opportunities for political participation and dissent;
- Economic facilities: opportunities that individuals have to use economic resources for the purpose of consumption, production or exchange. This includes the availability of, and access to, finance;
- Social opportunities: the arrangements that society makes for health care and education, which influence people's ability to live better. These are important for an individual to be a more effective participant in economic activities as well as for a person's own life;
- Transparency guarantees: involve the freedom to deal with one another under certainties of disclosure and lucidity. They have definite role in preventing corruption, financial irresponsibility and fraudulent activity;
- Protective Security: the need to provide a social safety net when vulnerable people suffer adverse circumstances.

Sen argues that development must be seen within the context of the complex interconnections between these five instrumental freedoms (Sen 1999, p. 38). However, Sen emphasizes the importance of political, economic and social opportunities over transparency guarantees and protective security. This emphasis on opportunities displays the importance of capacities and capabilities as potentials, rather than actualization in Sen's capability approach.

2. The Basic Roots of the Capability Approach

As discussed above, Sen's capability approach presents a completely different structure than what the mainstream economics do. The main reason of this stance is that capability approach is based on a substantially different methodological/epistemological ground with respect to the mainstream economics. The main aim of the study is to show that capability approach and mainstream economics are incompatible in terms of the methodological/cultural roots suggested in the first section. To this aim, we would like to analyze methodological/cultural roots of the capability approach and to compare it with mainstream economics.

2.1 A Specific Mathematical Method (Formalism)

Mainstream economics usually positions itself clearly in the Cartesian camp and Newtonian world which is extremely mechanical. The focus of modern economics is directed at the technical assumption which needs mathematical modelings and standard calculus. The soul of modern mainstream economics is an insistence on methods of mathematical-deductivist modelling. Mark Blaug (1997) expresses that modern economics is sick; because it has increasingly become an intellectual game played -namely social mathematics- for its own sake and not for its practical consequences for understanding the economic world.

The rise of positivism during the first half of the twentieth century, together with the great success of natural sciences where mathematical methods were extensively employed led to the *formalist* belief that the use of mathematical methods is not just useful, but actually essential for economics to become a scientific discipline. In other words, according to formalism, mathematical expression or models based on deductivism should not just be used as an instrument, but also as a specific philosophy of mathematics. In this context, the economic background of the models has become secondary. It means that the same models could be used to explain different phenomena other than economic ones.

According to Sen, the belief that mathematical methods are essential for economics to become a scientific discipline must be carefully scrutinized. Sen has clearly proposed that this kind of reasoning is not appropriate for solving the complexity of socio-economic phenomena. For him, it is certainly arguable that the language of standard mathematical expression is often not rich enough to capture many subtleties that call for informal understanding. The formal expressions of which, if possible, would be extraordinarily unhelpful, long, and complex (Sen 1984, p. 65).

He has also stated that the belief that mathematical expressions must be more precise in capturing what we wish to say can be badly mistaken, since subtleties may be eschewed in choosing particular formal statements. Indeed, the precise expression of a complicated truth cannot possibly take a simple form, however precise-looking the simple formula might be. A formal expression can be extremely precise without being at all a precise representation of the underlying concept to be captured (Sen 2004, p. 597).

On the other hand, it is not true to say that, he is definitely against using mathematical formalizations in economics. Actually Sen aims to emphasize that formal reasoning should be used with greater discrimination. He clearly states that the real issue does not concern doubts about the positive contributions of quantitative/empirical analysis, but relates to worries about the negative effects that overconcentration on standard mathematical methods often tends to produce (Sen 2004, p. 599).

2.2 The Method of Equilibrium

Economic equilibrium is simply a state of the world where economic forces are balanced and in the absence of external influences the (equilibrium) values of economic

variables will not change. Equilibrium analyses in mainstream economics have been established through the process of the injunction of Newtonian mechanics to economic theory (Philip Mirowski 1984). For the law of Newtonian mechanics which introduces a cause-effect relation, within a given set, one can definitely calculate and know the result of the forces that affect each other. Mainstream economists advocate that equilibrium analyses in economics are helpful in understanding market structure and these exercises in pure theory ultimately have much practical relevance.

