

# Strategic voting and social welfare rules

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# Strategic Voting and Social Welfare Rules- Emre Ergin

## 1. How to choose a fair delegation?

This paper analyzes how to choose a delegation, a committee to represent a society such as in a peace conference. We propose normative conditions and seek Pareto optimal, consistent, neutral, and non-manipulable ways to choose a delegation. We show that a class of threshold rules are characterized by these criteria. The rules do not choose a fixed number of delegates, but instead require different sizes of delegations, depending on the heterogeneity in society. Therefore the resulting delegations are very inclusive, and with  $t$  delegates the ratio of individuals whose opinions are not included is always below  $(0.5)^t$ . For instance a delegation of size two should have at least 75% support from the society and therefore only less than 25% of the opinion pool can be neglected.

## 2. Condorcet versus participation criterion in social welfare rules

Moulin (1988) shows that there exists no social choice rule, that satisfies the following two criteria at the same time: the Condorcet criterion and the participation criterion, a.k.a., No Show Paradox. We extend these criteria to social welfare rules, i.e., rules that choose rankings for each preference profile and replicate this impossibility in this new framework. Additionally we show that for a weaker concept of participation, it is possible to escape this impossibility.

## 3. How to compare rulers?

Given a preference order how to compare two other preference orders? We present an intuitive way that uses expected utility framework to derive utilities for preferences over some alternatives, from utilities for those alternatives. We also cover the implications of this framework, and question the use of distances when evaluating social welfare functions.

## References

- Moulin, H. (1988). Condorcet's principle implies the no show paradox. *Journal of Economic Theory* 45(1), 53–64.