

A THEORY OF TRANSFERABLE SINCERE VOTING*

Jin Yeub Kim[‡]

Extended Abstract Version: March 28, 2014

ABSTRACT

In this paper, I propose a theory of *transferable sincere voting* (TSV) – a modification of the standard sincere voting assumption. I examine how candidate’s pre-election activities – *candidate drop-out with endorsement* – influence the voters’ actions based on both their preferences and “transferred preferences” for candidates. A TSV equilibrium arises when the voters in an electorate, acting in accordance with their preferences for the candidates under the assumption of TSV, generate an election result that justifies their transferred preferences. I prove that TSV equilibria always exist while the set of TSV equilibria varies with the choice of voting system. I characterize equilibrium outcomes under different electoral systems: the plurality rule, approval voting, the Borda rule, proportional representation, and run-off. I contrast candidate activities of pure drop-out with that of candidate drop-out with endorsement intended to influence an equilibrium outcome by transferring voter’s choices. Through this paper, I introduce a new conceptual principle comparable to traditional sincere and strategic voting assumptions in the analysis of voter’s choice in multi-candidate elections.

Keywords: Election, endorsement, voting behavior, voting theory

JEL Classification: D72

*I greatly appreciate Scott Ashworth, Ethan Bueno de Mesquita, Roger Myerson, Lars Stole, and Richard Van Weelden for valuable insights and comments. I also thank seminar participants at the University of Chicago Economic Theory Working Group Meeting for helpful suggestions and discussions.

[†]The paper is work-in-progress and this version only contains an extended abstract.

[‡]Department of Economics, University of Chicago, Chicago, IL 60605. E-mail: jinyeub@uchicago.edu, webpage: <http://home.uchicago.edu/~jinyeub>.

EXTENDED ABSTRACT

MOTIVATION

There has been a substantial literature in political science considering the spatial theory of voting for over the past half-century.¹ The first major work dates at least to Downs (1957) and earlier. Voting procedures have been used to decide important and controversial issues, and the strategic behavior of parties, candidates, and voters, especially strategic voting, and the influence of different factors on presidential elections has been an important body of research in the voting literature.²

Elections dominated by two parties are the rule in the U.S.; however, in many cases, presidential elections involve more than two candidates or parties running for office and the choice are to be made among more than two candidates. Most quantitative analyses of mass elections, in particular, based on the spatial model have involved two-party elections; however, the literature vastly expanded its explorations to multicandidate or multi-party elections.³ Among those, vast majority of research on the third candidate effect has been on the effect of candidate drop-outs, of additional parties entering the race, or of endorsement by a third influential person toward a particular candidate in multiparty elections on election results.

I focus on the combined impact of candidate's pre-election activities of which I call *candidate drop-out with endorsement*. What happens if one candidate withdrew from the election campaign, but throwing his official support to a specific remaining candidate?

In this paper, I provide a theory of *transferable sincere voting*, focusing on mass elections with more than two candidates, and investigate from the theoretical perspective the behavioral equilibria consequences of voters actions under the assumption of transferable sincere voting. The goal of this paper is to introduce a novel conceptual principle comparable to the traditional sincere and strategic voting assumptions in the analysis of voter's choice in multi-candidate elections.

A BRIEF ROADMAP

Fix a voting rule, e.g. the plurality rule. Assume that there are three candidates and some underlying distribution of voters' preferences over those candidates. Consider a case in which one candidate drops out (exogenously, maybe because he runs out of money). Then, what does the mapping from preferences to candidates elected look like? How does drop-out impact the election outcome (under the standard voting assumptions)?

Now, I ask a second question: What happens if we randomly choose one of three candidates, "kill" him off; but just before he "dies," he can endorse another candidate who is closest (in terms of a policy space) to him. What would be the impact of this endorsement?

¹Simply stated, the spatial model predicts that a person votes for the candidate nearest to him or her on the issues, where issues or ideology matter.

²See Enelow and Hinich (1984).

³See Bartels (1986); Cox (1987); Alvarez (1998); Alvarez and Nagler (1995, 1998).