On the other hand, many economists, including Sen, have argued that not only is the nature of contemporary capitalism very different from what we see in models of competitive general equilibrium, but also that the most momentous features of modern capitalism are largely lost in these models.

Sen strongly argues that equilibrium analyses of economics need several different and difficult/unrealistic requirements (Sen 2004, p. 591). For example, as given constraints faced by him/her, each agent should be in a maximized position or there should be no excess demand and supply in the market or equilibrium is spontaneously reached and so on.

Sen states that the concept of equilibrium has an important reductionist role and it makes it possible to deal with complexities of human behavior and of interdependences in markets in a relatively simple way. On the other hand, he also explicitly says that the reductionist role of equilibrium analyses and its contribution to tractability are highly prized in economic theory. According to him, there is no doubt that equilibrium analysis has contributed both tractability and elegance to a good deal of economic reasoning. But these achievements have been purchased at a high price of remoteness from descriptive reality or predictive efficiency (Sen 2004, p. 591).

The other problem about equilibrium analyses –which also be stated by Sen- is that there are different important questions regarding equilibrium, in particular (1) existence, (2) uniqueness, (3)stability, and (4) efficiency. According to him, it is possible for equilibrium to exist, and even be unique, but nevertheless be unstable, so that departures from it may not be corrected, and it could not be assumed that irrespective of initial conditions the economy will move to such equilibrium. And also, an equilibrium could exist, be unique and stable; but be economically inefficient in the sense of not achieving Pareto optimality (Sen 2004, p. 592).

2.3 Methodological Individualism

Methodological individualism is the philosophical position that social phenomena are to be accounted for in terms of the actions of individuals. Social institutions and social development should be understood as no more than the aggregation of individuals and their dispositions. The emphasis on the individual in the analysis of socio-economic phenomena becomes prominent with the Enlightenment, and it is found in the works of numerous authors, including Locke and Bentham (Geoffrey Hodgson 2007, p. 211). In other words, the origin of this methodological principle dates back to the last quarter of the 17th century. But the term "methodological individualism" was invented by a leading economist. Joseph A. Schumpeter (1909) distilled some of the ideas in his 1908 text into an article published in the *Quarterly Journal of Economics*. It is here that the term "methodological individualism" first

appears in an academic work in English (Hodgson 2007, p. 212). When Schumpeter introduced the term "methodological individualism" in 1908, he was doing so as a student of Max Weber. Actually Weber (1968) promoted this doctrine as a methodological precept for the social sciences in the first chapter of *Economy and Society*, published after his death in 1920.

Methodological individualism has been also explained and called in different terms. For example, Bhargava's definition for this term is "all social phenomena are to be explained wholly and exclusively in terms of individuals and their properties" (Rajeev Bhargava 1992, p. 19). Or, from a critical realist perspective, Bhaskar calls it *social atomism*, in which the explanation of social events is deduced from the behavior of the participating individuals and the description of their situation (Roy Bhaskar 1998, p. 28).

The essential impetus behind the creation of mainstream economics is Newtonian atomism and also methodological individualism. According to Newtonian model of economic life, the workings of an economy as a whole can be "reduced" to a simple sum of the actions of each individual participant who aims to pursue selfinterests. The predecessor of this methodology in economics is Adam Smith. By moving the science of economics from the methodological holism of mercantilism to methodological individualism, though he has never used the term "methodological individualism", Smith made himself central to the use of this term in the science of economics. The atomistic reductionism of Newtonian classical mechanism basically determines the essence of neoclassical economics, rather than classical economics. According to Christian Arnsperger and Yanis Varoufakis (2006), it is indisputable that all the new manifestations of neoclassicism still subscribe to methodological individualism. While it is true that mainstream economists have, during the last few decades, acknowledged that the agent is a creature of her social context, and thus that social structure and individual agency are messily intertwined, their models retain the distinction and place the burden of explanation on the individual.

