

Political Repositioning: A Conjoint Analysis

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Abstract

A persistent puzzle in contemporary American politics is the polarization of political officeholders. One possible cause is the two-stage electoral process in the United States, which requires candidates to secure a nomination from their party before contesting a general election. We offer a theory of the costs that candidates incur when they shift positions on policy issues, and study how these costs influence the strategic choices that candidates make during primaries and general elections. We test our theory with conjoint experiments, in which voters choose between candidates who vary randomly on many characteristics, including their record of policy positions. We find that repositioning brings substantial electoral costs. As a consequence, public opinion must be running nearly 70-30 in favor of one side of an issue before politicians who previously took the other side will find it electorally optimal to switch. We conclude that, if candidates emerge from primaries with different positions, the electorate itself will provide strong disincentives for the candidates to converge during the general election. Our findings have important implications for representation in democracies.

1. Introduction

A prominent puzzle in contemporary America is the failure of politicians to converge on key public policy issues. Political polarization has, in turn, made it difficult for leaders to reach legislative agreement (Binder 1991, McCarty 2007). The American public appears to have little patience for this state of affairs. Congressional approval has sunk to historic lows, and over 60% of Americans identify gridlock and lack of compromise as the source of their dissatisfaction.¹ Moreover, people overwhelmingly place the blame for the failure of Congress squarely on the members of Congress themselves.²

The puzzle of polarization is seen most crisply when viewed through the lens of the median voter theorem, which holds that in a two-candidate majoritarian election the winning candidate will be the one that is most preferred by the median voter. This fact, in turn, should incentivize candidates to converge on the ideal policies of the median voter (Hotelling 1929; Downs 1957). The theoretical prediction of convergence has not been borne out in the United States, however. Instead, candidates from the two parties have taken distinctive positions on important public policy issues, ranging from economic policies like the appropriate level of taxation to social policies like the legality of abortion.

This mismatch between theory and everyday experience has led pundits and academics to search for possible causes of polarization. Popular accounts often cite gerrymandered congressional districts or the extreme preferences of politically active citizens. Academics have challenged some of these explanations (Barber and McCarty 2013; Fiorina, Abrams and Pope 2005) and suggested possible alternatives, including campaign contributions by citizens with extreme views (Bonica 2013), the discipline imposed on rank-and-file legislators by party leaders (Rohde 1991, Cox and McCubbins 2005), and the growth of economic inequality (McCarty, Poole, and Rosenthal 2006).

In this paper we consider a complementary explanation for polarization: the electoral pressures arising from two-stage elections.³ Candidates for many offices must secure their party's nomination before competing in a general election. Democrats typically need to voice liberal positions in order to win their party's approval, whereas Republicans need to embrace conservative stances to secure their party's endorsement. When the eventual nominees enter the general election, they face a choice: stick with the positions that helped them win their respective primaries, or shift toward the median member of the electorate as a whole?

Candidates might be tempted to reposition toward the median. We argue, however, that changing positions involves political risks. When a candidate shifts, many voters will disparage

¹ Gallup, June 1-4, 2013.

² Pew Research Center. Oct. 9-13, 2013.

³ We are not the first to consider the consequences of two-stage elections. Previous investigations have reached contradictory conclusions, however (e.g. Brady, Han, and Pope 2007; Burden 2004; Hirano, et. al. 2010). A related literature reaches inconsistent findings about whether "open" primaries produce less polarization than "closed" primaries (McGhee, et. al. 2013; Gerber and Morton 1998; Rogowski 2013).

the candidate's character and doubt his new position. Thus, candidates who move toward the median will tend to suffer a character penalty, while only getting partial credit for their new policy stance. In many circumstances, the costs of repositioning will be large enough to deter candidates from converging on the median voter.

Our findings suggest voters themselves play an important role in promoting and enforcing polarization. By penalizing candidates for changing positions during a campaign, voters lock candidates into positions that may not reflect the will of the median voter. Our analysis also sheds light on why candidates who enter office with divergent stances find it so difficult to compromise. Even when a strong majority in the electorate disagrees with the stance of an officeholder, abandoning that stance may do more harm than good to the officeholder when seeking reelection. In this sense, the voters themselves bear some of the blame for the gridlock in Congress that they find so frustrating.

2. Theory

Scholars have used formal models to analyze the logic of two-stage elections. In these models, candidates first compete in primaries and caucuses, where they must win the support of factions whose opinions may differ from the median in the country as a whole (Aranson and Ordeshook 1972; Cadigan and Janeba 2002; Coleman 1971; Coleman 1972; Owen and Grofman 2006). Winning a Democratic primary, for example, requires catering to voters who are more liberal and politically active than the rest of the population.

After winning the nomination, why wouldn't candidates reposition to get closer to the median voter? Existing formal models assume away this possibility. Aranson and Ordeshook, for example, write, "we assume in this study that the candidate must adopt a single position on the issues that stands as his issue strategy in the nominating contest and in the general election." They go on to note that, "there are no apparent reasons to relax this assumption, even though candidates enjoy *some* spatial mobility. The assumption's credentials ... both in terms of empirical reality and mathematical simplicity, convince us that it is not far-fetched" (1972, 300).

That reality is more complicated, however. Candidates do shift positions on occasion.⁴ Far from a political death sentence, repositioning may well be the best strategic move in some circumstances. To understand why candidates remain polarized in some circumstances but not others, it is important to study when the costs of repositioning would outweigh the benefits, and vice-versa.

