

Candidate Responsiveness to Voters in Two-Stage Elections*

Kevin K. Banda[†]
kbanda@unr.edu

Thomas M. Carsey[‡]
carsey@unc.edu

John Curiel[§]
jcuriel@live.unc.edu

Abstract

In all electoral contests, candidates must decide as part of their strategy whether to respond ideologically to their constituency. However, two-stage elections force candidates to decide which parts of their constituency to which they should respond: citizens who are active enough to participate in primaries or those who only participate in general elections. We present arguments for expecting candidates to respond to either or both sets of voters, but conclude that the case for responding to primary voters is stronger. We test this conclusion using public opinion and campaign donation data for U.S. House and Senate contests held in 2010. Our results suggest that candidates' ideological positions respond to primary election voters' preferences, but not to those of voters who only participate in general elections. However, even the response to primary voters disappears among incumbent candidates. We also find suggestive evidence that the timing of primaries conditions the degree to which candidates respond to primary voters. Our findings suggest that scholars need to pay closer attention to the two-stage nature of U.S. elections when evaluating electoral responsiveness.

*A previous draft of this paper was presented at the American Political Science Association Annual Conference, September 3-6, 2015.

[†]Department of Political Science, University of Nevada, Reno

[‡]Department of Political Science, University of North Carolina at Chapel Hill

[§]Department of Political Science, University of North Carolina at Chapel Hill

Elections for national office and most state-level offices in the U.S. follow a two-stage process: candidates first compete in primaries for the nomination of their party, and those nominees then compete in a general election to determine who wins the office.¹ Two-stage elections create strategic challenges for candidates because the voters and the candidates' opponents typically differ at each stage. As a result, the optimal strategy for winning the first stage will likely differ from the strategy that maximizes the chance of victory in the second. This requires candidates to develop a mixed strategy that balances the need to win at both stages of the electoral process.

Two-stage elections provide an excellent opportunity to build and test a general theory in which candidates employ a mixed electoral strategy based in part on contextual circumstances. Two-stage elections also have consequences for representation because elected officials must consider how and whether to respond to primary and/or general election voters. This raises normative concerns regarding electoral responsiveness in terms of knowing which subsets of voters might be most influential on the behavior of elected officials.

We examine the degree to which political candidates respond in terms of their ideological location to primary and general election voters.² We further explore if responsiveness to either set of voters is conditioned by whether or not the candidate in question is an incumbent and by the timing of the primary relative to the general election. Our analysis combines voter data from the 2010 Cooperative Congressional Election Study with data on financial contributions to candidates that is used to measure the ideologies of candidates running for the U.S. House and Senate that same year drawn from the Database on Ideology, Money in Politics, and Elections (Bonica 2014). We find strong evidence that candidates respond to

¹There are of course exceptions, including Louisiana's open primary where if one candidate receives more than 50% of the vote in the primary there is no general election, the newer top-two primaries in states like California and Washington where an open primary might produce two candidates for the general election of the same party, and Virginia's frequent use of nominating conventions for statewide offices rather than primary elections.

²In a similar study, Banda and Carsey (2015) examine how candidates engaged in two-stage elections respond to each other's advertising strategies.

their specific primary election voters but not to voters who only participate in the general election, and that this behavior is limited to non-incumbent candidates. Incumbents show no evidence of responding ideologically to either of these distinct sets of voters. We also find some evidence that candidates are somewhat more responsive to their primary election voters when primaries are held relatively early in the election cycle.

1 Two-stage Campaigns and Responsiveness to Voters

Most research on political campaigns focuses on general elections. This has the side effect of largely ignoring the primary election stage that precedes the general election in most contests in the U.S. Candidates must calculate the probability of winning at both stages, and the product of these two probabilities defines the overall probability of holding office. They must consider both stages if they are to develop a strategy designed to maximize their chances of winning office. Numerous scholars argue that individual candidates perform a similar calculation when they decide whether or not to run (e.g. Maestas et al. 2006; Carsey and Berry 2014). Here we extend this logic to consider how candidates might balance their need to respond ideologically to the voters who participate in primary and general elections.

Two-stage elections present challenges to candidates because the best strategy for winning one stage may not be the best strategy for winning the other because the voters and opponents faced by a candidate change between the two stages. Voters in primary elections, for example, tend to be more interested in politics and hold more extreme policy preferences relative to those who only vote in general elections. This might suggest that candidates should change their strategies as they move from the primary to the general election. However, potential general election opponents and the press, if not all voters, are surely watching the primary closely to ensure that candidates are not free to reinvent themselves once the primary ends. As a result, candidates must develop a strategy that balances the need to win

both the primary and the general elections if their goal is to actually hold elected office.

The extant literature suggests that candidates alter their campaign strategies in response to who their opponents are and what they do (e.g. Carsey 2000; Banda 2013; Windett 2014; Banda 2015; Acree et al. 2014). However, deciding to which constituents to respond is the most fundamental choice candidates in two-stage elections face because this decision likely influences who they will represent if they win. There are numerous dimensions to constituency representation (see Harden 2015), but we focus on ideological responsiveness here. Representative democracy rests in part on the idea that candidates seeking elective office will try to reflect the general ideological leanings of their constituents. As voters become more liberal (conservative), nearly all normative theories of democracy would expect — and many positive theories would predict — that candidates seeking office would also become more liberal (conservative). This does not require that all candidates converge towards a single median voter within their district, but this pattern should appear as we compare candidates across districts. In fact, there remain important debates revolving around proximity (e.g. Downs 1957) and directional (see Rabinowitz and Macdonald 1989) models of voting that differ sharply on the role of the median voter, but those debates do not change the expectation that if one constituency is more liberal compared to another, that the distribution of candidates in that first district would also be expected to be more liberal.

The preceding paragraph, however, still assumes a single set of voters. Two-stage elections result in at least two sets of voters for each candidate — those who vote in that candidate’s primary (who also typically vote in the general election) and those who vote only in the general election. Given the two-party system in the U.S., each district really has three sets of voters — Democratic primary voters, Republican primary voters, and people who only vote in general elections. Major party candidates might largely ignore those who vote in the opposing party’s primary, but they must consider those who vote in their own party’s primary and those who do not participate in primaries but do participate in general elections.

