The Electoral Challenge of Balancing Primary and General Electorates

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Abstract

U.S. legislators face a two-stage election process, incentivizing them to appeal to both their base – the primary electorate – and their broader constituency – the general electorate. However, the preferences of the primary and general electorate can be in tension on important policy issues. The researchers argue and show empirically that legislators have incentives to be more responsive to primary voters because primary voters are more unified in their policy preferences and because voters in primaries are more responsive to the policy positions of incumbents than are voters in general elections. Senators' roll call votes demonstrate that the primary electorate's preference is a more important factor than the general electorate's preference on cross-pressured votes. The findings point to the incentives legislators face to be more responsive to primary than general election voters – an insight that has implications for representation of the views of underrepresented voters and the role of primary elections in polarization.

Legislators' electoral interests are an important driver of policy representation (Mayhew 1974; Miller and Stokes 1963) and the structure of electoral institutions in the United States – with a two-stage process of primary and general elections – produces the potential for competing incentives (Brady, Han, and Pope 2007; Canes-Wrone, Brady, and Cogan 2002). In some instances, the constellation of voter preferences allows legislators to be responsive to both electorates, but on other important policy issues, some legislators will face cross-pressures between the preferences of the primary and general electorates. We explore legislators' incentives to be more responsive to primary election than general election voters when these groups disagree.

Intuitively, primary elections may pull legislators away from the preferences of their broader general election constituency and toward the constituents who vote in the primary and who are likely to be more extreme (Burden 2001, 2004; Nielson and Visalvanich 2017; cf. Woon 2018). Legislators have incentives to cater to primary voter's policy positions because of the fear that they may lose votes in the next primary election if they do not (e.g., Anderson, Butler, and Harbridge-Yong 2020; Brady, Han, and Pope 2007; Nielson and Visalvanich 2017). Yet legislators also risk general election defeat if they are too extreme or partisan for their district (Canes-Wrone, Brady, and Cogan 2002; Carson et al. 2010; cf. Pyeatt 2015) and some research concludes that legislators face no real threat from supporting compromise policies that the general electorate wants (Koger and Lebo 2017; Wolak 2020). Missing from this previous research is an explicit focus on how a legislator's policy position, particularly on cross-pressured votes between the two constituencies, affects their electoral fortunes in both the primary and general election.

There are theoretical reasons to believe that, when the primary and general electorates disagree on issues of the day, it is more advantageous to be aligned with the primary electorate than the general electorate. First, the primary electorate is likely to be more unified because it is composed of voters who share the same partisan attachment and who generally share many political views. By contrast, the general electorate includes voters with a wide range of views. If primary unity is greater, the electoral benefit of siding with the primary electorate (and the electoral cost of going against it) is larger. Second, individual voters may be more responsive to the policy positions of incumbents in primaries than in general elections. In primary elections, party is not on the ballot making it more likely that voters consider factors like the incumbent's issue positions (Aldrich and Alvarez 1994; Henderson et al. forthcoming). If there is a primary premium, where the effect of alignment with a legislators' roll call position is greater for voters when they vote in primary elections compared to when they vote in general elections, this gives incumbents more reasons to consider the position of the primary electorate when voting on bills. Combined, primary unity and a primary premium may produce incentives for legislators to side with the position of the primary electorate over the position of the general electorate on cross-pressured votes.

To understand legislators' electoral incentives, we leverage surveys of voter positions and an experiment on voter responses to candidate positions. In the empirical analysis we confirm the pattern of greater primary unity with a brief examination of data on public opinion from the 2016 Cooperative Election Study (CES). We then report the results of a survey experiment that estimates the effect of alignment between legislators and their voters in both the primary election and the general election. We find that the effect of alignment is larger in primary elections, demonstrating a primary premium for being in line with these voters. Then we explore how the

combination of greater primary unity and the primary premium incentivizes legislators when they are cross-pressured by their primary and general electorates by using data from the CES to look at voters' positions on twenty-one issues. We find that Senators have incentives to side with their primary voters on 84 percent of these cross-pressured votes. Finally, we illustrate how the incentives to side with the primary electorate play out in practice by studying how the positions of primary and general election voters (as measured by the CES data) predict Senators' roll call votes. We find that the primary electorate's preference is a more important factor than the general electorate's preference on cross-pressured votes. The findings consistently point to the incentives legislators face to be more responsive to primary than general election voters – an insight that has implications for representation of the views of underrepresented voters (see Fraga 2016; Gerber et al. 2017; Leighley 2001; Verba, Schlozman, and Brady 1995) and helps explains how primary elections can contribute to polarization.

The Importance of Primary Voters

Legislators' electoral incentives are often theorized to be the important linkage that determines the degree to which legislators represent constituents' preferences (e.g., Levitt 1996; Mayhew 1974; Soontjens and Sevenans 2022). The electoral structure in the US produces incentives for legislators to worry about two different electorates: the primary and the general. When the preferences of the primary and general electorate align, legislators face no tradeoff in deciding what position they should take to represent voters' preferences. By acting on what the majority wants, legislators can be good representatives of the majority in each group. But when the preferences of the primary and general electorates diverge, legislators face competing electoral incentives and a choice of which group's preferences to represent.

Knowing how legislators will act when they face cross-pressures from the primary and general electorates is important because primary electorates can differ from the general electorate in several ways. Lower turnout in these elections skews participation toward particular demographic groups (Fraga 2016) and the more politically engaged (Sides et al. 2020), who may also be more ideologically extreme (Hill 2015). Moreover, legislators believe that primary voters hold differing views than general election voters (Anderson, Butler, and Harbridge-Yong 2020). Although there is mixed evidence about how much the preferences of primary voters and rank-and-file voters in the party differ (Sides et al. 2020), whether voters are sophisticated enough to identify more ideologically extreme candidates (Ahler, Citrin, and Lenz 2016), and whether primary election rules further skew participation (Gerber and Morton 1998; McGhee et al. 2013), the two-stage electoral process in the US opens the door for legislators to face cross-pressures from their two electorates. Studying primary and general elections *together* is important because the difficult roll call votes – from a legislator's perspective – are those where the primary and general electorates take different positions on the same issue.

Existing research offers a limited answer to the question of whether legislators have stronger electoral incentives to side with the primary electorate or the general electorate when they are cross-pressured by the two groups. This is in large part because scholars tend to look at the electoral incentives from primary and general elections in isolation, rather than studying these elections *together* (cf. Banda, Carsey, and Curiel 2021).[1] For instance, scholars looking at general elections contend that legislators risk general election defeat if they are too extreme or

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[1] Some research examines how the choice of nominees in primary elections affects the party in the general election (see Hall 2015; Hall and Thompson 2018), but it does not address how voters use information in the two electoral contexts.

too partisan for their district (Canes-Wrone, Brady, and Cogan 2002; Carson et al. 2010), suggesting that legislators should be responsive to the general electorate. On the other hand, scholars looking at primary elections show that primary voters reward greater partisanship (Pyeatt 2015) and shape the ideological positions of primary candidates and winners (Burden 2004; Nielson and Visalvanich 2017), suggesting that legislators may have electoral incentives to align with the primary electorate (Brady, Han, and Pope 2007). Moreover, experience with a primary challenger from an incumbent's ideological flank may drive the incumbent to adopt more ideologically extreme positions to stave off a future challenger (Jewitt and Treul 2019; cf. Hirano et al. 2010), suggesting that legislators have incentives to be attentive to primary voters. Extant literature that does examine the two elections together (e.g., Banda, Carsey, and Curiel 2021) points to the power of the primary electorate, particularly for non-incumbent candidates, both because of the resources primary voters can provide and the role of these voters in both stages of the election.[2]

We study legislators' incentives on votes where they are cross-pressured by the two electorates by examining how a change in a legislator's position on an issue might change their vote share in both the primary election and general election. When a legislator is weighing how a particular position might impact their vote share in the primary and in the general election, they must consider both the distribution of voters' preferences on the issue and the effect of issue

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[2] Although Banda, Carsey and Curiel (2021) find that incumbents are not responsive to the preferences of the primary or general electorate, our argument and approach differs in key respects: first, we focus on cases where the preferences of primary and general electorates diverge; second, we focus on voter responses to incumbents and not just the observed candidate positions; and third, the decline of the incumbency advantage in recent years (Jacobson 2015) increases the likelihood that incumbents will also be attentive to the preferences of primary voters.

alignment. The distribution of voters' preferences refers to how many voters support versus oppose the issue.

