

The welfare consequences of strategic voting in plurality runoff rule

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ABSTRACT

This paper studies the welfare consequences of strategic voting in plurality runoff rule by comparing the utilitarian efficiency obtained in simulated voting under two behavioural assumptions: Expected Utility maximising behaviour (EU-behaviour) and Sincere Voting behaviour (SV-behaviour). In SV-behaviour all voters always vote sincerely. In EU-behaviour, the voters may vote strategically or sincerely in the first stage of voting depending on the expected utility of their choice options.

The main result is that utilitarian efficiency is higher with EU-behaviour than with SV-behaviour. The result is fairly robust to different specifications of the voters' preferences, beliefs and observations.

The importance of such an investigation is twofold. First, the paper provides an incomplete information framework for assessing the performance of the plurality runoff rule and the desirability of strategic voting. Second, the result that strategic voting is welfare-increasing means that it would be undesirable to preclude the possibility of strategic voting in plurality runoff rule. Hence, the normative validity of the widely used condition of strategy-proofness is put to question.

The simulation framework is based on an expected utility model of voting. The voters' beliefs are determined with an incomplete information model which is similar to global games. The voters obtain noisy observations of the true structure of the game and formulate beliefs on the basis of these observations. Unlike previous contributions to global games this model is based on computer simulation. Although this paper considers only plurality runoff, the simulation framework can be used to study other voting methods also.

The result that strategic voting may result in better outcomes on the aggregate level than sincere voting may be surprising because strategic voting means voting for an alternative that is not highest in one's preference order. However, it can be explained with the mechanism of counter-balancing strategic votes. In a large group of voters, any given candidate may gain or lose votes through strategic voting because there are usually incentives to vote strategically both for and against a candidate. Strategic votes for an alternative are counter-balanced by strategic votes against this same candidate. It will be shown that a candidate with a large sum of utility gets more strategic votes than a less intensively supported alternative, and this increases the likelihood that a utilitarian winner is selected.