Response to the Referee (author of report 1)

We are grateful for the comments. We are happy to revise the paper to take account of all the minor comments.

Regarding the main comments:

1) The fact that the number of states of the world is countable is not really a limitation if one wants to introduce continuous distributions, because approximations are possible, as explained in our footnote 7. The motivation for this restriction is only to simplify some of the results and proofs, and it does not have a deep meaning. The results could be adapted to other frameworks (finite number of states of the world, or a continuum).

2) We agree that total wealth is generally not independent of the distribution of wealth, and this is easily accommodated in our model because the lotteries to be evaluated can incorporate this constraint. We will clarify that if it is not clear.

What happens in our model is that *any* lottery (p,u) can be evaluated. The domain of possible lotteries includes a wide set of possible worlds, much larger than the actual world. The justification for looking at such a wide domain is that a social criterion that would be satisfactory only on a small domain and could not work in a different world (say, a much richer or a much poorer world) would be too limited.

Once the criterion is well defined and justified by properties satisfied on a wide domain, it can be applied to our specific world with particular feasible allocations. The feasibility constraint can include the fact that redistribution reduces the total utility, etc.

Thank you again for these comments which will help us improve the paper.

The Authors