In earlier work we developed a theory of political repositioning (Tomz and Van Houweling 2013), which we summarize briefly here. Our theory holds that voters evaluate politicians on two dimensions: policy and character. An enormous literature, originating with Downs (1957), posits that citizens prefer politicians whose policy positions are closest to their

⁴ For example, see Harwood, John, "After a Divisive Primary, Shifting to the Center" *New York Times* 13 May 2012. See also, Halbfinger, David M, "Shedding Populist Tone, Kerry Starts to Move to Middle" *New York Times* 8 May 2004.

own. Previous scholars have also shown that voters value politicians with good personality attributes, such as integrity and competence (Stokes 1963; Kinder et al. 1980). Repositioning, we argue, changes how voters evaluate candidates on *both* dimensions.

First consider the effect of repositioning on perceptions of character. In previous experiments, we found that candidates who changed positions were seen as less honest and knowledgeable, and as weaker leaders, than candidates who remained steadfast. Moreover, although we expected repositioners to receive some praise for being open minded, this pattern did not materialize in the data. Our previous work implies that the character effects of repositioning are almost entirely negative.

Second, repositioning affects calculations of about policy proximity. Candidates who shift toward the median voter presumably hope that their new position will be taken at face value. Our previous research suggests the contrary, however: voters discount the current positions of politicians who voiced different positions in the past. When a candidate abandons one position in favor of another, many people doubt whether the candidate will follow through. Some expect the candidate to pursue his old policy; others conclude that the candidate's true intention lies somewhere between his old position and his new one.

These findings have important implications for polarization. There are, we maintain, two reasons why candidates who express extreme positions in primaries might not shift during the general election. Candidates who shift would not only lose points for displaying bad character, but would also receive only partial credit for their new policy stances. These two effects create incentives for candidates to stick to their prior positions.

But how strong are these effects, and when would they be powerful enough to deter candidates from converging? We address these questions in the remainder of the paper. First, we use conjoint experiments to estimate the penalty for repositioning. Across a wide range of issues, we find penalties that are substantial not only in absolute terms, but also relative to other electoral considerations such as a candidate's race, gender, religion, political experience, and party affiliation.

Second, using data from the experiments, we infer when convergence would be politically optimal. We find that, if Democratic and Republican nominees emerged from primaries holding different positions, they would not find it electorally profitable to converge unless 70% of the general electorate shared the views of the median voter. This level of consensus on contested political issues is uncommon in the population as a whole. Thus, the costs of repositioning are typically large enough to prevent candidates from converging in a general election.

Finally, we analyze the strategic incentives that candidates face in primaries. We find that the costs of repositioning are much smaller in partisan primaries than in general elections. Consequently, even moderate candidates will find it politically expedient to shift toward the median voter within their primary constituency. Having shifted during the primary, however, the candidates will have trouble moving back during the general election. In summary, voters not

only pull candidates toward the extremes during the primaries, but also deter them from moderating during the general election.

3. Experimental Design

We develop these points through a series of experiments, which we embedded in public opinion surveys. In our experiments, voters chose between candidates who varied randomly on several electorally salient dimensions, including party, gender, race, religion, experience, and their record on one of eight contested policy issues. This “conjoint” design allowed us to compare the effects of repositioning with the effects of other electoral considerations. It also allowed us to identify how the costs of repositioning would affect the equilibrium strategies of candidates.

We fielded two surveys, each involving a representative sample of approximately 2,100 U.S. adults. The surveys were administered by Knowledge Networks, an internet-based polling firm, with support from the National Science Foundation. Knowledge Networks used random-digit dialing and address-based sampling to recruit representative samples of participants, and they provided Internet access to households that did not already have it.

The first survey, which took place in April-May 2013, included questions about the Affordable Care Act (ACA), marijuana laws, same-sex marriage, and the minimum wage. The survey began by asking people to express their opinions about one of the four issues, selected at random. Table 1 gives the question wording for each issue. We also asked each respondent how important the issue was to them personally.

Table 1: Policy Issues in the First Survey

Issue	Question
Affordable Care Act	In 2010 Congress passed a new health care law called the Affordable Care Act. Do you think Congress should repeal the Affordable Care Act, or should they let it stand? [Repeal it; Let it stand]
Marijuana laws	Do you think the use of marijuana should be legal, or not? [Should be legal; Should not be legal]
Same-sex marriage	Do you support or oppose same-sex marriage? [Support same-sex marriage; Oppose same-sex marriage]
Minimum wage	Do you support or oppose an increase in the Federal minimum wage from \$7.25 to \$10 an hour? [Support an increase from \$7.25 to \$10 an hour; Oppose an increase from \$7.25 to \$10 an hour]

After measuring the respondent’s preference on the issue, we presented two candidates (A and B) who varied randomly in their demographic attributes and their history of statements about the issue. Our presentation included five demographic variables: party, gender, race, religion, and experience. We selected these variables because they are salient during political

campaigns and are thought to affect public support for candidates. Table 2 shows the possible values for each demographic variable.

Table 2: Demographic Attributes of Candidates

Attribute	Possible values
Party	Democrat or Republican
Gender	Male or Female
Race	White, Black, or Hispanic
Religion	Catholic, Protestant, or Unaffiliated
Years in office	0, 1, 2, 3, 4, 5, 6, 7, 8, 20, 22, 23, 24, 25, 26, 27, 28, or 30

We also randomized what each candidate said about the issue last year, and what the candidate said this year. In each period, the candidate’s policy position was drawn randomly from the same set of response options we had offered when asking respondents about their own policy preferences. All this information was presented in tabular form, with one column for each candidate, and with attributes (rows) in random order. We concluded by measuring which candidate the respondent preferred, and how strongly they felt about their answer.

Figure 1 exemplifies how we presented the information to respondents. In this example, Candidate A consistently held the position that marijuana should not be legal, whereas candidate B moved to the left on this issue. Purely by chance, the candidates differed on some dimensions (marijuana, experience, gender, and race) while being similar on others (party and religion).

Figure 1: Screen Shot of the Experiment

We would like your opinion about two political candidates, whose names will remain confidential. They are Candidate A and Candidate B. The table below describes the candidates; summarizes what they said last year about marijuana; and shows what they are saying this year about the same issue.

