The Concept of Equality in Nobel Laureate A. K. Sen's Work: A Critical Assessment

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Abstract

This article analyzes the theoretical foundations of Nobel Laureate A.K. Sen's concept of equality as reflected in his work in many areas of economics and social thought. The fundamental approach of "functionings" and "capabilities" that has been the hallmark of Sen's approach to equality is first presented and the common bases identified. The basic concept used is then analyzed from a logical and empirical perspective. The adequacy of this approach is then scrutinized by contrasting alternative approaches of *end-state* and *process* notions of equality. A comprehensive critique is developed, and the major shortcomings of Sen's concept of equality are detailed. Sen's conception of equality is found to be inadequate on logical and methodological grounds. Hence, it is suggested that this approach may be an inappropriate guide for economic policy and social intervention to facilitate human development.

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Introduction

Nobel Laureate Amartya Sen's work in economics, political theory and philosophy has been founded on the principle of *end-state equality*. His magisterial contributions to economics and social thought have covered a wide canvas, with his theoretical writings being at the center of the controversies that have raged in social choice theory and welfare economics; economic philosophy; public choice and political theory; the economics of poverty, distribution and development; and the economics of famines. His contributions in each one of these fields of human inquiry are so prolific that a fulllength treatment of these contributions in each area would take many pages to write. However, the notion of *end-state equality* has permeated all his work in these areas. This paper limits itself to a critical examination of Sen's concept and application of *end-state equality*. No attempt is made here to detail or assess other aspects of his many contributions in the areas identified above.

This paper focuses on Sen's concept of equality with a particular emphasis on the theoretical basis of this important concept as reflected in his two major books on inequality, On Economic Inequality (1973), abbreviated to OEI, and Inequality Reexamined (1992), abbreviated to IER, as well as in his more extensive work on freedom and development (see Sen 1991, 1992a, 1992b, 1993, 1999 and 2002). While Sen has been sensitive to the process that generates inequality and has tried to deal with criticisms of his end-state notion of equality in his later work, I will argue that this attempt remains unpersuasive. This later work is also permeated by the same concept of outcomes that he uses in the books analyzed in detail here (see, for example, his Development as Freedom, 1999).

Sen on Equality

Throughout his writings, Sen focuses on human development as being measured and assessed in terms of the provision of "social opportunities" and "capabilities" (in terms of health, literacy, education, nutrition, longevity, self-respect, etc.). This focus on the

expansion of "social opportunities" and "capabilities" is predicated on the notion of freedom seen as the range of options a person has in deciding what kind of life to lead. According to Sen, the capacity to enjoy such freedom is predicated on equality of opportunity in attaining the requisite capabilities (see OEI, Annexe A.7). This underlying focus is clear from his discussion on the Demands of Equality in IER,

> The particular approach to equality that I have explored involves judging individual advantage by *the freedom to achieve*, incorporating (but going beyond) *actual achievements*. In many contexts, particularly in the assessment of individual wellbeing, these conditions can, I have argued, be fruitfully seen in terms of the *capability to function*, incorporating (but going beyond) the actual functionings that a person can achieve. The 'capability approach' builds on a general concern with freedoms to achieve (including the capabilities to function) (IER: 129).

Sen's argument for equalizing capabilities can be summarized as follows:

- (1) Ultimate well-being is dependent not upon one's income, ownership of commodities or resources, but on the capability set (of functionings such as good health, literacy, education, security, self-respect, etc.) that one possesses.
- (2) The 'capability set' that one possesses can be seen as the overall freedom that one enjoys in pursuing well-being.
- (3) Since individual well-being depends crucially on the capability to function, it is only by achieving equality of opportunity in acquiring this capability set that one can maximize the wellbeing of the individuals in a society.

Sen explicitly recognizes that the analysis of equality has fundamentally to face two underlying realities: (1) that human beings are heterogeneous and diverse in both external and personal characteristics, and (2) it is a complex and difficult task to define and measure equality in terms of the multiplicity of variables that can be used to evaluate it. However, he argues that nevertheless any theory of social arrangements must endorse equality in terms of *some* focal variable, even though the equality in terms of the one or more variables chosen by a particular theory inevitably implies inequality in terms of some other variable. Thus, equality of opportunity entails unequal outcomes in terms of distribution of income, wealth, etc.