The effect of alignment refers to how much individuals change their voting decision in response to whether they are aligned with the incumbent's position on the issue. Table 1 provides the annotation that we use in the formula for calculating the effect of alignment. The cells in Table 1 indicate the proportion of voters who respond to being aligned or not aligned with the legislator on a given issue by abstaining, voting for the incumbent, or voting for the challenger.

Table 1. Legislators' Positions and Voters' Reactions

	Abstain	Vote for Incumbent	Vote for Challenger
Aligned	A_A	I_A	C_A
Not Aligned	A_{NA}	I_{NA}	C_{NA}

The effect of alignment is calculated by estimating the incumbent's margin of victory in each condition (i.e., $(I-C)/(I+C)$) and then taking the difference in this quantity for the aligned versus not aligned conditions:[3]

$$\textit{Effect of Alignment = Incumbent Margin of Victory}_A\textit{- Incumbent Margin of Victory}_{NA} \quad \text{(Eq. 1)}$$
$$= ((I_A - C_A) / (I_A + C_A)) - ((I_{NA} - C_{NA)}) / (I_{NA} + C_{NA}))$$

We combine these two inputs – the distribution of voter preferences and the effect of alignment – to identify the change in vote share for taking a position on a given issue in each type of election:

$$\textit{Change in Vote Share for Voting Yes instead of No}_{Election} =$$
$$\textit{Effect of Alignment}_{Election} \textit{ * Distribution of Preferences over Issue}_{Election} = \quad \text{(Eq. 2)}$$
$$\textit{Effect of Alignment}_{Election} \textit{ * (\% Yes on Issue - \% No on issue)}_{Election}$$

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[3] Note that we calculate the effect of alignment so that it is symmetric with regard to whether the incumbent votes yes or no.

Legislators have incentives to be more responsive to the electorate where the absolute value of the change in vote share is largest. Equation 3 provides a formula for how to evaluate what actions they are incentivized to take.[4] When the quantity in Equation 3 is positive, the change in vote share is larger in the primary election and so legislators are incentivized to cater to the preferences of the primary electorate. When the quantity in Equation 3 is negative, the change in vote share is larger in the general election and so legislators are incentivized to cater to the preferences of the general electorate.

$$\begin{aligned}
&| \textit{Change in Vote Share for Voting Yes instead of No}_{Primary} | - \\
&\quad | \textit{Change in Vote Share for Voting Yes instead of No}_{General} | = \\
&| \textit{Effect of Alignment}_{Primary} * (\textit{\% Yes on Issue - \% No on issue})_{Primary} | - \\
&\quad | \textit{Effect of Alignment}_{General} * (\textit{\% Yes on Issue - \% No on issue})_{General} | = \quad \text{(Eq. 3)} \\
&\textit{Effect of Alignment}_{Primary} * | (\textit{\% Yes on Issue - \% No on issue})_{Primary} | - \\
&\quad \textit{Effect of Alignment}_{General} * |(\textit{\% Yes on Issue - \% No on issue})_{General} |
\end{aligned}$$

As we discuss in the sections that follow, Equation 3 can be positive when the primary electorate is (a) more unified in their opinion and/or (b) more responsive to legislators' roll call positions. For theoretical and empirical reasons, we expect both inputs to most often produce incentives for legislators to be more responsive to the primary electorate. Before we turn to the combination of primary unity and primary premium, we estimate them separately.

Greater Primary Unity

When electorally-minded legislators face cross-pressured votes, whether the primary or general electorate is more unified affects their incentives. Simplifying Equation 3 when the

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[4] The *Effect of Alignment*$_{Election}$ terms are not in absolute value terms because the effect of alignment is assumed to be non-negative, meaning that people do not punish legislators for voting the way they, the voters, want.

effects of alignment in the primary and general are equal (i.e., when *Effect of Alignment$_{Primary}$* = *Effect of Alignment$_{Ggeneral}$*), it becomes:

$$\begin{aligned}
&\textit{Effect of Alignment}_{Primary} * | \textit{ (\% Yes on Issue - \% No on issue)}_{Primary} | - \\
&\quad \textit{Effect of Alignment}_{General} * |\textit{(\% Yes on Issue - \% No on issue)}_{General} | = \quad \text{(Eq. 4)} \\
&\textit{Effect of Alignment}_{General} * (| \textit{ (\% Yes on Issue - \% No on issue)}_{Primary} | - \\
&\quad |\textit{(\% Yes on Issue - \% No on issue)}_{General} |)
\end{aligned}$$

Note that *Effect of Alignment$_{General}$* will be positive (because voters do not punishing legislators for voting with their voter's preference) so whether this quantity is positive or negative depends purely on the distributions of preferences in the two electorates, i.e., *| (% Yes on Issue - % No on issue)$_{Primary}$ | - | (% Yes on Issue - % No on issue)$_{General}$ |*. When this quantity is positive, which occurs when primary voters are more unified in their position on the issue, legislators have incentives to be more responsive to the primary electorate.

When there is a tension between the preferences of the primary and general electorate, the primary electorate is likely to be more unified. This is because the primary electorate is composed of voters who largely share the same partisan affiliation (Hill and Tausanovitch 2018), which is strongly related to shared policy views (Levendusky 2009). By contrast, the general electorate includes voters of both parties and with a wide range of views. Given the linkage between party, issue positions, and primary election participation, it may not be surprising that the primary electorate is more unified. But it is nonetheless important to test this proposition and consider how it shapes legislators' incentives. These insights lead to our first expectation:

> *Hypothesis 1 – Primary Unity:* Among constituency-issue observations where the median voter in the primary and general electorate diverge, the primary electorate is likely to be more unified.

Evidence for Greater Primary Unity

To test Hypothesis 1, we use Americans' issue positions in the 2016 Cooperative Election Study (CES; Ansolabehere and Schaffner 2017). The 2016 CES survey, the most recent year in

which there was an open presidential primary for both the Republican and Democratic Parties, includes 64,600 respondents and a battery of questions asking respondents whether they support or oppose a particular policy.[5] We weight the data using *commonweight_vv_post* created by the CES and then identify the percent of the population who supported each of the policies in the primary and general electorate for each Senator serving at the time of the survey, yielding state-level estimates.[6] We use self-reports to identify voters in each electorate, with the primary electorate including those who reported voting in the presidential primary election corresponding to the party of their incumbent Senator.[7]

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[5] These policy questions forced respondents to choose a side by giving them only two options for these questions: support or oppose the policy. 98 percent or more of respondents provided a position on all policy issue questions.

[6] Each Senator is treated as a separate observation in our analysis. States with two Senators from the same party have two observations with the same information about the primary and general electorates' preferences. In states with Senators from different parties, the information about the general electorate's preferences is the same while the information about the primary voters' preferences comes from their different, respective, primary electorates.

[7] The CES primary vote questions ask about primary election participation and vote choice independent of respondents' partisanship, which allows us to capture the primary electorate across a variety of institutional rules that affect whether independents can participate in primaries.