Please review the information in the table very carefully.

	Candidate A	Candidate B
Marijuana (last year)	Should not be legal	Should not be legal
Marijuana (this year)	Should not be legal	Should be legal
Party	Republican	Republican
Years in office	20 years	4 years
Gender	Male	Female
Race	White	Hispanic
Religion	Protestant	Protestant

Which candidate do you prefer?

Select one answer only

- Candidate A
- Candidate B

After measuring preferences about candidates A versus B, we displayed two additional pairs of candidates (C versus D, and E versus F), who varied randomly in their demographic attributes and their positions on the same policy issue. For each of these additional pairings, respondents indicated which candidate they preferred. Finally, we repeated the exercise with a second policy issue that was randomly drawn from Table 1. We measured what the respondent thought about the second issue, and then asked the respondent to evaluate three pairs of candidates—G versus H, I versus J, and K versus L—who varied demographically and in their record on the issue. This design efficiently allowed us to collect a large number of evaluations. Because the policy positions and the demographic features of candidates were completely randomized, the design made it possible to estimate and compare the effects of each consideration.

The second survey, fielded in December 2013, was identical in structure but covered four different issues: the debt limit, gun control, immigration, and limits on carbon emissions by power plants. Table 3 gives the wordings of these items.

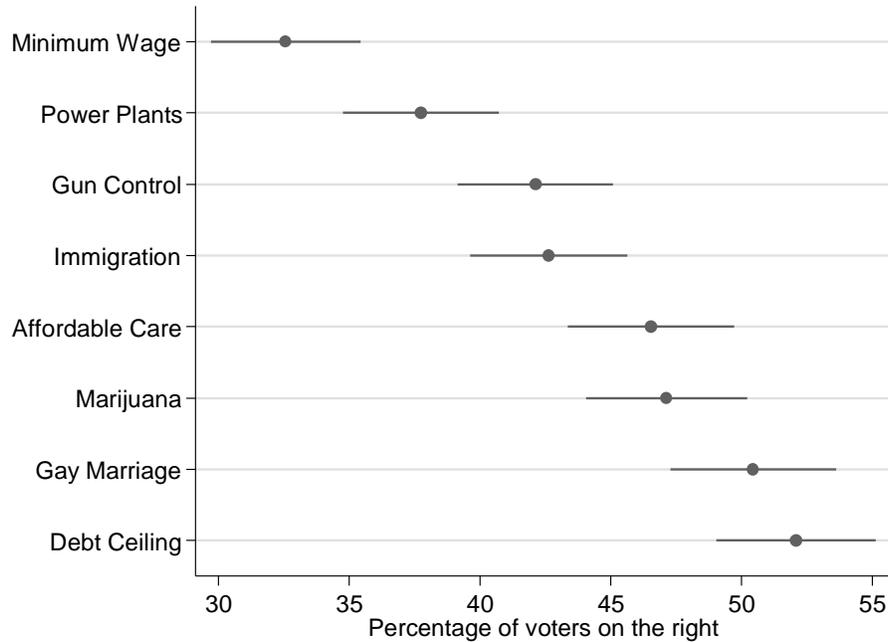
Table 3: Policy Issues in the Second Survey

Issue	Question
Debt limit	The debt limit, also known as the debt ceiling, is the maximum amount of money the federal government is allowed to borrow. Congress must decide whether to raise the debt ceiling. The Treasury says that, if Congress does not raise the debt ceiling, the government will default on its legal obligations for the first time in American history. Do you think Congress should raise the debt ceiling, or not? [Should raise the debt ceiling; Should not raise the debt ceiling]
Gun control	Do you support or oppose stricter gun control laws? [Support stricter gun control laws; Oppose stricter gun control laws]
Immigration	Overall, do you support or oppose a path to citizenship for undocumented immigrants now living in the United States? [Support a path to citizenship; Oppose a path to citizenship]
Power plants	Some people say the government should set stricter emission limits on power plants in order to address climate change. Other people say the government should not set stricter emission limits on power plants because this would lead to higher electric bills. Do you favor or oppose setting stricter emission limits on power plants? [Favor stricter emission limits on power plants; Oppose stricter emission limits on power plants]

4. Descriptive Statistics and Benchmark Effects

Figure 2 presents the distribution of opinion on the eight policy issues in our surveys. The dots show the percentage of respondents who preferred the right (conservative) side of the issue, and the thin black lines surrounding the dots indicate 95% confidence intervals. Opinion varied substantially across issues; only 32% of respondents supported the conservative position on the minimum wage, for example, whereas most respondents supported conservative positions on gay marriage and the debt ceiling.

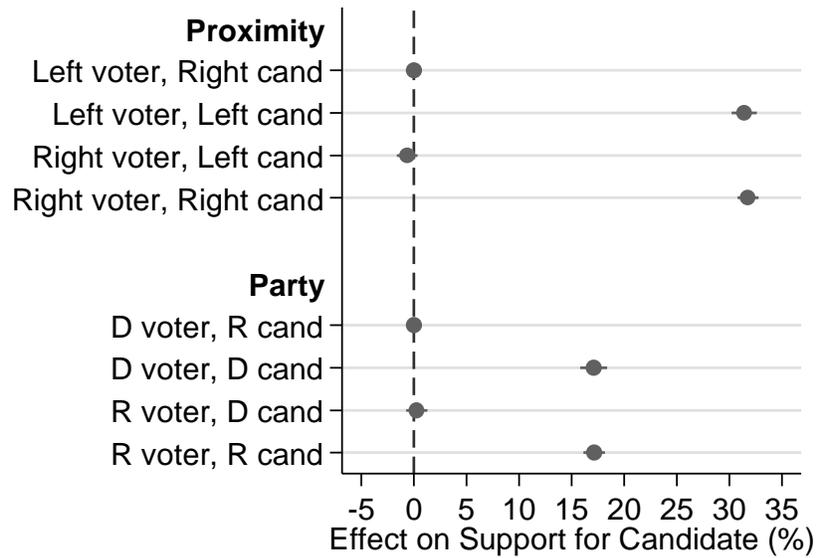
Figure 2: Voter Preferences by Issue



Before discussing how voters responded when candidates shifted on these issues, we present the average effects of the other variables in our experiment. These effects provide useful benchmarks against which we can compare the consequences of repositioning. In the figures that follow, we present the effect of each factor, averaging across all other factors in the experiment. Our estimates come from a multivariate model that includes dummy variables for each factor in our conjoint experiment. Given that each factor was randomized independently of the others, though, such a model is not strictly necessary and does not materially affect our findings.