Following his justification of the primacy of equality in any theory of social arrangements, Sen then goes on to assert his own choice of focal variable for assessing the nature, type and level of equality underlying a particular social arrangement. This choice of focal variable forms the basis for the assessment of the processes and outcomes of his work on development. The equalization of resources or the ownership of primary goods (rights and liberties, powers and opportunities, income and wealth, self-respect, etc.) does not equalize the substantive freedom to achieve of different individuals, since significant differences can occur in the manner in which resources and primary goods are converted into this freedom. Thus, a focus on freedom of choice requires that one look beyond resources and primary goods to an assessment of the individual's "functionings" and constituent "capabilities," where the former are related to the achievement of well-being and the latter being related to freedom of choice (see OEI, Annexe A.7). Hence, the focus on equalization of functions and capabilities is claimed to be superior for purposes of evaluation of the efficacy of various social arrangements. Based on this foundation, Sen's work has concentrated on assessing human development in terms of the egalitarian provision of functionings and capabilities. These functionings and capabilities are embodied in such variables as the freedom to lead normal life spans, freedom from deprivation and the freedom to achieve one's potential (as reflected in

the rate of literacy, particularly female literacy, school attendance, political participation, etc.).

To provide a framework for assessing the broad ambit of Sen's work in economics and social thought per se, a critical assessment of his basic approach to equality is provided below to assess his work in the appropriate methodological context.

A Critical Assessment of Sen's Concept of Equality

It is important to recognize that any theory of equality that focuses on *end-state* principles of equality necessarily looks at equality as an end in itself. Sen's espousal of equality of functionings and capabilities can be identified as being based on *end-state* principles of equality rather than historical or *process-based* principles of equality (even though he has been sensitive to criticisms about ignoring *process* attributes cf. Sen's 2002 Arrow lectures). Such *end-state* theories of equality have in common that they focus on the equality of outcome of some variable such as income, wealth, education, health, selfrespect, etc. and are not focused on the process by which such outcomes may result.

While Sen has been sensitive to the importance of process outcomes in his comments (see Sen 1982b and 2000) on Robert Nozick's Anarchy, State and Utopia (1974) and most recently in his second Arrow Lecture (2002) extending his work on freedom and social choice (1991, 1993, 1999), his work nevertheless is mainly focused on what he calls opportunity outcomes, seen as the freedom to achieve and do as captured in his concepts of "capabilities" and "functioning." This is borne out by his focus on opportunity outcomes in the overwhelming majority of his work and his focus on the provision of capabilities and functionings on his work on development as freedom (Sen 1999) and on choice, welfare, measurement, resources, values and development (as contained in Sen 1982a and 1984). Even when he does invoke process outcomes as in the Arrow lectures (2002) and related work (Sen 1991, 1992a, 1993 and 1999), it is always included as a critique of process-based theories of

justice such as Nozick's theory (1973, 1974), Buchanan's public choice theory (1954a, 1954b, 1986) or the theory of game forms (e.g., Sugden 1981, 1985; Gaertner, Pattanaik and Suzumura 1992; Pattanaik and Suzumura 1994; or Pattanaik 1996) or as trade off conditions to be included in social choice models emphasizing *opportunity* outcomes (see Sen 1985, 1992b, 1997, 2000) rather than explored in depth like the issue of *opportunity outcomes* in the majority of his work. The crucial role of *opportunity outcomes* is emphasized in all his major work, including his seminal *Development as Freedom* (1999), in which the *process aspect* of freedom gets a total mention of two pages and reference on two other pages. Certainly, Sen's work on equality (the subject of this assessment) is focused on *opportunity outcomes* as is borne out by almost all his writings on this subject.

