

Consolidating Votes: The Lingering Effects of Same-day Primaries

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Abstract

This paper investigates the electoral effects of holding Congressional primaries on the same day as Presidential primaries. Exploiting state-level changes in the timing of Presidential primary elections, I find that holding a U.S. House of Representatives primary on the same day as a presidential primary significantly increases voter turnout. In the subsequent general elections, I find that nominating a challenger via a consolidated primary doubles the likelihood of a challenger victory over an incumbent. I then provide a potential mechanism through which consolidated primaries lead to increased challenger success. Consolidated primaries choose ideologically different candidates, resulting in nominees who appear to be well-suited to challenge incumbents.

Keywords: Primary Elections, Election Timing, Candidate Ideology, Turnout

Introduction

Despite widespread concern about low voter turnout in American elections, researchers have found little evidence of a causal link between voter turnout and election outcomes (McGhee et al., 2014; Hirano et al., 2010). This paper utilizes a unique shock to primary-election turnout to explain how the size of a primary electorate affects both a nominee's characteristics and a party's general-election success.

To identify the causal effect of a turnout shock to primary electorates, I use state-level changes in the consolidation of primary elections during Presidential election years. As illustration, consider April 26, 2016, when Pennsylvania, Delaware, Maryland, Connecticut, and Rhode Island all held Presidential primaries. When voters in Rhode Island and Delaware went to the polls, they saw candidates for the President, cast their vote, and were finished. In Pennsylvania, Maryland, and Connecticut, in addition to the Presidential race, voters could also cast ballots for all other primary elections, including the United States Senate and House of Representatives, and other down-ballot races. To vote in non-Presidential primary elections, Rhode Island and Delaware voters would have to return to the polls again in September. Across the country, millions of primary voters were able to simultaneously vote for the President and for all other offices. Millions of other voters needed to cast two separate ballots, usually months apart, to vote in all their state's primaries.

These different voting rules can affect who is voting in primaries. Unfortunately, researchers know little about the composition of different types of primary electorates. Most surveys that ask about primary election participation fail to even ask in which primary (Presidential or Congressional) the respondent voted. To my knowledge, only one nationwide survey (the 2010-2012 Cooperative Congressional Election Study panel) asked voters separately about their Congressional and Presidential primary voting behavior.

Figures 1 & 2 show the differences in self-stated voter ideology between Congressional primary voters those who participated in Presidential primaries or caucuses but did not participate in Congressional primaries. Figure 1 shows that Presidential-only primary voters consider themselves more ideologically moderate. 68% of voters in Congressional primaries considered themselves strong partisans; only 56% of those who participated in Presidential primaries but not in Congressional primaries said the same. Voters in the Presidential primary group were 50% more likely to classify themselves as “Middle of the Road” (13% to 19.5%).

But the differences are not just that Presidential primary voters are more moderate; they are also more likely to cross party lines. Figure 2 shows the percentage of self-proclaimed conservatives who participated for the Democratic primaries and self-proclaimed liberals who voted in a Republican primary. These voters occupy a relatively small share of Congressional primary voters but a larger share of those who participated only in the Presidential primary. Conservatives consisted of 9.22% of Congressional Democratic primary voters, but 11.11% of those who only participated in Democratic Presidential primaries. Fewer self-proclaimed liberals participated in Republican primaries, but there are still substantial relative differences. Republican-voting liberals consist of 2.17% of Congressional primary voters, but 2.49% of Presidential-only primary voters. Taken together, Figures 1 and 2 suggest that the voters drawn into Congressional primaries through consolidation are of a different ideological composition than voters who are already most likely to be voting in them.

Using a difference-in-difference framework, I estimate the effect of consolidation on the outcomes of primary and general elections in the U.S. House of Representatives. I find that consolidated primaries¹ increase in primary election turnout for House of Representatives elections by 42.5%. This turnout effect is largest in primaries involving incumbents or challengers for incumbents.

¹To my knowledge, there is no widely-accepted term for holding Presidential and down-ballot primaries simultaneously. The term “consolidated primary” comes from Illinois statutes.

I then test whether challengers selected in consolidated primaries are more successful in subsequent general elections. I find that they are. Challengers selected during consolidated primaries are twice as likely to win the general election. The proposed mechanism for this result is a change in the ideology of challenger characteristics. I find that consolidated primaries choose challengers who are closer in ideology to the incumbents they are attempting to unseat. Instrumental variable regressions are consistent with the hypothesis that the increase in general election success is driven by the change in challenger ideology.

The research design presented here exploits variation in primary consolidation brought on by changes in the timing or existence of Presidential primary elections. While these changes are often caused by state legislators' actions, I show that the changes are not caused by state-specific economic or political shocks and that state legislators are not attempting to gain a political advantage. In fact, these shocks usually affect both parties equally, so changing consolidation for political gain would also help political rivals. Finally, there is no evidence that lawmakers anticipate any effect on Congressional elections from changes in Presidential primaries. Instead, they appear to set the timing of the Presidential primary based on how they want to fit into the national Presidential primary and caucus calendar, with little to no consideration of the down-ballot effects.

Literature Review

Primary elections have become a more important mechanism through which voters can shape public policy as Congressional seats have become increasingly safe for one party or another.² Hirano and Snyder Jr. (2014) argue that the existing literature has understated the importance of primary elections and show that even in non-competitive districts primaries often succeed in producing high-quality candi-

²The number of swing seats decreased by 45% between 1998 and 2014 (Karmack, 2014)

dates. The importance of primary elections is also suggested by research finding that general elections candidates do not converge in policy to that of the median voter (Lee et al., 2004). A large body of research showing that the decisions of elected officials are affected by their personal characteristics, including race (Rocca et al., 2009; Logan, 2018), gender (Gertzog, 1995), and military experience (Lupton, 2017), reinforces the notion that candidate selection is a crucial component of representation in U.S. politics.

The empirical literature has shown that certain characteristics of primary-election winners can be strong predictors of their general-election success. Several papers (Hall, 2015; Hall and Thompson, 2018) show that moderate candidates perform better and that ideologically extreme primary election winners drag down their party's general election fortunes. Stone and Simas (2010) show that when challengers are more ideologically similar to district voters, they perform better against incumbents. More experienced challengers are more likely to successfully defeat incumbents (Jacobson, 2009; Green and Krasno, 1988), though the direction of causality has been questioned (Lazarus, 2008). Similarly, high-spending candidates do better in general elections (Goldstein and Freedman, 2000; Sprick Schuster, 2020). While the causal mechanism is debated, there is a consensus that higher-spending candidates are generally higher-quality ones.

