

The Increasing Value of Inexperience in Congressional Primaries

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Abstract

The dynamics of congressional primaries have changed dramatically in recent years. Recent examples, such as Majority Leader Eric Cantor losing to a political novice in the Republican primary in 2014 and Alexandria Ocasio-Cortez's defeat of Democratic Caucus Chair Joe Crowley in 2018, demonstrate that traditional theories of candidate success may not translate to today's primary electoral landscape. Utilizing new data on candidate experience in congressional primary elections we analyze what types of candidates are successful, how these trends have changed over time, and variation by party. As expected, we find evidence, especially in recent primaries, that candidates with prior experience in elective office may not be besting those without prior experience in the systematic way they once did. We find the driving force behind the success of inexperienced candidates to be the growth in outside money in primary elections. Our primary findings aid our understanding of electoral competition and the candidate choices voters are given in the general election. Perhaps most importantly, the results showcase the electoral consequences of early PAC donations and the types of candidates PAC money supports in congressional primaries.

Introduction

In 2014 Majority Leader Eric Cantor lost his Republican primary to David Brat, an economics professor at Randolph-Macon College. On the coattails of primary victory, Brat went on to win the general election despite having never held elective office before.¹ Brat's triumph was newsworthy because he defeated a sitting House Majority Leader, and his victory led members of Congress to ask themselves, "Could this happen to me?" Although Brat's victory was surprising, his entry into congressional elections was not unusual; House members increasingly face inexperienced challengers in their bids for reelection.² In fact, since 2012, more inexperienced candidates have beat out an incumbent in the primary than have experienced or "quality" candidates—defined as candidates who have previously held elective office.³ This trend is not abating. In 2018, Representative Robert Pittenger (R-NC) became the first House incumbent to be defeated during the 2018 election cycle by losing the Republican primary to Mark Harris, a former Southern Baptist preacher with no prior political experience. This Republican incumbent loss was followed by one on the Democratic side, when inexperienced candidate Alexandria Ocasio-Cortez grabbed headlines with her primary defeat of Democratic Caucus Chair Joe Crowley (D-NY).⁴

Instances of inexperienced candidates toppling incumbents may be indicative of a rise in the electoral value of inexperience, but such occurrences are still relatively few and far between. Despite these high profile losses, incumbents still enjoy most of the success we

¹Brat lost his own bid for reelection in 2018 to Abigail Spanberger, a Democratic candidate without prior experience in elective office.

²The term "inexperienced" here is being used to mean someone who has not previously held elective, political office. We are choosing to use this language as opposed to the more standard "quality" language (Jacobson, 1989) because later in the paper we break down experience by type of occupation.

³From 2012-2016, 11 inexperienced candidates defeated an incumbent in a primary as compared to eight experienced candidates.

⁴Both Harris and Ocasio-Cortez went on to win the general election.

see in congressional elections. For decades, incumbents have held a greater than 90 percent reelection rate, including a 97 percent reelection rate in 2016. Even in 2018, an election year where majority control of the House flipped, the reelection rate for incumbents who ran was 93 percent.

Given the pervasive success of incumbents in the general election, we turn our attention to primaries without an incumbent. Evidence from open seat primaries and out-party primaries, where there is no incumbent to compete against, demonstrate a more systematic increase in the number of inexperienced candidates defeating experienced candidates. In 2016, inexperienced candidates won 45% of non-incumbent primaries, besting at least one experienced candidate in each of these races. Examining only Republican primaries, inexperienced candidates won nearly 60% of non-incumbent primaries. It appears that in congressional primaries today, political experience is no longer seen as an asset and may even be viewed as a liability. The mantra of “Washington needs an outsider” has spread across the country and even found traction at the presidential level with the election of President Donald Trump in 2016. Even an incumbent like Pittenger, who was only in his 3rd term in the House, was portrayed by Harris as a creature of the Washington “swamp,” despite Pittenger’s membership in the House Freedom Caucus, which is often best known for its ability to thwart the efforts of the Republican establishment in the House. Election outcomes provide considerable evidence that the electorate is increasingly willing to support inexperienced candidates for Congress. Uncovering the dynamics of why political novices are winning with increasing regularity in primaries is what motivates this paper.

This manuscript utilizes newly compiled, comprehensive data to analyze candidate

success in primary elections from 1980-2016. With comprehensive data on the political and professional experience for nearly every primary candidate dating back to 1980,⁵ we track success trends over time to systematically assess candidate performance in primary elections. With our newly collected primary data we are able to show that inexperienced candidates are faring better than ever before, and that the success of inexperienced candidates is especially remarkable in Republican primaries. We then seek to determine the reasons for this shift, assessing changes in district context (e.g. are more candidates running, are inexperienced candidates performing better in safe districts) and also the characteristics of the candidates and their campaigns (e.g. gender, campaign fundraising, whether a candidate previously ran).

Our data allow us to shed new light on classic questions of success in elections, but more explicitly at the primary level. Understanding when experienced and inexperienced candidates are successful has important consequences for electoral competition, representation in American politics, and congressional behavior. If incumbents increasingly fear intra-party competition, worried they will become the next Eric Cantor, there are likely downstream consequences for the type of representation they afford their constituents. Members fearing primary competition may be more likely to cater their representation to those voters most beneficial to warding off a primary challenge and thus keeping them in office. Further, if inexperienced challengers are beating those candidates with prior elected experience with increased frequency, this may help explain changing patterns in candidate emergence (Thomsen, 2014).

⁵The data collection will be discussed further below, but using local newspapers, campaign websites, and archive records, we successfully determined the occupations of 24,306 primary candidates. This makes up over 90 percent of the candidates that ran between 1980 and 2016.

This paper proceeds as follows. We first review the literature on the electoral success of congressional candidates. Next we discuss the literature on primary elections and how our data shed light on the changing dynamics of primary competition, demonstrating that in recent elections inexperienced primary candidates, particularly Republican inexperienced candidates, are frequently outperforming candidates with previous experience in political office. We then test whether the recent success of inexperienced candidates is the result of electoral and district level characteristics or individual candidates and their campaigns. We find that the success of inexperienced candidates is driven not by changes in race dynamics, but rather by individual campaign characteristics, namely the onslaught of early PAC money. We conclude by discussing how this shift in primary success should change not just how we analyze elections, but also the consequences of inexperienced members on Congress's institutional capacity.

The Electoral Success of Congressional Candidates

The path to power for inexperienced candidates in primaries was paved by the Progressive movement, which ended the ability of party machines to determine nominations. Before the advent of the direct primary, parties were often able to recruit experienced candidates by offering them insurance in the form of patronage positions or other forms of employment if they lost (Carson et al., 2007). Through funding and campaign support, party machines lessened the burden for a challenger to run for office and produced fairly fierce electoral competition for the U.S. Congress. Advocates of the direct primary as a nomination mechanism often argued that primaries would spur greater competition within the party by encouraging (allowing) an increased number of candidates to run for office. This

competition would enable voters to hold their political leaders more accountable. However, one of the results of primary reform was the dismantling of party machines, which took away much of the financial support and the job insurance in the event of a loss that persuaded potential candidates to run. This lack of support led to a decline in experienced candidates challenging incumbents, contributing to the high reelection rates we still see in elections today (Carson and Roberts, 2013).

