

# Ideology and the Congressional Vote Appendix

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## Appendix A: Legislator-Specific Estimates

To maximize the number of candidates and races we include, we use responses to any NPAT survey completed by the candidate; since many candidates do not complete the survey in every election year, we include their responses from the most recent election year in which they participated in the survey.<sup>1</sup> Two assumptions must hold for this approach to be valid. First, questions must not be so time-bound as to render them meaningless across time. NPAT questions do not suffer from this defect; substantially identical questions are repeatedly asked over time, and questions typically do not refer to specific legislation or events. Moreover, we included those NPAT questions that were asked over most of the surveys administered over this time period. Second, we require ideological consistency in candidates' survey responses over time and across constituencies. The available evidence that legislators “die with their ideological boots on” (Poole 2007) boosts our confidence in this assumption. Beyond consistency within Congress, it appears present even in the wrenching constituency changes that accompany a move from state legislature to Congress (Shor et al. 2010).

To further increase our candidate sample, we supplemented our 2008 data with state legislative roll call votes. Many congressional candidates seek to advance from state legislatures, and for these candidates we use a new comparative data set of state legislative roll call votes reported in Shor and McCarty (2011). This allows us to characterize the ideological locations of challengers who did not complete the NPAT surveys. Furthermore, for both

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<sup>1</sup>For instance, Jon Corzine did not fill out a survey for his run for US Senate in 2000, but did complete a survey prior to his 2005 gubernatorial campaign. This approach may actually help alleviate concerns about selection bias, in that the larger sample of districts this enables us to sample from each election year—because we are not bound by response year—are likely to be more representative.

2008 and 2010 we used congressional roll call data to characterize the ideological positions of incumbents who did not complete the NPAT surveys.<sup>2</sup> Finally, for the 2010 election, we also supplement the NPAT survey responses with candidate positions noted by Vote Smart's VoteEasy tool. The organization researched answers to a subset of the NPAT survey even for candidates who did not fill out their own surveys.<sup>3</sup> Due to the data-intensive nature of this project, we chose to vary our data collection strategies across years; nevertheless, our results are strongly consistent, which suggests that our results are robust to the choice of particular bridging technique or the inclusion of roll call data for incumbents.

Of course, not all candidates completed the Vote Smart survey, which may raise questions about whether the results shown later in the paper are an artifact of the selection process by which candidates chose to complete the survey. Indeed, as Rogowski (forthcoming) shows, the probability of answering the survey is lower among Republicans, incumbents, first-term members of Congress, quality challengers, victorious candidates, and better-funded candidates. This same study also shows that there are no major differences in the nature of the competitive environments between districts for which both candidates do and do not complete the surveys. Beyond concerns about generalizability, we are less concerned about whether the results shown later in the paper are a function of self-selection. For this concern to hold, the probability of answering the survey would need to be correlated both with the candidates' chosen platforms and voters' use of spatial proximity. Though not wholly implausible, on its face we believe this possibility seems rather unlikely.

As Rogowski (2014) shows, using almost identical data, these estimates appear to meaningfully describe candidates' campaign positions. First, estimating issue-specific ideal points for each of the 14 distinct issue areas, candidates' policy views are highly correlated across domains. In other words, a candidate's views on abortion policy are quite informative about her views on education policy and tax policy. Second, the issue-specific estimates scale together quite well, producing a Cronbach's alpha of 0.96. Thus, the omission of specific issue areas has virtually no impact on the reliability of the scale produced using the other items, which suggests that the platform estimates are relatively insensitive to the particular combinations of issue areas that are used to estimate them. This finding assuages concerns that our estimates of candidate platforms would differ if we used only those issue that candidates

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<sup>2</sup>In 2008, roll call scores for incumbents were projected into NPAT survey space using the linear mapping technique described in Shor and McCarty (2011). In 2010, roll call data was simultaneously and jointly scaled along with survey data.

<sup>3</sup>Impressively, the organization documents where it found evidence for these candidate positions, and assigns no position where conflicting or no information is found. See <http://www.votesmart.org/voteeasy> for a contemporary example.

chose to emphasize in campaigns. Third, Rogowski (forthcoming) finds that candidate platforms in the 2006 congressional elections were strongly correlated ( $r = 0.92$ ) with citizens' perceptions of candidate location (intra-party correlations are a bit lower, at 0.74 for Republicans and 0.83 for Democrats). In sum, the Vote Smart data appear to be a reasonable way of characterizing candidates' chosen platforms irrespective of the particular mix of issue positions that were discussed during the campaign, and the issue positions reflected in these data also reflect voters' perceptions of the candidates' policy views.

## Appendix B: Sample Means Comparison

	Sample	Non-Sample		Sample	Non-Sample
Black	0.08	0.12	Black	0.10	0.09
Hispanic	0.93	0.93	Hispanic	0.04	0.04
High School Only	0.31	0.29	High School Only	0.30	0.29
Graduate Degree	0.11	0.10	Graduate Degree	0.13	0.12
Pol Info	0.61	0.59	Pol Info	0.85	0.83
McCain Vote	0.48	0.45	McCain Vote	0.50	0.59
PID	-0.09	-0.11	PID	0.00	0.16
Self Rep Ideology	3.21	3.21	Self Rep Ideology	3.27	3.42
R House Vote	0.45	0.44	R House Vote	0.52	0.63
NPAT Score	-0.07	-0.13	NPAT Score	-0.05	0.07
N	1475	2471	N	25877	8990
Districts	179	255	Districts	312	123

(a) CCAP 2008

(b) CCES 2010

**Table 1:** Comparison of survey means (proportions) for 2008 and 2010 from district voters with both candidates having available common space scores (column 1) compared with one or none (column 2).

## Appendix C: Instrumental Variables Results

Independent Variables	2008		2010	
	(1)	(2)	(1)	(2)
Republican spatial advantage	0.35 (0.18)	0.70 (0.27)	0.46 (0.05)	0.89 (0.09)
Total campaign spending (millions)	-0.08 (0.08)		0.04 (0.04)	
Spending imbalance		-1.11 (1.11)		-1.35 (0.58)
Republican spatial advantage $\times$ Total campaign spending	0.09 (0.10)		0.06 (0.02)	
Republican spatial advantage $\times$ Spending imbalance		-0.55 (0.71)		-0.99 (0.33)
Republican	1.21 (0.17)	1.18 (0.15)	1.13 (0.04)	1.12 (0.04)
Democrat	-1.37 (0.18)	-1.38 (0.18)	-1.38 (0.05)	-1.36 (0.04)
Incumbent party (+=Republican)	0.22 (0.08)	0.23 (0.07)	0.21 (0.04)	0.25 (0.04)
Toss-up election	-0.13 (0.37)	-0.62 (0.45)	0.06 (0.10)	-0.09 (0.12)
(Intercept)	0.12 (0.22)	0.45 (0.40)	0.43 (0.09)	0.95 (0.20)
N	1404	1404	21700	21700

**Table 2:** *Electoral Context, Spatial Proximity, and Vote Choice in Congressional Elections.* Entries are probit coefficients from instrumental variables estimation and standard errors, clustered by congressional district. The dependent variable is a reported vote for the Republican Congressional candidate. Total campaign spending and Spending imbalance are instrumented using spending levels from the previous election.

## References

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