On the other hand, it is also arguable to claim that Smith and other classical or neoclassical economists advocate methodological individualism. Many scholars consider that the individualism of classical economics was more political and economical than theoretical and methodological (Lars Udéhn 2001, p. 6).

If we term individualism as the situation in which the individual cannot be subjected to a higher authority, we would say that Sen's capability approach is "too individualistic". However, we know that there are different concepts of individualism. If we trace this term in an ethical or normative manner, we would again say that Sen's capability approach is "too individualistic". Hence, in order to analyse "individualism of the capability approach", we should distinguish between the definitions of ethical, methodological, and ontological individualism. Ethical individualism makes a claim about who or what should ultimately count in our evaluative exercises and decisions (Robeyns 2005, p. 101). It postulates that individuals, and only individuals, are the ultimate units of moral concern. According to this description, Sen essentially deals with ethical individualism, since he evaluates the concept of development as a "human being's development", not as "development for human beings", or since he evaluates economic policies in terms of their effect on the individual's capability set.

It should be also noted that Sen has obviously considered the limitations of "autonomy, agency and individualism". In order to reveal the effects of dominant customs, beliefs and modes of living which also cause for example unjust constraints on their activity, Sen introduces the term "critical voice":

"... an adequate realisation of women's agency relates not only to the fredoom to act but also to the freedom to question and reassess. Critical agency is a great ally of development" (Sen 2002, p. 274).

2.4 The Mechanics of Self-interest and Utility

Behind the mechanics of self-interest and utility, there are two important hegemonic powers. While the idea of "methodological individualism" established the methodological framework of mainstream economics, liberal political theory formed the political culture of this economics, which could justify market enlargement and excessive consumption of capitalist system. According to the majority of classical liberal philosophers, human nature includes greedy, selfish, possessive, aggressive individualistic elements. Alongside these assumptions, the utilitarian approach of classical liberal philosophy states that the individual pursues his own interests and aims to maximise his individual utility.

Two different definitions of rationality are used in economics: internal consistency of choice and maximization of self-interest. Internal consistency of choice may be necessary for rationality, as we could consistently act to achieve exactly the opposite of what we want to achieve. Sen (2002) argues that although it may be feasible to assume that people always maximize their self-interest, the suggestion that any behavior other than the maximization of self-interest is irrational, as it implies a rejection of the role of ethics in decision-making. Since economic behavior may rely on culture, religion, country, sex, age and so forth, and may have a strong ethical dimension, Sen criticized to classify self-interest as the only motivation, rather than one of many motivations. Therefore, Sen suggests that the definition of rationality is ideal as neither internal consistency of choice nor as the maximization of self-interest.

Sen states that the concept of utility as a measurement of well-being is too narrow. Although it can reflect well-being, this may be insufficient, and furthermore well-being may be better described as something other than utility. Sen states that "there are different interpretations of utility, in particular (1) happiness, (2) desire fulfillment (3) choice" (Sen 1985a, p. 187). Sen criticized all three types of utilitarianism and also social choice theories (such as those of Buchanan and Arrow) in his studies. We can give an example of his criticism as follows:

"...in arriving at social choice solutions of diverse views on systematic process concern, preferences cannot do all the work. In particular, rules of aggregation are processes too, and they are needed to do the social choice exercise of combining diverse views. Rules that fix the constituent features of the overall arrangement for aggregation are sometimes called 'the constitution' in terms of which individual preferences are put together to arrive at a social choice. For example, in the Arrovian system, rules such as the independence of irrelevant alternatives and the Pareto principle are not themselves put to a vote. In fact, if these rules themselves were to be determined by a 'prior' voting mechanism or some other social choice process, there would then be a need to have other rules governing the choice

of these 'prior' social choice mechanisms. At some stage, some rules would have to come from outside the immediate domain of individual preferences." (Sen 2002, p. 626).