What then predicts success in modern elections? Clearly the number one predictor of candidate success is incumbency. In the last two decades, the incumbent reelection success rate exceeded 90% in all but the year 2010, when the reelection rate was 85%. Recognizing this, a voluminous literature has developed to measure and understand the incumbency advantage (Erikson, 1971; Mayhew, 1974; Ansolabehere et al., 2000; Cox and Katz, 1996; Carson et al., 2007). Given the power of incumbency, a more interesting question is what influences the likelihood of a candidate winning when there is no incumbent? Open seats and out-party primaries—those primaries where the incumbent is from the other party—require that someone other than the incumbent wins, and given the absence of an incumbent they are often the most contested and have a deeper field of candidates. Per the emergence literature, a greater number of experienced candidates run in open seats because these contests are strategically advantageous (Jacobson and Kernell, 1983; Robeck, 1982; Kazee, 1994; Maisel et al., 1994; Maisel and Stone, 1997; Carson et al., 2011). Therefore, in our analyses, we exclusively examine conditions for candidate success in non-incumbent races. Non-incumbent races allow us to more directly test our question of interest—what accounts for the recent success of inexperienced candidates in congressional primaries—without the overwhelming influence of incumbency.

Beyond incumbency, and all of the benefits it accrues, other factors found to contribute to a greater chance of electoral victory include name recognition (Grimmer, 2013), fundraising (Abramowitz, 1991; Box-Steffensmeier, 1996), national and partisan tides (Jacobson, 1989), and candidate positioning (Ansolabehere et al., 2001; Carson and Williamson, 2018). Of course, incumbents also possess many of these advantages (i.e. name recognition and large war chests chief among them), but challengers' prospects of victory are also influenced by these factors. Additionally, challengers, especially experienced (i.e. "quality challengers") tend to emerge when the prospects of victory in a race are favorable (Jacobson, 1989). Lazarus (2008) finds that this self-selection into winnable races is one of the main reasons experienced candidates outperform inexperienced candidates in congressional elections. This is also the reason women are oftentimes viewed as so successful when they run—they only run when the conditions for success are the most favorable (Gertzog, 2002; Palmer and Simon, 2001).

District conditions have also been suggested as a potential explanation for trends in primary electoral success. A growing literature examines how the nomination procedures, or how "open" a primary is to cross-party participation, influences the ideological composition of the primary electorate and, in turn, what types of candidates are successful. Gerber and Morton (1998) find that members of Congress elected from states with closed primary systems take policy positions further from their district's median voter, indicating that moderate candidates are more successful in states with more open nominating procedures.⁶ Conditions are also more favorable following a redistricting cycle when a

⁶McGhee et al. (2013) conversely find that the openness of primary elections has little effect on the extremism of politicians produced. Hill (2015) does not find that voters in closed primaries are more extreme, but rather that voters in congressional primaries on whole are more extreme than average voters.

constituency may be new to an incumbent (Hetherington et al., 2003; Schantz, 1980). Whether a seat is competitive for both parties or drawn to advantage one may also impact success trends. Schantz (1980) finds that candidates see the most success in primaries where the party's prospects are good—particularly in safe seats.

Much of the aforementioned work emphasizes that candidates with experience in prior political office will be more successful than inexperienced candidates because they, similarly to incumbents, have name recognition, fundraising experience, and are strategic about throwing their name in the hat. On the other hand, research finds that for those candidates *without* previous electoral experience, the emergence calculus is slightly different. Banks and Kiewiet (1989) suggest that these candidates maximize their chances of winning by challenging incumbents because it is easier for them to win one very difficult race against an incumbent than to defeat several strong challengers in the primary and another (likely experienced) candidate in the general when the seat is open. Canon (1993) puts forward a slight twist on inexperienced candidate emergence by first separating these candidates into two categories: experience-seeking amateurs who do not necessarily expect to win and ambitious amateurs who are seriously seeking office. Interestingly, he finds that ambitious amateurs emerge similarly to their more experienced counterparts. That is, they also respond to favorable national and district conditions in making their decision to run, whereas experience-seeking amateurs do not. Roberds and Roberts (2002) build on this work and show that “competitive amateurs” (i.e. those who held non-elective office or are lawyers) behave in ways that are comparable to experienced candidates in terms of their entry decisions. They go on to suggest that these types of amateurs might be more successful than other amateurs due to their prior occupation or, at least, their victory

in the primary, which gives them all of the same natural advantages of an experienced candidate in the general election.

Testing Primary Success

In order to test whether today’s political environment influences success in congressional primaries differently than in the past, we create a comprehensive data set of all primary challengers from 1980-2016.⁷ To our knowledge, this is the first data set on primary congressional elections that comprehensively codes whether or not the challenger had prior experience in elective office. Beyond the simple dichotomous measure, we also coded for the type of political or professional experience that may have qualified a challenger to run for office. If the value of inexperience in elections is indeed increasing, understanding whether an experienced candidate was a city councilman or a state senator, or if an inexperienced candidate was a practicing lawyer or an ex-Marine could provide greater leverage in explaining candidate success.⁸

The coding of challengers’ occupations was a feat in itself, as many primary challengers do not have previous electoral experience or other noteworthy experience beyond their challenger status, making them difficult to find.⁹ The original list of primary candidates

⁷No write-in candidates were included in the data.

⁸We intentionally move away from the dichotomous “quality” measure, as our data allow us to dig deeper than a simple dichotomous measure and explore types of occupational experience that might also influence success.

⁹We assigned each candidate a code corresponding to her professional or political occupation. Each candidate was only assigned one code, indicating her highest level of political experience or her most relevant qualification for holding office. For candidates who held multiple elected positions, we assigned the code corresponding to their highest level of political office. For candidates without prior experience in elective office, more discretion was necessary. In most cases, the occupation coded was the one that accompanied the candidate’s name. For example, a newspaper might write, “John Smith, a lawyer from Smalltown, is running for office.” If there were multiple occupations attributed to a candidate, coders first looked for the occupation most closely associated with a job in politics/government. These were often non-elected positions such as an advisor or an appointed position. If there was no occupation seemingly directly relevant to politics, the coders looked for the occupation with the highest level of

was taken from the Federal Elections Commission and the American Votes book series. Information about candidate experience was hand-coded from newspaper articles, campaign websites, and archive records; these data were particularly difficult to find for the 1980s and early 1990s. For these earlier decades we utilized digital newspaper archives available at Newspapers.com to code the experience and occupation variables. We employed two source verification to ensure correct reporting for the experience variable. For those candidates we could not find, a similar search was conducted through Google News followed by a simple Google search.¹⁰ In our data collection we successfully located the experience and occupation variables for 24,306 candidates in congressional primaries, which equates to 90% of all candidates who ran between 1980 and 2016 including incumbents. We coded 4,058 challengers as possessing prior experience in elective office and successfully determined the seat of previously held office for 99% of those candidates.

Success of Experienced Candidates

Using our occupational data on nearly all primary candidates dating back to 1980, we examine all contested, non-incumbent primaries where at least one experienced candidate ran, giving voters the choice between at least one candidate with political experience and one without. From these data, we are able to determine the percent of primaries won by experienced and inexperienced candidates over time. From 1980-2012, 75% of primaries without an incumbent were won by a candidate who had previously held elective office. Democrats with prior experience won 78% of non-incumbent primaries during this time period and experienced Republicans won 74% of non-incumbent primaries. These

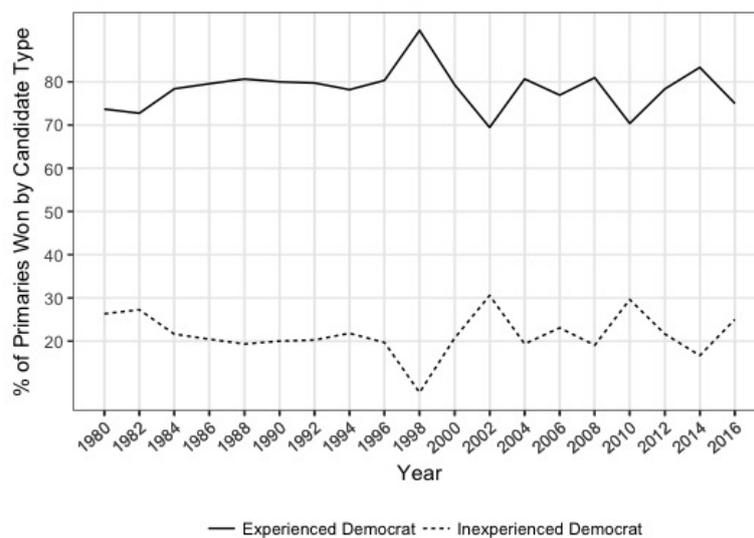
required education. If a candidate had no noteworthy experience, they were coded accordingly.

