

Associate Editor report for *Social Choice and Welfare* on the paper

“Two principles for two-person social choice”

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The authors consider social choice correspondences for two agents with strict preferences. They study two appealing principals: Minimal Rawlsianism (MR) and Equal Loss (EL). They also focus on some of their variants, mostly on the Minimal Dispersion (MD) axiom, a variant of EL. The authors study several known social choice correspondences according to the two principles. They show (in Theorem 4) that MR and MD are compatible only when the number of alternatives is low. Finally, to reconcile the two principles, they propose and study the Rawlsian Minimal Dispersion (RMD) axiom and its strong version (SRMD).

I have two referee reports written by two experts on the field. The two referees disagree on the relevance and assessment of the results, and on their recommendations. Referee 1 considers that the paper contains a valuable contribution that fits well with *Social Choice and Welfare* and recommends a minor revision. Referee 2 perceives the paper as being preliminary, considers the incompatibility result in Theorem 4 as an initial starting point only, and views the remaining results as not being sufficiently relevant.

My assessment of the paper is closer to that of Referee 1. In addition, the two reports contain many comments, suggestions and questions that can help the authors to write a better version, which could induce Referee 2 to have a more positive view of the paper.

Therefore, my recommendation to the editor is that the authors be allowed to revise and resubmit the paper to the journal. The new version should try to deal with all comments, suggestions and questions contained in the two reports. In particular, the authors should try to make some progress in the analysis that Referee 2 proposes at the end of the third paragraph of his/her report as well as to answer the two questions raised at the end of the report. Regarding the report of Referee 1, I fully agree with comments (1) and (2); the other comments seem reasonable and I think that the authors will be able to address them satisfactorily.

What follows is a non-exhaustive list with some minor comments and suggestions on the first seven pages that the authors may use when preparing a new version of the paper. They should be seen as illustrations of how to improve a bit the presentation of the paper.

Minor comments and suggestions

1. Page 2, first paragraph. The convexity assumption in the Nash bargaining problem may be natural if the bargaining solution admits lotteries on a finite set of alternatives. But then, preferences should be cardinal.
2. Page 4, line 99. "[2014]³." is ugly. Footnote 2 in page 3, line 75, looks better.
3. Page 4, line 110. Replace "expressed the union all" by "expressed as the union of all".
4. Page 4, lines 111-112. Replace "sub correspondences" by "sub-correspondences", as in page 5, line 178.
5. Page 4, line 113. Replace "odd, Within" by "odd, within".
6. Page 4, 155. Replace "other that" by "other rules that".
7. Page 5, footnotes 5 and 7. In footnote 5, replace "⁵ In" by "⁵In", as in almost all the other footnotes. The same applies to footnote 7.
8. Page 6, line 165. Replace "notation. Sections 4 and 5" by "notation. Section 3 presents several social choice rules. Sections 4 and 5".
9. Page 6, line 196. Define the notation " $\lfloor \frac{m}{2} \rfloor$ ".
10. Page 7, lines 220 and 299. The notation " λ_P " has not been defined.