Figure 1 plots the policy support in the primary electorate and general electorate for the twenty-one issues[8] we examine.[9] The y-axis of Figure 1 gives the percent in favor of the policy in the primary electorate and the x-axis gives the percent in favor of the policy in the general electorate. When more than 50 percent of the electorate favors the policy, legislative responsiveness to the median voter would suggest the legislator should support the policy. The upper-right and lower-left quadrants are issues for which the majority in the primary and general electorates hold the same position and the legislator faces no tradeoff in representation. There are 1,504 Senator-issue observations in these no-tradeoff quadrants, 72% percent of the sample. In these cases, legislators can be good representatives of their primary and general electorates by taking the same position.

The other two quadrants of Figure 1 show cases where majorities of the primary and general electorates are on opposite sides of the issue, yielding cross-pressures on the legislator. The negatively sloped line through these quadrants captures instances where the level of unity is

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[8] Issues are background checks on gun purchases, gun registries, conceal-carry permits, increased border patrols on the US-Mexico border, legal status for Dreamers, prohibiting abortions after 20 weeks, allowing employers to deny abortion coverage in insurance, renewable fuels, enforcement of Clean Air and Clean Water Acts, mandatory use of police body cameras, increasing police on the street, minimum wage, banning assault rifles, legal status to immigrants who have paid taxes for 3 years and have not been convicted of felony crimes, always allowing abortion as a matter of choice, prohibit expenditure of funds from the federal government for abortion services, give the EPA power to regulate carbon dioxide emissions, raise fuel efficiency for average automobile from 25 mpg to 35 mpg, eliminate mandatory sentences for non-violent drug offenders, increase prison sentences for felons with previous violent crimes, and repealing the Affordable Care Act.

[9] As a robustness check, we estimated the results when dropping the three states with two-two primaries (CA, LA, WA) and found the same basic results (see Appendix Figure C1).

the same in the primary and general electorate and divides these observations into groups based on which electorate has a larger majority for its position. There are 436 primary-dominated cases (104+332) where the primary electorate is more unified in its position compared to 160 general-dominated cases (12+148) where the general electorate is more unified in its position. Where the primary and general electorate were on opposite sides of the issue, the primary electorate was more unified in their position in 73 percent of the cases. Consistent with Hypothesis 1, we find that, when legislators face cross-pressures between the policy stances of their primary and general electorate, the primary electorate is likely to be more unified.

As a robustness check, we did the same analysis using the 2018 CES survey, a midterm election when the levels of voter participation might be different.[10] The results are presented in Figure C2 of the Appendix and show that primary voters are more unified in 72 percent of the cross-pressured cases. The unity of primary voters is one reason legislators have incentives to be

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[10] In the 2018 CES survey, respondents in the top-two primary states (CA, LA, and WA) were not asked about primary election participation and so these states were dropped from the analysis. In the analysis we again used 21 issues. Fourteen of those issues were on the same topic as questions we used from the 2016 analysis: background checks on gun purchases, conceal-carry permits, legal status for Dreamers, prohibiting abortions after 20 weeks, allowing employers to deny abortion coverage in insurance, renewable fuels, enforcement of Clean Air and Clean Water Acts, minimum wage, banning assault rifles, always allowing abortion as a matter of choice, prohibit expenditure of funds from the federal government for abortion services, give the EPA power to regulate carbon dioxide emissions, the fuel efficiency for automobiles, and repealing the Affordable Care Act. We added an additional 7 issues: withhold funds from police departments not identifying undocumented individuals, cut the corporate income tax rate, limit the amount of state and local taxes that can be deducted, appoint Neil Gorsuch to the Supreme Court, tariffs on Chinese goods, the Keystone XL pipeline, and withdraw from the Iran Nuclear Accord and reimpose sanctions on Iran.

more responsive to primary electorates; voting against the median voter in the primary risks losing support from a larger proportion of the primary electorate than does voting against the median voter in the general.

Figure 1. Voter Preferences by State on 21 Issues in the Primary and General Electorates
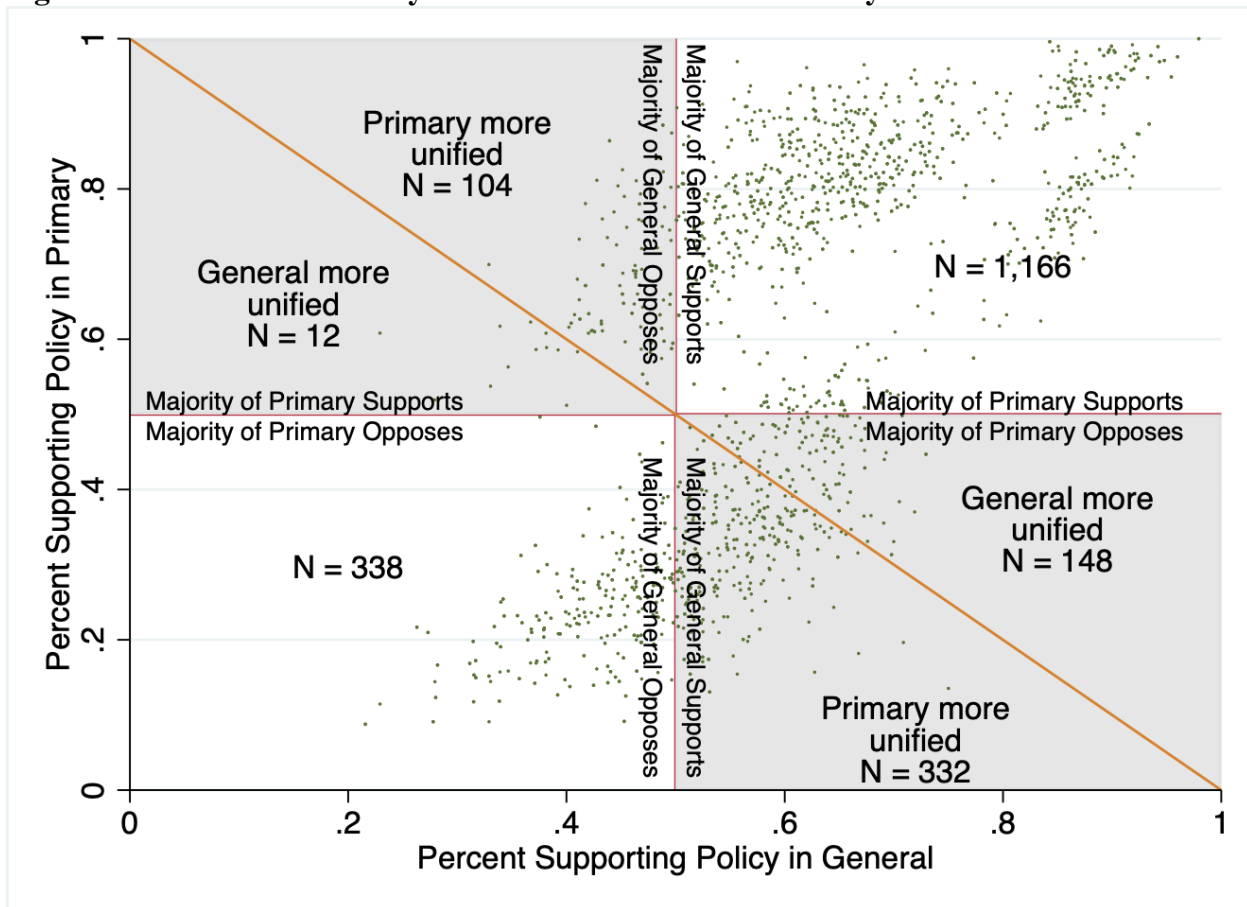
A Primary Premium for Issue Alignment