¹⁰For a complete description of our coding strategy and data collection, see our codebook in Appendix Section B

patterns of success are what prior literature on candidate experience would lead us to expect. However, the success of experienced candidates diverged by party beginning in 2012, and that divergence accelerated in 2014 and 2016.

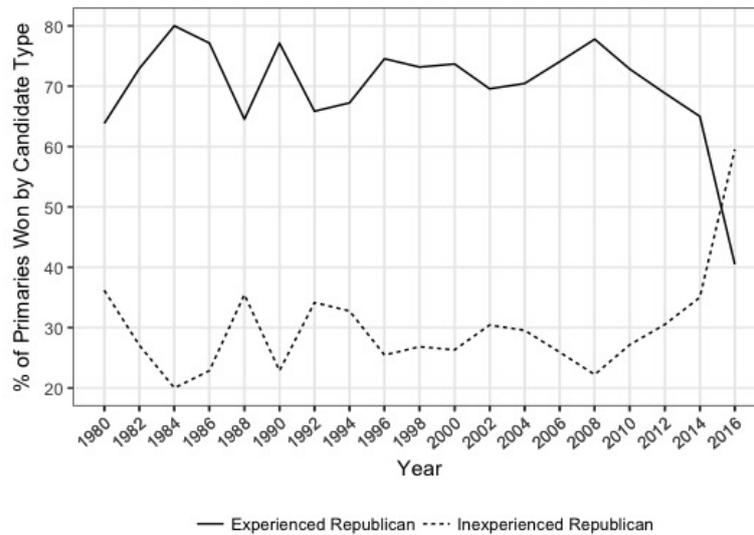
Figure 1 indicates that in Democratic primaries where there is no incumbent in the primary, the percent of primaries won by an experienced candidate has remained relatively consistent from 1980-2016. For Democrats, 74% of non-incumbent primaries were won by an experienced candidate. Figure 2 shows Republicans, on the other hand, seeing a steady decline in experienced candidates winning primaries from 2010-2014 and a drastic drop in 2016. For Republicans, just 40% of non-incumbent primaries in 2016 were won by an experienced candidate. In both figures we use the more restrictive measure of experience and only classify a candidate as having experience if she had previously held elective office.

Figure 1: Open Seat Democratic Primaries Won by Experience, 1980-2016



Note: Democratic primaries here are only those in which the general election seat is open (i.e. there is no incumbent in the district). Experienced candidates here are those with previous experience in elected office. Inexperienced candidates are those without any previous experience in elective office.

Figure 2: Open Seat Republican Primaries Won by Experience, 1980-2016



Note: Republican primaries here are only those in which the general election seat is open (i.e. there is no incumbent in the district). Experienced candidates here are those with previous experience in elected office. Inexperienced candidates are those without any previous experience in elective office.

What explains this change in primary election success? As stated above, traditional models of challenger success in congressional elections show that candidates with previous experience in elected office outperform those candidates without any prior experience. However, as the introductory examples illustrate, it is possible that what makes for a successful candidate has changed in the last several years. In congressional elections today, political experience may no longer be the best predictor of candidate success. It could also be the case that certain district conditions have brought about the recent rise in inexperienced candidate success. Inexperienced candidates may only win under certain, specific circumstances. To test these competing explanations, we first explore various district conditions that may have given rise to inexperienced candidate success. Next, we turn to characteristics of the candidates themselves to determine if inexperienced

candidates today are somehow different than in the past.

District Conditions, Electoral Context, & Candidate Success

Two straightforward supply-side possibilities are that the overall number of candidates running in primaries has increased and/or that the number of experienced candidates running has increased. If either of these was the case, the increased success of inexperienced candidates could be the result of the victor needing fewer votes to be declared the winner. Further, if the number of experienced candidates has increased over time, voters, unable to coordinate on an experienced candidate, may spread their votes out with the end result being the inexperienced candidate wins. This is not what the data reveal, however. The average number of candidates in non-incumbent races, the average number of experienced candidates per race, and the average number of inexperienced candidates per race has remained relatively constant across our time period of interest.¹¹ It is also not the case that these inexperienced candidates are winning by the smallest of margins. Between 2012 and 2016 when an experienced candidate came in second to a winning inexperienced candidate, there was an average 23% vote difference between the two candidates.

To investigate how race conditions affect inexperienced candidate success further, we fit a logistic regression model where the unit of analysis is the primary election, the dependent variable is whether an inexperienced candidate won that primary election, and the key independent variables are characteristics of the primary election. Examining race characteristics, we investigate whether certain race conditions are more likely to produce an inexperienced candidate victory. To test how institutional factors may influence inex-

¹¹Data showing the average number of candidates in non-incumbent primaries and the number of experienced and inexperienced candidates in those primaries are available for each year from 1980-2016 in Table A.1 of the Appendix.

perienced candidate success we include several key predictors. First, we include the *Open Seat* (open vs. out party primary) predictor to determine if inexperienced candidates are systematically winning in out-party races. Because the victor must face the incumbent in the general election, out-party primaries generally have a weaker field of candidates and are less competitive than open seats. The *Safe Seat* (60% same party presidential vote share in previous election) variable tests whether inexperienced candidates are more often nominated in districts that are advantageous for their own party. If the general election lacks two party competition, the primary electorate for the advantaged party in safe districts may be more confident in nominating an inexperienced candidate. We include the variables *Closed Primary* (open/semi or closed) and *Redistricting* to further control for institutional factors that may influence primary election outcomes.

Beyond institutional characteristics, we also examine characteristics of the races themselves. We include a continuous measure, *Number of Candidates*, for the total number of candidates in the race and a dichotomous indicator, *More than One Experienced Candidate in Race*, to account for races that have a deeper field of experienced candidates. The *South* variable controls for regional influence by indicating whether the primary occurred in a southern state. Finally, to account for how “expensive” a primary race is we include *Logged Total Money Raised in Race*.¹² We produce different regressions for Democrats and Republicans to account for our expectation that the effects of race characteristics on inexperienced candidate success will be conditional on party — a hypothesis drawn from the trends in outlined in Figure 1 and Figure 2. We constrain our time series to the most

¹²This includes PAC fundraising, party fundraising, self financing, and individual contributions for Federal Election Commission (FEC) reporting quarters 3 and 4 of the year prior to the election and quarter 1 of the election year.

recent (2012-2016) apportionment/redistricting cycle, which for these years ensures that all of the districts being analyzed are geographically the same across elections. Our analysis only includes those non-incumbent races where at least one experienced candidate ran in the primary.

The results, presented in Table 1 indicate that institutional factors including seat safety, primary type, and redistricting are not significantly more likely to produce an inexperienced winner. This is also true of primaries in the South and high profile or “expensive” races. Democratic and Republican primaries that had more than one experienced candidate in the race were both less likely to produce an inexperienced winner, however the size of this effect is substantially different by party. We generated predicted probabilities for the likelihood that a race had an inexperienced winner, holding predictors constant at their average value and varying the presence of more than one experienced candidate in the race.¹³ For Republican primaries, the probability of an inexperienced challenger winning dropped from 43.5 percent to 25 percent with the inclusion of more than one experienced candidate. For Democratic primaries, this probability dropped from 29 percent to less than 6 percent. The discrepancy in the marginal effect of experienced candidate presence between parties further validates our descriptive findings in Figure 1 and Figure 2—inexperienced candidate success today is far more prevalent in Republican primaries.