Though candidates matter, it is not clear what role primary electorates play in their selection, nor whether the composition of primary voters affects election outcomes. Primary elections are much more likely to have large margins of victory, so marginal changes to the electorate may leave the average race unaffected. Fully understanding the role that electorates play in candidate selection is further complicated by the dual (and potentially competing) goals of nominating a preferred candidate and increasing the likelihood of general-election success. 40 years ago, Abramowitz et al. (1981) uncovered evidence of strategic voting in primaries, and subsequent theory (Chen and Yang, 2002) and empirical evidence (Hall and Snyder,

2015) have illustrated how the voters must weigh their preferred candidate against their electability.

Candidate behavior within a 2-stage election process could further dilute the power of the primary electorate, and again the empirical evidence leaves the issue unresolved. Brady et al. (2007) describe a trade-off candidates face between appealing to more ideologically extreme primary electorates and moderate general election voters. They find that primary electorates provide sufficient pressure on candidates to move away from the district's median voter towards more extreme positions. On the other hand, Hirano et al. (2010) found that the introduction of direct primaries did not result in increased polarization in Congress. Hirano and Snyder Jr. (2019) argue that candidates are unaffected by primaries, and primary election winners are no more extreme than primary election losers. Adams and Merrill III (2014) provide evidence that the effect of primaries is diminished by the fact that candidates will typically use the distribution of general election voters when choosing their policy position.

When looking directly at the effect of changes in the composition of primary election voters on election outcomes, the empirical literature has found that the effect depends on what is driving the change. Research studying the effect of “open” and “closed” primaries (Rogowski and Langella, 2015; McGhee et al., 2014) fails to support the claim that open, more inclusive primaries affect the ideology of candidates. Gatrell and Bierly (2002) find that inclement weather decreases primary-election turnout, but do not find significant partisan effects. Thompson et al. (2020) find that vote-by-mail leads to only a modest (2%) increase in turnout, but no significant partisan advantages.

A growing literature on election timing has explored effects of consolidated primaries. Boatright et al. (2020) show that U.S. House primary elections held on the same day as Presidential primaries see significantly higher voter turnout than those held on different days (a result that I confirm), though the authors do not estimate

any effects on candidate selection or general election outcomes. In a footnote in their paper about primaries and polarization, Hirano et al. (2010) say that they see no effect in their sample of 1980-2004 Congressional elections of consolidation on turnout. However, their analysis is focused only on open Congressional seats, and I also fail, using my larger sample, to find a significant effect within this subset of races.

Though consolidated elections are relatively unstudied in the federal context, the literature studying on-cycle local elections is illuminating. Several studies (Anzia, 2012; Dynes et al., 2021) have shown that off-cycle local elections decrease turnout. Several studies looking at California elections have shown that holding on-cycle elections leads to increases in voter turnout (Zoltan and Lewis, 2003; Phillips, 2022). Hajnal et al. (2021) find that on-cycle elections (especially those held during Presidential election cycles) boost turnout and lead to a more representative electorate. These findings have led to several recommendations (Hartney, 2021; Hajnal, 2012) that local democracy could be improved by moving all local elections to on-cycle.

This paper expands the literature in several important ways. First, it builds on the findings of the local democracy literature that has found that holding local elections concurrently with federal (and especially Presidential) elections significantly affects election outcomes and representation. While several papers (Boatright et al., 2020; Hirano et al., 2010) have looked at the turnout effect of consolidated primaries, this is the first paper that has explored how those primaries meaningfully impact general elections through the selection of candidates and the competitiveness of general elections.

Similarly, the paper advances the broader literature of the role of election structures. A vast literature has shown us the myriad of ways that the method of election administration, from electoral systems (Scarrow, 1986; Jones, 1997) to ballot format (Ho and Imai, 2008; Kimball and Kropf, 2008) can influence the election outcomes. While some issues, such as the expansion of instant runoffs, have received significant

attention (Burnett and Kogan, 2015; Grofman and Feld, 2004), same-day primaries have been largely overlooked.

Finally, this paper builds on a large body of literature that has explored the general-election effects of candidate selection (Anastasopoulos, 2016; Lazarus, 2008) by directly investigating the role of the primary electorate. Given that papers have struggled to find exogenous sources of variation in the composition of the primary electorate (Rogowski and Langella, 2015; McGhee et al., 2014) this paper furthers our understanding of the role of primary voters by identifying a setting where plausibly exogenous variation in voters is not just present, but large enough to affect candidate selection.

Data

To measure the impact of consolidation on election outcomes, I gathered data on vote share and turnout for federal primary and general elections for the U.S. House of Representatives held during Presidential election years from 1976 to 2016. Primary election data is from Pettigrew et al. (2016), supplemented using data from the Federal Election Commission (FEC) for 2012 and 2016. General election data comes from CQ Press's Voting and Elections Collection. Both sources provide complete coverage for federal elections over the period of my sample (1976-2016). The consolidation variable was constructed using a variety of sources, including thegreenpapers.com, the FEC, and Secretaries of State websites.

I also gathered data on candidate characteristics. To measure the ideological position of candidates, I could not use DW-NOMINATE scores, which are only measurable for elected officials. I therefore turn to candidate policy scores from Bonica (2016), which uses contributions to candidates to map them along an ideological spectrum. Candidates that receive more donations from people who also donate to the most liberal candidates for Congress receive more negative scores

while those who receive donations from those who donated to more conservative members receive a more positive scores (along a $[-2,2]$ range).

The other important candidate characteristic I measure is candidate quality, for which I use two common proxies that are standard in the literature: candidate spending and previous office-holding experience. Candidate spending data is from the FEC; challenger quality is from Jacobson (2009), as is district-level Presidential vote share.

Consolidated Primary Elections

The identification strategy for this paper relies on changes in primary election consolidation stemming from changes in the timing of Presidential, not Congressional, primary elections. While the timing of Congressional primaries is relatively stable within states across time, the timing and nature of Presidential primaries and caucuses have varied significantly over the past 50 years. Most states did not hold presidential primaries before 1972, and since 1980 all but a dozen states have seen changes in the timing, consolidation, and even existence of their presidential primaries and caucuses. The average 2008 primary was held a full 2 months before the average 1972 primary. Over this same time, down-ballot primaries have changed little, with the average Congressional primary being held between the 175th and 198th day of the year. When states change the timing of Presidential primaries, this often results in a change in the consolidation of primaries even though Congressional primaries are, in every other measurable way, unchanged.

Table 1 shows which states changed the consolidation of their primaries each year compared to the previous Presidential election cycle. I observe a total of 40 instances of changes in consolidation, and these changes are split mostly evenly between states breaking up previously consolidated elections and states introducing

consolidation to primaries that were previously held on separate days.³ On average, 4 states see experience a change in their consolidation status each cycle.

Southern states are more likely to have consolidated primaries and are therefore slightly over-represented in the group from which I am deriving variation. A little more than half of all instances of consolidation changes coming from Southern states, though they represent only 30% of the elections in my sample. However, my results are not specific to Southern elections, as my main regression results are similar if I drop Southern states from my sample entirely (though the precision of my estimates drops).