In short, studying ideological responsiveness in two-stage elections requires defining to which set of voters a candidate can be expected to respond.

We identify three general schools of thought regarding how candidates might interact with these sets of voters. First, extending the pure median voter theory as elaborated by Downs to two-stage elections suggests that candidates would locate themselves at the median of primary voters' preferences in the first stage and then shift toward the general election voters' median in the second stage. (Downs 1957).³

The second possibility is that candidates position themselves for success during the primary election and maintain that position well into the general election campaign. In this conceptualization, primary voters consider both the ideological positions of the candidates and their likelihoods of winning the general election when considering who to support (Hummel 2013, 2010*b*; Groseclose 2001). This view shifts the strategic calculation of navigating two-stage elections away from candidates and on to primary election voters.

The last school of thought suggests that primary voters' ideological preferences are inflexible and differ significantly from those held by people who only participate in general elections. Primary election voters in this model are unlikely to tolerate anything less than ideological purity (Tomz and Houweling 2009; Doherty, Dowling, and Miller Forthcoming). These ideologically rigid voters expect candidates to attempt to converge towards the median of the distribution of ideological preferences within the primary and punish what they perceive as inconsistency if candidates drift away from their primary positions during the general election (Alvarez 1997; Hummel 2010*a*). While voters might forgive changes in policy positions over time, there is evidence that candidates cannot escape the penalty of flip-flopping within a single election (Doherty, Dowling, and Miller Forthcoming). This leads to a dominant strategy for candidates to position themselves as more extreme and not move

³Downs (1957) does note the need to retain a sense of authenticity that might prevent candidates from complete convergence toward the general election median.

even once the general campaign starts (Brady, Han, and Pope 2007).

The theoretical and empirical support for the median voter theorem as articulated by Downs (1957) — and tested by countless additional scholars — makes a compelling case for expecting candidates to respond to voters who failed to vote in primaries so long as they participate in general elections. The argument is that candidates running in winner-take-all single-member districts simply cannot afford to ignore such a large block of voters in a general election. Candidates who respond only to their partisan base risk ceding the median voter in the general election, and thus the majority of voters, to their opponent. There is some evidence that candidates can work around the preferences of primary voters by remaining ambiguous about their true positions (Meirowitz 2005) and focusing on valence issues (Hummel 2010*a*). Acree et al. (2014) find that the presidential nominees in 2008 and 2012 moderated their ideological rhetoric during the general election compared to the primaries. Voters who participate in general elections but not primary elections frequently occupy a middle ground ideologically, which means if candidates respond to the general election median voter, they must moderate as well. The median voter school of thought also suggests that the party organization should intervene to keep candidates within an acceptable ideological range. While the parties may not have the power of candidate selection that they enjoyed in the past (Carson, Engstrom, and Roberts 2007), Hassell (2015) provides some evidence that party organizations are able to pressure candidates who are out of step with voters who only participate in general elections by denying them funding and effective campaign staffers. This leads most primary challenges against incumbents to be self-financed Goodliffe and Magleby (2001) and encourages potential candidates to wait until an incumbent vacates their seat.

Many scholars point to the importance of party activists and primary election voters that often reflect similar views as critical to any candidate's success. Activists in general, and primaries in particular, put pressure on candidates to move away from the ideological

center of their constituents as a whole (e.g. Aldrich 1983*b,a*; Aldrich and McGinnis 1989; Layman et al. 2010; Miller and Schofield 2003). Journalists and pundits alike frequently point to threats from primary challenges as pushing incumbents to ideological extremes and contributing to contemporary polarization. Because candidates must win a primary election before they can even hope to compete in the general election, responding to the preferences of those who vote in primaries might be a dominant strategy. Brady, Han, and Pope (2007) show that congressional candidates tend to position themselves closer to the primary as opposed to the general electorate. With the presence of large ideologically extreme groups such as the Tea Party willing to scuttle high quality and incumbent candidates Bradberry and Jacobson (2014); Rapoport (2014), candidates might focus more on the preferences of primary voters relative to those who participate only in general elections.

Primaries offer ideological activists the means to express their true preferences by selecting among a larger field of candidates, and also to express the intensity of their preferences through making donations. In regards to campaign contributions, the signaling and expressive models of donations posit that individuals and groups donate to candidates close to their own ideological preferences. Donations “signal the extent to which any informational lobbying by the group would be valuable to the legislator” (Austen-Smith 1995, 567). Expressive models likewise predict that interest groups donate to ideological proximate incumbents and challengers in order to express their policy beliefs McCarty and Rothenberg (1996); McCarty and Poole (1998). In the context of primaries, an activist or interest group can donate to one of possibly several candidates in their preferred party. If an activist donates to an ideologically extreme challenger in a primary, they signal to other candidates in their party that they are not pleased with more moderate candidates. This signal can be reinforced by failing to donate during the general election if a more moderate candidate wins the primary or if the primary winner moderates in an effort to appeal to the general election median voter.

In addition, directional theories of voting posit that voters prefer candidates who offer

a clear direction to policy preferences and a distinct ideological difference between themselves and their opponents (Rabinowitz and Macdonald 1989). This comports with theories of campaigns that focus on the desire of candidates to differentiate themselves from their opponents more generally (e.g. Carsey 2000; Riker 1990).

Overall, the case for responding to primary voters over general election only voters is stronger, but finding evidence of responsiveness to both would not be surprising. A second question is whether all candidates should respond equally to these competing pressures. We look specifically at whether incumbents behave differently than non-incumbents. Incumbency may provide legislators with the opportunity to build a scholars call a personal vote. Cain, Ferejohn, and Fiorina (1987, p. 9) define the personal vote as, "... that portion of a candidate's electoral support which originates in his or her personal qualities, qualifications, activities, and record." The personal vote has generally been presented as based on non-ideological behavior such as casework, credit claiming, and bringing policy or so-called "pork barrel" benefits back to the district (e.g. Mayhew 1974; Fiorina 1977; Ansolabehere, Jr., and III 2000). These sorts of behaviors are consistent with aspects of Fenno's (1978) description of homestyle. Numerous scholars point to the personal vote as the primary source of advantage incumbents enjoy in their re-election bids (e.g. Desposato and Petrocik 2003; Jacobson 2004).