The top half of Figure 3 shows that, other factors equal, respondents preferred candidates whose current positions were more proximate to their own. The reference category (Left voter, Right candidate) refers to configurations in which the voter preferred the left side of an issue, whereas the candidate who was being evaluated was currently advocating the right side of the issue. Relative to this baseline, improvements in proximity translated into substantially higher levels of electoral support. When the candidate's current position matched the voter's position, the candidate received 31-32 percentage points more votes, on average, than when the two actors had different policy positions. These findings not only accord with previous experiments (Tomz and Van Houweling 2008), but also reinforce one of the key assumptions in our theory of repositioning.

Figure 3: Effects of Proximity and Party



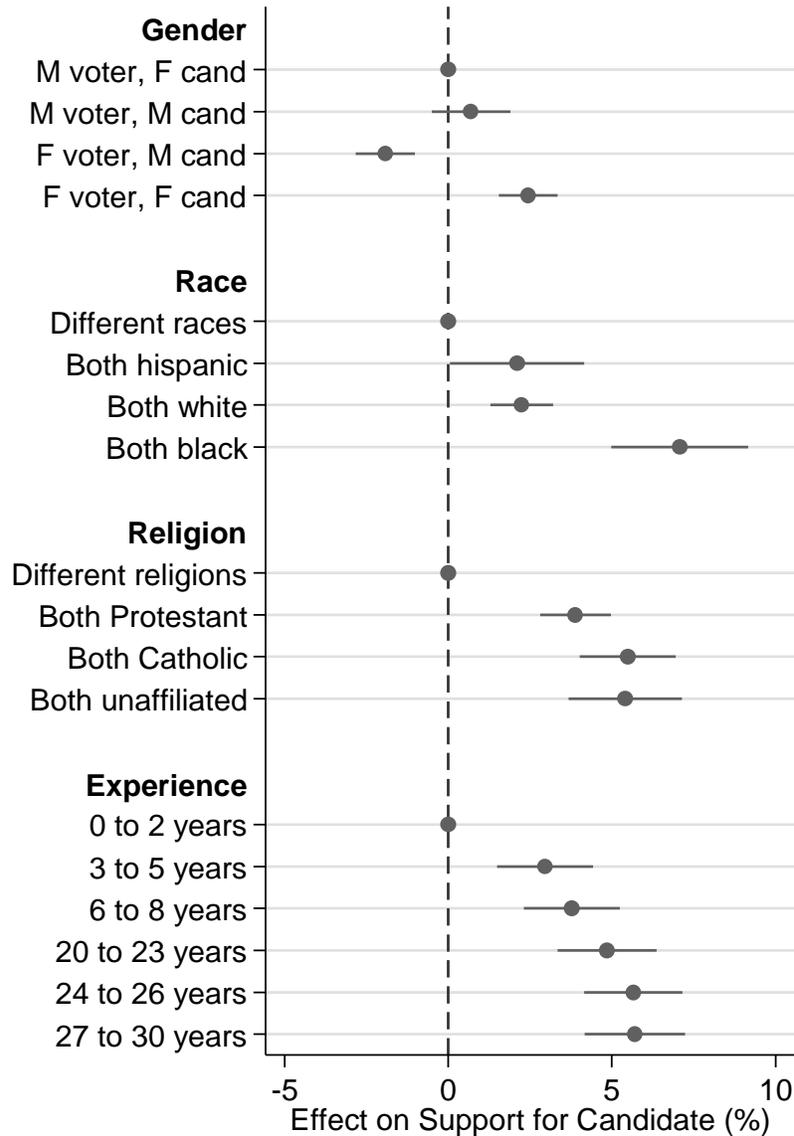
Note: These estimates were produced by pooling across all other attributes in the study.

The bottom half of Figure 3 shows that, other factors equal, voters preferred politicians from their own party. Our reference category was a situation in which Democratic voters evaluated Republican candidates. Compared with this baseline, Democratic voters provided 17 percentage points more support for Democratic candidates than to otherwise identical Republican candidates. Likewise, Republican voters provided 17 percentage points more support to Republican candidates than to equivalent Democratic candidates.

It bears emphasizing that we generated these estimates by averaging over all other factors in the experiment. Thus, the top half of Figure 3 isolates the effect of issue proximity, disconnected from confounders such as party affiliation and candidate demographics that are often correlated with issue positions in the real world. Likewise, the bottom half isolates the pure effect of party, independent of potentially confounding variables. Overall, Figure 3 confirms that issue stances and party affiliation have independent and substantial effects on voter choice.

Figure 4 plots the effects of demographic variables that we manipulated in our experiment. Although the demographic variables were not as consequential as proximity or party, they did have statistically and substantively significant consequences. Women, for instance, provided nearly 5 percentage points more support to female candidates than to otherwise identical male candidates. White voters afforded 2 percentage points more support to white candidates than to candidates of another race, and black voters offered an even larger 7 percentage point bonus to Black candidates. Catholics, Protestants, and without a religious affiliation provided 4-5 percentage points more support to candidates who shared their faith or lack thereof. Finally, people provided measurably more support to candidates with more political experience.