The most important consideration in discussing the role of equality in theories of social arrangement is the crucial distinction between *end-state* equality and *process* equality that Sen addresses as discussed above but does not examine in detail because of his focus on the former at the cost of the latter. By limiting himself to criticisms of *process-based* theories like those of Nozick and Buchanan from an *end-state* equality perspective, Sen obscures the completely different nature of these types of analyses and the implications that they have for freedom, efficiency and economic development.

The end-state theories of equality of the kind espoused by Sen place the onus on unconstrained, knowledge-endowed decisionmakers who are able to collect and act on information and knowledge that is widely dispersed in society (cf. Hayek, 1937 and 1945). Endstate theories of equality necessarily presume that it is possible to establish equality in some preferred space deemed to be superior while trading off such equality with inequality in other end-state spaces. Process-oriented theories of equality depend on a constrained vision of knowledge-deficient decision-makers dispersed across society treated equally by the discipline of general laws and rules of conduct (not necessarily equal as in the case of Hayek). They are motivated by and discover the uncertain outcomes that result from

interaction in the market without any presumption of a stable or systematic pattern in the outcomes in terms of the relevant output or input variable space. Thus, there is a primacy of process rather than outcomes, so that inequality may be generated in some or all the outcome spaces as well as the process space.

Many theories of social arrangements do not espouse equality of either outcome or process. Many theories of social arrangements, such as those of Bohm-Bawerk (1959), Mises (1949, 1979), etc. focus on process evolution rather than process variables or outcomes, as do the theories of Gauthier (1986) and the anarchists. These latter theories eschew equality of any kind, including equality of opportunity or liberty. The most prominent one is the economics of the early Austrian School (up to Hayek, who has written much about equality before the law and the equality of general rules of law and conduct) in which there is no requirement that equality of opportunity or any other kind of equality exist. The early Austrians do not argue for equality in any space, thus bringing in to question Sen's claim that any theory of social arrangement must necessarily discuss equality in some dimension. Neither Menger (1963, 1976) nor Mises (1949) discuss in detail the concept of equality before law except for the latter making a passing reference to it (1949, p. 841) when he refers to the "the liberal champions of equality under the law" and their conception of inequality. In fact, Mises specifically argues that "the inequality of incomes and wealth is an inherent feature of the market economy. Its elimination would entirely destroy the market economy." (1949, p. 840) Only Hayek (1960, 1976) develops the conception of the universal rules of law and conduct and their universal applicability to underpin his Austrian analysis. Nevertheless, he insists on equality of process, not equality of outcome.

A basic contradiction arises within *end-state* principles of equality. It is clear that in equalizing *some* end-states to achieve *some* social or practical objective, *some* other *end-states* will be, willy-nilly, made more unequal. As Schmidtz (2006) perceptively points out, "By the same token, every theory demands inequality too, including

egalitarian theories. An egalitarian is someone who embraces one kind of unequal treatment as the price of securing equality of (what he or she considers) a more important kind." (p. 110) Thus, in equalizing the endowment of education, good health or nutrition of the individuals in a society on the grounds that these *functionings* are of intrinsic importance, play instrumental personal, social and process roles, and contribute to empowerment and distributive roles, this will necessarily result in the unequal treatment of other *functionings* such as the ability to trade, to earn and dispose of one's income (however meager) in the way one feels fit, etc.

This necessarily implies that someone other than the individual economic actor who is the recipient of such equalization knows the correct distribution of individual wants and needs that will make the individual and the society he lives in better off. Such an approach claims too much for the policy-maker in terms of his or her knowledge about the preferences and situation of the individuals in society. The Knowledge Problem identified by Hayek (1937, 1945) looms large in this context, especially given the complexity of social policy and the lack of markets or market prices to aid in decisionmaking due to the publicly-owned nature of these services. Recourse to the argument that since the government is involved anyway in presently misallocating expenditures away from the preferred endstate variables offers no escape hatch since that process itself is deeply problematic (see Kamath 1994a and 1994b). As the work of Buchanan (1986), Hayek (1945, 1975, 1978), Mises (1979), and others has shown, government is incapable of making the simplest of market allocation decisions because of the underlying knowledge and incentive problems, and thus the feasibility of making decisions about capabilities and functionings is a non sequitur.