For Republican primaries, open seats and contests that had a deeper field of candidates were more likely to produce an inexperienced winner. These findings are particularly

¹³We hold redistricting, closed primary, open seat, south, and safe seat constant at 0. We hold continuous values at their mean. The number of candidates in the race is held at 4.6. Logged total money raised in race is held at 5.2 or \$158,489.

Table 1: Inexperienced Candidate Success & Race Conditions, 2012-2016

	<i>DV: Inexperienced Candidate Won Primary Election</i>	
	Republican Primaries	Democratic Primaries
Number of Candidates	0.150* (0.087)	0.200 (0.160)
More than One Experienced Candidate in Race	-0.840* (0.490)	-2.000* (0.830)
Safe Seat	-0.750 (0.520)	-0.530 (0.860)
South	0.520 (0.430)	0.560 (0.530)
Open Seat	0.850* (0.490)	0.170 (0.540)
Logged Total Money Raised in Race (Odd Year Q3 - Even Year Q4)	-0.023 (0.037)	-0.096 (0.060)
Closed Primary	-0.220 (0.430)	0.630 (0.590)
Redistricting	-0.630 (0.430)	-0.140 (0.510)
Constant	-0.830* (0.480)	-1.300* (0.590)
Observations	125	115
Log Likelihood	-77.000	-53.000
Akaike Inf. Crit.	172.000	124.000

Note: The dependent variable is dichotomous: 'Inexperienced Candidate Won Primary Race' or 'Inexperienced Candidate Candidate Lost Primary Race.' The unit of analysis is primary election; capturing whether certain types of races or specific characteristics of races increase the propensity for a inexperienced candidate to win. Independent variables are district-level covariates. *p<0.1

noteworthy, indicating that inexperienced candidates are not simply winning out-party primaries only to be beaten by the incumbent in the general election, but rather are winning highly coveted nominations in open districts. Between 2012 and 2016 nearly 65 percent of inexperienced candidates who won the Republican nomination went on to win in the general election and the vast majority of these candidates won their party's nomination in an open seat.¹⁴ Further, inexperienced challengers are winning in races with a deeper field of candidates, a potential indication that something about inexperienced Republicans has changed in recent elections that makes them more competitive. It could also be the case that "ambitious amateurs" today are more often self selecting into the best races. In Democratic primaries, open seats and contests that had a greater number of candidates were not significantly more likely to produce an inexperienced winner. These findings point to the likelihood of a candidate-centric explanation for the rise of inexperienced candidate success, particularly the impact of experience or "quality." For that reason, we turn to an investigation of candidate characteristics on primary success.

Candidate Characteristics & Candidate Success

The recent surge in inexperienced candidate success may be explained by a rise in the value of inexperience. Given past research that suggests that primary elections have become increasingly ideological (Jewitt and Treul, 2014; Boatright, 2014), there is reason to suspect that holding previous electoral office might not be the guarantee of electoral success at the primary stage that it is often thought to be in the general. Primary voters, particularly in the Republican primary, might be looking for something other

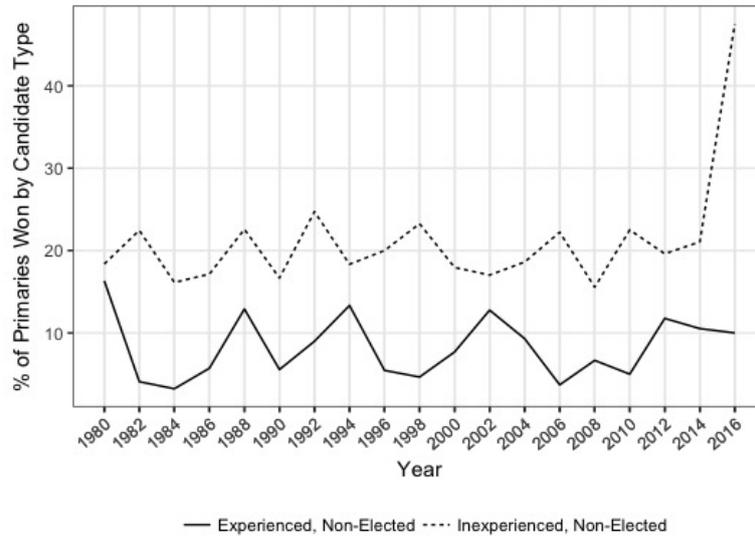
¹⁴For the same time period, 53 percent of experienced challengers went on to win in the general election. 78 percent of inexperienced candidates that went on to win in the general election ran in an open seat.

than experience in electoral office from their candidates. One other possibility is that the dichotomous distinction of inexperienced/experienced no longer works, or at least does not work for primary elections. It could be the case that a broader conception of “experience” is necessary, one which captures other forms of non-elected political experience.

To test this we assess candidate success based on different levels of experience. Here we take advantage of our occupational data on primary candidates and breakdown inexperienced candidates into two sub-categories similarly to Roberds and Roberts (2002). We classify non-elected governmental officials, former congressional aides or advisors, local party leaders, and lawyers as “Experienced, Non-Elected” and other occupations (e.g. educator, military, doctor) as “Inexperienced, Non-Elected.” A complete list of the occupations in the data and how they are classified can be found in Table A.2 of the Appendix.

Using our new classification of inexperienced candidates, Figure 3 reveals that for non-incumbent Republican primaries, the “Inexperienced, Non-Elected” candidates have won a larger percentage of contests than those “Inexperienced, Elected” candidates for the entire time period. Figure 4 reveals that the same is not true for Democratic, non-incumbent primaries. For Democrats, the inexperienced candidates who win are not always those classified here as “Inexperienced, Non-Elected.” Looking more closely at the data, it appears that the “Experienced, Non-Elected” classification measure better suits the types of inexperienced candidates who win Democratic primaries than those that win Republican primaries. Instead of lawyers and government aides, Republican inexperienced winners are more often business professionals or military personnel.

Figure 3: Percent of Non-Incumbent, Contested Republican Primaries Won by Non-Elected Candidate Type



Note: The line indicating Experienced, Elected has been omitted to better display the relationship between Experienced, Non-Elected and Inexperienced, Non-Elected candidates.

Figure 4: Percent of Non-Incumbent, Contested Democratic Primaries Won by Non-Elected Candidate Type



Note: The line indicating Experienced, Elected has been omitted to better display the relationship between Experienced, Non-Elected and Inexperienced, Non-Elected candidates.

Having demonstrated that successful inexperienced candidates do not systematically come from a political/government/legal background, we next examine whether the char-

acteristics of the candidates themselves and their campaigns influence their likelihood of success in non-incumbent primary elections. Traditionally, the overriding predictor for candidate success has been whether a candidate has previously held elective office. Previously holding elected office has proved a useful indicator for political adroitness. The existing literature has demonstrated that experienced candidates are judicious in their emergence decisions (Jacobson and Kernell, 1981; Lazarus, 2008). Experienced candidates also have greater name recognition and possess established networks of supporters (Carson et al., 2011). In particular, the strong fundraising abilities of experienced candidates have been cited for the “bonus” these candidates accrue in campaigns (Abramowitz, 1991; Box-Steffensmeier, 1996).

As our analyses have demonstrated, there is something different about today’s inexperienced Republican candidates. While it is clear these Republican amateurs are winning highly competitive open races, the question of what is propelling these ambitious, inexperienced candidates to victory remains. Maestas and Rugeley (2008) show that when these ambitious amateurs self-select into the best races, their fundraising potential can equal that of experienced candidates. Biersack, Herrnson, and Wilcox (1998) and Bonica (2017) find that inexperienced candidates can gain a competitive advantage through early fundraising, leading to larger fundraising totals later in the campaign and a greater chance of winning the election. In particular, PAC contributions have been shown to be most predictive of future electoral success (Bonica, 2017; Alexander, 2005). We hypothesize that early monetary contributions to inexperienced Republicans are what is fueling the success of these candidates in non-incumbent primaries today. We believe the onslaught of outside money in congressional elections since the *Citizens United v. FEC* (2010) created

conditions where inexperienced candidates have greater access to fundraising avenues.