2.5 Universalism and Uniformity of Human Nature

Universalism is reason and science producing general principles and laws which can be applied to all situations everywhere. On the other hand, uniformity of human nature is the concept that the principal characteristics of humans are always and everywhere the same.

At this point, it has become more crucial to examine the stance of mainstream economics on human needs and rights, and also on universalism. It has adopted a Euro-centric universalist viewpoint, which means that in the process of development there is an absolute and universal path, valid for all societies and economies; and that due to this, "development" cannot differ among societies and cultures. Parallel to this view, human needs show an absolute and universal path, valid for all human beings. This viewpoint ignores the fact that people could perceive development differently according to their identities (gender, religion, ethnic identities etc.) or to the communities to which they feel they belong. In other words, in the Euro-centric viewpoint of universalism, an attitude which is closed to the difference of human existence and hence to its incomparability is displayed.

While his theory can be situated within universalism, Sen criticizes any form of rough universalism which does not consider the difference between and among cultures. Sen also criticizes cultural relativist forms of communitarian or post-modern ethics which treat each culture as sacrosanct and beyond criticism. This stance presupposes that each culture has completely different structures and has to be isolated from others. In this way, by avoiding tracing development ethics within two extreme approaches, Sen seeks universal ethical discourse with cultural relativity within their local traditions and local choices (Des Gasper 1996, p. 628).

While making an effort to offer an area for consensus with the claim for universality and cultural relativism (or pluralism), he aims to emphasize that any form of development ethics theory must be in a universalistic framework which also considers the pluralism of human values, different cultures, religions and habits. Hence, the combination of universalism and pluralism is central to Sen's analysis.

Nevertheless, Sen (1993) definitely refuses to accept a definite Nussbaum list of capabilities and hence an attempt to line the Aristotelian link to the capability approach in terms of "definite list of good life". Sen himself lists some reasons why he does not agree to draw a definite list of human needs². But mostly his intransigence arises from the consideration that the deliberate incompleteness of the capability approach permits other routes to be taken which also have some plausibility (Sen 1993, p. 47).

-

¹ Aristotle believes, as Nussbaum notes, "that there is just one list of functionings (at least at a certain level of generality) that do in fact constitute human good living".

² As Yamamori stated, perhaps Sen wanted to avoid the almost violent connotations of the process of "listing-up" criteria and in this sense Sen is more critically universalistic than Nussbaum. This direction for being sensitive to people's differences has been termed by many scholars as constructive universalism (Yamamori 2003, p. 10).

2.6 Predictability and Verifiability

Positivism and the prestige of 17th and 18th scientism and especially of Newtonian physics are mainly responsible for bringing about the linear paradigm which was founded on four golden rules: (1) reductionism, (2) order, (3) determinism, and (4) predictability and verifibiality.

The first rule implies that the behavior of a system can be understood, clockwork fashion, by observing the behaviors of its parts. There are no surprises; the whole is the sum of the parts, no more and no less. We have analysed this golden rule, namely reductionism, under the analyses of methodological individualism.

While the rule of order means that given causes lead to known effects at all times and places, the rule of determinism implies that processes flow along orderly and predictable paths that have clear beginnings and rational ends. In this study, we have also analysed both of them under universalism.

On the other hand, predictability means that once global behavior is defined, the future course of events can be predicted by the application of appropriate inputs to the model. Sen especially criticizes the positivist and instrumentalist perspectives of mainstream economists. Within this understanding, the notions of efficiency, calculability, predictability and control are dominant factors in explaining the development process of both developing and developed countries. Sen criticizes the narrowness of the prediction and calculation-centred methodological approach and argues that there are other exercises as important as predictive-calculative theories, such as providing adequate description.

