We thank all the reviewers for the helpful and supportive reviews. The reviewers made a range of suggestions concerning 1

the presentation of the paper, which we take seriously; we will do our best to incorporate them into the revised version 2 of the paper. 3

Since the reviewers did not ask any (non-rhetorical) questions, we focus in our rebuttal on one potential misunderstand-4 ing. 5

Reviewer #2: "... the paper is limited in that cardinality constraints are generalized to binary decisions, which may 6

not always be the case in applied settings. Financial aid or loan settings may qualify various amounts of financial 7 resources to applicants, but the algorithm assumes that allocations are equally spread across members."

- 8
- Please note that our model already generalizes binary allocations to continuous allocations between 0 and 1 for each 9 agent. The purpose of this generalization is precisely to capture financial aid or loan settings, which provide different 10 amounts of resources to different applicants. This is discussed in the first three paragraphs of Section 2.1.
- 11
- We do assume that all agents within the same bucket (e.g., those that have the same probability of repaying a loan) 12
- receive the same allocation. As we describe in Section 2.1, this is necessary to guarantee equalized odds without further 13 information (except for extremal values of p, where it is not interesting). This assumption also seems natural from an
- 14 ethical viewpoint. We emphasize that agents in different buckets may receive different allocations. 15