

I. Introduction

- A. We have to this point, we have focused on the pure theory of elections. Electoral models that took account of some of the effects of interest groups were developed in the mid 1980s..
- Surprisingly little theoretical work has been done before that to integrate the election and interest group models of governance.
 - This is not to say that theorists did not know that campaigns took place or that donors had effects on candidate positions, but simply to say that these effects were not incorporated into electoral models.
 - (Political campaigns and campaign contributions in perfectly informed models of electoral competition naturally played little role.)
- B. The formal effort to integrate interest group and election models began with a fairly famous paper by Austin-Smith (1987), and less known papers by me (1986, 1989), all published in *Public Choice*.
- Some years later, Coughlin, Mueller, and Murrell (1990) recast and extended Austin-Smith's stochastic voting approach in a clearer more tractable manner.
 - This line of research continued with Baron (*APSR* 1994) and Grossman and Helpman (*REStud* 1996), who used similar campaign-based models of incentives for a politicians to their positions as a method of obtaining funds to persuade undecided voters to vote for them.
 - F. Van Winden (1999) extended this line of research to include sociological (group-orientated) voting behavior.
 - In most complete election-based models, **campaigns and campaign resources influence electoral outcomes by changing the information available to voters.**
 - This provides candidates with tradeoffs at the margin between representing donor interests (which tends to increase campaign resources) and voter interests.
- C. In addition to the efforts of model builders to build internally consistent models of political campaigns, there is a much larger empirical literature that explores
- the effects of campaign expenditures on electoral success,
 - the effects on alternative regulatory schemes on election results,
 - and the extent to which Congressional voting is affected by campaign contributions.

- Thomas Stratmann's work on campaign finance reform is among the best known work in this field. [See, for example, Stratmann (1991, 1995, 2005)]
- The estimated influence of campaign funds and campaign limits varies quite a bit, but there is broad agreement that campaign funds generally increase the probability of being elected and that incumbents have a far easier time raising funds than challengers.
- Nonetheless, and perhaps surprisingly, there is not much statistical evidence that campaign contributions affect legislative outcomes by causing candidates to vote against the interests of their electoral districts [Coates 1996, 1995 (with Munger)].

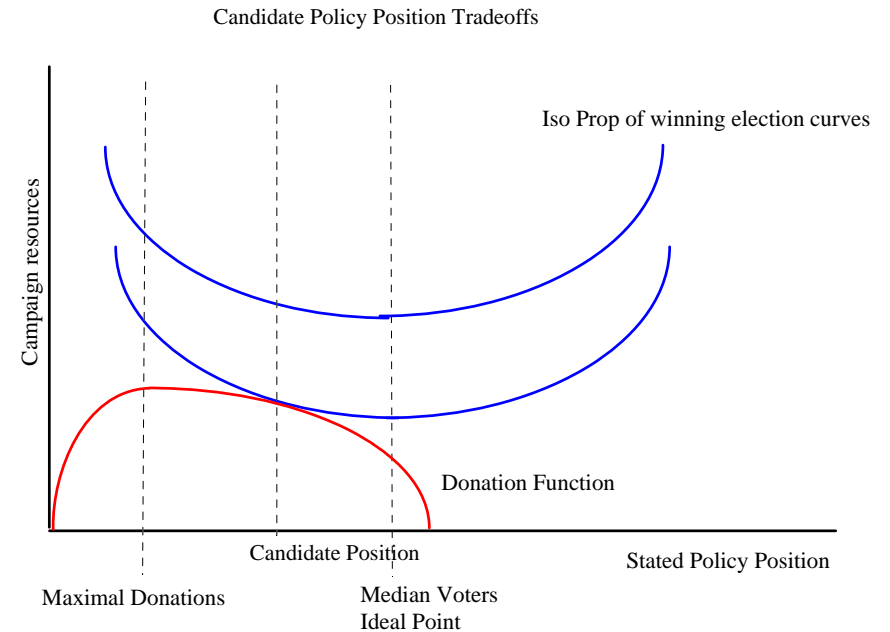
II. An overview of early "complete" models

- A. "Complete" models all attempt to provide a motive for candidates to pay attention to interest groups based on their interest in winning office.
- Congleton (1986, 1989) develops a non-stochastic model of the manner in which campaign messages and financial support may influence electoral outcomes.
 - Voters are assumed to estimate the positions of candidates partly based partly on campaign messages and partly on prior information.
 - The learning process is based on Bayes' law, but there is no presumption that a full Bayesian equilibria emerges..
 - Candidates benefit from campaign resources insofar as these may be used to change voter expectations (forecasts) about the future consequences of their policies relative to their opponents.
 - Or to produce similar changes in voter estimates of the competence, honesty, or ideology of the candidates themselves.
 - Thus, how "plastic" voters are is a significant determinant of the influence of campaign contributions on electoral outcomes and candidate platforms.
 - (Perhaps surprisingly, there is no equilibrium to this game, unless one occurs at the median voter's ideal point, which requires symmetric distributions of donors.)
- B. In most "complete" models campaign resources are acquired by adopting positions that favor campaign contributors who are variously modeled as voters with unusually intense policy preferences or as non-voting "industries and unions."
- All these models assume that candidates need campaign resources in order to run a successful campaign.