Every single instance of a change in consolidation is due to a change in the state's Presidential primary. Based on evidence from both contemporaneous reporting of these changes and the academic literature on the timing of Presidential primary elections, I argue that changes in the consolidation status of primaries result from time-invariant, state-specific customs interacting with national-level political shocks. A nationwide political event, such as the expectation of hotly contested Presidential primary, will influence the political environment in all states. However, only some of those states will experience changes in whether they have consolidated primaries, based on the traditional timing of elections. Therefore, the variation in whether a state holds a same-day election can be plausibly exogenous to other political outcomes, when controlling for both time and place fixed effects.

The 2008 primaries illustrate how common time shocks interacted with state-specific election calendars. Both Republican and Democratic primaries were expected to be highly competitive, without clear front-runners (Giroux, 2007). This anticipation created an incentive for states to move their primary elections earlier, based on a perception that this would increase their influence on the nomination process. Seven states moved their primaries up by more than a month to Super Tues-

³I observe a few instances of both occurring simultaneously, which occurs when one party in a state ends consolidated primaries while the other introduces them. This occurs in a special case which I discuss below.

day or earlier (New Jersey, California, Alabama, Arkansas, Connecticut, Florida, and Georgia). This changed the consolidation for New Jersey, California, Alabama, and Arkansas, because these states previously held consolidated primaries. Connecticut, Florida, and Georgia, though they also engaged in the same behavior as the other states, did not change the consolidation status of their primaries, which were already held on different days. Likewise, many other states already held early Presidential primary elections, so they did not change their primary calendar at all, and their consolidation remained unchanged. This creates a quasi-random variation, as all states experienced the same time shock (a competitive 2008 primary), and responded in similar ways, but experienced variation in consolidation status due to previous state calendars and customs. A similar phenomenon occurred in 1988, when numerous Southern states moved their primaries to March, hoping for a stronger influence in Presidential nominations by creating a regional primary (Asheville Citizen-Times). North Carolina and Kentucky previously had consolidated primaries in May, while other states either already had March primaries (Texas, Georgia) or didn't have their consolidation affected when they moved their primaries up (Tennessee, Louisiana). In both 1992 and 2012, states moved their primaries back to the traditional dates, meaning that those states which typically held consolidated primaries again changed their treatment status.

2008 and 1988 are illustrations of “front-loading”, which has been heavily studied and also one of the biggest drivers of variation in consolidation in my data. The motive behind front-loading is clear and is concisely summarized by Norrander (2009a): “States move their primary, or caucus, dates forward because they believe it is necessary in order to influence presidential nominations. (Norrander, 2009a, p. 26).”

Another common occurrence of changes in consolidation is that some states have rules that force them to cancel primaries when only one candidate qualifies for the ballot. For example, Mississippi and South Dakota canceled the 1984 Republican

and 2000 Democratic primary when only Ronald Reagan and Al Gore qualified for the ballot, respectively. In 2004, both states cancelled their Republican presidential primaries due to George W. Bush being the only candidate. In that same year, three other states also cancelled their Republican primaries for the same reason; these states did not already have consolidated primaries, so their treatment status did not change. As with front-loading, state-specific variation in consolidation was the result of each state's persistent customs interacting with a common time shock, instead of states experiencing different time shocks.

If lawmakers were introducing or eliminating same-day primaries explicitly to gain a political advantage, this could lead to a bias of my estimates (though the direction of this bias is unclear). However, I find no evidence that law-makers hold any belief that the date of the Presidential Primary election will affect any down-ballot election. Norrander (2009b) provides a thorough account of the contemporary criticism of the 1988 Southern primary, including an increased possibility of a convention stalemate, a shift in focus away from smaller states, and a skepticism over the perceived benefits. No mention is made of any possible effect of the timing of Presidential primaries on down-ballot elections. In contemporaneous news stories of the two most salient examples of front-loading (1988 and 2008), I find no mention of a desire by politicians to gain an electoral advantage, or of critics arguing that moving away from a consolidated primary would hurt or help any particular group of down-ballot candidates.⁴

When states move the dates of Presidential primaries, they usually so for all political parties. Therefore, if politicians believed that they would gain by having their own primaries held with (or without) Presidential primaries, they would likely believe that this same benefit would be realized by their political opponents. In fact, the moves often have bi-partisan support. In most instances where states have moved away from consolidated primaries (such as the 2008 or 1988 front-loading)

⁴Talks with current campaign staff confirms that there is no widespread belief that consolidated primaries have any particular effect on Congressional general election outcomes.

states quickly re-consolidate their primaries, citing the high costs of running an additional primary. If the purpose of moving a presidential primary was to change Congressional election outcomes, surely those same politicians would keep those rules in place if they believe that they had an effect.⁵

By using a difference-in-difference estimation strategy, I fully control for persistent differences across states as well as common time shocks. A hotly contested Presidential primary, such as 2008 or 1988, takes place in a different political environment than primaries in 1984 or 1996. Congressional elections in 1996 can therefore not be a proper comparison to those in 1988, since they occur in different political environments. Similarly, state traditions and political institutions will affect whether they are likely to have consolidated primary elections; these states may, for a variety of reasons unobserved by the researchers, have different political outcomes. Difference-in-difference will allow me to fully control for common time shocks and persistent differences between states.

To test the validity of my estimation strategy, I attempt to predict whether a state holds consolidated primaries using a number of political and economic variables within a diff-in-diff framework. I use the following independent variables: the unemployment rate, the percentage of seats for which an incumbent is running for re-election, and whether the presidential primary features a “favorite son” or “favorite daughter.”⁶ If states are more or less likely to consolidate their primaries in periods of high or low unemployment or following a change in the state-specific political environment (such as how many incumbents are running for re-election, or if a favored son or daughter is running), my estimates of the causal effect of consolidated primaries would be biased if these shocks also affected the political outcomes I measure. The results, reported in Table 2, show that none of these variables pre-

⁵When lawmakers change the consolidation of primaries, they do not change the date of Congressional primaries. I find no correlation between changes in the timing of Presidential primaries and changes in down-ballot primaries.

⁶This is measured as having a candidate from that state participate in the presidential primaries.

dict changes in the consolidation of primaries, giving credence to my identification strategy. The point estimates for each of the variables fail to be statistically or practically significant.