Prediction is undoubtedly a major exercise in economics, but an overconcentration on this one function can lead to undue neglect of other exercises –for example, doing economic evaluation or providing adequate description. For this case, Sen gives an example that descriptive statements such as "unemployment has increased" or "inflation is slowing down" call for some way of assessing the reality of what is occurring. They are primarily concerned with reflecting adequately what has happened rather than with foretelling what will happen or what would have happened had the circumstances been different (Sen 2004, p. 584).

The issue of testing and verification are also important for many types of economic analyses. Sen (1991) argued that since most economic analyses involve causal relationships, economists have to analyse this relationship systematically.

Inquiring the need of the variability in economic theory, Sen (2004) explicitly declares that it is not necessary. According to him, the point has often been made that many economic theories are hard to test, and sometimes they are not testable even in principle. This recognition is frequently seen as the basis of justified skepticism regarding the value of such theories. For him, a great deal of economic theory involving causal relationships is, in fact, of this kind, and the practical value of insights obtained from analytical reasoning may well be very substantial (Sen 2004, p. 585). Hence as far as causal theories are concerned, the need to test them with empirical information is fairly universally accepted in principle by economic theorists.

Although Sen criticized the strict positivist-linear paradigm in explaining economic and social reality, Sen (2002) also refrained from the relativist-pluralistic

paradigm. In other words, Sen takes a middle position between the two apparently extreme paradigms.

2.7 The Idea of Freedom

In the old classical liberal philosophy, while savings and ownership rights were the main focus in the determination of individual freedoms, the state was mainly viewed as an institution which protects these rights of the individuals. In other words, for old classical liberal philosophy, freedom refers to the absence of interference; this type of freedom is also called negative freedom. The concept of negative freedom is also used by mainstream economists³ as the absence of coercion and interference by others, and specifically as the absence of government "interference" in the market. This is often the meaning given to "free market": it is a "freedom-from"; a freedom from constraints on one's choices in markets, leaving producers and consumers *Free to Choose*, as indicated in the book of that title by M. Friedman & R. Friedman (Gasper and Irene van Staveren 2003, p. 139). For Friedman as well as other mainstream economists, human freedom and economic freedom work together and redistributive action by the government is interpreted as coercive intervention in the life of an individual.

Freedom is one of the most important concept of Sen's analyses. Sen (1999, 2002) has consistently placed freedom to achieve (capability) as the central category of his analysis. As noted in the previous section, Sen refers to the "positive concept of freedom" in his studies, stating how freedom should be viewed as both "the primary end" and the "principal means" of development and he criticized its use in a negative manner. It is not necessary to re-explain the importance of the concept of positive freedom in this section. However, it is necessary to emphasize the link between individual freedom and social arrangement. Sen (1999, p. xii) emphasizes the importance of social arrangements in achieving freedom of agency. According to him, since there is a deep complementarity between individual agency and social arrangements, it is important to give simultaneous recognition to the centrality of individual freedom and to the force of social influences on the extent and reach of individual freedom. Hence to counter the problems individual freedom should be considered as a social commitment.

3. Conclusion

The main characteristic of the capability approach is its focus on doings and beings and the freedom to achieve them, instead of the goods and resources that people can

³ The negative concept of freedom which was also traced by mainstream economists goes back at least to Hobbes. The positive concept, on the other hand, has been associated with Rousseau, Kant and Hegel and more generally with socialist writers. Although Sen emphasize the importance of social arrangements in accessing freedom, there are some important differences between Sen's analysis and communitarian and socialist writers' analysis. Sen's emphasis on individual freedom has led to concerns that he failed to take sufficient account of the social nature of freedom as emphasized by Hegel and Marx and, in more recent times, by communitarians such as Charles Taylor (Renee Prendergast 2005, p. 1158). Since Sen discussed "positive freedom" within the liberal framework, his stance on the social nature of freedom is also consistent with his liberal identity.

access or possess. According to this approach, human beings have to be given the opportunity to shape their own destiny rather than be the passive recipients of externally devised development projects like the westernization project that was designed by mainstream economics. Regarding this statement, it could easily be noted that the capability approach and mainstream economics display fairly discordant structures. The main reason for this discord is that these two analyses are grounded on considerably different microeconomic foundations of macro economics and hence methodological/epistemological roots.