Figure 4: Effects of Demographic Variables



Note: These estimates were produced by pooling across all other attributes in the study.

5. The Effects of Repositioning

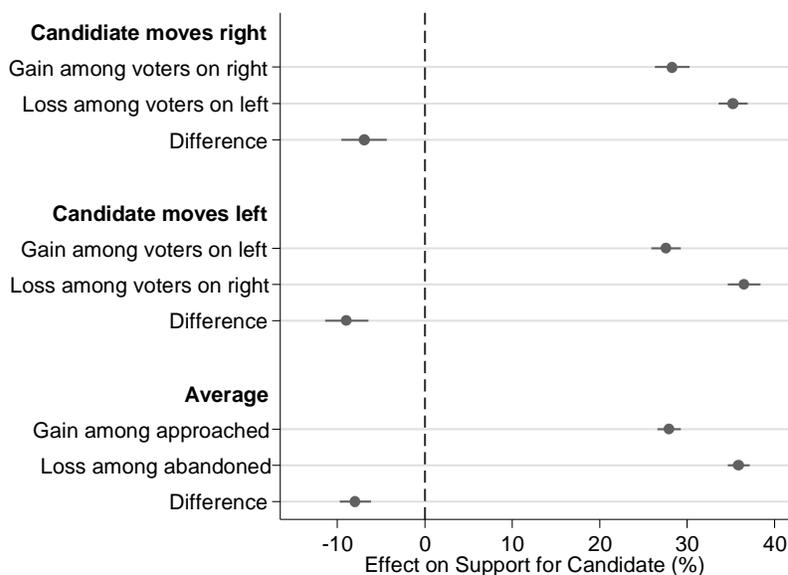
Having summarized the effects of our other experimental manipulations, we now analyze the consequences of repositioning. How, for example, would voters respond if a candidate shifted from left to right on an issue? This type of move should trigger three effects. First, having approached voters who prefer the right side of the issue, the candidate should gain popularity among that subset of the electorate. Second, having abandoned voters who prefer the left side of the issue, the candidate should lose support among that subgroup. Third, the negative reactions of the abandoned group should outweigh the positive reactions of the approached group. This

prediction arises because abandoned voters have two reasons to dislike the candidate: for becoming more distant, and for displaying bad character. Approached voters are more ambivalent: they appreciate the candidate for moving closer, but dock the candidate for bad character.

As a first test of these propositions, we pooled the data from all eight issues in our experiment. Pooling gives the average effect of repositioning across a wide range of policy issues, and it keeps the exposition relatively simple. Pooling does, however, mask potentially interesting heterogeneity across issues. Thus, after presenting the pooled results, we disaggregate the estimates by issue.

Figure 5 displays the average gains and losses that candidates incurred by shifting instead of standing firm.⁵ The top portion shows that, in our experiments, candidates who moved from left to right on an issue gained 28 percentage points among the approached group (voters on the right side of the issue) but lost 35 percentage points among the abandoned group (voters on the left side of the issue). The difference between these effects was not only substantively large but also statistically significant. Moving in the opposite direction, from right to left, triggered a similar reaction.

Figure 5: Effects of Repositioning, Averaged Across All Issues



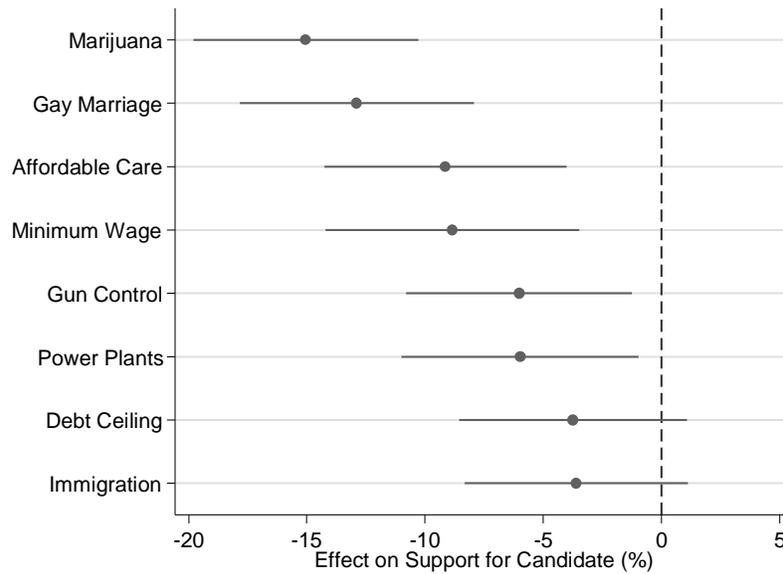
Note: Pooled estimates. The net effect, or *difference*, is calculated as the gain among approached voters, minus the loss among abandoned voters.

⁵ To calculate this quantity we compared support for candidates who made the change, relative to candidates who stuck with their initial position. Estimates were averaged across all issues, all candidates, and all opponents.

The bottom portion of Figure 5 averages across these two types of moves, from left to right and from right to left. The figure shows that, on average, candidates lost much more among the abandoned group than they gained among the approached group. The difference in effects was around 8 percentage points. These findings imply that, if the subset of constituents on the right of an issue is equal in size to the subset on the left, candidates will always find loss, not profit, in changing their stance on an issue. We return later to a discussion of would happen if opinion varied from this 50-50 split, thereby making repositioning a more or less attractive course of action. For now, however, it is worth stressing that the overall average loss from repositioning is larger than most of the other candidate attributes we randomized, including gender, race, religion, and years of political experience.