- Campaigns are modeled as informative or persuasive enterprises where candidates use campaign contributions to send messages to voters with the aim of securing office.

III. An illustration of the tradeoffs faced by a candidate facing an opponent with a known position

- A. The tradeoffs faced by a candidate who can use campaign resources to influence his or her probability of being elected (or vote share) can be illustrated in the following diagram.
- The diagram includes the following assumptions:
 - Donors vary in their ideal points, and typically will make donations to the candidate whose platform is closer to their ideal point.
 - Donors care about the probability that a candidate is elected, and so their maximum donations occur for position somewhat away from their own (profit maximizing or ideological) ideal point.
 - Voters are influenced by political campaigns, but their evaluation of the relative merits of candidates and/or their platforms is not entirely determined by spending in a given campaign.
 - The shapes of the iso-probability lines are crucial to the importance of campaign resources for candidate success.
 - If they are shaped as drawn there is a clear trade off that has to be made between satisfying the median voter and securing sufficient resources to run a creditable campaign
 - If campaign resources are irrelevant, only policy position matters, the iso-probability of success curves are vertical lines (*why?*), and the median voter model in its pure form obtains
 - If only money matters, the iso-probability lines are horizontal, and in which case the candidates should attempt to maximize campaign resources.
 - The “flatter” the iso-probability curves are, the more responsive voters are to campaign expenditures, and the more important are donor influences.
 - A broad range of geometries are possible, with more or less severe tradeoffs between voter initial positions (especially that of the median) and donor preferences.



- B. As the opponent's position changes, many of these curves also change.
- For example, if the opponent moves to the right, the donors on the left will be willing to contribute more to this candidate's campaign (other things being equal).
 - By varying the opponent's position and finding the optimal position for the candidate of interest, one can derive a best reply function.
 - If this is done for both candidates, a Nash equilibrium in pure (or mixed) strategies can be characterized.
 - Note that that equilibrium will also be affected by shifts in voter opinion or susceptibility to advertising, except in the extreme case in which campaign contributions are completely decisive (e.g. voters are completely “plastic”).
 - (Unfortunately somewhat ad hoc assumptions have to be introduced to demonstrate the existence of an equilibrium.)
- C. In my model (*Public Choice*, 1989) candidates were equal and the game symmetric, equilibria did not usually exist, because candidates who

expected to lose could always adopt a “mirroring” strategy in which they took the same position as the other candidate.

- (The one most likely to lose can always gain a 50% chance of winning by taking the same position as the other candidate, yet once this happens the other generally can find a better position, thus there is no equilibrium, but a range of possible positions (as in musical chairs) that candidates might take in a given election. This result surprised me.)
- Indeed, an equilibrium existed only if donors were symmetrically distributed about the median voter.
- In that case, the result was a median voter equilibrium.

D. To assure an equilibrium, the most other complete models assume that voters have an **exogenous bias** favoring one of the candidates.

- This generates an equilibrium where the favored candidate departs furthest from the median voter position, secures the most resources, and wins the election.
 - (The other candidate in such models often locates at the median voter position, but loses none the less.)
- The **bias term** implies that the less funded candidate locates roughly at the median or weighted-average voter position, while the winner takes policies that move toward those preferred by his or her financial backers.
- Both the Austin Smith and the Coughlin, Mueller, and Murrell models assume that voters cast their votes stochastically and that the probability of voting for each candidate is influenced by messages (or at least the campaign resources) of the candidates as well as candidate position.
 - These models typically assume that there is a voter bias—one not based on policy positions—that eliminates the advantage that the less financially supported candidate may secure by adopting the same platform as his or her opponent.
 - In spatial voting and stochastic voting models, persons with the same policy positions have the same probability of winning, in part because they should receive the same amount of donations. (Possibly zero, explain why.)
 - [An overview of spatial voting models appears at the end of the webnotes for Lecture 3.]

E. There is statistical evidence that combined models predict better than either pure election or pure interest group models.

- See Congleton and Shughart (1990) or Congleton and Bennet (1995).