The capability approach and mainstream economics are incompatible in their viewpoints of the dominant methodologies in the social sciences. While the capability approach is based on non-Cartesian epistemological roots that lead to a recognition of knowledge as socially constructed, mainstream economics has essentially adopted Cartesianism and the doctrine of Newtonian atomism that lead to a recognition of formalism, predictiability, verifiability, linearism, methodological individualism.

Political, economical and cultural extensions of the Enlightenment and classical liberal philosophy based on Cartesian epistemological roots have also increased the conflict between these two analyses. Since Sen criticizes any form of rough universalism which does not consider the differences between and among cultures and he questions whether it is correct to classify self-interest as the only motivation, rather than one of many motivations. Since he rejects the negative type of freedom which goes back to Hobbes, it can be explicitly stated that Sen does not recognize nor internalize unhesitantly all the ideas of the Enlightenment and classical liberal philosophy.

In conclusion, it should also be stated that while Sen rejects the main political, cultural and economical implications of classical liberal philosophy and the main metholodological/epistemological roots of mainstream economics, he has never challenged the ontological foundations of mainstream economics and liberal philosophy. This distinction is of crosscutting importance, precisely because the "individual" focus of the capability approach is often misunderstood or inaccurately criticized. Although the capability approach offers an alternative approach within the frame of epistemological/ methodological grounds, it also strongly defends individualism ontologically. For this approach, individuals, and only individuals, are the *ultimate* units of concern. As Robeyns (2003) states, this, of course, does not imply that it should not evaluate social structures and societal properties, but it strongly implies that these structures and institutions will be evaluated *in virtue of* the causal importance that they have for individuals" "well-being". On the other hand, since the ontological break of the approach is not currently our research theme, we have not discussed it in this study.

References

- **Arnsperger, Christian, and Yanis Varoufakis**. 2006. "What Is Neoclassical Economics? The Three Axioms Responsible for Its Theoretical Oeuvre, Practical Irrelevance and, thus, Discursive Power." *Panoeconomicus*, 53(1): 5-18.
- **Benicourt, Emmanuelle.** 2002. "Is Amartya Sen a Post-Autistic Economist?" *Post-Autistic Economics Review*, 15(4): article 4. http://www.btinternet.com/~pae news/review/issue15.htm.
- **Bhargava, Rajeev.** 1992. *Individualism in the Social Science. Forms and Limits of a Methodology.* Oxford: Clarendon Press.
- **Bhaskar, Roy.** 1998. The Possibility of Naturalism: A Philosophical Critique of the Contemporary Human Sciences. New York: Routledge.
- Blaug, Mark. 1997. "Ugly Currents in Modern Economics." Options Politiques, 18(17): 3-8.
- **Cameron, John.** 2000. "Amartya Sen on Economic Inequality: The Need for an Explicit Critique of Opulence." *Journal of International Development*, 12(7): 1031-45.
- Clark, David. 2007. "The Capability Approach: Its Development, Critiques and Recent Advances." Global Poverty Research Group (GPRG) Working Paper 032.
- **Gaertner, Wulf.** 1993. "Amartya Sen: Capability and Well-Being." In *The Quality of Life*, ed. Martha Nussbaum and Amartya, 62-67. New York: Oxford Clarendon Press.
- **Gasper, Des, and Irene van Staveren.** 2003. "Development as Freedom And as What Else?" *Feminist Economics*, 9(1): 137-161.
- **Gasper, Des.** 1996. "Culture and Development Ethics: Needs, Women's Rights, and Western Theories." *Development and Change*, 27(4): 627-661.
- **Fine, Ben.** 2001. "Amartya Sen: A Partial and Personal Appreciation." CDPR (Centre for Development Policy & Research) Discussion Paper 1601.
- Fine, Ben. 2004. "Economics and Ethics: Amartya Sen as Starting Point." *The New School Economic Review*, 1(1): 151-162.
- **Friedman, Milton, and Rose Friedman.** 1980. *Free to Choose*. New York: Harcourt Brace Joyanovich.
- **Guerrian, Bernard**. 2002. "Is There Anything Worth Keeping in Standard Microeconomics." *Post-Autistic Economics Review*, 12(15): Article 1. http://www.btinternet.com/~pae_news/review/issue15.htm.
- **Hodgson, Geoffrey**. 2007. "Meanings of Methodological Individualism." *Journal of Economic Methodology*, 14(2): 211-26.
- **Jhunjhunwalla, Bharat**. 2000. Welfare State and Globalization: A Critique of Amartya Sen. Jaipur: Rawat Publications.
- Lawson, Tony. 1997. Economics and Reality. London: Routledge.
- **Mirowski, Philip.** 1984. "The Role of Conservation Principles in Economics." *Philosophy of Social Science*, 14(2): 461-474.
- **Nussbaum, Martha.** 1992. "Human Functioning and Social Justice: In Defense of Aristotelian Essentialism." *Political Theory*, 20(2): 202-46.
- Prendergast, Renee. 2005. "The Concept of Freedom and its Relation to Economic Development: A Critical Appreciation of the Work of Amartya Sen." Cambridge Journal of Economics, 29(2): 1145-1170.

