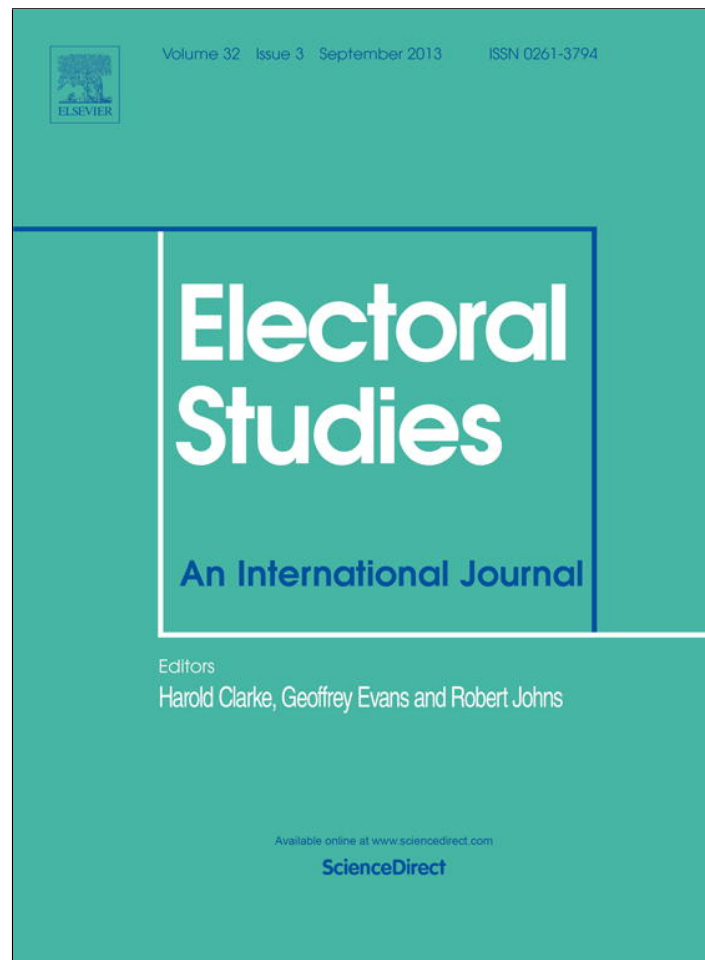


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Voter perceptions of agenda power and attribution of responsibility for economic performance[☆]

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ABSTRACT

In two recent experiments (one in the lab and one over the internet) concerning collective decision making we determined that individuals mainly assign responsibility to the decision maker with agenda power and with the largest vote share (Duch et al., 2012). We found rather weak evidence that responsibility is assigned to decision makers with veto power or allocated proportional to weighted voting power. Our conjecture then is that individuals in our online experiment who recognized the importance of proposal power in the embedded experiment will be those more likely to exercise an economic vote for the Conservative PM Party (since they are the agenda setter in the governing coalition) and for the opposition Labour Party. The conjecture is confirmed. Essentially, the data show that economic voting at the individual level is confined to individuals who understand the value of proposal power. This in turn suggests that the economic vote itself is motivated by a coherent attempt to punish or reward parties that actually deserve it in the specific sense that they were mostly responsible for choosing the policies that were implemented. Further, the strong reliance on proposal power as the workhorse of this mechanism of accountability, tells us that simple heuristics can do a lot of the work that cold rationality and complex calculation have done in much of the previous discussion of economic voting.

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1. Introduction

Most voters in democratic elections cast a vote for a party that was either a member of an incumbent governing coalition or, if they expected to govern, would have to join a coalition government after the election (Armstrong and Duch, 2010). Recent work demonstrates that voters in these coalition systems appear to behave as rational voters should – that is significant numbers of voters in coalitional contexts engage in “coalition-directed voting”, i.e. tactical voting for particular parties in order to try to bring a preferred coalition to power. Kedar (2005) or Bargsted and

Kedar (2009), for example, find that voters in contexts with coalition governments engage in compensational voting, i.e. certain voters vote for more extreme parties with the goal of shifting the policy position of governing coalitions closer to their ideal points. Based on data from 86 election surveys conducted in 22 countries, Duch et al. (2010) find that in 75% of these surveys more than 50% of voters make coalition-directed calculations.