Fiorina (1977) argues that legislators focusing attention on constituency service and casework weakens the partisan connection between voters and their representatives. He argues that this lowers the level of meaningful electoral competition in elections even when the underlying partisan distribution in a district is evenly balanced. Similarly, Ansolabehere, Jr., and III (2000, p. 27) report evidence they argue supports the claim that, at least since the 1960's, "... the personal vote acts against party strength." They go on to say, "The substitution of the personal vote for the party vote... suggests that the personal vote erodes partisan attachments," and that it reflects the "trade" made by legislators as they balance

their need to toe the party line in some instances with their need to appease voters who do not share their partisan leanings (p. 31).

Given this, we expect to find less ideological responsiveness to either primary voters or general election only voters among incumbents compared to non-incumbents. Incumbents' service and support to their districts on non-ideological grounds should weaken their need to respond ideologically to voters. In this sense, voters may experience a trade-off between ideological and non-ideological representation when faced with a choice between an incumbent and a challenger.

We also examine whether the timing of primaries affects candidate responsiveness to either set of voters. The theoretical foundation for this analysis is weaker, as we suspect that it is difficult for candidates to alter their ideological locations during the course of the two-stage campaign.⁴ Still, if candidates are able to reinvent themselves at least somewhat between the primary and general election stages, it should be more likely when there is more time between the two stages. In other words, candidates with a longer time span between stages should be more likely to respond to general election only voters compared to candidates with a shorter gap between stages.

2 Research Design

We test our expectations using data drawn from two sources: the Database on Ideology, Money in Politics, and Elections (DIME) (see Bonica 2014) and the 2010 Cooperative Congressional Election Study (CCES). The DIME data includes common-space campaign finance scores (CFscores) designed to measure each candidate's ideological position. These ideal points are estimated using campaign contributions and rest on the assumption that

⁴Acree et al. (2014) present evidence that recent presidential candidates have shifted the ideological content of their rhetoric, but numerous scholars cited previously suggest substantial limits and risks associated with such efforts.

donors contribute to the campaigns of candidates who they believe to be ideologically similar to themselves. The DIME data contain measures of ideology for donors and candidates contesting national and subnational elections from 1979 - 2012. For candidates who win Congressional races, the DIME measure appears to tap into the same dimension as does the first dimension of DW-NOMINATE scores generated by roll call votes as evidenced by the 0.92 bivariate correlation between the two (Bonica 2014, 371). The measure of candidate ideology based on the DIME data set serves as the dependent variable in our analyses.

Using contributions to measure candidate ideology assumes that interest groups and Political Action Committees seek to support candidates who share their ideological position – an assumption that is fairly non-controversial in the field Bonica (2014). Some groups donate merely to gain access to elected officials Kollman (1997). However, recent evidence suggests that there is next to no direct significant effect of donations as a form of investment Ensley (2009); McCarty and Rothenberg (1996); Bonica (2014), and that donations are a means to express ideological sincerity Ansolabehere, de Figueiredo, and Snyder (2003); Bonica (2014). The CFscores we use do not control explicitly for committee positions as the IRT version of the scores do Bonica (2013), but the results between IRT and common space measures do not meaningfully differ Bonica (2014). Therefore, the scores either capture the sincere ideologies of interest groups or constitute costly signals Austen-Smith (1995) – both of which capture stable ideologies of office holders and interest groups alike.

Our main independent variables of interest are drawn mostly from the CCES. Because we wish to observe the degree to which the ideological preferences of both primary and general election voters inform the ideological dispositions of the candidates who seek their support, we need survey data that allows us to distinguish between citizens who may be members of one or both of these groups. The 2010 CCES gives us the opportunity to do so because it asks separate questions of respondents regarding whether they voted in their state’s Democratic primary, Republican primary, and general elections.

We categorize respondents who said they voted in the Democratic primary as Democratic primary voters. Similarly, those who participated in the Republican Party’s primary are categorized Republican primary voters. We categorized anyone who cast a ballot in the general election *and who was not classified as a primary voter* as a general election only voter. This allows us to isolate the key portions of the voting population without double counting primary voters, who typically participate in both stages of elections.

We measure citizens’ preferences using the CCES’ five-point ideological measure. This scale ranged from 1 = “very liberal” to 5 = “very conservative.” We then aggregated these data to produce measures of the average ideological scores across primary and general election only voters in both U.S. House and Senate elections, with higher values indicating more conservative preferences among a given group of voters.⁵ Note that people who lived in states that had Senate elections in 2010 were included as voters in both a House and a Senate contest.

The average number of respondents available to measure the ideological preferences of primary and general election only voters in a given contest was approximately 62 and 55 respectively. The range for the primary voters runs from 1 to 1,613, while the range for the general election only voters runs from 2 and 918. Recall that these aggregate measures are weighted, so these data are not quite simple counts. We do not include in our analyses any contest in which our aggregated measures of primary and general election only voters ideologies were generated using a number of respondents at or below the tenth percentile of the count for a given group. Thus, we omit any observation in which the ideology of primary voters was generated using 9.9 or fewer weighted observations and in which the ideology of general election only voters was generated using 10.3 or fewer weighted respondents.⁶

We then merged the aggregated CCES data with the 2010 candidate data drawn from

⁵We used the probability weights included in the CCES when we aggregated these data.

⁶This decision does not affect the substance of our findings.

DIME so that the average ideologies of primary and general election only voters matched with the correct candidates. For example, the primary voters ideology measure for Democratic candidates contesting the Democratic nomination in Pennsylvania’s first district is the average ideology of those CCES respondents living in that district who said they voted in the Democratic primary. Republican primary candidates in this district, on the other hand, were matched with the average ideology among those respondents from the same district who voted in the Republican primary. Both sets of candidates were matched with the same indicators of the average ideology of general election only voters from the district. Our unit of analysis is the individual candidate. There are generally multiple candidates in most contests included in our data. In total, there are 1,430 candidates in these data, roughly 38% of whom are Democrats while the remaining 62% are Republicans. In each primary election contest, there are between 0 and 12 Democratic and 0 and 11 Republican candidates. The average number of Democrats per contest is just below two while the average number of Republicans is approximately 3.4.