When legislators face cross-pressures between the two electorates, whether the effect of issue alignment with the incumbent is greater for primary or general election voters also affects their incentives. When the magnitude of unity in voter preferences on the issue in the primary and general are equal to each other (i.e., when | *(% Yes on Issue - % No on issue)Primary* | = | *(% Yes on Issue - % No on issue)General* |), Equation 3 becomes:

$$Effect\ of\ Alignment_{Primary} * |\ (\%\ Yes\ on\ Issue - \%\ No\ on\ issue)_{Primary}\ | -$$
$$Effect\ of\ Alignment_{General} * |(\%\ Yes\ on\ Issue - \%\ No\ on\ issue)_{General}\ | = \qquad (Eq.\ 5)$$
$$(Effect\ of\ Alignment_{General} - Effect\ of\ Alignment_{Primary}) *$$
$$(|\ (\%\ Yes\ on\ Issue - \%\ No\ on\ issue)_{General}\ |)$$

Note that the quantity ($|\ (\%\ Yes\ on\ Issue - \%\ No\ on\ issue)_{General}\ |$) will be positive, so whether this quantity is positive or negative depends purely on the differences in the effect of alignment, i.e., *Effect of Alignment$_{Primary}$ - Effect of Alignment$_{General}$*. When this quantity is positive, which occurs when the effect of alignment on voters' decisions is larger in primary elections, legislators have incentives to be more responsive to primary voters. We explore this incentive to side with the primary electorate by testing the following hypothesis.[11]

> *Hypotheses 2 – Primary Premium*: Alignment between a voter and their representative on policy issues has a bigger effect on vote choice in the primary election than in the general election.

Primary election voters may exhibit greater responsiveness to issue alignment in their voting either because they use different criteria when evaluating candidates in the two electoral contexts or they have more intense views than general election voters, suggesting two potential mechanisms.[12] First, party is not on the ballot in primary elections, making it more likely that voters consider factors such as the incumbent's roll call record instead (Aldrich and Alvarez 1994; Crowder-Meyer, Gadarian, and Trounstine 2020; Gopoian 1982; Henderson et al.

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[11] Hypotheses 2-4 and the experiment designed to test them were part of a pre-analysis plan placed before the study was carried out. An anonymized copy of the plan is available in the online appendix.

[12] These mechanisms are not exhaustive nor mutually exclusive. For example, another mechanism could be that primary voters are more likely to learn the position of the incumbent and then be more likely to hold them accountable for those positions. However, this is unlikely to be the driving force behind the primary premium because challengers have incentives to inform voters about the incumbent's positions if the incumbent is out of step with constituents.

forthcoming; Hirano et al. 2015; Kirkland and Coppock 2018; Schaffner, Streb, and Wright 2001). An observable implication of this mechanism is that people who vote in both the primary and general elections (what we call V_{PG} types) will be more responsive to the incumbent's voting record in the primary than in the general election.[13]

> *Hypothesis 3 – Different Behavior by Type of Election:* For voters who vote in both the primary and general election (V_{PG} types), alignment on policy issues will have a bigger effect on vote choice in the primary election than in the general election.

Second, the constituents who participate in primary elections may have more intense preferences, which may even be why they turn out in primaries (Hill 2022). General election-only voters, by contrast, may have weaker policy views or may rely on party cues alone. This difference may make primary voters more likely to punish (or reward) incumbents for their roll call positions in all electoral environments than the constituents who turn out in only general elections (Costa 2021). Because the general electorate combines both primary and general election voters, the overall pool of voters may water down the powerful effect of alignment among primary voters. Thus, it may be the composition of the primary electorate compared to the general electorate that drives the primary premium.

> *Hypothesis 4 – Different Electoral Composition:* In the general election, the voters who also vote in the primary (what we call V_{PG} types) will be more responsive to legislators' voting behavior on policy issues than the voters who only vote in the general election (what we call V_G types).

Estimating the Effect of Issue Alignment

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[13] Primary and general election voters may respond differently to other pieces of information not studied here. We focus on how voters respond to legislators' voting records because this is where legislators have significant discretion to make representational choices.

To understand legislators' incentives when considering whether to take a position aligned with primary or general election voters on a roll call, we assess the choices that voters make when the legislator takes positions aligned with the voter's policy preferences and compare that to when the legislator takes positions that are not aligned with the voter's policy preferences. We use a survey experiment to measure the effect of alignment on voters' choices to vote for the incumbent, vote for the challenger, or abstain in the primary and general elections. We use the following designations for the different types of voters:

V_P = Primary Election Voter only
V_G = General Election Voter only
V_{PG} = Both Primary and General Election Voter

To ensure that the sample distribution, and therefore the estimates of incumbent margins of victory, accurately reflects the types of voters in real-world elections, we calculated what percent of the 2016 CES national sample were V_P, V_G and V_{PG} voter types.[14] Then, we weighted our survey sample based on these percentages so that the estimates reflect the proportion of general-only and primary-general voters in the general election and the proportion of primary-only and primary-general voters in the primary election at the national level.[15]

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[14] These are not the same as the weights provided in the CES, although we do use the original CES weights in determining what percent of the CES sample are V_P, V_G and V_{PG} voter types.

[15] We use the 2016 data because it is the most recent year in which there was an open presidential primary for both the Republicans and Democrats, which allows us to identify likely primary voters in both parties across all states. The formula for the weights for those in the primary election condition is:

Weight for V_i type (W_i) = Proportion of V_i type in CES = [CES_i / (CES_P + CES_{PG})]

For those in general election condition, it is:

$$= [CES_i / (CES_G + CES_{PG})]$$

To estimate the *Effect of Alignment in Primary Elections* we restrict the sample to V_P voters and V_{PG} voters who are asked about their vote choice in the primary. To estimate the *Effect of Alignment in General Elections* we restrict the sample to the V_G voters and V_{PG} voters who are asked about their vote choice in the general election. Our core hypothesis is that voters (V_P and V_{PG}) reward legislative alignment with their own position in primary elections more than voters (V_G and V_{PG}) do in general elections. In other words, we test whether there is a primary premium for being congruent with primary voters' policy positions.[16]

Primary Premium = Effect of Alignment$_{Primary}$ - Effect of Alignment$_{General.}$ (Eq. 6)

Hypotheses 3 and 4 explore two mechanisms that could lead to the existence of a primary premium: different behavior in different electoral contexts (Hypothesis 3) and compositional differences in the voters who participate in the two electoral contexts (Hypothesis 4). Because we randomized which election V_{PG} voters were asked about, we use the primary premium among that subset of voters to test for different behaviors across elections associated with Hypothesis 3. Hypothesis 4 requires assessing whether the types of voters who participate in general elections only (V_G types) are less responsive to alignment than the voters who participate in primaries and general elections (V_{PG} types). Thus, we assess whether the effect of alignment in general elections among V_{PG} voters is larger than the effect of alignment for V_G voters who share the party identification of the hypothetical candidate.

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[16] We use bootstrapping procedures to estimate the standard error for the primary premium.

Survey

We surveyed over 13,000 individuals in July 2021 using the LUCID Theorem platform[17] to ensure that we had sufficient statistical power to identify a primary premium of 10 percentage points.[18] Such a primary premium would reflect a margin of victory with substantively important consequences. A pre-analysis plan for the experiment was registered prior to fielding the survey.

In the survey we asked respondents for their stance on twelve issues consistent with the types of votes facing members of Congress. A full copy of the survey is provided in Appendix B.