All of these recent works on the coalition-directed vote make simplifying assumptions regarding responsibility attribution which is critical for the coalition-directed vote. How do voters map the observed distribution of responsibility (i.e., seats won and cabinet positions held) into actual administrative responsibility within the cabinet? Our answer to this question is that voters approximate the fully rational calculus of a coalition-directed vote by employing responsibility attribution heuristics for

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individual parties making up the governing coalition (Duch et al., 2012). We identify the heuristics voters employ for attributing responsibility for individual parties in coalition government by conducting experiments about collective decision making.

Individuals clearly favor agenda power as a heuristic for attributing responsibility for members of a collective decision making body. Two quite different responsibility attribution experiments – one conducted in the Nuffield CESS lab and the other conducted online by CESS with a representative sample of the UK population – produce this same result (Duch et al., 2012). The lab experiment demonstrates that when individuals have the opportunity to hold individual decision makers responsible for a group decision, they primarily attribute responsibility to the proposer and the party with the largest weight. The second experiment was designed to confirm that individuals hold proposers responsible because they believe they actually have a disproportionate impact on the outcome (rather than simply treating proposers as a focal point for an individual's anger or enthusiasm for a collective decision). Results from this second experiment confirm the two lab findings: individuals believe that the proposer and the largest party in fact have a disproportionate impact on the outcome of collective decision making.

The surprising result from these experiments is the importance that voters place on agenda setting power when they attribute responsibility for collective decisions. The experiment is a powerful tool for isolating the attribution heuristics that individuals deploy when confronted with collective decisions. And while the experiment is extremely useful for isolating the general heuristic it leaves some important questions unanswered: Are voters who recognise the importance of proposal power more likely to hold policy makers accountable? And, secondly, are those who recognise the importance of proposal power more likely to attribute responsibility to the individual party in the coalition with proposal power? This is a classic limitation of lab experiments – they are powerful tools for testing theory but can be limited with respect to external validity (Morton and Williams, 2009). External validity is of interest to us here because the agenda setting result from the lab should have important implications for how we specify vote choice models in contexts with coalition governments.

In order to address this challenge we supplemented the lab experiment with an online survey of a representative sample of the UK population. The online survey included an experiment designed to identify responsibility attribution heuristics – essentially an extension of the lab experiment. Participants in the survey were also asked an extensive battery of questions, including vote preference, that allowed us to estimate a standard UK vote choice model (Duch and Stevenson, 2008). Accordingly we had two pieces of critical information: First, the incentive-compatible decisions made by the participants in the attribution responsibility experiment provided a behavioural measure of the extent to which individual respondents valued proposal power in attributing responsibility for collective decisions. Secondly, we had all

the necessary information to model vote preference for parties in and out of the governing coalition. The empirical results reported here will focus on responsibility attribution for the government's economic performance.

Our experimental results suggest that individuals that attribute responsibility to individual decision makers for collective decisions favor proposal power as a heuristic for deciding who to reward or punish. And given the nature of this heuristic we think this makes theoretical sense. Compared to other possible cues voters could use to attribute responsibility for collective decisions, proposal power is a particularly useful heuristic because it predicts outcomes well in the real world (i.e., the Prime Ministers often get their way or some favorable compromise), is easily applied to contemporary politics (i.e., simply knowing which party is PM), and is comparatively simple in its form. Compare proposal power to, for example, using voting weights (e.g., seat shares) to predict policy influence: the impact of voting weight is certainly not linear, is highly contingent on the specifics of the situation, and in multiparty democracies requires voters to learn and remember a great deal more information than simply who is the PM.¹ Given our evidence of the centrality of proposal power to responsibility attribution we conjecture that economic voting at the individual level is confined to individuals who understand the value of proposal power.

We expect that agenda power is typically, although not always, associated with the Prime Ministerial party. For most coalition policies it is the Prime Ministerial party that is considered by the voters to command agenda power. This certainly seems to be the case with respect to managing the economy although we have presented evidence suggesting that with respect to the economy voters may consider the party of the Finance Minister to have agenda power (Duch and Stevenson, 2008). In the case of the incumbent UK coalition government both the Prime Minister and the Chancellor of the Exchequer were controlled by the Conservative Party – agenda power with respect to economic policies would seem to be unambiguously in the hands of the Conservative Party. Accordingly, for those who favor proposal power in responsibility attribution, economic voting should be particularly focused on the Conservative, as opposed to the junior partner in the coalition, i.e., the Lib-Dem Party. If our conjecture is correct then we would expect that those participants that favored the agenda power heuristic would focus all of their economic vote on the Conservative Party. Respondents who have internalised this agenda setting heuristics are more likely to hold accountable the member of the governing coalition with clear proposal power for economic policy. The attraction of having incorporated the experiment in a representative online survey is that we are able to estimate responsibility attribution for each of the major parties.

