Report on „Minority Voting and Public Project Provision" by H. Gersbach

The paper compares two different public good provision mechanisms. The first one is the well known majority voting mechanism, while the second one, called minority voting, is novel. The project adoption decision is a binary choice and is made by risk-neutral voters who differ in their evaluation of the public good. Financing is socially costly in the sense that that raising public revenues involves a deadweight loss from distortionary taxation and hence redistribution of public funds (instead of or in addition to public good provision) is inefficient. The novel voting scheme, minority voting, splits the adoption process into two stages. At the adoption process all voters cast their vote, but only the minority voters from this stage are allowed to vote on the financing proposal. This appears attractive from an efficiency point of view because it tends to distribute the burden of financing according to project evaluation. Yet it does not guarantee that all efficient projects are proposed initially. For this reason the comparison to majority voting is non-trivial. The author argues that often minority voting dominates majority voting, but not always.

The paper presents a novel mechanism and provides a thorough characterization of its properties. In this sense the paper makes an interesting contribution and fits into a useful research agenda that looks for alternative, superior decision making processes. The paper is largely silent about the applicability of the novel mechanism, which is understandable given that we first need to understand better the desirability. Still, ultimately one would like to know for which type of actual projects/environments minority voting is suitable. As the mechanism does not completely dominate majority voting on welfare grounds, it is not clear whether in practice voters could be easily convinced to switch to such a mechanism. This point does not take away from the author's creative voting scheme, but rather points to a long term objective.

Further comments:

1. The paper could be made more accessible by putting more effort in the exposition. Many results are just formally stated without much interpretation. Without working through proofs it is difficult to understand the contribution of some of the formal results, not least because the paper is written with an emphasis on mathematical rigour (which is fine, but makes author's interpretations necessary).

2. The terminology is perhaps a little misleading. Minority voting should not be understood as the opposite to majority voting. The latter means that a proposal passes if at least 50 percent support it. Minority voting, by contrast, refers not to the necessary quorum but who is allowed to vote in the second voting stage. At each voting stage majority voting (or unanimity rule) is used. This could be easily clarified.

3. I feel somewhat uncomfortable about the assumption that voters observe their own and everybody else's utility from the public project. This is clearly unrealistic. Would the model go through if agents had the same utility functions, but different endowments/incomes? If so, does the mechanism imply that taxes paid are increasing in income/wealth (a property that seems necessary from a political economy viewpoint)? Intuitively, I think that the two models would give similar outcomes, but it is worth exploring an alternative model that appears to me more realistic.

4. At the beginning of the model description the author introduces two separate instruments for redistribution (t and s), rather than one instrument for 'net' contribution. It is not clear to me why. I sense that the two instruments are necessary/useful for some results (e.g., Prop. 1,

differentiating between agenda setter and others), but if so, this needs to be explained more carefully. Also, the upper limit on taxation seems somewhat arbitrary if the net burden (t-s) was substantially smaller.

5. Minority voting appears relatively favourable because it eliminates the adoption of pure redistribution proposals. Redistribution is inefficient from an ex ante perspective because taxation is socially wasteful and citizens are risk neutral. Clearly, the latter is typically not the case and existing welfare states are often justified by risk aversion of individuals who cannot insure against risk in private markets.

6. I found Prop. 2 conceptually a bit confusing. p(G) refers to the probability of project adoption before the agenda setter is chosen, yet in stating the Proposition the author distinguishes between two cases assuming that the agenda setter is known. This point goes hand in hand with my initial comment 1. The paper could be improved by providing more motivation and interpretation (in particular for the latter sections). Similar questions arise regarding Prop. 8 (what is the contribution, what do various sub-cases mean?).