Our measures of candidate ideology and the ideologies of primary and general election only voters are static for this analysis. In other words, they do not change over the course of the campaign. This is non-controversial for our measures of the different groups of voters because citizen preferences are generally quite stable over the short time frame of a campaign. The behavior of candidates, however, is viewed by many scholars as more dynamic. Unfortunately, the DIME data set does not permit us to generate dynamic measures of candidate ideology. However, we offer three additional points in defense of using the static measure we have. First, our measures of both candidate and citizen ideology are meant to be quite general, which should aggregate away short-term ideological changes on any specific issues. Second, while there is some evidence that presidential candidates might moderate their ideological rhetoric (Acree et al. 2014), evidence from non-presidential elections tends to suggest that candidates alter the issues they emphasize (Banda and Carsey 2015) or their willing-

ness to attack their opponents Carsey et al. (2011) more so than their ideological locations. Third, when candidates decide to run and formulate their basic strategy, they must do so estimating the ideological preferences of both primary and general election only voters at the same time. Adoption of a mixed strategy happens early in the process, and candidates can face backlash from changing that strategy too much over the course of a campaign.

We include several controls in our analysis. We control for whether or not a candidate is an incumbent, whether or not the contest was for an open seat, the sex of a candidate,⁷ the partisanship of a candidate, and whether or not the election is for a Senate seat. In addition, we also include in one of our models an indicator of the number of days between a contest’s primary election day and general election day.

Table 1: Summary Statistics

	Mean	Std. Dev.	Min	Max
Candidate ideology	0.32	1.21	-5.04	4.58
Primary voters ideology	3.45	0.70	1.68	4.52
General only voters ideology	3.18	0.29	1.88	3.99
Candidate is an incumbent	0.25	0.43	0.00	1.00
Days between elections	131.65	66.02	45.00	266.00
Candidate is a Democrat	0.38	0.49	0.00	1.00
Candidate is female	0.16	0.37	0.00	1.00
Open seat election	0.20	0.40	0.00	1.00
Senate election	0.14	0.34	0.00	1.00

Table 1 contains summary statistics for each of the variables we use in our analyses. Note that the dependent variable — candidate ideology — ranges from about -5 to 4.6. As this value increases, so too does the estimated level of conservatism of a given candidate. Thus our expectation is that increases in a group of voters’ ideology measure will lead to increases in our measure of a candidate’s ideology. In other words, candidates will become more conservative as primary and/or general election only voters become more conservative.

According to Table 1, about 25% of our candidates are incumbents. Also note that the

⁷The DIME data utilized an automated coding scheme based on candidates’ names to determine their gender. We coded by hand the few candidates whose genders were not included in the data.

variance is greater for the ideological preferences of primary voters compared to that of general election only voters. This is expected because participants in primaries tend to be more ideologically extreme than people who only participate in general elections. Statistically it does not threaten the parameter estimates of our subsequent models, but lower variance in an independent variable will, all things equal, lead to somewhat larger standard errors.

3 Results

Figure 1 presents two scatterplots that show the bivariate relationships between our measures of candidate ideology and the ideological preferences of both primary and general election only voters. Candidate ideology is plotted on the y-axes of both graphs while the relevant set of voters' ideology is plotted along the x-axes. We also plot the best fit regression lines in each panel, with a gray shaded area indicating a 95% confidence interval. The plot on the left in Figure 1 shows a strong relationship between the ideological preferences of primary voters and candidates' ideologies. As primary voters become more conservative, so too do candidates. The plot on the right shows a similar relationship between general election only voters and candidates' ideologies, but this relationship is much weaker. This initial evidence suggests that candidates' ideologies are more responsive to the preferences of primary voters than they are to those of general election only voters.

Next, we present the results of our statistical analyses in Table 2. Our dependent variable is a continuous measure of candidate ideology and our observations are nested within states and contests. The nature of these data allow us to run fairly straightforward linear regression models, but also require that we account for the multilevel nature of the data. We do so by including random intercepts for the state in which an election takes place and for each individual contest.

In Model 1, we test the degree to which candidates' ideologies are associated with the

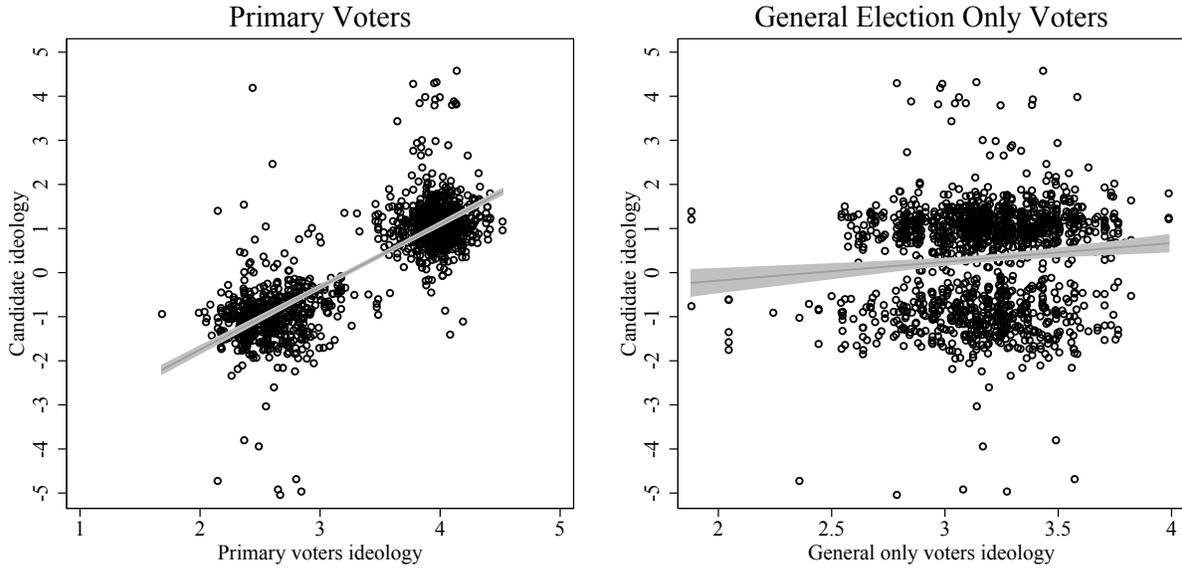


Figure 1: Scatterplots of candidate and citizen ideologies with linear fit lines and 95% confidence intervals.

ideological dispositions of primary and general election only voters. When the primary voters faced by a candidate becomes one unit more conservative, the candidate becomes about 0.27 units more conservative. This effect differs significantly ($p \leq 0.05$) from zero and is consistent with our expectation that candidates would respond positively to the ideological leanings of primary voters.