¹ See the large literature trying to develop indexes of voting power, (Banzhaf, 1965; Shapley and Shubik, 1954; Straffin, 1978; Gelman et al., 2002, 2004; Heard and Swartz, 1999).

2. Internet survey results

The analysis we present here will be based on an Internet survey of 1004 UK respondents that was conducted by the Nuffield CESS July 1–7, 2011.² The survey included a responsibility attribution experiment along with the standard set of election study questions.

The design of the internet survey experiment and a discussion of the results are reported in detail in Duch et al. (2012) and in the Online Appendix to this article. In the experiment, respondents were asked to guess the outcome of three collective decisions that had been decided by the weighted vote of five decision makers (DMs) prior to the survey. The voting weight distributions varied across the three treatments and respondents were compensated for the accuracy of their guesses. For each respondent, for each of these questions, we calculated the spatial distance between the respondents guess about the collective decision and the ideal points of each of the five DMs. This gives us five data points for each respondent for each of the three questions. Taken together, these data points contain information about the respondent's beliefs about the relative influence of different DMs (with different seat weights, positions, and agenda powers) had on the collective decision. We used these responses to model the characteristics of decision makers that mattered most to our respondents guesses. We found that, on average, our respondents put a great deal of weight on proposal powers (i.e., the guessed policy outcomes were much closer to the ideal point of the proposer) controlling for all the other characteristic of decision makers mentioned above.

Most importantly, since we are concerned here with characterizing differences across respondents in the importance they place on proposal power in forecasting policy outcomes (i.e., the extent to which they understand the importance of such power), we allowed the coefficient on the variable identifying who was the proposer to vary over individuals. The estimates from this model are reported in the Online Appendix (and a full explanation of the variables included in the model is in Duch et al. (2012)).³ For our purposes, however, what is important is the variation in the coefficient capturing how much respondents weighted proposal power in their assessment of policy outcomes (i.e., did they guess the policy would be closer to, or further from, the ideal point of the proposer). Fig. 1 gives a histogram of this variation.

Notice that these coefficients are mostly negative, as they should be since a negative coefficient means the respondent put policy closer to a decision maker's ideal point if she was the proposer. Still there is substantial variation with about one-third of the respondents giving essentially no weight to proposal power in their choices. In order to facilitate the use of these coefficients in an

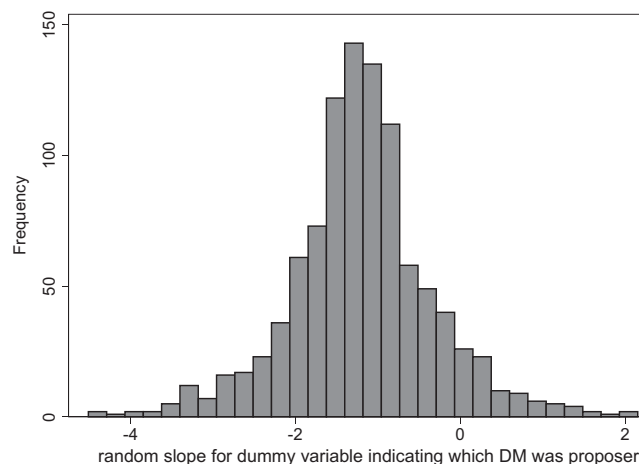


Fig. 1. Variation in the revealed importance of proposal power on respondents guesses about policy outcomes: raw coefficients. Bayes predictions for the slope for each respondent from a random coefficient model of the distance between respondents' policy guess and the ideal point of each decision maker. Negative coefficients mean the respondent thought policy would be closer to a DM's ideal point if that DM was the proposer.

interaction term (where having negative and positive values leads to cumbersome interpretations), we transformed these coefficients to a continuous 0-1 metric. This monotonic transformation retains the key characteristics of the data (and the results, if not the ease of interpretation, are robust to using either). The histogram of this transformed variable is shown in Fig. 2.