To test the hypothesis that early, outside money is what is leading to inexperienced candidate success, we model candidate success in primary elections as a function of candidate characteristics by fitting four different regression models. We produce separate analyses for Democrats and Republicans to account for our expectation that the effects of model predictors on success will be conditional on party.¹⁵ We further divide our analysis into two time periods—2004-2010 and 2012-2016—to account for the influence of *Citizens United v. FEC* (2010) on campaign financing.¹⁶ We are interested in the effect of *Citizens United* because it had a broad impact on PAC giving, allowing for unlimited spending by PACs so long as they do not coordinate with candidate campaigns. This shift may have made PACs better equipped to rally behind inexperienced candidates who support their agenda.

To verify that the *Citizens United* decision has systemically changed PAC fundraising, we conduct a change point analysis. A change point, simply put, is a temporal threshold beyond which the statistical properties of the data generating process change. So, for data z_1 to z_n if a change point exists, then data from z_1 to z_τ and data from $z_{\tau+1}$ to z_n should differ in some way. Our specific goal is to determine if and when a change point has occurred in PAC fundraising for congressional elections.¹⁷ The results for our

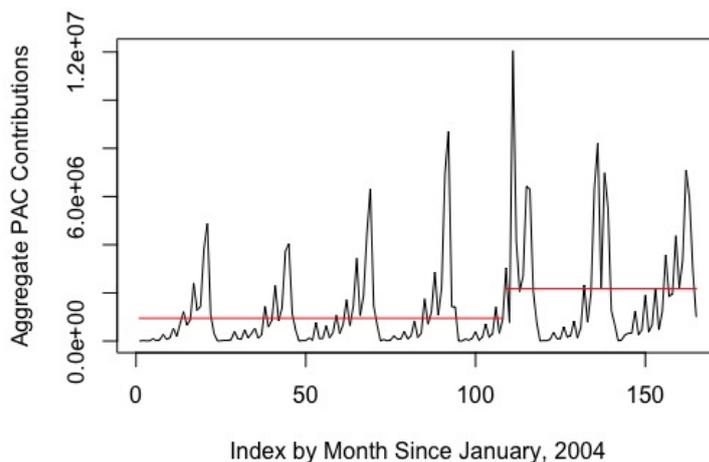
¹⁵This expectation is generated from the differences in inexperienced candidate success of Democrats and Republicans displayed in Figure 1 and Figure 2, respectively.

¹⁶The Federal Election Commission (FEC) did not begin labeling whether electronically-filed campaign contributions were from a Political Action Committee, party organization, individual contributor etc. until after April 2002. Therefore, we constrain our time series to 2004 forward.

¹⁷In our definition of the change point model, we specify that there can be at most one change point to test our *Citizens United* hypothesis. We use a log-likelihood approach for change point detection. Further, we specify an asymptotic penalty to ensure that model improvement is in fact due to the definition of a true change point and not the inclusion of additional parameters. Our asymptotic penalty is valued at .01, indicating a 99% confidence level in the existence of a change point in our data.

change point analysis are displayed in Figure 5. We find that PAC fundraising in the 2012 primary and onward is systematically different than in elections prior.¹⁸ Comparing PAC contributions by month before and after the change point, average aggregate contributions increased by \$1,226,075 after the 2010 decision—a shift that is significant at the 0.01 level—indicating PAC fundraising in elections was significantly different pre and post the 2010 *Citizens United* decision.

Figure 5: Change Point Detection for PAC Fundraising in Congressional Campaigns



Similar to our prior analyses, we examine those primary elections that were contested, non-incumbent races that had at least one candidate running who had previously held elective office. The dependent variable in our analysis is whether or not a given candidate won the primary election. Modeling candidate success in primary elections presents a challenge because candidate outcomes are not independent. Whether or not each candidate is successful in winning the primary is dependent on the performance of other

¹⁸The specific change point identified is February, 2012 or quarter 1 of the election year.

candidates in that race. Within each race there can only be one winner, therefore all other candidates in that race must lose. To account for this dependency, we model candidate success using a conditional logit. Similar to a multinomial logit, the conditional logit groups discrete alternatives by choice set. In our analysis, choice sets are primary elections and discrete alternatives are candidates. By grouping candidates by primary election, the conditional logit accounts for dependent candidate outcomes within a given race. Therefore, in our model the unit of analysis is a primary election (choice set) rather than an individual candidate (alternative). In a conditional logit the explanatory variables for alternative selection (candidate success) within a choice set (primary election) are attributes of the alternatives (candidates). In short, a candidate’s success in a given primary election is modeled as a function of that candidate’s characteristics—for instance her gender, political experience, or amount of money raised—and the characteristics of other candidates running in that race. The conditional logit is extremely flexible, allowing for fluctuations in the number of candidates across primary races and variation in candidate characteristics. We exclude top-two primaries from our analysis because they do not fit the assumptions of any commonly used discrete choice model—where there can only be one winner outcome per choice set.

The predictors for our analysis are characteristics of primary election candidates. The independent variable *Experienced Candidate* captures the traditional measure of candidate quality—whether the candidate has held previous elective office. We also fit models using the more nuanced measure of inexperienced developed above but find null results for the effect of being an “Experienced, Non-Elected” candidate on success.¹⁹ The variable

¹⁹For the complete model output, see Table A.3 in the Appendix.

Female indicates that the candidate identifies as female. *Previous Run for House* is a dichotomous variable indicating whether the candidate has previously run for the US House in the same district.²⁰

The variable *Logged PAC Fundraising* is the logged PAC fundraising for FEC report periods Q3 and Q4 of the year prior to the election and Q1 of the year of the election. We specifically focus on these quarters because they occur during the primary election season.²¹ *Logged Party Fundraising* is the logged candidate fundraising for FEC report periods Q3 and Q4 of the year prior to the election and Q1 of the year of the election.²² We examine party contributions because they may constitute a form of endorsement, allowing us to investigate if these inexperienced winners are party-backed candidates. The interaction *Logged PAC Fundraising* \times *Experienced Candidate* is included because we expect that PAC fundraising may have differential effects for experienced and inexperienced candidates. Without the same level of name recognition or political savvy, early money may be more influential for an inexperienced candidate's success than it would be for an experienced candidate. Therefore, we interact logged PAC fundraising with the experienced candidate predictor. Similarly, we create *Logged Party Fundraising* \times *Experienced Candidate* to capture the expectation that party fundraising may also have differential ef-

²⁰If the candidate previously ran for the House but ran in a different district, she is considered not to have previously run for the purposes of this variable. Further, write-in candidates or candidates who ran previously but did not meet the low threshold for filing FEC disclosure reports are not considered to have previously ran for the House.

²¹We omit Q1 and Q2 of the year prior to the election because these fundraising periods are incredibly early in the fundraising period, and very few contributions occur in these months. Further, contributions during these quarters are so far out that they are not be indicative of future primary election success. We re-estimate our model using FEC PAC/party fundraising from Q1 of the year prior to the election through Q1 of the election year and find nearly identical results, see Table A.4 and Figure A.2 in the Appendix.

²²For both PACs and party organizations, we use the FEC's classification to determine what groups fall into these respective categories.

fects for experienced and inexperienced candidates. Republican inexperienced candidates often do not receive party money until *after* they have won the primary. Further, these inexperienced candidates may brand themselves as political outsiders or mavericks—in which case party money may actually *hurt* their chances.