Did the consequences of repositioning vary by issue? Figure 6 shows that the average loss from repositioning ranged from 15 percentage points when the topic was marijuana legalization, to around 4 percentage points when the topic was immigration reform. The effects were statistically different from zero on all but two issues: the debt ceiling and immigration reform. Even on those issues, though, the estimated effect was sizable and on par with many other demographic attributes of candidates.

Figure 6: Effects of Repositioning, By Issue

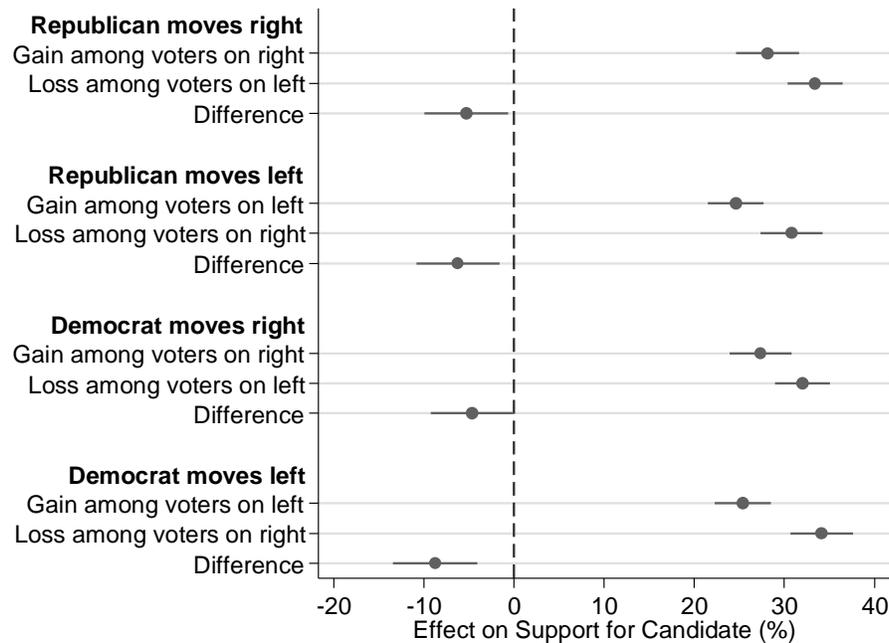


Note: The effect is calculated as the average gain among approached voters, minus the average loss among abandoned voters.

6. Repositioning in General Elections

In the next analysis, presented in Figure 7, we move toward examining the consequences of repositioning in general elections. To approximate a general election we consider the subset of experimental treatments in which respondents of both parties were asked to choose between a Democratic candidate and a Republican one. In these circumstances, the penalty for repositioning ranged between 4 and 8 percentage points, with an average of around 6 points. There is some evidence that Democrats who moved from right to left paid higher costs than Democrats who moved in the opposite direction. However, we cannot reject (at the 95% confidence level) the null hypothesis that all the moves in Figure 6 were equally costly for candidates of both parties.

Figure 7: Effects of Repositioning in a General Election



Note: General election is defined as a contest between a Democratic candidate and a Republican candidate.

We now deepen the analysis by asking what strategies candidates should play in a typical general election. In the United States today, general elections usually involve a Democratic candidate with a history of positions on left, facing a Republican with a history of positions on the right. When those types of candidates meet in a general election, should they stick with their earlier positions, or should they converge on the median voter? To find out, we analyzed how voters responded to the subset of experimental scenarios in which a Democrat on the left faced a Republican on the right.

Using data from our experiments, we identified the mutual best responses of the two candidates for *every* possible distribution of opinion in the electorate. Our findings are presented in Table 4. We found that Republican candidates will only find it in their interest to move to the left side of an issue when support for the conservative position they initially took drops below 37% of the electorate. Similarly, Democratic candidates who start out on the left will only find it in their interest to move right when over 73% of the electorate favors the right side of the issue.

Table 4: Equilibria in General Election

Equilibrium	Equilibrium Range (% of voters on right)
Democrat stays left, Republican moves left	0 - 37
Democrat stays left, Republican stays right	37 - 73
Democrat moves right, Republican stays right	73 - 100

This leaves a 36-point interval (from 37 to 73%) in which neither candidate has an incentive to change positions. We refer to this interval as the “non-convergence” region, since it reflects the divisions of public opinion for which vote-maximizing candidates would not find it rational to converge in policy. Public opinion falls within this interval for many controversial political politics, including seven of the eight issues that we included in our experiments. Our findings contrast sharply with standard spatial equilibria, in which unencumbered candidates would always find it in their best interest to converge to the position of the median voter in general election.

Importantly, the equilibria in Table 4 do not depend on the absolute magnitude of the costs and benefits of repositioning. Our experiments provided voters with limited information, conveyed in a fairly authoritative manner. The effects of news about repositioning could be either smaller or larger in the more chaotic environment of actual elections. It turns out, however, that equilibrium strategies of candidates depend on the *relative* gains and losses from repositioning, not the absolute gains and losses. The ideal strategies of candidates would, therefore, remain the same if the gains and losses that we estimated were deflated or inflated by any constant factor.