Thus, in the models below, respondents with a 1 on this variable are those whose policy prediction was most heavily impacted (in the correct direction) by proposal power (so these are individuals who most “recognize” the value of proposal power), while those toward zero either did not use proposal power or used it nonsensically.

3. The economic voting model and test of the main hypothesis

As explained above, our survey and the experiments embedded within it provide both survey questions with

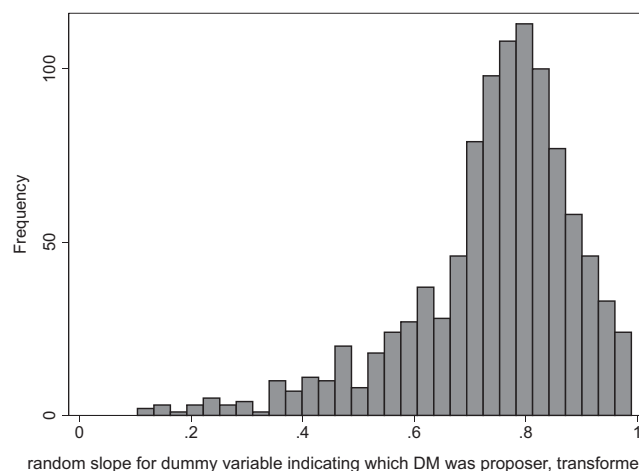


Fig. 2. Variation in the revealed importance of proposal power on respondents guesses about policy outcomes: transformed coefficients. A value of 1 means the respondent put a great deal of weight on whether a DM was the proposer in guessing how close policy would be to a DM's ideal point.

² The internet panel sample was provided by Survey Sampling International (SSI) – their panelists are compensated with SSI points which are exchanged for money. A complete description of the survey and sample characteristics is available from the authors.

³ Duch et al. (2012) estimated this exact model, with the exception of the random intercept and slope that we added for the current application.

Table 1
Multinomial logit model of vote choice in UK, 2011.

Variable	Coefficient	Z
PM equation		
Economic perceptions	0.02	0.07
Economic perceptions X value of proposal power	-1.15	-2.91
Value of proposal power	5.17	3.66
Age group	0.42	8.17
Education quartile	0.04	0.59
Income quartile	0.20	3.38
Female	0.28	2.21
Union household	-0.40	-2.32
Left-right placement	0.51	11.62
Constant	-6.08	-5.47
Junior partner equation		
Economic perceptions	0.31	0.78
Economic perceptions X value of proposer power	-1.05	-1.98
Value of proposer power	5.17	2.62
Age group	0.08	1.19
Education quartile	0.16	2.07
Income quartile	0.05	0.63
Female	0.52	3.32
Union household	-0.49	-2.14
Left-right placement	0.22	4.29
Constant	-5.73	-3.65

Observations: 1956 (652 respondents × 3 treatments).

which to estimate an economic voting model and a continuous measure of the extent to which each respondent has demonstrated (over our three survey experiments) that he or she understands the value of proposal power in majority rule decision making. In this section we use these data to estimate an economic voting model in which we interact economic perceptions with our measure of the respondent's demonstrated understanding of the value of proposal power. Since the government in the UK at the time of our survey was a coalition, we estimate a multinomial logit in which respondents may indicate support for the Conservatives (the PM party), the Liberal Democrats (the junior partner in the government), or one of the opposition parties. The variable capturing economic perceptions is a five-category variable asking whether the respondent thought the economy over the last year had gotten much better, better, stayed the same, gotten worse, or gotten much worse. This variable was interacted with our measure of the respondent's demonstrated understanding of the value of proposal power. Given this setup, we expect the effects of worsening retrospective economic perceptions on support for the various parties (or groups of parties) to be negative for the Conservatives and Liberal Democrats and positive for the opposition parties. However, we expect the size of these effects to be small (or even