The estimated coefficient capturing the effect of general election only voters' ideologies on a candidate's ideology is negative, which is contrary to our expectations. However, it does not approach traditional levels of statistical significance and substantively is about one-twelfth the size of the primary voters coefficient estimate.⁸ In other words, Model 1 in Table 2 provides no evidence to suggest that candidates respond to the set of voters in

⁸Note that the estimated standard error for the coefficient capturing the effect of general election only voters ideology is actually smaller than it is for the primary voters ideology coefficient estimate. This suggests that the null finding for the general election only voters' ideology measure is not just an artifact of the lower variance in this independent variable reported in Table 1.

Table 2: The Effects of the Ideologies of Primary Voters and General Election Only Voters on Candidate Ideology

	Model 1		Model 2		Model 3	
Primary voters ideology	0.266*	(0.083)	0.410*	(0.085)	0.235*	(0.097)
Primary \times incumbent			-0.385*	(0.056)		
Primary \times days between elections					0.000	(0.000)
General only voters ideology	-0.028	(0.065)	-0.005	(0.074)	-0.027	(0.155)
General \times incumbent			0.020	(0.132)		
General \times days between elections					-0.000	(0.001)
Candidate is an incumbent	-0.023	(0.041)	1.180*	(0.416)	-0.026	(0.042)
Days between elections					-0.000	(0.003)
Candidate is a Democrat	-1.740*	(0.119)	-1.690*	(0.117)	-1.747*	(0.119)
Candidate is female	-0.095*	(0.047)	-0.102*	(0.046)	-0.094*	(0.047)
Open seat election	-0.023	(0.049)	-0.009	(0.048)	-0.021	(0.049)
Senate election	0.031	(0.056)	0.043	(0.053)	0.033	(0.056)
Intercept	0.177	(0.358)	-0.422	(0.378)	0.249	(0.560)
Random Intercepts						
σ_{State}^2	0.021	(0.057)	0.042	(0.034)	0.019	(0.062)
$\sigma_{Contest}^2$	0.128	(0.037)	0.106	(0.039)	0.125	(0.037)
BIC	2,829.067		2,795.008		2,849.800	
N	1,430		1,430		1,430	

Note: cell entries are estimated coefficients from a multilevel regression with random intercepts estimated for states and contests. Standard errors are reported in parentheses.

* $p \leq 0.05$.

their constituency that only vote in general elections. Thus, our initial findings suggest that candidates' ideologies respond to the ideological preferences of the people who participate in their party's primary election and not to the ideological preferences of those who only participate in general elections.

We test the degree to which incumbency status conditions the effects of the ideologies of primary voters and general election only voters on candidate ideologies in Model 2. We include interactions between the incumbency indicator and both of the measures of the ideologies of voters. Because the incumbency indicator is dichotomous, we can directly interpret the substantive meaning of each of the constituent terms. The estimated coefficient on primary voters' ideology captures the effect of a one unit increase in this measure on non-incumbent candidates' ideologies. When primary voters become one unit more conservative,

non-incumbent candidates on average become 0.41 units more conservative. This effect attains a traditional level of statistical significance and is substantively larger than the effect reported for Model 1.

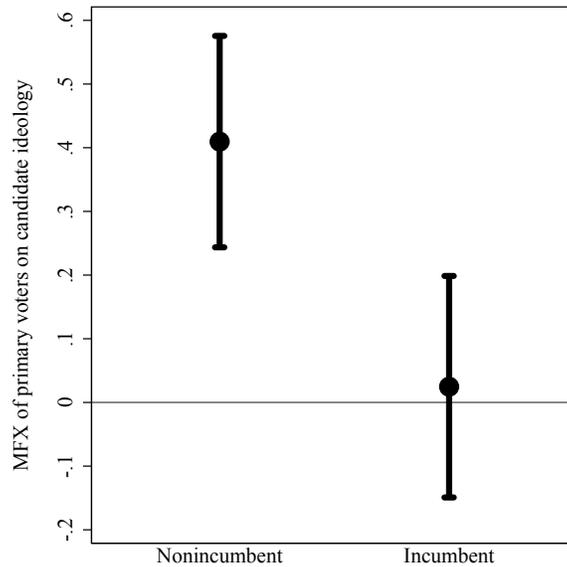


Figure 2: Marginal effect of primary voters' ideology on candidate ideology among incumbents and non-incumbents. Generated by the estimates produced by Model 2 in Table 2.

The estimated coefficient for the interaction between primary voters' ideology and the incumbency indicator captures how the effect of the ideological preferences of primary voters on a candidate's ideology changes when comparing a non-incumbent to an incumbent. Here we observe a significant effect relative to the one described above for non-incumbents. When primary voters become one unit more conservative, we observe that incumbents on average become 0.025 units more conservative ($0.410 - 0.385 = 0.025$). As indicated by the marginal effect plotted in Figure 2, this effect is indistinguishable from zero. Thus, it appears that incumbents do not alter their ideological positions in response to the preferences of their primary voters. We present predicted values of candidate ideology across all observed values of primary voters' ideology among both incumbent and non-incumbent candidates in Figure

3.⁹

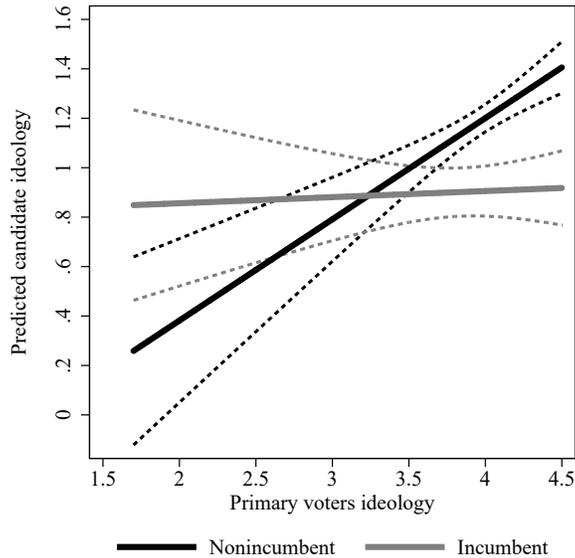


Figure 3: Predicted candidate ideology across primary voters’ ideology among incumbent and non-incumbent candidates. Generated by the estimates produced by Model 2 in Table 2.

