

## Voting the public expenditure: an experiment

Carla Marchese\*  
Università del Piemonte Orientale

and

Marcello Montefiori\*\*  
Università di Genova

This paper is intended to study the individual's strategic behaviour in social choices when the quantity of a public good is set by the mean vote procedure, i.e. the social choice is represented by the mean of the quantities chosen by the citizens. It is assumed that everyone knows also the tax burden that she will bear as a function of the quantity chosen by the collective— so that the individual utility only depends on the quantity of the public good.

An experiment has been run in order to test the extent of the strategic bias that arises in the individual vote. In particular two conflicting theoretical predictions are available in the literature on this purpose: Ehlers et al. predict that sincere disclosure of preferences will arise as long as the size of the group grows large, since the information costs will induce a form of threshold strategy-proofness while Renault and Trannoy predict widespread strategical extremist behaviour. After a discussion of the theoretical problems involved by mean voting, we present a laboratory experiment to test which predictions, if any, are supported by data and in particular whether the mean rule actually prompts sincere revelation of preferences or not, and in the latter case if extremist behavior prevails. The experiment is aimed also at testing the effects of the mean voting rule upon social welfare.

The experiment has been run using 80 participants assigned, in turn, to groups of 2, 4 and 8 people. Participants are invited to voting for their preferred amount of a public good in the interval [0-150]. They receive payoffs based on single peaked utility functions which are assumed to describe each participant's net benefit as a function of the amount of the public good. During the experiment, agents always, i.e., from round to round, change randomly their utility (i.e. payoff) and are sorted randomly in groups.

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### References

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\* Carla Marchese, Department of Public Policy and Public Choice POLIS, University of Eastern Piedmont "Amedeo Avogadro", Via Cavour 84, 15100 Alessandria, Italy. Phone: +39-0131-283744; fax: +39-0131-283704, e-mail: carla.marchese@sp.unipmn.it

\*\* Marcello Montefiori, Department of Public Economics DISEFIN, University of Genoa, Via Vivaldi 5, 16126 Genova, Italy. Phone: +39-010-2095207; fax: +39-010-2095223, e-mail: montefiori@unige.it