Hypotheses and Results

I estimate the effects of primary election timing on primary election turnout using the following difference-in-difference model:

$$\text{Ln}(\text{Votes})_{dst} = \beta_0 + \beta_1 \text{Consolidated}_{dst} + \iota_{tp} + \gamma_s + \alpha \text{Polarization}_{dst} + \epsilon_{dst} \quad (1)$$

where $\text{Log}(\text{Votes})_{dst}$ is the natural log of the number of votes in a House of Representatives primary election in year t and state s for district d . $\text{Consolidated}_{dst}$ is a binary variable equal to 1 if a primary was held the same day as a presidential primary, and 0 otherwise. γ_s is a full set of state dummy variables and ι_{tp} is a full set of year dummy variables interacted with political party, to capture any time shocks, such as those caused by the turnout effect of heavily contested Presidential primaries. By interacting them with a party dummy, I am allowing year shocks to vary between parties. State dummy variables capture any time-invariant differences between states, caused by history, political customs, or long-standing party strength. $\text{Polarization}_{dst}$ is a district-level measure of polarization in the election year, as measured by the absolute value of the distance between the districts' two-party vote share from an even 50/50 split in the Presidential election, and therefore measures the competitiveness of the district at the Presidential level. In later regressions I will explore the effect of consolidation on general-election competitiveness, so controlling for the level of polarization at the Presidential level controls for district-level changes in the overall competitiveness. Any general changes in district-level

voter preferences, as measured by the Presidential vote share, are fully captured by this variable, meaning that any variation caused by the *Consolidated_{dst}* variable is working *only* on non-Presidential elections.

The sample is all House of Representatives primary elections for the Republican or Democratic party during a Presidential election year from 1976 to 2016⁷ for which the number of votes cast is recorded, including cases where the Presidential primary was uncontested. For some uncontested elections (especially those before 1996) the total number of votes is not available. The results are similar if I exclude all uncontested elections. I only analyze years 1976 onward because many states had no presidential primaries or caucuses before 1976. If I included previous years, variation in the *Consolidated* variable would be coming from the establishment of presidential primaries, and not variation in election timing. If the creation of Presidential primaries or caucuses affected other outcomes, such as rates of voter registration, my results could be driven by factors other than the consolidation of primaries.

Consolidating primaries dramatically decreases the cost of voting in Congressional elections for Presidential primary voters. Many of the opportunity costs of voting (such as registration and locating and travelling to a polling station) have already been paid by voters who intend to vote in Presidential primaries. A large literature (Gomez et al., 2007; Highton and Wolfinger, 1988; Brady and McNulty, 2011) has shown a negative correlation between the cost of voting and voter turnout, and Boatright et al. (2020) found consolidated primary elections featured higher turnout. Though my sample and empirical specification differ from those authors, I expect that my estimates will confirm their findings.

Hypothesis 1: Consolidating primary elections will increase in the number of voters in U.S. House of Representatives primary elections.

⁷Since the primary election calendar was altered dramatically due to COVID-19 towards a heavily mail-in-ballot system, 2020 primary elections could not be included in my sample.

The results of the tests of Hypotheses 1 are presented in Table 3. I present the baseline difference-in-difference regression results alongside two robustness checks. First, I use a set of state-specific linear time trends, and then I use a set of treatment leads, which will control for future changes in the treatment variable. If controlling for future changes in the treatment variable significantly affects my point estimates, it would be suggestive of omitted variable bias, as future changes in treatment cannot cause current changes in my outcome variables.

I show the results for the entire sample and present the estimates separately for primary races with incumbents, challengers, and open-seat races. Column 1 shows the baseline diff-in-diff results for the full sample. The coefficient of 0.377 with a logged outcome variable means that primaries held on the same day as a Presidential primary saw turnouts 45.8% higher than those held on different days. These results are consistent with other literature (Gomez et al., 2007; Highton and Wolfinger, 1988; Brady and McNulty, 2011) that have found a negative relationship between the opportunity cost of voting and turnout, and the findings of Boatright et al. (2020) that turnout is higher in same-day primaries. Including state-specific linear time trends (Columns 2) does not significantly change these results, nor does the inclusion of the set of 2 leads in the treatment variable (Column 3).⁸

The rest of Table 3 shows the results for each type of primary election. The regression results for challenger and incumbent primary elections show that consolidation significantly increases turnout these races. The point estimates show that the effect of consolidation is similar for the two types of contests, and both sets of estimates are robust to alternative specifications.

The regression results for open-seat races differ significantly from other primaries. Like Hirano et al. (2010), I find no significant boost in turnout for this subset of primaries. There are several reasons why open races could be less affected

⁸The differences in the sample between Columns 1 & 2 and Column 3 is because of the leads used in the column 3 regression, requiring me to drop the last 2 elections of my sample.

by consolidated primaries. First, they have high baseline turnout, with 70% more voters than primaries to nominate challengers. Also, I find that open races occur more frequently in moderate districts. In addition to the fact that primary turnout is higher in these districts,⁹ voters in moderate districts may be less affected by the consolidation of primary elections in their turnout decision. I find some evidence of this,¹⁰ as the causal effect of consolidation is higher in strongly partisan districts, defined as districts where one party won the two-party vote by more than 20 percentage points.

Consolidating Congressional primaries with Presidential ones not only affects voter behavior in the primary election itself, but also in the subsequent general election. Given the large turnout effect in challenger and incumbent primaries and null effect in open seat races, I consider the effect of consolidation on general election races when an incumbent is up for re-election. To estimate the spillover effect of the primary election turnout shock to general elections, I use a similar difference-in-difference framework:

$$Y_{dst} = \beta_0 + \beta_1 \text{Consolidated}_{dst} + \iota_t + \gamma_s + \alpha \text{Polarization}_{dst} + \epsilon_{dst} \quad (2)$$

Where Y_{dst} is the general election outcome variable in district d in state s in year t . $\text{Consolidated}_{dst}$ is equal to 1 if the state held consolidated primary elections, and 0 otherwise.¹¹ ι_t and γ_s are year and state fixed effects. $\text{Polarization}_{dst}$ is my level of polarization in district d in the election year. Polarization may affect challenger success, and this addresses concern that polarization is also affecting a state's decision to consolidate its primaries. As before, I estimate my baseline diff-in-diff regression alongside the two robustness checks discussed above.

⁹The coefficient in my regressions on the degree of district partisanship is strongly negative.

¹⁰Results not shown, but available upon request.

¹¹In a few instances, one party held a consolidated primary and the other party did not. In these instances, the *Consolidated* variable is equal to 1 if the challenger's party had a consolidated primary.

The regression results are shown in Table 4. Columns 1-3 show the results using incumbent vote share as the dependent variable, and consistently show negative, statistically significant results. Consolidated primaries reduce an incumbent candidate's vote share by about 2.7-3.6 percentage points, against a baseline of about 69 points. Columns 4-6 provide a similar set of results, showing that consolidated primaries reduce the margin of victory in elections involving an incumbent by 5.1-6.9 percentage points, against a mean of 40. Consolidated primaries result in more competitive general elections involving incumbents, and incumbents see significant decreases to their vote shares.