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[17] The authors affirm compliance with APSA's Principles and Guidance for Human Subjects Research. Lucid provides quota-based national samples (with quotas for age, gender, race, and region). While respondent quality and representativeness can vary in online samples, Lucid is a commonly used platform for experimental studies where internal validity is achieved through the experimental design and the sample allows for a reasonable degree of external validity (see Coppock and McClellan 2019; Costa 2021). As described in our pre-analysis plan, respondents are excluded from the survey prior to filling the sample quotas if they do not meet survey criteria (e.g., under 18 or outside the US) or if they are determined by Lucid to be speeders (i.e., complete the survey in less than 120 seconds, which was 1/3rd the median time in our pilot study). We use this time-based threshold rather than individual attention or factual manipulation checks to balance the competing demands to ensure sample quality (Ternovski and Orr 2022) and the risks to balance across treatments and generalizability that can come from using too stringent of attention measures (Kane and Barabas 2019). Respondents are omitted from the analysis if they live in Puerto Rico or Washington DC (since they have no incumbent Senator) or if they did not vote in the 2016 or 2020 general election and did not vote in a primary election in either year for the party of their incumbent Senator.

[18] Appendix A provides information about the power calculations based on a pilot study conducted on LUCID with 500 respondents.

We included issues that were asked about in the 2016 CES and were still relevant in 2021.[19] As a result, these issue positions likely reflect constituent preferences on controversial and salient votes that have electoral implications (Bovitz and Carson 2006). We also asked respondents about their partisanship, ideology, political interest, and political participation. In order to identify whether people were V_P, V_G, V_{PG}, or non-voters, we asked them about their participation in the 2016 and 2020 presidential elections.[20] If respondents indicated that they had voted in either the 2016 or 2020 presidential primary, we asked them which party's primary or caucus they usually participate in.

Respondents saw a vignette about a hypothetical, incumbent Senator who was from the same party as one of the US Senators from their state. We opt to use hypothetical rather than real legislators for two reasons. First, maintaining accuracy of real voting records to avoid deception would severely restrict how many respondents and which issues would allow for randomization of alignment between voter and incumbent positions (see Broockman, Kalla, and Westwood 2021). Second, hypothetical legislators allow us to evaluate the counterfactual of what would happen if a legislator had voted differently than a real incumbent might have chosen to vote. Legislators have incentives to strategically choose the positions that will maximize their chances of winning office (Jacobson 1993), but a survey with hypothetical incumbents allows us to

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[19] The twelve issues included in our survey are a subset of the issues included in the analysis of greater primary unity in the CES. We note that in the 2016 CES, the minimum wage level is lower than the $15 we used in our survey.

[20] When legislators take a position on an issue, they are not sure which voters will participate in the next primary or general election. While not all presidential primary voters participate in House and Senate primaries, especially if they are held off-cycle, legislators' best guide to likely voters may be who participated in the most recent competitive presidential primary election.

include the full set of choices to estimate the effect of alignment with primary and general election voters. Fortunately, the use of hypothetical and real candidates in experiments typically yields similar substantive conclusions (Brutger et al. 2020), even if the magnitude of the effects may be larger with hypothetical candidates (McDonald 2020). In our case, the benefits of isolating the quantity of interest and avoiding deception of respondents make hypothetical candidates a better research strategy (see Brutger et al. 2020; McDonald 2020).

We assign respondents to an incumbent's party based on their state and the 2021 makeup of the US Senate. If the respondent lives in a state with a unified Senate delegation (as of May 2021), their hypothetical incumbent is from that party. If the respondent is from a state with a split Senate delegation, their hypothetical incumbent is randomly assigned to be a Democrat or a Republican. Because we are focused on the perspective of incumbent legislators, we define a V_P (or V_{PG}) voter as someone who votes in the primary of the party of their assigned Senate incumbent. A person who votes in the general election and the Republican primary but is represented by a Democrat in Congress will be considered a V_G voter because they did not vote in their incumbent's primary election. Therefore, V_G voters comprise those who voted only in the general election (regardless of partisanship) and those who voted in the general election and in the opposing party's primary.

The election described in the vignette was based on the type of voter:

V_P Voters: Receive a vignette that asks how they would vote in the primary;
V_G Voters: Receive a vignette that asks how they would vote in the general;
V_{PG} Voters: Receive a vignette randomly assigned to ask how they would vote in the general or how they would vote in the primary.

In the vignette we describe information about the challenger and the incumbent Senator. For the incumbent Senator we listed three roll call positions randomly drawn from the issue positions asked about earlier in the survey to provide a strong cue about the incumbent's alignment with

the voter.[21] We randomly assigned, with equal probability, whether the incumbent took positions on these three issues that all aligned with respondent's own positions or took positions on the opposing side of these three issues.[22,23]

We also present three issue positions for the challenger, which were selected to reflect a mix of popular and less popular positions across parties. Although challengers in the real world come in all varieties, we hold the challenger constant in the experiment, presenting respondents with a challenger that was believable as a candidate in either party and someone voters would consider supporting (but not be overwhelmingly drawn to). We provided the party affiliation of each candidate and some additional information about experience, family, religion, and career background.[24]

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[21] Pilot studies using one and three issues revealed a substantially larger effect of alignment with three issues. Previous work on the effect of legislators' votes has also used multiple issues (e.g., 3 issues in Broockman, Kalla, and Westwood 2021; 2 issues in Henderson et al. forthcoming).

[22] Because respondents were not required to answer all issue position questions in the survey, we utilize an iterative process in assigning issues in the vignette. We begin by randomly assigning respondents to one issue. If that was an issue question they skipped, they are randomly assigned to a different issue. We repeat this process for issues two and three, re-randomizing if the same issue is picked twice.

[23] Although some incumbent candidates in the experiment take one or more positions that are atypical for their party, evaluating atypical candidates is valuable for assessing the effect of alignment because it allows us to evaluate voters' reactions to positions that are typical for an incumbent versus those that are atypical.

[24] Given the realities of different electoral contexts, our treatments are effectively bundled treatments – they change the type and purpose of the election (e.g., primary elections select nominees, general elections select who serves in office) and the party affiliation of the challenger (e.g., same as the incumbent in a primary, opposite of the incumbent in a general). The benefit of this approach is that it captures the core distinctions between most primary and general election contests.

After asking about their vote choice, we asked respondents how often they thought the representative is likely to vote the way they prefer (with options ranging from none of the time to all of the time). This manipulation check shows that the alignment treatment worked as intended; assignment to the aligned condition has a significant effect on the perceived frequency of agreement (ordered probit regression, p<0.001).[25] The full text of the vignettes can be found in Appendix B.

Results: There is a Large Primary Premium

Not only does alignment between voters and legislators affect vote choice, differences in the degree of this effect between the two elections point to a significant primary premium. Being aligned on three issues has a large effect on vote choice in both the primary election and the general election (Table 2). The first column shows that going from being unaligned on these issues to being aligned has an 89 percentage point effect on the incumbents' expected margin of victory in primary elections. In other words, an incumbent could go from winning less than 30 percent of the two-candidate vote to winning more than 70 percent of the two-candidate vote in the primary election. There is also a 50-percentage point effect in the general election (see column 2). Both effects are statistically significant, as is the 36-percentage point primary premium shown in the third column. These results are consistent with Hypothesis 2: that the effect of alignment is larger in the primary election than it is in the general election.[26] This

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[25] We also assess how the issue alignment treatment impacted respondents' perceptions of the ideological distance between themselves and the incumbent. As expected, alignment has a significant negative effect on the size of perceived gap in ideology between the respondent and the incumbent (OLS, -0.84, p<0.001) and a positive but smaller effect on the size of the gap for the challenger (OLS, 0.22, p<0.001).