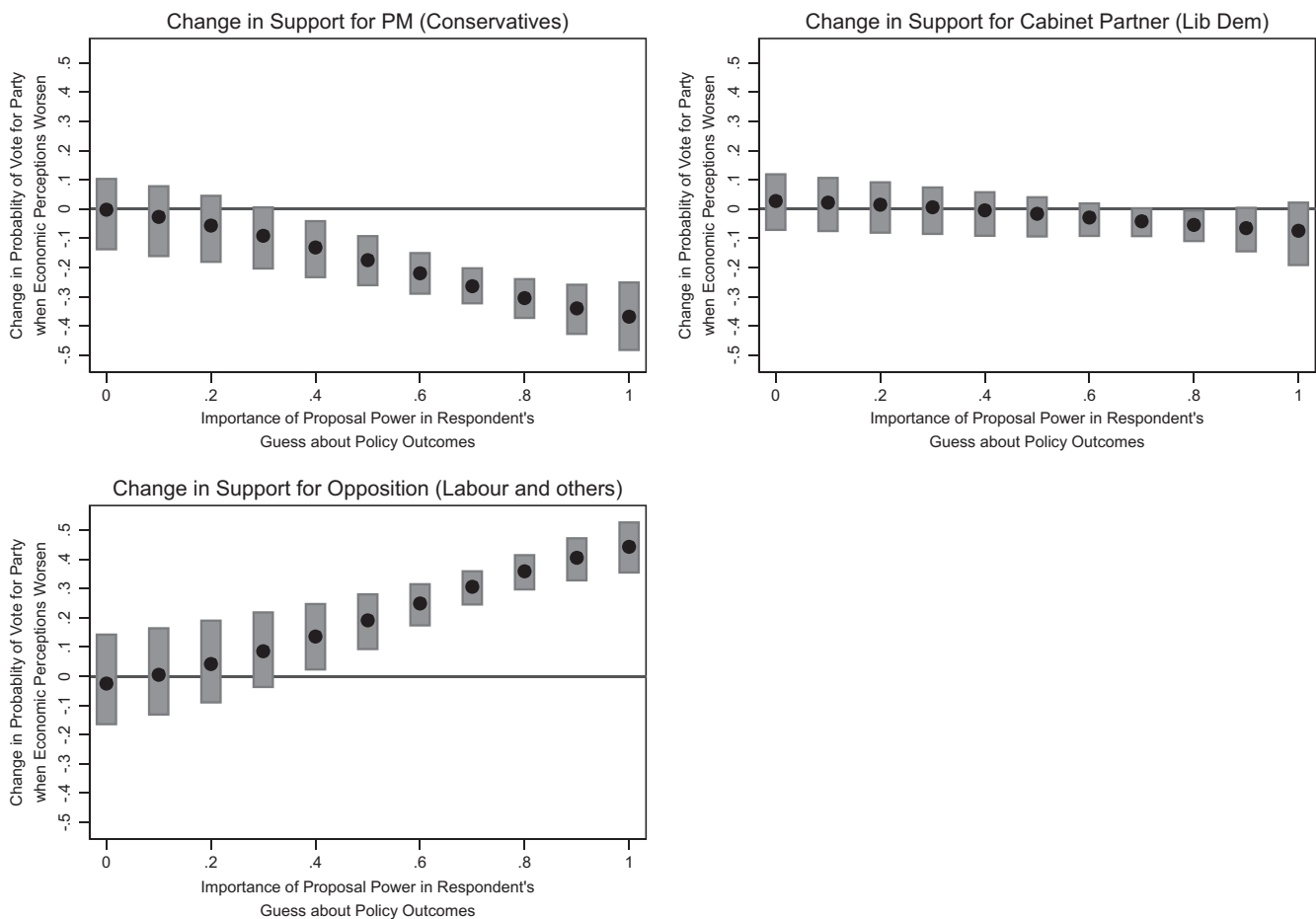


Fig. 3. How the importance of proposal power on respondents guesses about policy outcomes impacts estimates of economic voting. Graphs are for a woman age category 3, education quartile 2, non-union member, who places themselves at 4 on the left-right scale.

zero) for individuals who do not understand the value of proposal power and larger for those who do. In addition, if we accept the auxiliary assumption (discussed above) that individuals think of the PM as having significantly greater agenda setting powers than his cabinet partners, we would expect these effects to be most apparent for the PMs party and least apparent for his junior partner.

Table 1 provides the coefficients from the estimated model, and we can see immediately that the interaction term on economic perceptions is both highly significant and in the expected direction (likewise for cabinet partners). Further, the signs on the various control variables all make sense with, in general, older, rightist, higher income, non-union member households supporting the Conservatives.