Another problem relates to the claim that focusing on capabilities increases freedom, especially the freedom to achieve. From a freedom of choice perspective, equalizing the endowment of individuals in terms of functionings necessarily involves the reduction of freedom in some other dimension (see Engerman 2003 and

Dowding 2006 for a similar development of this point). First, if government action is required in the provision of these public services, they have to be financed by increased taxation, which reduces the freedom of at least some individuals in society if not the very same individuals whose freedom to achieve is being increased. If there is a presumption that government expenditure is likely to be less productive than private expenditure using the same funds, we will see the diminution of the national product of the nation and therefore a reduction in economic freedom interpreted to be the widening of consumer choice through higher incomes. This, in turn, would imply a reduction in the freedom to achieve.

Secondly, the equalization of the endowment of public services such as health, education, etc. will at least involve the reduction of the freedom of some to consume more of these services, leading back to the difficult task of comparing the wellbeing gain of one or more persons against the well-being loss of others.² Clearly, this is problematic, given Sen's own criticisms of utilitarian theories of consumer choice (see Sen 1970a, 1970b, 1977).

The provision of equal functionings or equal access to such functionings as education, health care and nutrition by the state so as to improve the capability to achieve can also be interpreted to be focused on the provision of "equal opportunities." While Sen claims that the two are not the same and argues that the capability

² While OEI deals with the measurement of inequality and examines it as a quasiordering, it nevertheless concludes that the idea of inequality is both "very simple and very complex." Larry Temkin (1993) contains the most thorough and wideranging analysis of inequality, including a detailed examination of Sen's view of equality as put forth in OEI. He concludes that the concept of inequality is complex, multifaceted and incomplete, and, despite some plausible arguments advanced to the contrary, it is inconsistent, incompatible and severely limited, especially on the question of interpersonal comparisons and transfers. See Schmidtz (2006, Part 4) for a perceptive discussion of the nuances of and the difficulties with the concept of equality. Scanlon (1998, 2003) deals with some of the difficulties with the concepts of equality and justice.

perspective is much broader in scope, this is contradicted by his own admission that "in a very basic sense, a person's capability to achieve does indeed stand for the opportunity to pursue his or her objectives....a more adequate way of considering 'real' equality of opportunities must be through equality of capabilities (or through the elimination of unambiguous inequalities in capabilities, since capability comparisons are typically incomplete)"³

fundamental problem exists with equalizing the Α opportunities (or functionings) of individuals. Since the opportunities (or functionings of individuals) are both the product of "nature" and "nurture," equalizing them would involve extensive interference in and control of all aspects of the physical and human environment of people so that ultimately government controlled every aspect of a person's well-being. This would involve equalizing the home environment (since the role of the family has been shown to be paramount in shaping one's capabilities and opportunities), one's education, health care, nutrition, skills, mental capabilities, etc. Since genetically transmitted capacities will substantially affect one's capabilities, such an equalization of opportunity (or functionings) will never bring about true equality. Attempts to achieve such equality would, however, in the limit, involve the "nanny" state of Plato's Republic with every aspect of the young citizen's life socialized starting at birth.⁴ While Sen recognizes these problems, he does not address them, especially in the context of his specific formulation of the "equality of opportunity" perspective in the form of "equality of capability."

A final criticism is very important in assessing the validity of Sen's concept of equality. Since his methodological approach is developed entirely for purposes of application to real world problems

³ IER: p. 7. See also Chapter 9.