IV. Grossman and Helpman (*RE Stud* 1996)

- The Grossman and Helpman paper is a refinement of the earlier complete models, that differs mostly through what might be considered better “craftmanship.”
 - The paper is a bit more carefully written, their model is more clearly stated, and it uses somewhat more modern methods to represent the efforts of interest groups.
 - For example, it takes account of the 0 lower bound on contributions (by characterizing choices to make an offer to politicians or not, e.g. the participation constrain).
- GH assume two classes of voters: informed voters and uninformed voters.
 - Informed voters cast their votes based on the policy positions of the candidates.
 - Uninformed voters cast their votes based on the campaign expenditures of the two candidates.
 - Both of whom vote stochastically, at least as far as the parties are concerned. (That is, there is a positive probability that a voter will vote for all candidates.)
- Candidates can vary their positions to attract the votes of informed voters, but these positions also affect the level of campaign contributions that they receive.
- Interest groups give money to candidates in the form of a contribution schedule which reflects their willingness to pay for (expected) policy shifts from candidates after the election.
 - (Here they use the results from the Berheim and Whinston (1986) work on menu auctions which implies full valued bidding (honest bidding) at the margin.
 - For most of their analysis they assume the existence of a **single organized interest group**.
 - Members of the interest group cooperate fully, that is to say there is no free riding.
- The electoral contest is a two stage game (as is true of most combined models, although a few use three stage games)
 - In stage one the interest group(s) announce their contributions schedules (conditioned on policy positions).

- ii. In stage ii, the candidate (parties) adopt their platforms
 - iii. After that contributions are made according to the schedule, voters cast their votes, and the legislature enacts legislation.
- F. Candidates trade off lost votes from informed voters in order to receive more campaign funds with which to attract the votes of uninformed voters.
- i. Candidate/parties are vote maximizers
 - (In the GH model, this maximizes their representation in parliament and the probability that they get their platforms adopted.)
 - ii. Not all policies can be varied.
 - (GH distinguish "pliable" from "non pliable policies.")
- G. A variety of simplifying assumptions are made to make the math a bit more tractable including (i) separable objective functions for voters, parties, and interest groups, and a (ii) uniform distribution of voter ideal points for informed voters.
- H. They conclude that:
- i. Political outcomes will likely deviate from the policies that maximize aggregate welfare of informed voters,
 - (For the symmetric uniform distribution of informed voters, the mean, median, and social welfare maximizing policy are all the same.)
 - ii. The platforms of parties tend to deviate from each other (largely because of "slight" asymmetries).
 - iii. The smaller or less well known party will take a position that more nearly maximizes the welfare of informed voters than the larger more popular party, which wins more seats.
 - iv. Both parties cater more to the preferences of interest groups the more susceptible the uninformed voters are to campaign spending and the larger is the fraction of those individual in the population.
- V. **Fiscal Illusion: Do Voters Have Biased Expectations?**
- A. Congleton (2001) "Rational Ignorance and Rationally Biased Expectations: The Discrete Informational Foundations of Fiscal Illusion," *Public Choice* 107.
- B. This paper distinguishes between **two type of information problems**, both of which can cause voters to make errors when casting votes.
- i. One, the standard economizing on information theory, suggests that voters will have less than complete samples when they estimate fiscal parameters.
 - The result of this method of economizing on information costs is that voters estimates have **higher variance** (because of estimation errors) than would have been the case with a more complete information (a larger sample).
 - They are not, however, necessarily biased, as implied by the early rational expectations literature.
 - ii. The other method of economizing on information costs involves collecting no data about a variety of parameters of the real model. "Rational ignorance" in this sense implies that individuals choose to have a sample of size zero.
 - Individuals may know that a given program or tax exists, but not collect any information about it.
 - In this case, not only do error variances of voter estimates (expectations) tend to be larger than would have been the case with more complete samples, but the **estimates tend to be biased** as well.
 - iii. Rationally ignorant voters have fiscal illusion. "Finite" sample voters do not. Ignorance is a sufficient condition for fiscal illusion
- C. The analysis, however, suggests that **voters tend to be better informed than most rational ignorance models suggest**, because they have *non-electoral reasons* to gather information about candidates and candidate policy positions (private investments, jobs, recreation possibilities, ideological hobbies).
- D. Candidates strategically subsidize information (which for the purposes of the paper are assumed to be complete and accurate).
- i. Nonetheless, many voters remain uninformed on at least a subset of issues, which implies that they have biased expectations about public policies.
 - Unless information is free, many voters will find the expected benefits of that information (even after it is subsidized) to be less the expected costs.
 - Informed voters often have special economic interests in the policies they become informed on.
- E. In equilibrium, candidate positions tend to reflect the positions of *informed* voters (because only these voters change their votes as policy positions change).

- i. The policies adopted tend to be biased away from the policies that maximize the interests of the median voter, because the median voter is unlikely to be informed (even slightly informed) on all policy issues.
- ii. The median of informed voters on each policy issue, thus, tends to differ from that of the median voter.
- iii. The equilibrium is thus affected by the existence of rational or natural ignorance.