Given the high average margins of victory and incumbent vote shares, increases in the competitiveness of elections may not change election outcomes. Therefore, I test for the effect of consolidation on the likelihood of a challenger victory (Columns 7-9). Consolidated primaries double the probability of a challenger victory. Regardless of the specification, I find that challengers selected in a consolidated primary election experience an increase in the likelihood of that challenger unseating an incumbent. The point estimates range from 3.85 to 4.52 percentage points, against a baseline likelihood of about 4 percent. All results are robust to alternative specifications, with very little change in the coefficients or statistical significance.

What is driving these general-election effects? Given that both incumbent and challenger races experience similar turnout boosts, there is little reason to suspect that simple voter habituation would lead primary voters systematically shift the vote share towards one candidate or another. Instead, I consider how consolidated primaries affect the characteristics of primary election winners.

As seen in the sample of 2012 primary election voters, voters who are most likely to have their turnout affected by consolidated primaries (voters who participated *only* in Presidential primaries) are ideologically different than those already participating in Congressional primaries. There may be other unobserved differences in the voters that are drawn into U.S. House elections through consolidated pri-

maries. For example, people who were already voting in Congressional primaries may be especially high- or low-information voters, meaning that consolidated elections may affect the average level of voter knowledge. Alternatively, voters most affected by a decrease in the cost of voting may be voters with different methods of assessing candidate quality. Given this uncertainty, I initially remain agnostic about the changes in election outcomes that could occur due to consolidation, and simply hypothesize that consolidation will have an effect on nominee characteristics.

Hypothesis 2: The influx of voters in consolidated primaries will cause an observable change in the characteristics of primary election winners.

These new voters may value other candidate characteristics, such as experience or fundraising ability, as these are tied to increased success in general elections (Lazarus, 2008; Bonica, 2017). Alternatively, since the ideology of the pool of voters has likely changed, there may in turn be changes in the ideology of primary election winners. Given the different measures of candidate characteristics available for the pool of challengers and incumbents, I estimate the effects of each group separately.

Table 5 shows the effect of consolidation on the characteristics of challengers to incumbents, focusing on candidate quality or ideology. To measure challenger quality, I use two measures that are commonly used in the literature: candidate spending and whether or not a candidate previously held a political office. To measure the ideology of candidates, I focus on the ideological proximity of challengers to incumbents, using the candidates' CF scores, as developed by Bonica (2016). I estimate whether consolidation leads to challengers who are more (or less) similar to the incumbents they are trying to unseat by estimating the effect of consolidation on their relative CFscores.¹²

¹²One concern of using CF scores to measure candidate ideology is that consolidated primaries could change the behavior of donors, or lead candidates to seek out different donors. In this case, the causal effect would not be because different kinds of candidates are being selected, but because of changes in who was donating to candidates. However, the correlation between CF scores and

The regression results show that consolidated primaries change challenger ideology, but not other observable characteristics. The top of Table 5 shows the null results. Challengers selected in consolidated primaries are no more likely to have held previous office or to be better fundraisers than those chosen in stand-alone primaries.

The bottom of Table 5 measures relative challenger ideology in two separate ways. First, I take the difference between the CFscore of the challenger and incumbent (Column 4). Consolidated primaries lead to a challenger whose CFscore is 0.10 closer to the incumbent. The average distance in my sample is 1.64. This means that consolidation decreases the ideological distance between challenger and incumbent by about 6.1%. I also measure the ideological proximity of challengers and incumbents differently by reducing it into a binary variable, equal to 1 if the challenger and incumbent are ideologically “close” and 0 otherwise. “Close” is defined as having CF scores that are within 2 points of each other. I am doing this to 1) reduce my measure of ideological distance into a more concrete notion of relative measures and 2) separate ideological outliers (challengers who are very far from incumbents) from the rest of the distribution. The coefficient shows that challengers chosen during consolidated primaries are far less likely to have CFscores that are far from incumbents. When primaries are consolidated, the challenger is 7.5-10.6 percentage points more likely to have a CFscore within 2 points of the incumbent. In my sample, about 25% percent of challengers were more than 2 points away, so this represents a significant relative decrease.

Table 6 shows that the effect of consolidated primaries when an incumbent is running. The top two sets of regressions show that consolidated primaries do not change the identity of a party’s nominee when primaries are consolidated, and the bottom two sets show that the behavior of the incumbent is not affected by

DW-Nominate scores for Presidential-year Congressional candidates is high (0.92), though the within-party correlation is lower (0.69 for Republicans, 0.51 for Democrats). CFscores are likely accurate reflections of the preferred policy positions of the candidates themselves.

consolidation. Consolidation does not affect whether an incumbent chooses to run for re-election, nor whether they lose their primary election. This means that consolidated primaries do not affect the identity of the incumbent party's nominee since it doesn't change the likelihood that the incumbent themselves is the nominee. The bottom 2 sets of regressions show that consolidation does not change either the spending patterns of incumbents, nor their CFScores.

I then use an instrumental variable regression to test whether the nomination of challengers more ideologically similar to incumbents is *causing* the increase in challenger success. I do this by using consolidation in a first stage regression to obtain exogenous variation in challenger ideology. I measure candidate ideology as whether or not the challenger is ideologically close to the incumbent (Table 5). I chose this because of the strong predictive power of consolidation on this variable, which improves the likelihood that the instrument is sufficiently strong. The empirical results up to this point also help motivate the IV framework, as regressions reported in Table 5 are the same as those in the first stage of the two-stage least squares framework, while the those in Table 4 (Columns 7-9) are the reduced-form regressions.

Given the identifying assumptions of instrumental variable regressions, claims of causal effect must clear another hurdle compared to the difference-in-difference regressions. For estimates from my IV regression to be unbiased, consolidated elections can only affect challenger success in general elections through its effect on their ideological positioning. The null findings in Tables 5 and 6 show that consolidated primaries do not affect other observable characteristics of challengers or incumbents, which supports the identifying assumption of the IV regression.

Table 7 shows the IV regression results. The Cragg-Donald Wald statistic is also reported to evaluate the strength of my instrument. Given that the point estimates and instrument strength are affected by the selected set of controls used, I present the results from several specifications. The results support the hypothesis that can-

didate ideology is causing challengers to have greater general-election success. The Cragg-Donald Wald statistic decreases as more controls are added. With a full set of state and year fixed effects I cannot rule out null that the instrument is weak, which I determined using the calculated critical value of 16.38, using the procedure developed by Stock and Yogo (2005). I find that nominating a challenger who is ideologically “close” to an incumbent increases the likelihood that a challenger wins the general election by 18.9 to 45.8 percentage points. Given the weak-instrument concerns in Columns 2-4, the lower end of this range is more reliable (and plausible). But even lower-bound estimates suggest that when primary voters select a challenger that is ideologically distant from the incumbent they are facing, their party suffers significantly.