⁴ For other criticisms of the "equality of opportunity" perspective, see Nozick (1974), pp. 235-238; Hayek (1960), pp. 91-93; and Schmidtz (2006), pp. 126-139.

of development, it must be capable of being made operational. Such operationality requires that there be a numeraire and operational calculus of valuation that is itself voluntary and removed from human control to preserve the freedom of choice that Sen insists should underlie theories of social arrangements. While he develops a number of measures of inequality (especially in his OEI, appendices A4 to A7), none of the measures or valuation methods are based on voluntary valuations developed in impartial and free social arrangements, such as the price system in a market economy. In a Senian world, a group of controllers or Platonic guardians will always be necessary to make the necessary valuations and judgments to equalize "capabilities" and "functionings." This is internally contradictory since Sen predicates his whole analysis on the critical importance of freedom as "the real opportunity that we have to accomplish what we value" (IER: 31) since such freedom will necessarily always be constrained and restricted by those who "value" and control the achievement of such "real opportunities," making such freedom impossible. This approach also begs the key question of how the controllers/guardians will be able to collect the necessary subjective information that is in the minds of individuals in order to make the appropriate decision to equalize the "capabilities" and "functionings." Sen's own recourse to public discussion and democratic decision-making is non-starter on practical and procedural grounds.

The operational applicability of the capabilities/functionings approach to equality has been questioned by a number of analyses. Sugden (1993), Cohen (1993, 1994), Sumner (1996), Rawls (1999), Sen himself (2005), Dowding (2006) and Robeyns (2006) have indicated the difficulties in making the capabilities approach operational. Rawls has labeled the approach as an "unworkable idea" and Sen himself has indicated that "there are widespread doubts about the possibility of making actual empirical use of this (capabilities) richer but more complex procedure." (2005, p. vii) Sugden (1993) makes the following assessment:

...given the rich array of functionings that Sen takes to be relevant, given the extent of disagreement among reasonable people about the nature of the good life, and given the unresolved problem of how to value sets, it is natural to ask how far Sen's work is operational. (Sugden, 1993, p. 1953)

Three symposia in *Economics and Philosophy* (2001), *Feminist Economics* (2003) and *The Journal of Political Philosophy* (2006), while providing thoughtful evaluations of Sen's approach on philosophical, feminist and political theory grounds, nevertheless emphasize the difficulties of operationalizing the capabilities approach, as does Sen's own recent work (see Sen 1999), in which the quandaries of what capabilities and functionings to include, the difficulty in their measurement, and the informational and knowledge problems are not adequately addressed.

Conclusions Regarding Sen's Concept of Equality

This article has presented an assessment of Nobel Laureate A. K. Sen's concept of equality. He has consistently tried to investigate critical areas in human thought with particular relevance to issues of human and societal development, with an underlying concept of *end-state* equality. My objective has been to critically assess this conception of equality in a substantial body of his work of most interest to economists, particularly in the field of development economics,

A critical examination of Sen's concept of equality reveals the following conclusions:

- (1) The basic method that underlies Sen's theoretical and applied work on inequality is one that treats equality as a basic attribute of all theories of social organization.
- (2) The functionings or capabilities approach to equality that Sen develops in his theoretical and applied work is based on a

methodologically flawed foundation of desired *end-state* equality as against the more methodologically viable *process* equality. This paper has established that the *end-state* view fails on a number of counts relating to the underlying assumptions and logical impossibility of collecting and acting upon the required knowledge and information to achieve these desired end states; the incentive and agency problems underlying such attempts; and for ignoring the insights of the theory of public choice and the underlying distortions and difficulties of public actions.

(3) The major problem with Sen's method (his sensitivity to process outcomes notwithstanding) lies in the fundamental contradiction of end-state theories of economic equality - in equalizing some end-states to achieve some social or practical objective, some other end-states will become more unequal. This necessarily implies that someone other than the individual economic actor who is the recipient of such equalization knows the correct distribution of individual wants and needs that will make the individual and the society he lives in better off. As a number of scholars have shown, the knowledge requirements information and of such omniscience are unattainable on theoretical and empirical grounds.

In conclusion, the methodological underpinnings of Sen's concept of equality can be criticized on a number of grounds. It is clear that greater methodological justification and thought needs to be provided if Sen's radical views on equality, poverty and development are to become a part of mainstream economic and social thought and practice. On their present justification, they are wanting in deserving such a place or the attention and discussion they have received from economists and policy-makers alike.

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