[26] We observe similar effects for Democratic and Republican incumbents (see Appendix Tables C1 and C2).

indicates that legislators' roll call decisions have a much larger impact on changing how voters vote in primary elections than on how they vote in general elections.[27]

Table 2. The Primary Premium Among All Voters

	Effect of Alignment in Primary Elections	Effect of Alignment in General Elections	Primary Premium
Estimated Effects for All Voters (V_P, V_G, and V_{PG} types)	0.890* (0.036)	0.529* (0.020)	0.361* (0.040)

Note: The sample includes all voters (V_P, V_G, and V_{PG} types). N = 10,953. Bootstrapped standard errors in parentheses. *Sig. at the 0.05 level.

These effects of alignment are likely larger than what we would expect in the real world for three reasons.[28] First, the focused nature of the information provided in the vignette means that the information we do vary has the potential to have a larger impact on voters (Bullock 2011). Second, we use issues asked about in the CES which are likely to be salient issues. Third, our interest in legislators' incentives drove our decision to include "off the equilibrium path" candidates, which means our experiment is capturing how voters respond to a broad range of candidates and not simply the truncated set of real candidates who may act with the primary

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[27] In addition to the incumbent's margin of victory, alignment also affects abstention rates (see Appendix Tables C3 and C4). Abstention is an important option for voters who are not happy with the incumbent's issue positions (see Hall and Thompson 2018), especially in general elections where defecting to the opposing party may be a more difficult choice. The relative rates of abstention between the aligned and not aligned treatments are similar for primary and general elections, suggesting abstention is not differentially impacting the calculation of the effect of alignment in primary and general elections.

[28] At the time of the survey, three states were using use two-two primaries (CA, LA, WA). As a robustness check we estimated the results when dropping these states and we found the same basic results (see Appendix Table C5).

premium in mind.[29] However, to the extent that any overestimation affects the two estimates similarly, the difference-in-difference estimates produce valid estimates of the primary premium. In the next section, we relax this assumption when we look at the substantive implications of the combined effects of primary unity and the primary premium.

We next test the two potential mechanisms behind the primary premium – different behavior in different elections and compositional differences in participation across election types. Table 3 provides the information to test Hypothesis 3 by giving the results for the subsample of voters who participate in both primary and general elections. The results show that the primary premium is even larger for this subset of voters, suggesting a major driver of the primary premium is voters responding to alignment with their representative differently in primary and general elections.

Table 3. The Primary Premium Among Voters Who Vote in Primary and General Elections

	Effect of Alignment in Primary Elections	Effect of Alignment in General Elections	Primary Premium
Estimated Effects for V_{PG} Voter Types	0.899* (0.037)	0.480* (0.035)	0.419* (0.053)

Note: The sample includes voters who vote in primary and general elections (V_{PG} types). N = 4,985. Bootstrapped standard errors in parentheses. *Sig. at the 0.05 level.

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[29] See Appendix Table C6 and C7 for the distribution of hypothetical incumbents with atypical party positions. Robustness checks that restrict our analysis to respondents who took at least one party-consistent position and one party-inconsistent position (on the three issues in the vignette) continue to yield a positive and significant primary premium (see Appendix Table C8). Regardless of treatment assignment, these respondents saw plausible incumbents who took a mix of party consistent and party inconsistent positions. These results increase our confidence in the generalizability of the core claim that there is a primary premium incentivizing incumbents to take policy positions aligned with primary voters.

Table 4 presents the results testing Hypothesis 4. To avoid confounds from partisan differences in the composition of the full general electorate compared to the primary electorate, we focus on co-partisans among general election-only voters (V_G).[30] Although the effect of alignment is significant in the general election for voters who vote in primary and general elections (V_{PG}) and for general-election-only voters (V_G), V_G voters are actually more responsive to alignment than V_{PG} voters. Thus, the composition of voters across elections is likely not the key mechanism behind the primary premium. Combined, our results suggest that there is a large primary premium and that this pattern is driven, in large part, by voters placing more weight on the incumbent's issue positions when they vote in primary elections.

Table 4. Electoral Composition and the Primary Premium

	Effect of Alignment for V_{PG} Voters	Effect of Alignment for V_G Voters	Difference between V_{PG} and V_G Voters
Estimates	0.474*	0.709*	-0.235*
	(0.034)	(0.057)	(0.067)

Note: The sample includes V_G, and V_{PG} types who receive a vignette about the general election and who are co-partisans (including leaners) with their sitting Senators. N = 3,197. Bootstrapped standard errors in parentheses. *Sig. at the 0.05 level.

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[30] The pre-analysis plan did not specify the inclusion of only co-partisans who receive the general election prompt. We intended to discern whether V_{PG} and V_G types behave differently, so excluding those who do not share partisanship of the hypothetical incumbent allows for a cleaner comparison, devoid of partisan differences. Analyses that include all general-election-only voters, regardless of partisanship, yield a null effect on the difference between V_{PG} and V_G voters, as do analyses that include only co-partisans but exclude leaning partisans.

Implications

The Combined Effect of the Unity of Voters' Preferences and the Primary Premium

When the primary and general electorates disagree on an issue, legislators' incentives depend on the distribution of voters' preferences on the issue in the primary and general electorates *and* on the differences in the effect of alignment in the primary and general elections.[31] Because voters are more responsive to alignment in the primary election (the primary premium) and because primary electorates are more unified in their issue positions when there is disagreement with the general electorate (primary unity), legislators have incentives to be more responsive to the position of the primary electorate more of the time.

We estimate the incentives created by the combined effect of the primary premium and the unity of voters' preferences for twenty-one issues from the 2016 CES.[32] For each issue, we use Equation 2 to combine information about the level of state support for the issue in the CES sample with our estimates for the effect of alignment to estimate the expected change in vote share for changing a legislator's position on the issue. We apply Equation 2 to the voters who participate in the general and primary electorates for each of the US Senators serving in 2016.

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[31] The expected closeness of the election is another important consideration for a legislator. If a Senator is likely to win an election with 80% of the vote, losing 7 percentage points does not matter. However, if a Senator is likely to get only 51% percent of the vote, then a 2-percentage point change would alter the election outcome. While primary elections always have the potential to be competitive if a legislator alienates their base, many Senators serve in states where they can reasonably expect to win the general election by a large margin, so we likely overestimate the concern that some legislators have about their general election prospects. Nonetheless, our analysis produces initial estimates of how often the primary premium is a relevant consideration for incumbent Senators.

[32] This set of issues includes the 12 issues included in our survey experiment plus nine additional policies, providing the same set of issues used in the analysis of primary unity above.

Figure 2 plots estimates of the change in vote share as a result of a Senator changing her

vote on a given issue. The x-axis gives the calculated change in vote share in the general election

from a change in vote on the issue, while the y-axis gives the change in vote share in the primary

election. Each point in the graph represents the estimates for one Senator for one issue. Like

Figure 1, Figure 2 is divided into 6 sections corresponding to whether and how the legislator is

cross-pressured.