The causal link of the effect of ideology on challenger success relies on the IV framework satisfying the exclusion restriction, meaning that consolidated primaries can only affect challenger success through ideology. Compared to papers that more cleanly isolate variation in candidate ideology (Hall, 2015; Hall and Thompson, 2018), the setting studied here leaves room for other mechanisms to plausibly affect election outcomes. The IV regressions should therefore be taken as suggestive evidence.

Conclusion

Challengers to incumbents will probably lose their elections. They face uphill battles against candidates who are well-funded, well-known, and (usually) well-liked within their own district. This paper shows how a seemingly trivial attribute of a challenger’s political environment, whether their primary was consolidated with a Presidential primary, significantly changes election outcomes. When down-ballot primaries are held at the same time a Presidential primaries, primary turnout spikes, and challengers are twice as likely to unseat an incumbent in the subsequent general

election.

The reasons for this increase in success advance our understanding of how primary electorates, and candidate ideology, translate to general-election outcomes. Consolidated primaries lead to the selection of challengers who more ideologically similar to the incumbents that they are facing. That this improves their general election odds is not an obvious outcome. While challengers who are ideologically closer to incumbents may be better positioned to compete over the population of voters in between the two candidates, they also find themselves further away ideologically from other voters.

The magnitude of the turnout effects in this setting dwarf those of other forces studied in the literature, such as open primaries, voter ID laws, or voting by mail (VBM). However, consolidation has received significantly less attention. This could be due to the lack of perceived partisanship regarding consolidated primaries. Unlike VBM¹³ or voter ID laws,¹⁴ consolidation is not associated with Republican or Democratic advantage, and therefore less likely to receive news coverage.

Ironically, the low baseline probability of challenger success likely helped the effect of consolidated primaries to go unnoticed for so long. Because challengers so rarely win elections, a doubling of challenger wins only increases chances of winning by 4-5%. In the average state, this equates to an extra challenger win every 2 to 2.5 election cycles. And since relatively few states change their consolidation status each year, there is no dramatic, nationwide shift in incumbent re-election rates that are attributable to consolidation. Otherwise, it's infeasible to imagine that a characteristic of Congressional elections could have such a large marginal effect on outcomes without being noticed before.

The fact that challengers are more likely to win suggests that consolidated primaries lead to a welfare improvement for the electorate. Consolidation does not

¹³<https://www.theguardian.com/us-news/2020/apr/08/trump-mail-in-voting-2020-election>

¹⁴<https://www.brennancenter.org/our-work/research-reports/restrictive-voting-laws-are-highly-partisan>

change the likelihood that incumbents appear on the general-election ballot, so the fact that challengers are more likely to win means that consolidation is replacing some challengers who voters do not prefer to the incumbent to one that they do. A simple argument of revealed preferences suggests that consolidated primaries improve the options available to general-election voters. This paper suggests that smaller, less-representative primary electorates lead to a set of choices that are not those that would be most preferred by general-election voters.

In addition to a potential welfare improvement, consolidated primaries would appear to have additional practical benefits. One estimate places the annual administration costs of elections at \$40 million for the average state (National Academies of Sciences and Medicine, 2019, p. 153), so eliminating a redundant day of voting could lead to meaningful cost savings. Finally, consolidated primaries would seem to serve the seemingly conflicting goals of increasing both voter enfranchisement and vote integrity. I have shown that consolidated elections increase turnout, but since fewer actual ballots are being cast, states will be able to confirm the authenticity of ballots at a lower cost (or confirm more ballots at the same cost).

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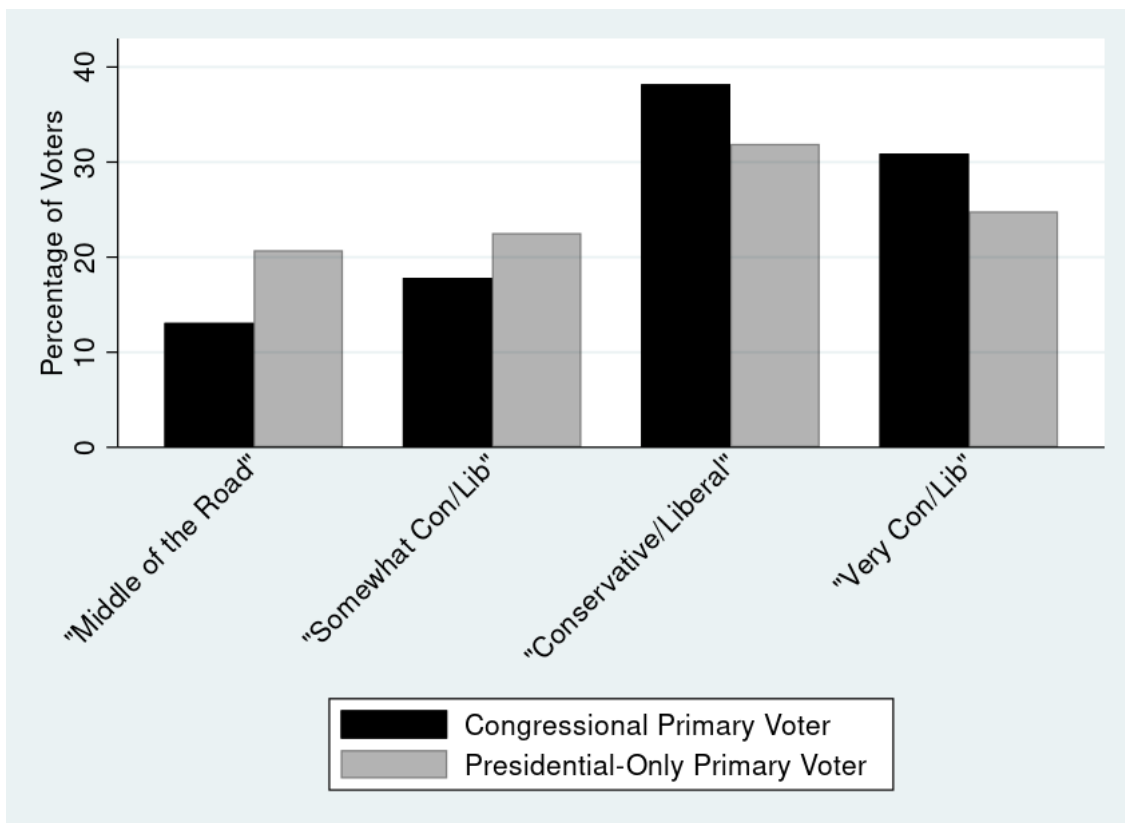
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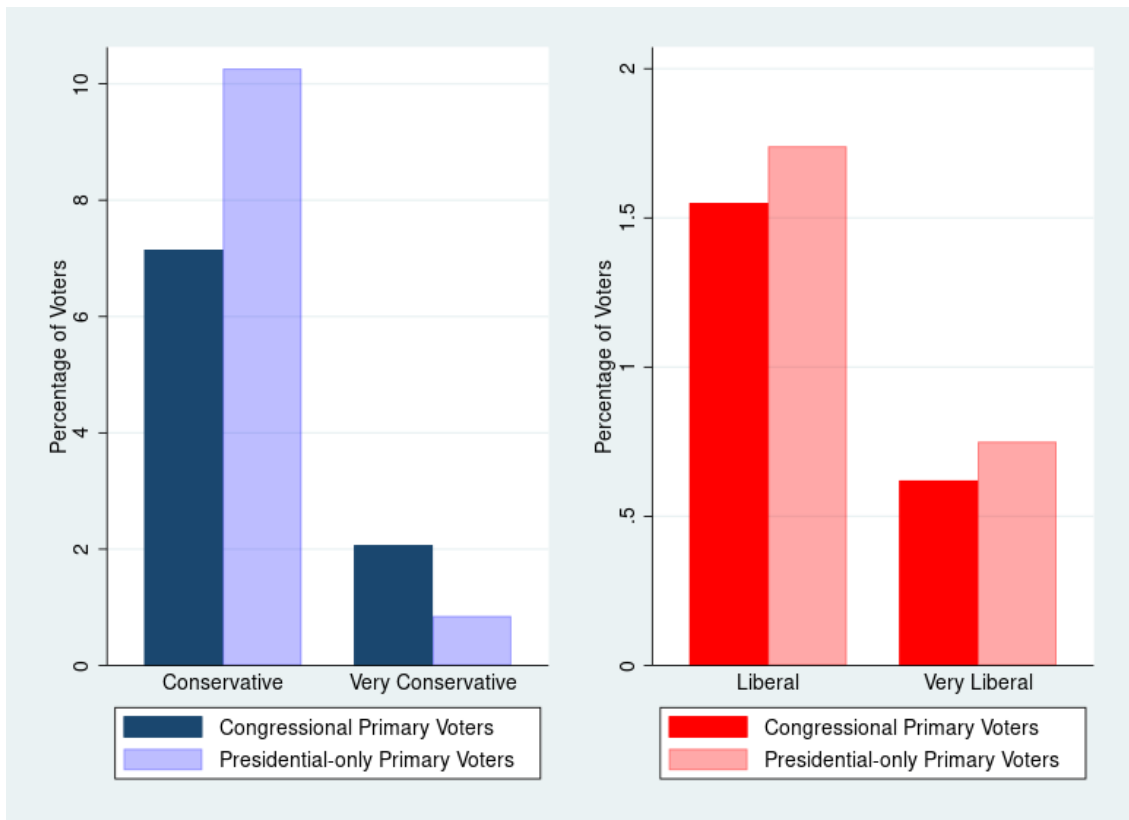
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Figure 1: Ideologies of Primary Electorates