7. Repositioning in Partisan Primaries

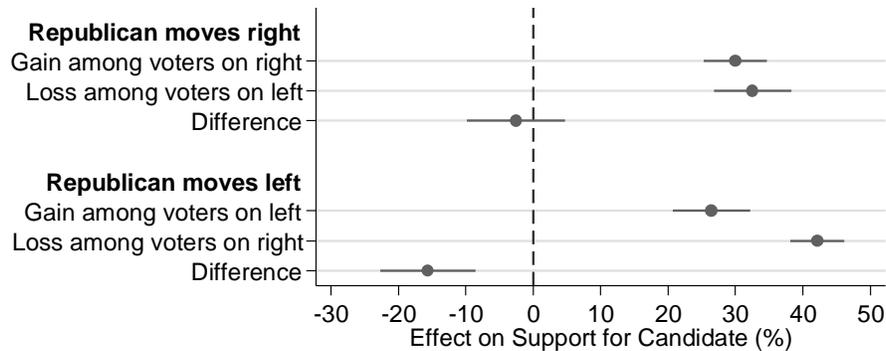
We next consider the strategic incentives that candidates face in closed partisan primaries. The top half of Figure 8 shows how Republican voters responded to repositioning in scenarios involving two Republican candidates. In such cases, Republican voters on the right side of an issue rewarded candidates who shifted toward their position just as much as Republican voters on the left side of an issue punished candidates for moving away. Thus, if the Republican electorate were split 50-50 on an issue, moving right in a Republican primary would be costless; the gains among the courted group (conservative Republican voters) would

counterbalance the losses among the abandoned group (liberal Republican voters). In real Republican primaries, of course, opinion is not 50-50. The vast majority of participants have conservative preferences, making shifts to the right extremely attractive.

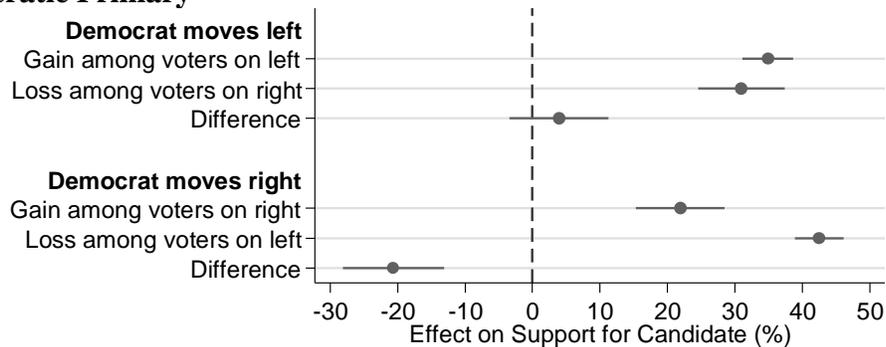
Although Republican voters tolerated shifts to the right, they strongly punished moves to the left. When Republican candidates in our experiment moved left, losses among the abandoned group far exceeded the gains among the courted group. Facing such a reaction, Republican candidates would stay put unless, contrary to reality, the vast majority of voters in Republican primaries favored liberal positions on issues.

Figure 8: Effects of Repositioning in Partisan Primaries

(a) Republican Primary



(b) Democratic Primary

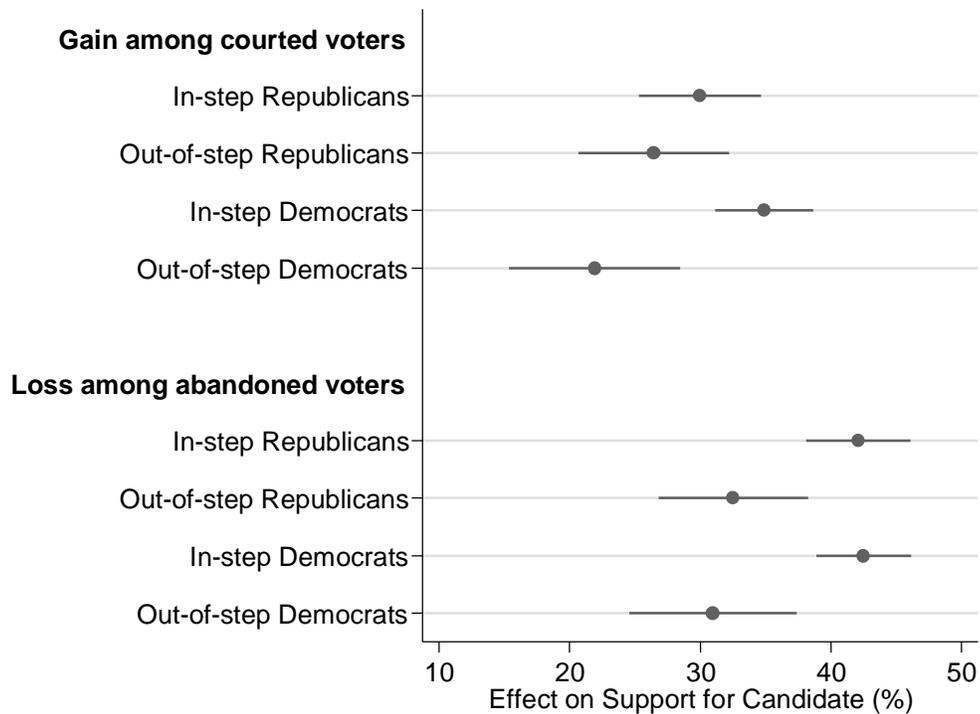


Note: In a Republican primary, Republican voters choose between two Republican candidates. In a Democratic primary, Democratic voters choose between two Democratic candidates.

In summary, our experiments uncovered a striking asymmetry: in a Republican primary, candidates can move to the right without suffering a penalty, but would suffer a substantial cost if they shifted in the opposite direction. We found a similar asymmetry in Democratic primaries (bottom half of figure 8). In those types of candidates, candidates who moved left did not suffer any penalty for repositioning, whereas those who moved right paid a heavy price.

What could explain these asymmetric reactions? One possibility is that voters who are out-of-step with their party on an issue (i.e. the Democrats on the right of an issue, and the Republicans on the left of an issue) are less concerned about the issue and less likely to react strongly when abandoned. Figure 9 provides evidence for this view. To construct Figure 9, we divided the sample into two groups: voters who were in-step versus out-of-step with their party on the issue we were studying. In every case, in-step voters reacted more strongly to the moves of a candidate.