Substantive effects from such models are, however, difficult to interpret from coefficients, so Fig. 3 gives the relevant substantive effects for each type of party and for each level of understanding/use of proposal power in the survey experiment. For example, the graph in the upper left panel of Fig. 3 shows that the estimated size of the economic vote (the change in probability of voting for the party when economic perceptions worsen) gets larger (i.e., more negative) as respondents better understand (and use) the distribution of proposal power over decision makers to guide their policy expectations. This holds true for cabinet partners, but quite weakly which is consistent with our assumption that voters consider the party of the PM to be the chief agenda setter in cabinet. Finally, the graph for the opposition is the mirror image of the other two (as it must be).

As we pointed out earlier, the lab and online experiments on responsibility attribution singled out proposal power as a critical heuristics that determines the individual decision makers that are rewarded or punished for a collective decision. The decisions made by the participants in the online experiment allowed us to recover a behavioural measure of the extent to which individual respondents favor proposal power when they attribute responsibility for collective decisions. As we would expect, this proposal power metric varies across the 1008 British respondents in the online survey. Given the centrality of the proposal power heuristic in our experiments our intuition was that those who more strongly favor proposal power for attribution responsibility in the experiments would also be more likely, in general, to attribute responsibility for the government's performance managing the economy. The results reported in this section clearly suggest this is the case. We do not see a similar effect for the junior partner in the coalition government (the Lib-Dems) which is what we would expect – those scoring high on the proposal power metric recognise the Conservative Party as having proposal power over the economy and hence reserve their economic vote for them.

4. Conclusion

Overall, we find these results striking. Essentially, they show that economic voting at the individual level is confined to individuals who understand the value of proposal power. This in turn suggest that the economic voting itself is motivated by a coherent attempt to punish or reward parties that actually deserve it in the specific sense that they were mostly responsible for choosing the policies that were implemented. Further, the strong reliance on proposal power as the workhorse of this mechanism of accountability, tells us that simple heuristics can do a lot of the work that cold rationality and complex calculation have done in much of the previous discussion of economic voting (including much of our own work on the topic). We hope then that this simple study will stimulate more work that attempts to combine survey experiments and traditional surveys in ways that help reveal the actual mechanisms by which voters achieve democratic accountability in complex political systems.

Appendix A. Supplementary data

Supplementary data related to this article can be found at <http://dx.doi.org/10.1016/j.electstud.2013.05.013>.

References

- Armstrong, D., Duch, R., 2010. How voters anticipate post-election coalition formation. *Electoral Studies* 29 (3), 308–315.
- Banzhaf, J.F., 1965. Weighted voting doesn't work: a mathematical analysis. *Rutgers Law Review* 19, 317–343.
- Bargsted, M., Kedar, O., 2009. Coalition-targeted Duvergerian voting: how expectations affect voter choice under proportional representation. *American Journal of Political Science* 53, 307–323.
- Duch, R.M., May, J., Armstrong, D., 2010. Coalition-directed voting in multi-party democracies. *American Political Science Review* 104 (4), 698–719.
- Duch, R.M., Stevenson, R., 2008. *The Economic Vote: How Political and Economic Institutions Condition Election Results*. Cambridge University Press, Cambridge.
- Duch, R., Przepiorka, W., Stevenson, R., July 2012. Responsibility Attribution for Collective Decision Makers. Working Paper Nuffield Centre for Experimental Social Sciences.
- Gelman, A., Katz, J.N., Tuerlinckx, F., 2002. The mathematics and statistics of voting power. *Statistical Science* 17, 420–435.
- Gelman, A., Katz, J.N., Bafumi, J., 2004. Standard voting power indices don't work: an empirical analysis. *British Journal of Political Science* 34, 657–674.
- Heard, A.D., Swartz, T.B., 1999. Extended voting measures. *Canadian Journal of Statistics* 27, 173–182.
- Kedar, O., 2005. When moderate voters prefer extreme parties: policy balancing in parliamentary elections. *American Political Science Review* 99 (2), 185–199.
- Morton, R., Williams, K., 2009. *From Nature to the Lab: Experimental Political Science and the Study of Causality*. Cambridge University Press.
- Shapley, L.S., Shubik, M., 1954. A method for evaluating the distribution of power in a committee system. *American Political Science Review* 48, 787–792.
- Straffin, P.D., 1978. *Game Theory and Political Science Chapter Probability Models for Power Indices*. University Press, New York, pp. 477–510.