Notes: The graph shows the distribution of voters by self-professed political ideology, using survey response data from the 2010-2012 Cooperative Congressional Election Study. The black bar shows the distribution for all voters in primary elections for the U.S. House of Representatives. The grey bar is for all voters who participated in Presidential primaries, but did not vote in House primary elections.

Figure 2: Aisle-Crossing Voters



Notes: The graph shows the share of Democrat-voting conservatives and Republican-voting liberals. The sample is anyone who participated in a party's Congressional primary and anyone who participated only in that same party's Presidential primary election. Voters' self-professed political ideology is from the 2010-2012 Cooperative Congressional Election Study.

Table 1: Changes in consolidation status

1980	• <i>AL</i> , ID , MS , NC
1984	• <i>AR</i> , <i>KY</i> , MS , <i>MT</i> , ND , TX
1988	• AR , MS , <i>MT</i> , <i>NC</i> , <i>TX</i>
1992	• AL , KY , NC
1996	• <i>ND</i> , <i>OR</i>
2000	• OR , <i>SD</i>
2004	• <i>MS</i> , <i>NM</i> , <i>NC</i> , SD
2008	• <i>AL</i> , <i>AR</i> , <i>CA</i> , NC , MS <i>NJ</i> , SD
2012	• AL , AR , <i>ID</i> , NJ , NM , UT
2016	• <i>UT</i>

Notes: Table shows the states that changed their primary-election consolidation status for at least one of the two major political parties between the given year and the previous Presidential election year. States in bold text are states that changed their status by introducing consolidated primaries. States in italics broke up previously consolidated primaries. When a state is italicized and in bold (1984 MS, 2004 SD) this means that one party introduced consolidated primaries while the other party broke up previously-consolidated primaries.

Table 2: Determinants of Primary Election Timing

VARIABLES	(1)	(2)	(3)
Unemployment Rate	-0.000690 (0.00928)	-	-
% Incumbents	-	-0.00530 (0.0483)	-
Favorite Son	-	-	-0.0114 (0.0270)
Observations	550	550	550
R-squared	0.799	0.799	0.800

Notes: Coefficients are from a difference-in-difference regression, using a full set of state and year dummy variables. The outcome variable is a binary variable equal to 1 if a state held a consolidated primary election for either party. The independent variables are, for each column, (1) The state's average unemployment rate over each year; (2) The percentage of U.S. House seat elections featuring an incumbent, and (3) Whether the Presidential primary featured a candidate from that state. Robust standard errors, clustered at the state/year level, in parentheses. *** p<0.001. ** p<0.05. * p<0.1.

Table 3: Primary Election Turnout

Dependent Variable: Log of Primary Election Total Votes						
SAMPLE:	All Elections			Incumbent Elections		
	(1)	(2)	(3)	(4)	(5)	(6)
Consolidated(=1)	0.377*** (0.090)	0.354*** (0.109)	0.313*** (0.068)	0.415*** (0.116)	0.466*** (0.140)	0.343*** (0.078)
Observations	5,316	5,316	4,241	2,308	2,308	1,759
R-squared	0.264	0.284	0.271	0.428	0.477	0.429
SAMPLE:	Challenger Elections			Open Seat Elections		
	(1)	(2)	(3)	(4)	(5)	(6)
Consolidated(=1)	0.403*** (0.082)	0.317*** (0.125)	0.289*** (0.0547)	0.028 (0.12)	-0.0837 (0.141)	0.0255 (0.112)
Observations	2,279	2,279	1,858	729	729	588
R-squared	0.435	0.477	0.426	0.326	0.370	0.345
Linear Time Trends	N	Y	N	N	Y	N
2 Treatment Leads	N	N	Y	N	N	Y

Notes: Coefficients are from a difference-in-difference regression, using a full set of state dummy variables and year dummies (which are interacted with a party dummy variable). Two robustness check are also shown: the inclusion of state-specific linear time trends and the use of 2 leads in the treatment variable. The sample is all primaries for the Democratic or Republican party from Presidential election years from 1976-2016. Louisiana is dropped, given the lack of party primaries in that state. Any year in which a state held an open primary (such as California after 2011) is also dropped. Any uncontested election where the number of voters is not reported is dropped. Robust standard errors, clustered at the state/year level, in parentheses. *** $p < 0.001$. ** $p < 0.05$. * $p < 0.1$.