Table 2 shows the results of the models described above. The table indicates that in Republican primaries between 2004-2010, holding all other variables constant at 0, the probability of winning a primary election for candidates who had previously held elected office was 83 percent. This probability of success for experienced candidates drops to 71 percent for Republican primaries in the 2012 - 2016 time period.²³ For Democratic candidates, the probability of winning a primary election for candidates who had previously held elected office remained more consistent, shifting from 81 percent to 78 percent. These findings reflect those displayed in Figure 1 and Figure 2, reinforcing our descriptive findings. Across all models, the effects of gender and running previously for the House of Representatives on the likelihood of a candidate winning are not statistically distinctive from zero.

We employ predicted probabilities to interpret the effect of logged PAC and party fundraising conditional on candidate experience. To produce predicted probabilities, we create 500 hypothetical primary election races (choice sets) where all candidate attributes (predictors) are held constant except for logged fundraising. In each of these 500 races, PAC/party fundraising varies across a sequence of evenly spaced values between the lowest and highest observed fundraising amount in the data set.²⁴ We produce separate predicted

²³These probabilities are created by passing them through the inverse logit function.

²⁴The range of PAC/party values we estimate predicted probabilities over can be found in Table A.5 and Table A.6 of the Appendix.

Table 2: Candidate Success in Primary Elections

	<i>Dependent variable: Won Primary Election</i>			
	Republican Primary		Democratic Primary	
	2004-2010	2012-2016	2004-2010	2010-2016
Experienced Candidate	1.586* (0.289)	0.872* (0.283)	1.424* (0.314)	1.264* (0.383)
Logged PAC Fundraising (Odd Year Q3 - Even Year Q1)	0.302* (0.041)	0.242* (0.045)	0.178* (0.053)	0.264* (0.062)
Logged Party Fundraising (Odd Year Q3 - Even Year Q1)	0.149 (0.172)	-0.040 (0.195)	0.287* (0.149)	0.039 (0.096)
Female	-0.269 (0.341)	-0.422 (0.361)	0.576* (0.304)	0.129 (0.314)
Previous Run for House	-0.029 (0.143)	0.020 (0.161)	0.340 (0.209)	0.132 (0.179)
Experienced Candidate × Logged PAC Fundraising	-0.084* (0.047)	-0.128* (0.049)	-0.006 (0.061)	-0.011 (0.057)
Experienced Candidate × Logged Party Fundraising	-0.157 (0.192)	0.243 (0.237)	-0.300* (0.182)	0.050 (0.136)
Observations	192	125	137	115
Log Likelihood	-154.644	-141.274	-97.075	-84.107

Note: Independent and dependent variables are explained in the text. The unit of analysis is primary election; a conditional logit is used to account for dependence across candidates running in the same race. Independent variables are candidate-level covariates. *p<0.1

probabilities for PAC and party fundraising. Therefore, when varying the amount of PAC money raised we hold party fundraising constant and vice versa.

In each hypothetical primary election, we hold the number of candidates (choice set) constant at five — which was the average number of candidates who ran in non-incumbent, contested races that had at least one experienced candidate from 2004-2016. For all five candidates in each hypothetical race, we hold gender and previous run for office at their modal value of 0—meaning that all candidates are male and no candidate has previously run for the House of Representatives. We estimate the predicted likelihood of winning the primary election for each of these five candidates.

To approximate a more realistic primary scenario, in which candidates likely possess different attributes, we hold certain candidate characteristics constant at different levels within each race. On average, 80% of all PAC and party fundraising within a given race is garnered by the top two vote-getters. Therefore, we assign two candidates identical logged values of PAC/party fundraising while PAC/party fundraising for the other three candidates is held constant at zero. In each hypothetical race, one of the two candidates who has PAC/party fundraising is labeled an experienced candidate, all other candidates in the hypothetical race are labeled inexperienced. The candidate with political experience and a value for fundraising is an experienced candidate and the candidate with no political experience and a value for fundraising is our approximation of an “ambitious amateur”—those inexperienced candidates seriously seeking office (Canon, 1993). This approach allows us to evaluate the predicted probability of success for the two “competitive” candidates with all predictors held constant except candidate experience. The other three candidates in the race are non-competitive. For a summary example of this

hypothetical data, see Table A.7 in the Appendix. With these predicted probabilities we can evaluate the interactive effect of candidate experience and logged fundraising, directly comparing the likelihood of winning the primary election for the two competitive candidates running in each race.

Our analysis uses nonparametric bootstrapped confidence intervals to infer the significance level of the predicted probabilities. This was performed with 1000 bootstrap replications, where the original data was re-sampled with replacement clustered by primary race.²⁵ A density curve of logged PAC/party fundraising is overlaid on each plot. The density plot in each figure is on the same scale as the predicted probabilities, where the area under the curve represents the density of logged fundraising values from the data used to estimate the model.

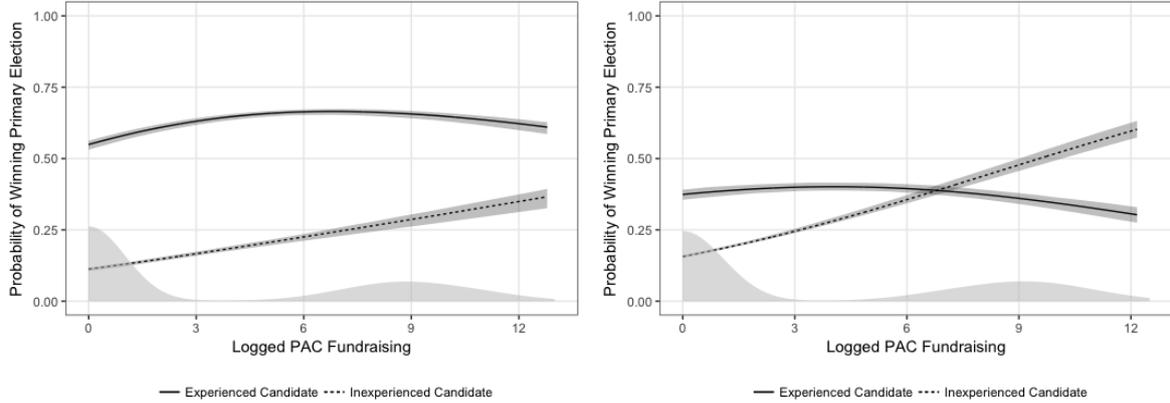
The predicted probabilities for PAC fundraising are presented in Figure 6. The predicted probabilities for party fundraising are included in Figure A.1 of the Appendix.²⁶ The lines plotted are the predicted probabilities for the two competitive fundraising candidates, one with experience and one without.²⁷ Referring to Democratic primaries in Figure 6 (c) and Figure 6 (d), there is very little change in the probability of success for the experienced and inexperienced competitive candidate moving from the 2004-2010 to the 2012-2016 time period. The plotted lines are nearly parallel, no increase in logged

²⁵Because our unit of analysis is primary race—not an individual candidate—we re-sample our data with replacement by primary race to produce the bootstrap replication data. We cannot sample by candidate because this will disrupt the choice set structure of our original data, therefore the produced replications will not accurately reflect the data generating process.

²⁶Our ability to simulate probabilities for party fundraising is limited by the fact that, relative to the general election, parties contribute very little money to candidates at the primary stage. Referring to the density curves in Figures A.1 (a)-(d) party fundraising is largely zero inflated. This is especially apparent in Republican primaries, which limited our ability to produce bootstrapped confidence intervals for these predicted probability plots.