In order to analyze this, we first need to think about what an endorsement means. Therefore, I propose a new assumption on voting behavior – *transferable sincere voting* (TSV) assumption: A voter votes for the candidate that she likes best; or votes for the candidate that she likes best endorses (in cases where the candidate that she likes best dropped out or she can place a second vote). In my model, voters are not strategic; rather, they vote according to TSV, i.e., the voters actions are based on their preferences and “transferred preferences” for candidates.⁴ I show that under the assumption of TSV, if one candidate drops out with endorsing another candidate, the dynamics of election outcomes would be different from that under the standard voting assumptions.⁵

Finally, I change the voting rule – e.g., approval voting, the Borda rule, proportional representation, or run-off – and ask: How does the mapping from preferences to final outcomes change?

Some issues to consider

- Welfare analysis: What is the impact of endorsement with TSV assumption on welfare? How do we compare different voting systems? What is the welfare metrics?
- Endorsement: Why it might be rational for the voters to listen to endorsements? We can imagine this game as some kind of a search model. An endorsement in fact has some information in it. For instance, it could save voters on their search costs. A single voter’s vote does not matter much anyway, so it may be rational for the voter to just use endorsement as information and do what her favorite candidate tells her to do rather than throw away her vote. This might give a lot of potency to endorsements.

REFERENCES

- Alvarez, R.M. 1998. *Information & Elections*. Ann Arbor: The University of Michigan Press.
- Alvarez, R.M. and J. Nagler. 1995. “Voter Choice in 1992: Economics, Issues and Anger.” *American Journal of Political Science* 39:714-744.
- Alvarez, R.M. and J. Nagler. 1998. “When Politics and Models Collide: Estimating Models of Multiparty Elections.” *American Journal of Political Science* 42:55-96.
- Austen-Smith, D. and J. Banks. 1988. “Elections, Coalitions, and Legislative Outcomes.” *American Political Science Review* 82:405-422.
- Bartels, L.M. 1986. “Issue Voting Under Uncertainty: An Empirical Test.” *American Journal of Political Science* 30:709-728.

⁴The preferences over candidates are not exogenous.

⁵I obtain different equilibrium outcomes. For example, under the TSV assumption, it is possible now that when candidate B drops out, candidate C wins, even though candidate A would have won when candidate B stayed in. Here, candidate B is in some sense a “spoiler.”

- Besley, T., and S. Coate. 1997. "An Economic Model of Representative Democracy." *The Quarterly Journal of Economics* 112:85-114.
- Cox, G. 1987. "Electoral Equilibrium Under Alternative Voting Institutions." *American Journal of Political Science* 31:82-108.
- Cox, G. 1997. *Making Votes Count*. Cambridge, U.K.: Cambridge University Press.
- Downs, A. 1957. *An Economic Theory of Democracy*. New York: Harper & Row.
- Enelow, J.M., and M.J. Hinich. 1981. "A New Approach to Voter Uncertainty in the Downsian Spatial Model." *American Journal of Political Science* 25:483-93.
- Enelow, J.M., and M.J. Hinich. 1984. *The Spatial Theory of Voting: An Introduction*. New York, Cambridge University Press.
- Feddersen, T. 1992. "A Voting Model Implying Duverger's Law and Positive Turnout." *Journal of Political Science* 36:938-962.
- Lacy, D., and B.C. Burden. 1999. "The Vote Stealing and Turnout Effects of Ross Perot in the 1992 U.S. Presidential Election." *American Journal of Political Science* 43:233-55.
- Myerson, R. 1999. "Theoretical Comparisons of Electoral Systems." *European Economic Review* 43:671-697.
- Myerson, R., and R. Weber. 1993. "A Theory of Voting Equilibria." *American Political Science Review* 87:102-114.
- Saxer, C. 2003. "A Generational Earthquake?: An Analysis of the 2002 Presidential Election in South Korea." *The Copenhagen Journal of Asian Studies* 18:23-39.
- Shepsle, K. 1972. "The Strategy of Ambiguity: Uncertainty and Electoral Competition." *American Political Science Review* 66:555-68.