The results in Model 2 again suggests that the ideology of general election only voters faced by a candidate does not systematically influence that candidate’s own ideological position. The estimated effect of general election only voters becoming one unit more conservative is negative but statistically insignificant for non-incumbents. The coefficient estimated on the interaction between the ideology of general election only voters and the incumbency indicator is positive, but also fails to differ significantly from zero. In sum, Model 2 shows us that only non-incumbents respond to the ideological preferences of primary voters — a result obscured by the more parsimonious specification of Model 1 — while neither incumbents nor non-incumbents respond in a meaningful way to general election only voters.

Model 3 in Table 1 tests whether the timing of the primary election conditions the degree

⁹To simplify producing Figure 3, we set all of the remaining covariates in the model to their median values.

to which candidates respond to the ideological leanings of primary and general election only voters. We expect that candidates involved in earlier primaries will be more responsive to the ideologies of primary voters because the extra time between the two election days gives them the opportunity to modify their strategies or reposition later if necessary. Model 3 thus includes a measure capturing the number of days between the date of the primary election and the date of the general election. We interact this measure with our indicators of the ideologies of primary and general election only voters. Because these variables are continuous, the raw coefficients are of less substantive interest. Thus, we present marginal effects plots in Figure 4. These plots show what the marginal effect of a one unit increase of each constituent term is across each value of the other variable on a candidate's ideology. The solid lines represent the marginal effects while the dashed lines capture the 95% confidence intervals around the effects. If the confidence intervals overlap with the horizontal line at 0 on the Y-axis, then the marginal effect at that value of the variable plotted along the x-axis fails to differ significantly from 0.

First, note that the marginal effect of a candidate's primary voters' ideology on her own ideology is always positive and differs significantly from zero at all values of the days between the primary and general elections variable. The marginal effect increases in magnitude as the number of days between elections increases. This suggests that candidates may be more responsive to the ideological preferences of primary voters as the number of days between the primary and general elections increases. However, the increase is not substantial relative to the confidence interval around it, suggesting only tentative evidence for this conclusion.

Second, note that none of the remaining three sets of marginal effects ever differs significantly from zero. We again find that candidates' ideologies are driven by primary voters, not by people who vote only in general elections.

Finally, we present predicted values of candidate's ideological positions in Figure 5 among

candidates with the earliest and the latest primaries.¹⁰ Both sets of predicted values indicate that candidates become more conservative as their primary voters become increasingly conservative. However, this effect is somewhat stronger among candidates with the earliest primary election dates compared to those with the latest primary elections.

4 Conclusion

Candidates must decide whether to respond ideologically to voters or not. Candidates in two-stage elections face the additional question of which voters to consider when making this choice. They cannot hold elected office without winning a general election, nor can they contest a general election as a major party candidate without first winning a primary election. Because the type of person who votes in primaries tends to be different than those who only vote in general elections, candidates face a potential strategic trade-off between satisfying voters in one stage over the other.

We find fairly strong and consistent evidence that candidates running for U.S. House and Senate seats systematically respond to the preferences of primary election voters while largely ignoring the ideological views of citizens who only participate in general elections. More specifically, we find that candidates become more conservative as primary voters become more conservative. and that this result appears to hold only for non-incumbents candidates. We further find some tentative evidence that as primary elections become more temporally distant from the date of the general election, candidates' ideologies become increasingly associated with the ideological preferences of primary voters.

Our results lead to several important implications. Ample evidence presented here and in the broader literature shows that candidates are aware of the two stage nature of elections in the U.S. and that they respond to the electoral incentives placed before them. We show that

¹⁰We once again set all additional covariates to their median values.

they appear to respond more strongly to primary voters, suggesting that research focused only on general elections overlooks a critical feature of electoral politics in the U.S. Our results also suggest that potential candidates considering a run for office may be more inclined to do so in a given district or state when their own ideologies better match the ideological dispositions of those who participate in the candidate's party's primary election. It is possible that potential candidates who hold preferences that are at odds with primary voters in their district may be disinclined to run because they know that they will have trouble appealing to voters — and donors — in the first stage of the election, even if they may otherwise hold a great deal of potential appeal to voters in the second stage.

Second, our findings suggest that primary election voters may hold disproportionate influence over the kinds of policies that government produces between elections. Whereas voters who participate only in general elections may prefer moderate candidates who might be more inclined to produce moderate policies, primary voters appear to prefer candidates with more ideologically extreme views. This leaves voters who only participate in the general election to choose between two ideologically extreme candidates who may not be very responsive to their preferences.

Last, incumbents' ideologies do not appear to be informed by primary election voters. This is likely due in part to the electoral safety incumbents enjoy stemming from experience, their campaign war chests, and any other non-ideological aspects of the personal vote. However, their ideological dispositions are also not informed by general election only voters. This suggests that incumbency confers enough electoral security that members' views largely stop being directly influenced by the views of their constituents. Thus, this may be a deleterious effect of incumbency on representation.

