

Referee report on ECONOMICS-MS-1935

“Doing Rawls Justice: Evidence from the PSID” by Antonio Abatemarco

The paper

The paper takes an individual perspective and derives tests for fairness based on it. It asks the following question: Under which conditions the income gap between two individuals, say $|y_i - y_j| > 0$, is fair, i.e., does not need to be compensated? A strict inequality perspective would simply reply “never”, while neglecting that inequalities generated by choices (named effort by the literature) might provide good incentives and should be preserved, while those generated by unfair social circumstances and poor access to resources are instead illegitimate. In line with Rawls principles of equity, the author partitions income differences into legitimate and non-legitimate. The share of average illegitimate individual income gaps over the average individual income gap (namely, the Gini coefficient) gives a measure of inequity. This is applied to PSID data to assess the pattern of fairness in the US over 14 years. Unfair inequality is relatively high compared to what found in other studies, and on the rise.

Comment

The paper is nicely written, results deliver contributions both on the theoretical and empirical side and contribute to the discussion about the measurement of fairness. The strength of the paper lies on the theoretical model and outweighs possible drawbacks, outlined hereafter. For this reason, I believe that the submitted paper should be taken into consideration for publication in Economics.

Strengths of the paper

The author commits to the “Difference principle” by Rawls, which states that economic disparities should exist if they are beneficial to the community and, in particular, to the least advantaged one. In this sense, the author provides a sufficient test for fairness, stating that the economic disparity $y_j - y_i > 0$ between individuals i and j can be deemed legitimate only if three conditions are met: i) j comes from a socially disadvantaged group (for instance, she is of a poor economic background) compared to i (that is, the disparity favors the least well off), ii) in case i and j effort differ, it must be that j has put more effort than i (the disparity does the best for the community through the incentives it gives) and iii) if the disparity cannot be connected to access or lack of access to some basic opportunities (hence the disparity is reasonably generated under fair access to positions and offices). Conditions i), ii) and iii) are implemented by Definitions 3.1, 3.2, 3.3. I think the structure is interesting, as it allows to classify economic disparities into legitimate and not legitimate. Equation (3) gives a coherent and simple measure of “lack of fairness”, by averaging non-legitimate disparities in the population.

This approach is generally different from what proposed by related literature, putting instead the focus on distribution of opportunities across types. It also brings novel ideas by transposing the requirement in Rawls into well defined criteria, such as the Rawlsian inequity measure.

Furthermore, the criterion relies on non-parametric estimators.

Weaknesses of the paper/suggested improvements

Restrictive notion of legitimacy. I think the author should discuss two important differences between his proposal and the literature, especially Roemer. The author proposes to identify legitimate economic disparities upon very restrictive criteria that (as the author mentions at pg 25§1) account for both implication (condition i) above) and origin (condition ii) and iii) above) of inequality. The proposed Inequity measure G_R aggregates residual economic disparities that are not legitimate.

Types order. The notion of legitimacy here builds on a key condition: that natural and social circumstances can be unambiguously ranked by their expected, not realized, implications on economic outcomes. So, an outcome disparity is legitimate if its sign does not match the postulated implications of the circumstances on outcomes. Disparities are fair as long as incomes do not stand in a monotonic relation with the implications that being exposed to better circumstances are expected to have on outcomes.

Existing literature proceeds differently. Generally, normative structure is introduced to qualify illegitimate inequalities, which are then quantified accordingly. Furthermore, in Roemer the types' disadvantage crucially depends on the associated opportunities distribution, from where the "min of means" criterion.

Correlated circumstances. I believe the author should warn the reader about these points. First, because they would help framing the paper over growing literature on equality of opportunity. Second, because this helps understanding the implications that the choice of circumstances, and especially the correlation between circumstances, might have on the results. The proposed approach overlooks potentially unclear consequences of correlation in circumstances on outcomes. For instance, being raised in an urbanized area might be a "more propitious" circumstance than being raised in the countryside, as more educational amenities are available in the cities. However, parental segregation by parental abilities (reflected in their incomes and education) in the cities raises concerns about the fact that being educated in segregated school districts of a city unambiguously raises human capital of the offspring. So, economic disparities that are beneficial to those raised in the countryside compared to those raised in the city are legitimate, even though they might simply reflect the implications of segregation by parental skills (unobservable). In this situation, the child raised in a neighborhood where low-skills parents are overrepresented might face worse circumstances than children raised in the countryside, although these are largely neglected by the approach.

Similar criticism applies to the choice of effort. However, effort is generally not observable and monotonicity assumptions are usually postulated to identify its consequences on the distribution of type-specific incomes. The author takes these identification conditions (monotonicity) for granted, and defines the "partial responsibility ordering" (pg. 14) on these grounds. Differently from before, but similar to Roemer, effort is now defined on the basis of consequences rather than of origins. This point deserves to be discussed in the paper.

Minor comments

- The individual-based approach on economic disparities can be readily contrasted to the proposals made by other papers to measure fairness on the basis of economic disparities in type-specific distributions (one example is <http://ftp.iza.org/dp8503.pdf>). Comparisons of the two approaches might be of interest.

- Is it there a specific reason to measure *individual* opportunities through disposable income, a measure that is also sensible to other factors such as composition of the *household* (to compute tax allowances and tax credits)? An alternative can be gross earnings of male workers.
- Abstract: "...by resorting *on* the well known...."
- Page 13, the paragraph "Evidently, the same...." repeats the first paragraph of the page with n replaced by s . It can be possibly simplified.
- Definition 3.3: Is the approach robust to the choice of z ?
- Page 19, line 8 : "...whenever $h, k \in \Omega$."