Figure 9: Responses to Repositioning, Conditional on Whether Voters Were In-Step with their Party on the Issue



For example, in-step Democratic voters rewarded a candidate who moved towards them with a 35 percentage point increase in vote share. The analogous reward among out-of-step Democratic voters was only 22 percentage points. Continuing the pattern, in-step Democratic voters punished a candidate who moved away with a 42 percentage point drop in vote share, while out-of-step Democratic voters delivered a punishment of only 31 percentage points. Given this pattern, Democratic candidates who move away from their party’s core positions will earn a relatively meager reward among the out-of-step voters they are courting, but suffer a much

harsher punishment among the in-step voters they are abandoning. As Figure 9 shows, a similar pattern is evident among Republican voters.

This finding raises a follow-on question: why are in-step partisans more reactive to candidates' positional changes than out-of-step partisans? One fact worth noting is that in-step partisans are more responsive to the issue positions of candidates in general, not just to changes in these positions. To document this we examined contests in which a candidate who had taken the left side of the issue in both the previous year and in the current election faced an opponent who had consistently taken the right side of an issue. In these circumstances, in-step voters chose the candidate who reflected their position 87% of the time, whereas out-of-step voters did so only 80% of the time. Thus, there is a significant difference in the rate at which these two groups vote for their undisputed spatial favorite. In this light, it seems understandable why out-of-step voters, being less reactive to issue stances in general, would also be less reactive to repositioning.

This finding, however, introduces yet another puzzle: why are in-step partisans more responsive to candidates' issue positions than out-of-step partisans? One possible answer is that in-step partisans care more about the issues, and thus weigh candidates' positions on the issues more heavily than the other information we presented about the candidates. In our survey, in-step partisans were substantially more likely than out-of-step partisans to say that the issue we presented was important to them personally.⁶ Furthermore, respondents were substantially more likely to make proximity-based choices on issues that were important to them, than on issues that were not. Thus, differences in importance that in-step and out-of-step partisans assigned to issues helps explain why the first group was more likely to make proximity based electoral judgments.

What implications do these findings have for candidate strategies in primaries? Using data from our experiments, we identified the equilibrium strategies that candidates would play in three cases: if both candidates started on the left, if both started on the right, or if the two candidates entered the primary with divergent positions. Table 5, below, shows the distribution of opinion (expressed as the % of voters favoring the right side of the issue) that would be needed for each equilibrium to hold. To put the numbers in perspective, note that 63% of Republican voters in our study took the right side of the issues we presented, whereas only 27% of Democratic voters took the right side of our issues.

⁶ For example, 20% of voters who agreed with the position of their party on an issue rated the issue as extremely important, while only 14% of voters who disagreed with their party did likewise.

Table 5: Equilibria in Partisan Primaries
 (Numbers in the table reflect the percentage of voters on the right)

Initial positions	Equilibrium	Republican Primary	Democratic Primary
Both start left	Both stay left	0 – 54	0 – 62
	Both move right	54 – 100	62 – 100
Both start right	Both move left	0 – 45	0 – 56
	Both stay right	45 – 100	56 – 100
One starts left, other starts right	Converge left	0 – 25	0 – 37
	Stay diverged	25 – 61	37 – 68
	Converge right	61 – 100	68 – 100

The top portion of Table 5 shows how candidates would behave if they entered the primary with a liberal record. If two Democratic candidates had previously espoused the left side of an issue, they would find it optimal to stay left throughout the primary unless 62 percent of Democratic primary voters preferred the conservative position. By contrast, if two Republicans had started on the left, they would shift right if at least 54 percent of Republican voters favored the conservative side of the issue. Thus, given the real-world distribution of opinion among Democratic and Republican identifiers, Democratic candidates who start on the left will stay left in equilibrium, whereas Republican candidates who start on the left will converge to the right despite the cost of repositioning.

The opposite will happen in scenarios involving candidates with conservative histories. If the two contestants in a Democratic primary had previously taken positions on the right, the real-world distribution of opinion would compel them to shift left in equilibrium. By contrast, Republican candidates who had previously advocated the conservative side would tend to stay there, in equilibrium.

When two candidates enter a primary having taken divergent positions, they could remain distinct in equilibrium. The region of non-convergence, expressed as support for conservative policies, runs between 37% and 68% for Democratic candidates, and between 25 and 61% for Republican candidates. Recall, however, that only 27% of Democrats in our sample wanted conservative policies, whereas 63% of Republicans did. Thus, given the distribution of opinion in our data, candidates who are competing in partisan primaries should converge on the position typically associated with their party, even if they entered the election with divergent stances. Once candidates take these positions in primaries, we have seen, they will have difficulty converging in the general election.

5. Conclusion

Our experiments strongly confirm that repositioning is costly. On average across all the issues included in our experiments, these costs are larger than the effects of sharing a candidate's race, gender, or religion, and around half the size of the effects of identifying with the party of a candidate.

Our analysis also shows that voters in partisan primaries will pull candidates to the extremes. Democratic candidates will face strong incentives to embrace liberal views, even if they had previously espoused conservative positions. Republican candidates, for their part, will face strong pressure to adopt conservative positions, even if they styled themselves as more liberal at an earlier stage in their political career.

Finally, our analysis provides evidence that candidates who emerge from primaries holding different positions will rarely find it in their electoral interest to converge on the view of the median voter. On average, it will not be electorally profitable for both candidates to adopt the median's position unless 70% of the general electorate shares the median's view. This level of consensus on contested political issues is uncommon in contemporary America.

Overall, our findings bolster the case that the two-stage electoral process in the United States contributes to the polarization of candidate policy stances. Our analysis also sheds light on why candidates who enter office with divergent stances find it so difficult to compromise. Even when a strong majority in the electorate disagrees with the stance of an officeholder, abandoning that stance may do more harm than good to the officeholder when seeking reelection. In this sense, the voters themselves bear some of the blame for the gridlock and stalemate in Congress that they find so frustrating.