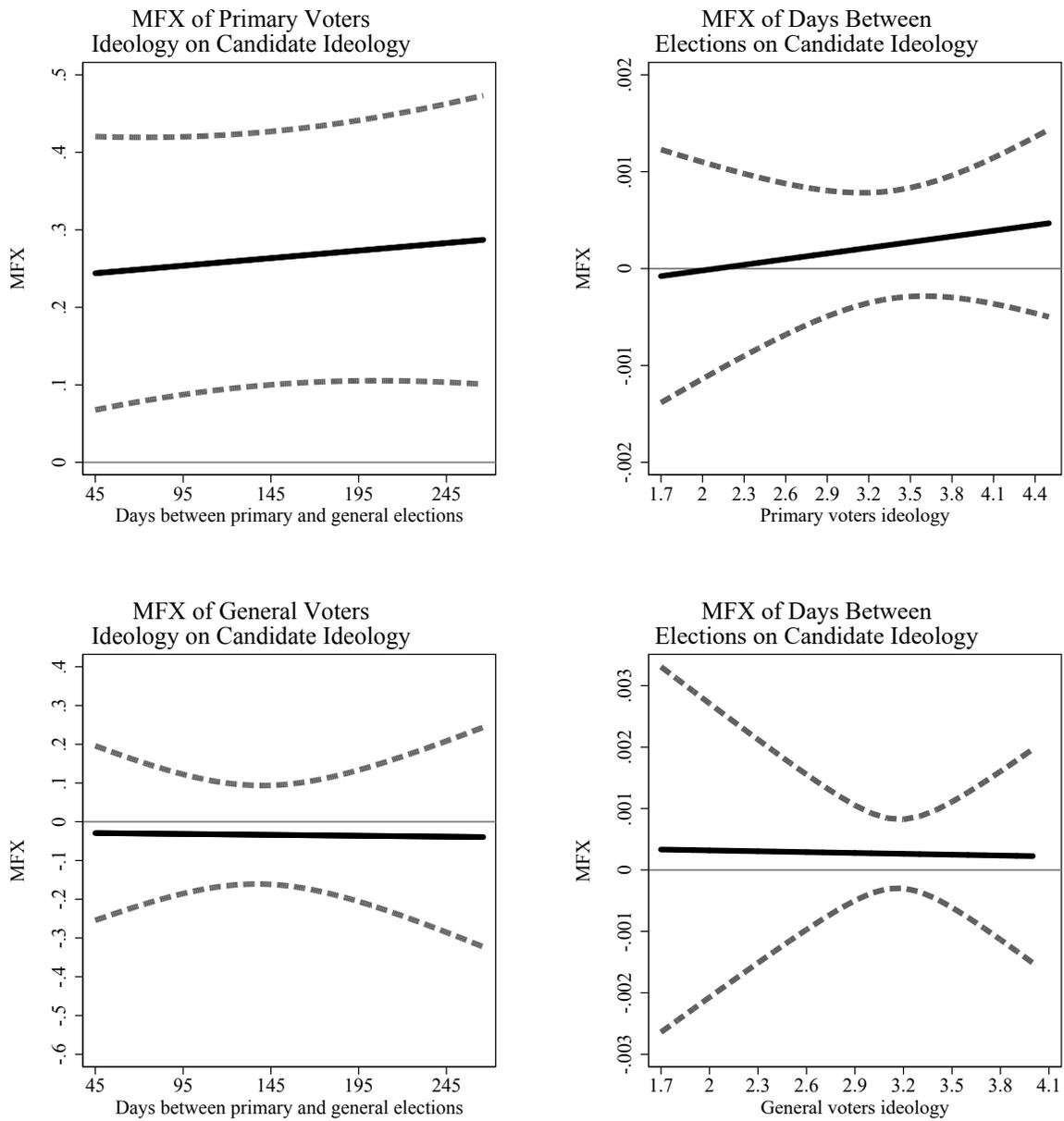


Figure 4: Marginal effects of citizens' ideologies and days between primary and general elections on candidate ideology. Generated by the estimates produced by Model 3 in Table 2.

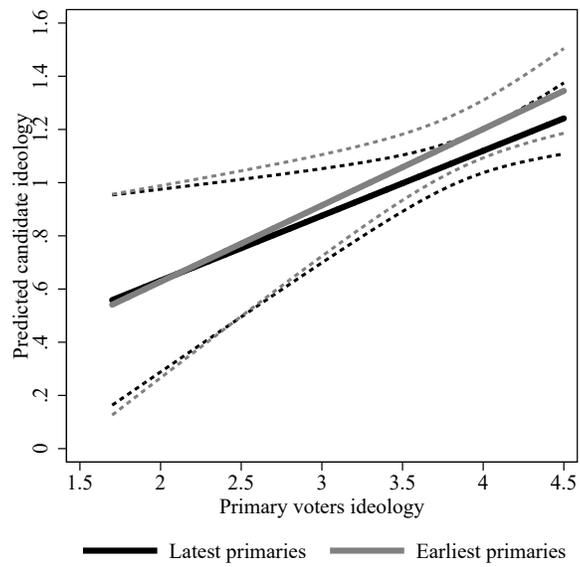


Figure 5: Predicted candidate ideology across primary voters' ideology among the earliest and latest primary elections. Generated by the estimates produced by Model 3 in Table 2.

References

- Acree, Brice, Amber Boydstrom, Yanchuan Sim, Noah Smith, and Justin Gross. 2014. "Etch-a-Sketching: Testing the Post-Primary Moderation Hypothesis". Presented at the American Political Science Association Annual Meeting, Washington D.C., August 28-31.
- Aldrich, John. 1983a. "A Downsian Spatial Model with Party Activists." *American Political Science Review* 77: 974–990.
- Aldrich, John. 1983b. "A Spatial Model with Party Activists: Implications for Electoral Dynamics." *Public Choice* 41: 63–100.
- Aldrich, John, and M. McGinnis. 1989. "A Model of Party Constraints on Optimal Candidate Positions." *Mathematical and Computer Modelling* 12: 437–450.
- Alvarez, R. Michael. 1997. *Information and Elections*. Ann Arbor: University of Michigan Press.
- Ansolabehere, Stephen, James M. Snyder Jr., and Charles Stewart III. 2000. "Old Voters, New Voters, and the Personal Vote: Using Redistricting to Measure the Incumbency Advantage." *American Journal of Political Science* 44(1): 17–34.
- Ansolabehere, Stephen, John M. de Figueiredo, and James M. Snyder. 2003. "Why Is There So Little Money in U.S. Politics?" *Journal of Economic Perspectives* 17: 105–30.
- Austen-Smith, David. 1995. "Campaign Contributions and Access." *American Political Science Review* 89(3): 566–81.
- Banda, Kevin K. 2013. "The Dynamics of Campaign Issue Agendas." *State Politics and Policy Quarterly* 13(4): 446–470.
- Banda, Kevin K. 2015. "Competition and the Dynamics of Issue Convergence." *American Politics Research* 43(5): 821–845.
- Banda, Kevin K., and Thomas M. Carsey. 2015. "Two-Stage Elections, Strategic Candidates, and Agenda Convergence." *Electoral Studies* 40: 221–230.
- Bonica, Adam. 2013. "Ideology and Interests in the Political Marketplace." *American Journal of Political Science* 57(2): 294–311.
- Bonica, Adam. 2014. "Mapping the Ideological Marketplace." *American Journal of Political Science* 58(2): 367–387.
- Bradberry, Leigh A., and Gary C. Jacobson. 2014. "The Tea Party and the 2012 Election." *Electoral Studies* 30.