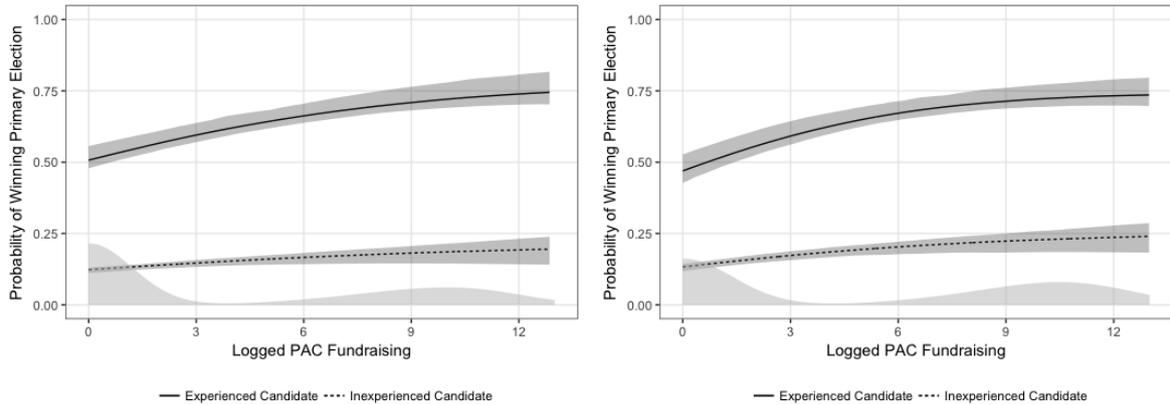
²⁷The probabilities of success for non-competitive candidates are omitted from the plot because their chance of victory is nominal.

Figure 6: Predicted Probability of Candidate Success as a Function of Early PAC Money and Candidate Experience



(a) 2004-2010, Republican Candidate

(b) 2012-2016, Republican Candidate



(c) 2004-2010, Democratic Candidate

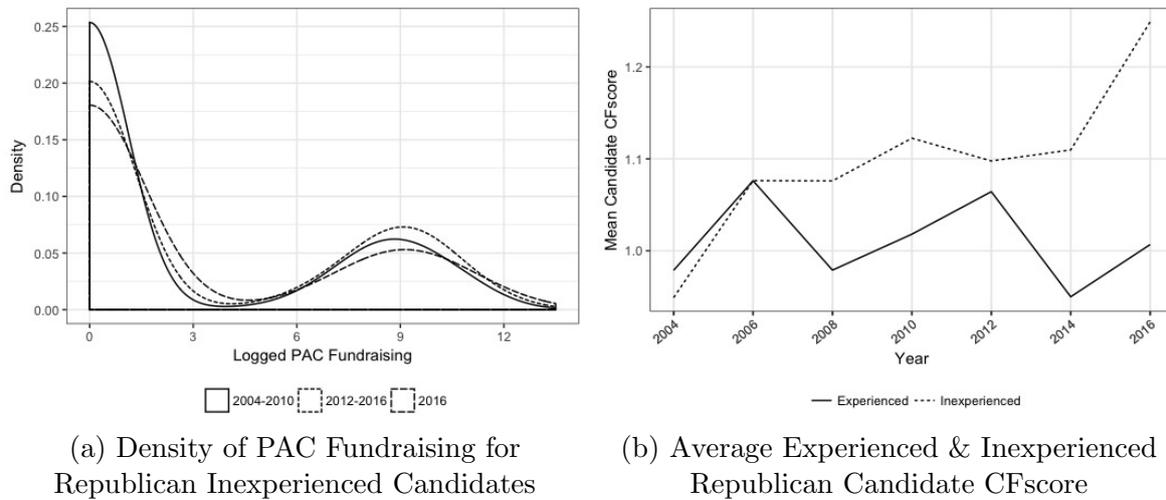
(d) 2012-2016, Democratic Candidate

Note: Early money is defined as money raised by a candidate in Quarter 3 and Quarter 4 of the FEC filing period for the year prior to the election, and Quarter 1 of the year of the election. For example, early money in the 2016 election is defined as money raised from July 1st through December 31st of 2015 and January 1st through March 31st of 2016. The density plot in each figure is on the same scale as the plotted predicted probabilities, where the x axis denotes logged party fundraising and the y axis denotes the density of observations who raised that given amount. Predicted probabilities have 99% bootstrapped confidence intervals generated with 1000 simulations.

PAC fundraising significantly improves an inexperienced candidate's likelihood of defeating the experienced candidate. In Republican primaries, on the other hand, there is a significant change in candidate probabilities for success across the two time periods. For Republican candidates in the 2004-2010 time period seen in Figure 6 (a), across the entire range of logged PAC fundraising the likelihood of the experienced candidate winning is significantly higher than the inexperienced candidate's likelihood of winning. In Figure 6 (b) this relationship shifts. For Republican candidates in the 2012-2016 time period, at the logged PAC fundraising total of 6.1 (or \$446 raised) the likelihood of the inexperienced and experienced candidate winning become statistically indistinguishable. At a logged PAC fundraising total of 7.7 (or \$2,208 raised) the likelihood of the inexperienced candidate winning overtakes that of the experienced candidate. This is especially noteworthy considering nearly 40% of Republican primaries from 2012-2016 had at least one inexperienced candidate who raised more than \$446 from PACs.

Fundraising from Political Action Committees post-*Citizens United* is clearly associated with the rise of inexperienced candidate success seen post-2012. Two potential avenues may help explain why the effect of PAC money on inexperienced candidate success has changed. First, the quantity of PAC money fundraised by inexperienced candidates increased after *Citizens United*. Turning to Figure 7 (a) the relative frequency of lower values in PAC fundraising for inexperienced Republican candidates decreases between 2004-2010 and 2012-2016—meaning a greater number of inexperienced candidates raised money from PACs in the latter time period. The outpouring of PAC money post-*Citizens United* may have made more funds available to inexperienced candidates, allowing them to capitalize on a greater number of fundraising channels. Given the importance of early fundrais-

Figure 7: Potential Explanations for the Effect of PAC Money on Inexperienced Candidate Success



Note: In Fig 7 (a) PAC fundraising is defined as money raised by a candidate in Quarter 3 and Quarter 4 of the FEC filing period for the year prior to the election, and Quarter 1 of the year of the election. Inexperienced candidates who garnered less than 5 percent of the vote were dropped from the data used to generate the density curve. In Fig 7 (b) all candidates who have generated CFscores are included in the yearly average.

ing, particularly from PACs, on future success, this increase in the quantity of money in elections may be elevating inexperienced candidates to victory in primary elections. It could also be the case that the types of PACs donating to inexperienced candidates are changing. Figure 7 (b) depicts the average CFscore for Republican inexperienced candidates from 2004 to 2016. CFscores use data on campaign contributions in order to measure congressional candidate ideology. Comparing inexperienced and experienced candidate CFscores may provide some insight into the ideological extremity of campaign donors including PACs. This approach is by no means a perfect way of measuring the ideology of PACs who donate to inexperienced and experienced candidates. CFscores use *all* campaign donations in order to generate point estimates, not just PAC contributions making this approach noisy. Further, CFscores use fundraising donations from the entire

campaign period including the general election, which may further bias these estimates for our purposes of exclusively examining primary elections.²⁸ Figure 7 (b) shows that in 2014 and 2016 the plotted lines begin to diverge, potentially indicating that more ideologically extreme funding sources are contributing to inexperienced candidates.

Discussion

Our results show that candidates without previous experience in elective office are faring better in non-incumbent, contested primaries than ever before, and this is particularly true in Republican primaries. We hypothesized several reasons why this could be the case, including the number of candidates competing, district characteristics, and campaign factors. Our findings clearly illustrate that the story of inexperienced candidate success is one of campaign finance. In today’s world of seemingly unlimited money, inexperienced candidates who garner the attention of PACs early in the primary campaign season are increasingly likely to experience electoral success. Our change point analysis further confirms that this deluge of PAC money is a recent phenomenon with the effects of *Citizens United v. FEC* (2010) coming to fruition in the 2012 primary election. All of this suggests that money is a big-time player not just in general elections, but in primary elections as well—big enough, especially within the Republican party, to swamp candidate experience.