Figure 2. The Combined Effect of the Primary Premium and Voter Unity on Legislators'
Incentives
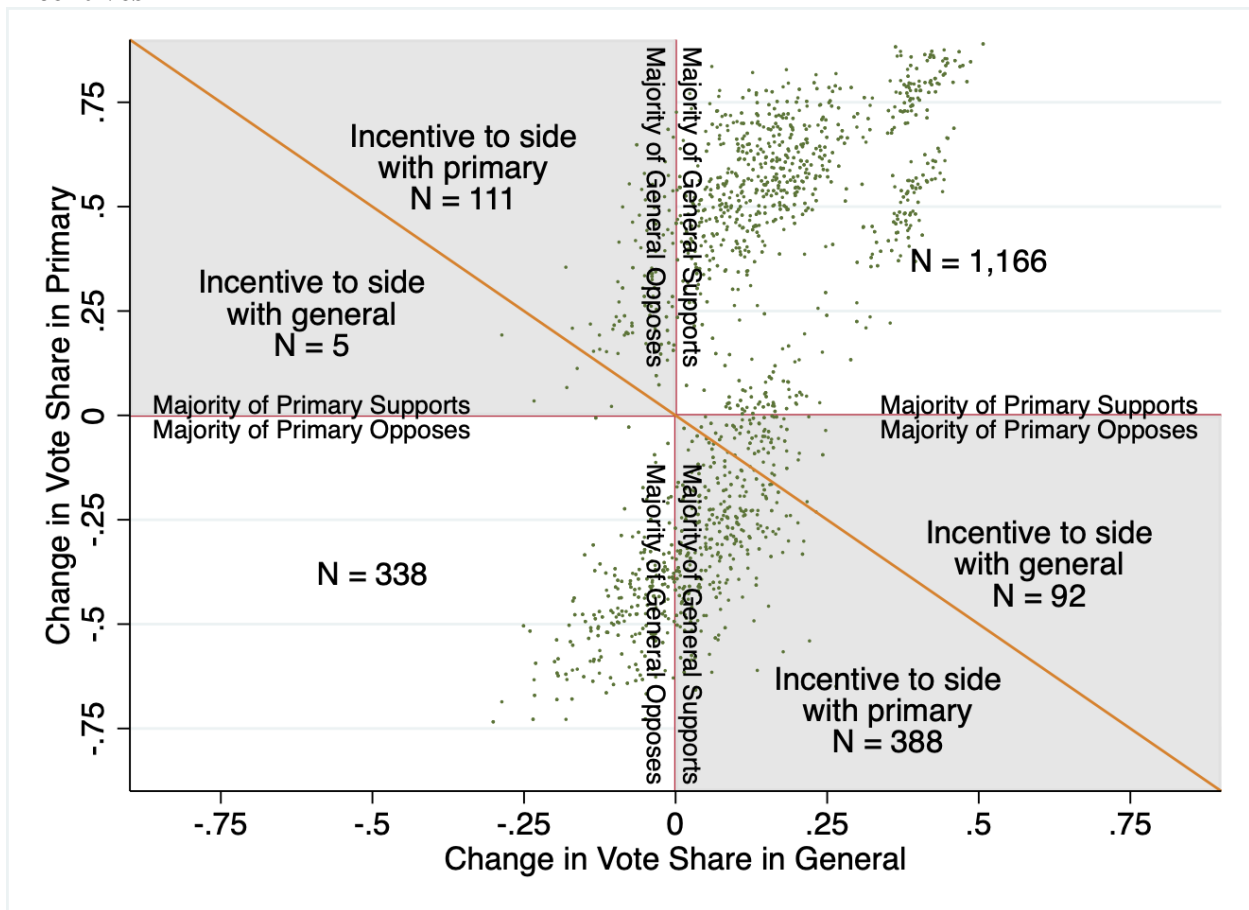
In Figure 2, the observations that fall exactly on the negative sloped line are cases where

the gain in one election exactly equals the cost in the other. By looking at the portions of the

graph that result from the negative sloped line, we can see how often the absolute magnitude of

the change in vote share in the primary is larger than the corresponding value in the primary. The

results of cross-pressured votes yield:

<u>Stronger Incentives to Vote with the Primary Electorate's Preferences:</u> 499 Senator-issue pairs
        Loses more votes in the primary than gains in the general: 388
        Gains more votes in the primary than loses in the general: 111

<u>Stronger Incentives to Vote with the General Electorate's Preferences:</u> 97 Senator-issue pairs
        Gains more votes in the general than loses in the primary: 92
        Loses more votes in the general than gains in the primary: 5

In 84 percent of the cases where the legislator is cross-pressured between the two electorates, the

legislator is better off siding with the primary electorate.

Importantly, the strong incentive to side with one's primary voters is not confined to a

small number of legislators. Among Senators in 2016, every legislator faced at least one issue

where they were cross-pressured and had incentives to side with the primary electorate, and

many legislators faced this incentive on several issues. Among the sampled issues, Republicans

face more issues with cross-pressures and incentives to side with the primary electorate than

Democratic Senators (see Appendix Figure C3), though both groups face this scenario.

Moreover, as expected, Senators in swing states face more issues where the electorate is divided

and they face incentives to side with the primary electorate, but legislators across the spectrum of

electoral competitiveness face these concerns (see Appendix Figure C4).

Table 5 explores how varying the size of the primary premium, from our estimate all the

way to a general premium equivalent in size, affects these legislators' incentives to side with

their primary voters. We report the number of observations that fall into the different categories

where legislators are cross-pressured and the percentage of cross-pressured votes where

legislators have electoral incentives to side with the primary electorate.

Table 5. Legislators Have Incentives to Side with the Primary Electorate Even If We Reduce or Remove the Primary Premium

Size of effect of alignment	Effect of alignment in…		Incentivized to Vote Primary		Incentivized to Vote General		Incentive to vote with primary electorate
	Primary	General	Gains more votes in the primary	Loses more votes in the primary	Gains more votes in the general	Loses more votes in the general	
Survey Estimate	0.890	0.529	111	388	92	5	84%
Reduced effect of alignment, esp. in primary	0.350	0.250	110	371	109	6	81%
	0.300	0.250	107	351	129	9	77%
No primary premium	0.250	0.250	104	332	148	12	73%
	0.250	0.300	102	309	171	14	69%
General election premium	0.250	0.350	99	284	196	17	64%
	0.529	0.890	88	258	222	28	56%

The findings show that legislators facing cross-pressures between the preferences of the primary and general electorate have electoral incentives to side with the primary electorate. With the estimated primary premium from our survey experiment, they face this incentive on the vast majority of cross-pressured votes. If we assume a smaller effect of alignment in each election and a smaller primary premium – whether because real-world races provide more information than our vignette or voters are responding less to position taking – legislators still have incentives to side with the primary electorate on a large majority of votes. Moreover, because primary voters are more unified in their preferences than general election voters, this incentive holds when the effect of alignment is the same in both elections (when there is no primary

premium) and even if there is a general election premium. In short, because of the distribution of voter preferences in the primary electorate, a very large general election premium would have to exist – larger than our estimated primary premium – for legislators to have incentives to vote with the general electorate's preferences on even half of cross-pressured issues.

Senators' Roll Call Votes Show Greater Alignment with Primary Electorate

To show that these survey-based findings have real-world consequences, we turn to the analysis of Senators' roll call votes on several issues we analyzed in the 2016 CES. From the full set of twenty-one issues we examined in the 2016 CES, we searched for corresponding Senate roll call votes that were well matched to the policy question asked in the survey item. In some cases, this meant using an amendment vote that closely corresponded to the issue articulated in the survey item. In other cases, we used the final passage or cloture vote. For many issues, there is no corresponding roll call vote, either because the issue never received attention on the agenda (e.g., gun registries or making policy body cameras mandatory) or because the policy at hand was included in a much larger legislative package where Senators' votes would likely be shaped by constituent preferences on a range of issues (e.g., eliminating mandatory minimum sentences for non-violent drug offenders is one provision of the 2018 FIRST STEP Act but did not receive a specific roll call vote). We also excluded a few potential votes that occurred well before the 2016 survey out of concern that constituent preferences in 2016 would be an unreliable estimate of their views a decade before (e.g., 2007 roll call vote on fuel efficiency standards). This process yielded eight votes in the 113th-116th Congresses (see Appendix D).[33]

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[33] The included issues are gun background checks, banning assault weapons, EPA power to regulate Carbon Dioxide emissions, repealing the ACA, legal status of DREAMERS, increased border patrols on U.S.-Mexico border, prohibiting abortion after 20 weeks, and prohibiting the expenditure of any federal funds for abortion.