- Brady, David W., Hahrie Han, and Jeremy C. Pope. 2007. "Primary Elections and Candidate Ideology: Out of Step with the Primary Electorate?" *Legislative Studies Quarterly* 32(1): 79–105.
- Cain, Bruce, John Ferejohn, and Morris P. Fiorina. 1987. *The Personal Vote*. Harvard University Press.
- Carsey, Thomas M. 2000. *Campaign Dynamics: The Race for Governor*. Ann Arbor: University of Michigan Press.
- Carsey, Thomas M., and William D. Berry. 2014. "Whats a Losing Party to Do? The Calculus of Contesting State Legislative Elections." *Public Choice* 160(1-2): 251–273.
- Carsey, Thomas M., Robert A. Jackson, Melissa Stewart, and James P. Nelson. 2011. "Strategic Candidates, Campaign Dynamics, and Campaign Advertising in Gubernatorial Races." *State Politics and Policy Quarterly* 11(September): 269–298.
- Carson, Jamie L., Erik Engstrom, and Jason Roberts. 2007. "Candidate Quality, the Personal Vote, and the Incumbency Advantage in Congress." *American Political Science Review* 101: 289–301.
- Desposato, Scott W., and John R. Petrocik. 2003. "The Variable Incumbency Advantage: New Voters, Redistricting, and the Personal Vote." *American Journal of Political Science* 47(1): 18–32.
- Doherty, David, Conor M. Dowling, and Michael G. Miller. Forthcoming. "When Is Changing Policy Positions Costly for Politicians? Experimental Evidence." *Political Behavior* .
- Downs, Anthony. 1957. *An Economic Theory of Democracy*. New York: Harper and Row.
- Ensley, Michael J. 2009. "Individual Campaign Contributions and Candidate Ideology." *Public Choice* 138: 221–38.
- Fenno, Richard F. 1978. *Home Style: House Members in Their Districts*. Boston: Little, Brown.
- Fiorina, Morris P. 1977. *Congress: Keystone of the Washington Establishment*. New Haven: Yale University Press.
- Goodliffe, Jay, and David B. Magleby. 2001. "Campaign Finance in U.S. House Primary and Elections." In *Congressional Primaries and the Politics of Representation*, ed. Peter F. Galderisi, Marni Ezra, and Michael Lyons. Lanham, MD: Rowman and Littlefield Publishers Inc.
- Groseclose, T. 2001. "A model of candidate location when one candidate has a valence advantage." *American Journal of Political Science* 45: 862–86.

- Harden, Jeffrey J. 2015. *Multidimensional Democracy: A Supply and Demand Theory of Representation in American Legislatures*. Cambridge University Press.
- Hassell, Hans. 2015. "Party Control of Party Primaries: Party Influence in Nominations for the U.S. Senate." *Journal of Politics* 78(1).
- Hummel, Patrick. 2010a. "Flip-flopping from primaries to general elections." *Journal of Public Economics* 94: 1020–27.
- Hummel, Patrick. 2010b. "On the nature of equilibria in a Downsian model with candidate valence." *Games and Economic Behavior* 70: 425–45.
- Hummel, Patrick. 2013. "Candidate strategies in primaries and general elections with candidates of heterogeneous quality." *Games and Economic Behavior* 78: 85–102.
- Jacobson, Gary C. 2004. *The Politics of Congressional Elections*. 6th ed. New York: Pearson Longman.
- Kollman, Ken. 1997. "Inviting Friends to Lobby: Interest Groups, Ideological Bias, and Congressional Committees." *American Journal of Political Science* 41(2): 519–44.
- Layman, Geoffrey C., Thomas M. Carsey, John C. Green, Richard Herrera, and Rosalyn Cooperman. 2010. "Activists and Conflict Extension in American Party Politics." *American Political Science Review* 104(May): 324–346.
- Maestas, Cherie D., Sarah Fulton, L. Sandy Maisel, and Walter J. Stone. 2006. "When to Risk It? Institutions, Ambitions, and the Decision to Run for the U.S. House." *American Political Science Review* 100(May): 195–208.
- Mayhew, David R. 1974. *Congress: The Electoral Connection*. New Haven: Yale University Press.
- McCarty, Nolan, and Lawrence S. Rothenberg. 1996. "Commitment and the Campaign Contribution Contract." *American Journal of Political Science* 40(3): 872–904.
- McCarty, Nolan M., and Keith T. Poole. 1998. "An Empirical Spatial Model of Congressional Campaigns." *Political Analysis* 7: 1–30.
- Meirowitz, Adam. 2005. "Informational Party Primaries and Strategic Ambiguity." *Journal of Theoretical Politics* 17(1): 107–136.
- Miller, Gary, and Norman Schofield. 2003. "Activists and Partisan Realignment in the United States." *American Political Science Review* 97: 245–260.
- Rabinowitz, George, and Stuart Elaine Macdonald. 1989. "A Directional Theory of Issue Voting." *American Political Science Review* 83(March): 93–121.

- Rapoport, Ronald B. 2014. "Epilogue: What the 2012 Nomination Contests Tell Us About the Future of the Republican Party." *Electoral Studies* 30.
- Riker, William H. 1990. "Heresthetic and Rhetoric in the Spatial Model." In *Advances in the Spatial Theory of Voting*, ed. James M. Enelow, and Melvin J. Hinich. Cambridge: Cambridge University Press pp. 46–65.
- Tomz, Michael, and Robert P. Van Houweling. 2009. "The Electoral Implications of Candidate Ambiguity." *American Political Science Review* 103: 83–98.
- Windett, Jason Harold. 2014. "Gendered Campaign Strategies in U.S. Elections." *American Politics Research* 42(4): 628–655.