Table 4: Challenger Success

Dependent Variable:	Incumbent Vote Share			Margin of Victory			Challenger Victory		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Consolidated (=1)	-3.65*** (1.24)	-2.74** (1.32)	-3.57*** (1.33)	-6.90*** (2.34)	-5.12** (2.47)	-6.57*** (2.48)	0.0415*** (0.0125)	0.0452*** (0.0163)	0.0423*** (0.0137)
Mean (D.V.)	69.93	69.93	69.16	39.88	39.88	40.28	0.0387	0.0387	0.0387
Observations	3,954	3,954	3,358	3,954	3,954	3,358	3,954	3,954	3,358
R-squared	0.566	0.300	0.266	0.294	0.307	0.272	0.028	0.042	0.029
Linear Time Trends	N	Y	N	N	Y	N	N	Y	N
2 Treatment Leads	N	N	Y	N	N	Y	N	N	Y

Notes: Coefficients are from a difference-in-difference regression, using a full set of state and year dummy variables. Two robustness checks are also shown: the inclusion of state-specific linear time trends and the use of 2 leads in the treatment variable. The sample is all general election U.S. House of Representative candidates for the Democratic or Republican party from Presidential election years from 1976-2016 involving an incumbent. The consolidated variable is equal to 1 if the challenger's party used a consolidated primary, and 0 otherwise. Louisiana is dropped, given the lack of party primaries in that state. Any year in which a state held an open primary (such as California after 2011) is also dropped. Robust standard errors, clustered at the state/year level, in parentheses. *** p<0.001. ** p<0.05 * p<0.1.

Table 5: Challenger Characteristics

Dependent Variable:	Previous Office			Ln(Expenditures)		
	(1)	(2)	(3)	(4)	(5)	(6)
Consolidated(=1)	-0.0017 (0.034)	-0.0058 (0.031)	-0.012 (0.034)	-0.201 (0.168)	-0.161 (0.183)	-0.151 (0.172)
Observations	3,954	3,954	3,358	2,305	2,305	1,909
R-squared	0.090	0.107	0.092	0.168	0.190	0.147
Dependent Variable:	Ideological Distance			Ideologically Close (=1)		
	(1)	(2)	(3)	(4)	(5)	(6)
Consolidated(=1)	-0.100** (0.0481)	-0.109** (0.054)	-0.0997*** (0.0482)	0.093*** (0.032)	0.106*** (0.031)	0.075** (0.035)
Observations	2,357	2,357	2,086	2,357	2,357	1,954
R-squared	0.422	0.444	0.361	0.371	0.409	0.294
Linear Time Trends	N	Y	N	N	Y	N
2 Treatment Leads	N	N	Y	N	N	Y

Notes: Coefficients are from a difference-in-difference regression, using a full set of state and year dummy variables. Two robustness check are also shown: the inclusion of state-specific linear time trends and the use of 2 leads in the treatment variable. The sample is all general election U.S. House of Representative candidates for the Democratic or Republican party from Presidential election years where an incumbent was up for re-election. The consolidated variable is equal to 1 if the challenger's party used a consolidated primary, and 0 otherwise. Louisiana is dropped, given the lack of party primaries in that state. Any year in which a state held an open primary (such as California after 2011) is also dropped. Robust standard errors, clustered at the state/year level, in parentheses. *** $p < 0.001$. ** $p < 0.05$ * $p < 0.1$.

Table 6: Incumbent Characteristics

Dependent Variable:	Runs for Re-election			Loses Primary		
	(1)	(2)	(3)	(4)	(5)	(6)
Consolidated (=1)	0.0402 (0.035)	0.0492 (0.039)	0.0426 (0.037)	0.0016 (0.0016)	0.0003 (0.0016)	-0.00034 (0.0016)
Observations	4,514	4,514	3,892	3,954	3,954	3,358
R-squared	0.035	0.046	0.038	0.52	0.58	0.50
Dependent Variable:	Ln(Expenditures)			CFScore		
	(1)	(2)	(3)	(4)	(5)	(6)
Consolidated (=1)	0.0356 (0.113)	0.0387 (0.103)	0.0063 (0.121)	0.00032 (0.00096)	0.00027 (0.0012)	-0.00012 (0.00098)
Observations	2,702	2,702	2,218	2,688	2,688	2,205
R-squared	0.87	0.89	0.87	0.996	0.996	0.995
Linear Time Trends	N	Y	N	N	Y	N
2 Treatment Leads	N	N	Y	N	N	Y

Notes: Coefficients are from a difference-in-difference regression, using a full set of state and year dummy variables. Two robustness check are also shown: the inclusion of state-specific linear time trends and the use of 2 leads in the treatment variable. The sample for the regressions where “runs for re-election” is the dependent variable is all U.S. House of Representative districts for which I have data. The sample for the regressions where “loses primary” is the dependent variable is all districts for which an incumbent ran for re-election. The sample for all other regressions is all general election incumbent candidates who are members of the Democratic or Republican party. The consolidated variable is equal to 1 if the challenger’s party used a consolidated primary, and 0 otherwise. Louisiana is dropped, given the lack of party primaries in that state. Any year in which a state held an open primary (such as California after 2011) is also dropped. Robust standard errors, clustered at the state/year level, in parentheses. *** p<0.001. ** p<0.05 * p<0.1.

Table 7: Instrumental Variable Regressions
 Dependent Variable: Challenger Win (=1)

VARIABLES	(1)	(2)	(3)	(4)
Ideologically Close (=1)	0.189* (0.110)	0.458** (0.222)	0.414* (0.235)	0.427 (0.292)
Cragg-Donald Wald	21.82	5.26	5.63	3.971
State F.E.	Y	Y	Y	Y
Year F.E.	N	Y	Y	Y
Linear Trends	N	N	Y	N
2 Treatment Leads	N	N	N	Y
Mean (D.V.)	0.0498	0.0498	0.0498	0.502
Observations	2,357	2,357	2,357	1,954

Notes: Coefficients are from an instrumental-variable regression, using the consolidation of an election primary as an instrument for whether the two candidates are ideologically close. The sample is all general election U.S. House of Representative candidates for the Democratic or Republican party from Presidential election years from 1980-2016 where an incumbent was up for re-election. The consolidated variable is equal to 1 if the challenger's used a consolidated primary, and 0 otherwise. Louisiana is dropped, given the lack of party primaries in that state. Louisiana is dropped, given the lack of party primaries in that state. Any year in which a state held an open primary (such as California after 2011) is also dropped. Robust standard errors, clustered at the state/year level, in parentheses. *** p<0.001. ** p<0.05 * p<0.1.