For each of these issues, we combined information on the Senator's vote with what fraction of their primary and general electorate supported the policy in the 2016 CES. Table 6 shows how often Senators were cross-pressured and how often they sided with the median voter in the primary electorate. The gray cells indicate the cross-pressured cases. In those cases, legislators sided with the preferences of the primary electorate on 66% of the votes.[34]

Table 6. Percent of Senators Who Voted with the Primary Electorate

	Majority in Primary – Oppose	Majority in Primary - Support
Majority in General – Oppose	79.4% (N=136)	78% (N=50)
Majority in General – Support	63.2% (N=185)	71.5% (N=410)

Table 7 assesses how support for each issue among the primary and general electorate relates to Senators' roll call positions. We use linear probability models, where the dependent variable is 1 if the Senator voted in favor of the policy and the independent variables are the proportion of the primary electorate and proportion of the general electorate expressing support for the policy in the 2016 CES. All models also include fixed effects for each roll call vote. As expected, the results show that Senators are responsive to both their primary electorate and the general electorate (column 1). An increase in support among either their primary or general electorate increases the likelihood that a Senator votes in support of the proposal. Although the point estimate on the effect of the primary electorate is larger than the point estimate on the general electorate, the difference between the two coefficients is not statistically significant ($p =$

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[34] On cross-pressured votes, the Senator sided with the majority of the primary electorate in 39 instances where the primary electorate supports the policy but the general electorate opposes it (.78*50) and in 117 instances where the primary electorate opposes the policy but the general electorate supports in (.63*185).

0.483). As Table 6 illustrates and this confirms, there are many Senator-issue pairs where the legislator is not cross-pressured and can vote to represent the preferences of both electorates.

Thus, column 2 presents the results for only cross-pressured votes. Here, we find that the views of the primary electorate are a significant predictor of a Senator's vote, while the preferences of the general electorate are not. Moreover, the difference between the coefficients is significant as well ($p = 0.027$). Combined, analyses of Senators' roll call votes show that legislators are more responsive to their primary electorate, consistent with our argument that greater primary unity and a primary premium for issue alignment produce incentives for legislators to be more attentive to the preferences of the primary electorate.

Table 7. Senators Are More Responsive to Voter Positions in Their Primary Electorate

	(1)	(2)
Support in Primary	0.81*	0.41*
	(0.08)	(0.16)
Support in General	0.59*	-0.29
	(0.25)	(0.32)
Roll Call FEs included in model?	Yes	Yes
Observations in Analysis	All	Cross-pressured Votes
N	781	235
R-squared	0.29	0.75

Notes: *Sig. at the 0.05 level (two-sided). Standard errors in parentheses.

Discussion

While the two-stage electoral process in the US sets up the potential for legislators to be pulled in different directions by their primary and general election voters, we found that for the majority of the issues we studied from the 2016 CES, legislators were not being pulled in different directions. In 72 percent of the Senator-issue observations, the median voter in the primary and general elections agreed. This result highlights why it is methodologically important

to study these elections together. Studying the primary or general election alone can misidentify the source of representation. Legislators face no difficult choice when coincidental representation can accommodate the preferences of both the primary and the general electorate.

To learn which voters are driving representation requires identifying votes where the primary and general electorate disagree. Recognizing that the preferences of the primary and general electorate can be in tension on important policy issues, we explore the incentives that legislators have to be more responsive to primary election than general election voters. On these votes (which represent nearly 30 percent of the votes that correspond to CES issue questions), legislators generally have incentives to be responsive to their primary voters, both because the primary electorate tends to be more unified in their issue positions and because primary voters are more responsive to the voting behavior of their legislators. In nearly three-quarters of the cross-pressured Senator-issue cases, the primary electorate is more unified in their position than the general electorate. When we combine the estimated effects of greater primary unity and the primary premium, this fraction increases to 84 percent of cross-pressured votes in our sample.

An analysis of their roll call votes when they face a divided primary and general electorate suggests that these incentives are powerful in determining the position legislators take on bill considered by the Senate. A ten percent increase in support for a policy position in the primary electorate is related to a 4-percentage point greater likelihood that a Senator will vote for that policy when they face a cross-pressure, whereas we find no relationship between the preferences of the general electorate and roll call votes in these cross-pressured cases. These results highlight the importance of the primary electorate in shaping voting behavior when legislators are in the difficult, but not uncommon, position of facing primary and general electorates with different preferences on an issue.

Although many scholars and pundits have raised concerns about high levels of polarization and skewed representation in American politics, there has been little agreement on the causes and whether primary elections are a contributing force. We focus on an underexplored aspect of primary elections – how the composition and voting behavior of the different electorates shapes legislators' incentives to be more attentive to primary voters. To the extent that primary voters hold more ideologically extreme positions (Hill 2015), the electoral incentives that we identify to side with the primary electorate may contribute to greater polarization, even though voters appear to support relatively moderate candidates (Woon 2018).

Although survey experiments are inherently limited in their external validity, we argue that the core insight here sheds important light on the electoral incentives facing legislators. Our estimate of the primary premium rests on a comparison between the effect of alignment in the primary and general elections, meaning that any inflated effect of alignment that is common across the two election scenarios is accounted for by the difference-in-difference estimate. And there is existing evidence that legislative positions can affect electoral outcomes, especially when they are salient (Bovitz and Carson 2006) and brought to the attention of the electorate, perhaps by a challenger or interest group (Arnold 1990). While our experiment captured a world of perfect information about legislators' voting records, legislators have incentives to act as if this is the case since a motivated challenger could easily provide this information to the electorate. Moreover, as our robustness check demonstrates, the resulting incentive to vote with the primary electorate is not very sensitive to the precise estimate of the primary premium.

A second consideration is whether strategic voting in primary elections poses either theoretical challenges to the primary premium argument or external validity concerns related to election dynamics. Theoretically, if primary voters care about electability, alignment in the

primary may be less important to their choice than if they vote sincerely. In the real world, this may mean that Democratic voters in West Virginia are willing to vote for Joe Manchin in the primary, even if his issue positions are often unaligned with theirs, because they know that an aligned Democratic candidate could not win in the general election. Although some classic works suggest that voters weigh electability when deciding on candidates (Abramowitz 1989; Stone, Rapoport, and Abramowitz 1992) and some experimental work suggests that voters may be drawn to candidates who have a greater chance of being the eventual winner (Simas 2017), other work finds that strategic voting occurs only among 10-18% of voters (Abramson et al. 1992; Cherry and Kroll 2003; Southwell 1989, 1991).[35] More recent experimental work suggests that strategic voting is even more limited than that (Henderson et al. forthcoming). Given the evidence that few voters engage in strategic voting and that it may not affect their response to the issue positions of candidates (Henderson et al. forthcoming), we have little reason to believe that it should act as a major countering force to the factors that we suggest might produce a primary premium[36] or that it should dramatically weaken the generalizability of our findings from the experimental to the real-world context.

That legislators face a more unified primary electorate and a primary premium for their voting records means that legislators are incentivized to represent only a small fraction of the public when they cannot rely on coincidental representation. The incentives to cater to primary

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[35] Even when voters do respond strategically in primary elections, campaign donors and other activists may not, limiting the ability for voters to impact the selection of candidates (Lockhart and Hill 2021).

[36] Robustness checks splitting the sample by swing and non-swing states yield evidence of a significant primary premium in both contexts (see Appendix Table C9 and C10), suggesting that strategic voting (which is more likely in swing states) is unlikely to eliminate the primary premium.

voters is potentially problematic because differences in primary election participation is a source

of inequality on the basis of race and income (Leighley 2001; Verba, Schlozman, and Brady

1995). When legislators have incentives to be more responsive to the primary voters than general

election voters, this compounds the skew in politics toward the preferences of a minority of the

population (Butler 2014; Harden 2015).

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