- **Robeyns, Ingrid.** 2002. "In Defence of Amartya Sen." *Post-Autistic Economics Review*, 17(1): Article 5. http://www.paecon.net/PAEReview/issue17/Robeyns17.htm.
- **Robeyns, Ingrid.** 2003. "Sen's Capability Approach and Gender Inequality: Selecting Relevant Capabilities." *Feminist Economics*, 2(1): 61-92.
- **Robeyns, Ingrid.** 2005. "The Capability Approach A Theoretical Survey." *Journal of Human Development*, 6(1): 93–114.
- Schumpeter, Joseph A. 1909. "On the Concept of Social Value." *Quarterly Journal of Economics*, 23(2): 213-32.
- **Sen, Amartya.** 1984. *Resources, Values and Development*. Cambridge: Harvard University Press.
- Sen, Amartya. 1985a. "Well-being, Agency and Freedom: The Dewey Lectures 1984." *The Journal of Philosophy*, 82(2): 169-221.
- Sen, Amartya. 1985b. Commodities and Capabilities. Amsterdam: North-Holland.
- Sen, Amartya. 1991. "What Did You Learn in the World Today." Harvard Institute of Economic Research Working Papers 1537.
- **Sen, Amartya.** 1993. "Capability and Well-Being." In *The Quality of Life*, ed. Martha Nussbaum and Amartya, 30-53. New York: Oxford Clarendon Press.
- Sen, Amartya. 1998. On Ethics, and Economics. New York: Oxford University Press.
- **Sen, Amartya.** 1999. *Development as Freedom*. New York: Oxford University Press.
- **Sen, Amartya.** 2002. *Rationality and Freedom*. Cambridge: The Belknap/Harvard University Press.
- Sen, Amartya. 2004. "Economic Methodology, Heterogeneity and Relevance." *Social Research*. 71(2): 583-614.
- **Udéhn, Lars.** 2001. *Methodological Individualism: Background, History and Meaning*. New York: Routledge.
- **Vukotić, Veselin.** 2008. "Economic Freedom and New Economic Paradigm." *Panoeconomicus*, 55(1): 115-128.
- **Weber, Max.** 1968. *Economy and Society: An Outline of Interpretative Sociology*. Translated from the German edition of 1921-1922 by G. Roth and C. Wittich. Berkeley: University of California Press.
- Yamamori, Toru. 2003. "Constructive Universalism: Sen and Sensitivity to Difference." Ethics and Economics, 1(1): 1-15.