²⁸In an attempt to more directly address this research question, we collected information from the FEC on every individual PAC that donated to an inexperienced or experienced candidate in our time period of interest. We then attempted to merge this data set of PAC information with Adam Bonica’s data set of PAC CFscores. Using this approach we could more directly compare the average ideology of PACs that donated to inexperienced candidates with the average ideology of PACs that donated to experienced candidates. Further, we could determine how often PACs donated to both experienced and inexperienced candidates by ideology. However, this approach was not successful. The vast majority of PACs do not have generated CFscores, which severely limited our sample size making this approach infeasible. Future research should develop better measures with which to more directly address this research question.

Having new voices in Congress and people who are not necessarily career-politicians may have some advantages, but there could be negative repercussions as well. On the positive side, there is little doubt that the success of inexperienced candidates in primaries means there will be new voices in Washington and this success may encourage a broader range of candidates to seek office. In fact, the 2018 primary season saw a massive increase in the emergence of non-traditional candidates, and the following general election sent several new faces to Congress, many of whom did not have previous experience in elective office (e.g. Alexandria Ocasio-Cortez (D-NY), mentioned at the beginning of this paper, will be the youngest woman to ever serve in Congress). These new voices could help increase descriptive representation in a chamber that skews heavily towards elderly, white men. On the other hand, the influx of candidates who lack legislative experience may be concerning for the institution as a whole. Governing a country as large as the U.S. is non-trivial and the policy environment is extraordinarily complex. Having a large number of legislative neophytes in the chamber can lead to legislation rife with contradictions and errors—as was evident in the last-minute changes the Republicans scrawled into the latest tax bill—and can increase the influence of lobbyists as legislators lack the expertise needed to evaluate requests. Similarly, amateur legislators might not have the institutional knowledge to fight adequately for constituents and preferred policy. Better understanding how these new types of candidates are representing their constituents and their legislative behavior more broadly, is an area ripe for future research.

References

- Abramowitz, Alan. 1991. "Incumbency, campaign spending, and the decline of competition in U.S. House elections." *Journal of Politics* 53:34–56.
- Alexander, Brad. 2005. "Good money and bad money: Do funding sources affect electoral outcomes?" *Political Research Quarterly* 58(2):353–58.
- Ansolabehere, Stephen, James M. Snyder Jr., and Charles Stewart III. 2000. "Old Voters, New Voters, and the Personal Vote: Using Redistricting to Measure the Incumbency Advantage." *American Journal of Political Science* 44(1):17–34.
- Ansolabehere, Stephen, James M. Snyder Jr., and Charles Stewart III. 2001. "Candidate Positioning in U.S. House Elections." *American Journal of Political Science* 45(1):136–59.
- Banks, Jeffrey S., and D. Roderick Kiewiet. 1989. "Explaining Patterns of Candidate Competition in Congressional Elections." *American Journal of Political Science* 33(4):997–1015.
- Boatright, Robert G. 2014. *Getting Primaried: The Changing Politics of Congressional Primary Challenges*. The University of Michigan Press.
- Bonica, Adam. 2017. "Professional Networks, Early Fundraising, and Electoral Success." *Election Law Journal* 16(1):153–171.
- Box-Steffensmeier, Janet M. 1996. "A dynamic analysis of the role of war chests in campaign strategy." *American Journal of Political Science* 40:352–371.
- Canon, David T. 1993. "Sacrificial Lambs or Strategic Politicians? Political Amateurs in U.S. House Elections." *American Journal of Political Science* 37(4):1119–41.
- Carson, Jamie L., Michael Crespín, Carrie Eaves, and Emily Wanless. 2011. "Constituency Congruency and Candidate Competition in Primary Elections for the U.S. House." *Legislative Studies Quarterly* 36(3):461–482.
- Carson, Jamie L., Erik J. Engstrom, and Jason M. Roberts. 2007. "Candidate Quality, the Personal Vote, and the Incumbency Advantage in Congress." *American Political Science Review* 101(2):289–301.

- Carson, Jamie L., and Jason M. Roberts. 2013. *Ambition, Competition, and Electoral Reform: The Politics of Congressional Elections Across Time*. University of Michigan Press.
- Carson, Jamie L., and Ryan D. Williamson. 2018. "Candidate ideology and electoral success in congressional elections." *Public Choice* 176:175–192.
- Cox, Gary W., and Jonathan N. Katz. 1996. "Why Did the Incumbency Advantage in U.S. House Elections Grow?" *American Journal of Political Science* 40(2):478–497.
- Erikson, Robert S. 1971. "The Electoral Impact of Congressional Roll Call Voting." *American Political Science Review* 65(4):1018–32.
- Gerber, Elisabeth R., and Rebecca B. Morton. 1998. "Primary Election Systems and Representation." *Journal of Law and Economics* 41(2).
- Gertzog, Irwin N. 2002. *Women Transforming Congress*, University of Oklahoma Press, chapter Women's changing pathways to the U.S. House of Representatives.
- Grimmer, Justin. 2013. "Appropriators not Position Takers: The Distorting Effects of Electoral Incentives on Congressional Representation." *American Journal of Political Science* 57(3):624–642.
- Hetherington, Marc, Bruce Larson, and Suzanne Globetti. 2003. "The Redistricting Cycle and Strategic Candidate Decisions in U.S. House Races." *Journal of Politics* 65:1221–1234.
- Hill, Seth J. 2015. "Institution of Nomination and the Policy Ideology of Primary Electorates." *Quarterly Journal of Political Science* 10(4):461–487.
- Jacobson, Gary C. 1989. "Strategic Politicians and the Dynamics of U.S. House Elections, 1946-86." *American Political Science Review* 83(3):773–793.
- Jacobson, Gary C., and Samuel Kernell. 1981. *Strategy and Choice in Congressional Elections*. Yale University Press.
- Jacobson, Gary C., and Samuel Kernell. 1983. *Strategy and Choice in Congressional Elections*. Yale University Press, second edition.
- Jewitt, Caitlin E., and Sarah A. Treul. 2014. "Competitive primaries and party division in congressional elections." *Electoral Studies* 35:140–49.

- Kazee, Thomas A. 1994. *Who Runs for Congress? Ambition, Context, and Candidate Emergence*, Congressional Quarterly Press, chapter Ambition and Candidacy: Running as a Strategic Calculation.
- Lazarus, Jeffrey. 2008. "Why do experienced challengers do better than amateurs?" *Political Behavior* 30(2):185–198.
- Maisel, L. Sandy, Linda L. Fowler, Ruth S. Jones, and Walter J. Stone. 1994. "Nomination Politics: The Roles of Institutional, Contextual, and Personal Variables." In *The Parties Respond. Changes in American Parties and Campaigns* (L. Sandy Maisel, editor), Westview Press.
- Maisel, L. Sandy, and Walter J. Stone. 1997. "Determinants of Candidate Emergence in U.S. House Elections: An Exploratory Study." *Legislative Studies Quarterly* 22:79–96.
- Mayhew, David R. 1974. *Congress: The Electoral Connection*. Yale University Press.
- McGhee, Eric, Seth Masket, Boris Shor, Steven Rogers, and Nolan McCarty. 2013. "A Primary Cause of Partisanship? Nomination Systems and Legislator Ideology." *American Journal of Political Science* 58.
- Palmer, Barbara, and Dennis Simon. 2001. "The Political Glass Ceiling: Gender, Strategy, and Incumbency in U.S. House Elections, 1978-1998." *Women and Politics* 23(1-2).
- Robeck, Bruce W. 1982. "State Legislator Candidates for the U.S. House: Prospects for Success." *Legislative Studies Quarterly* 7:511–12.
- Roberds, Stephen C., and Jason M. Roberts. 2002. "Are All Amateurs Equal? Candidate Quality in the 1992-1998 House Elections." *Politics and Policy* 30(3):482–501.
- Schantz, Harvey L. 1980. "Contested and Uncontested Primaries For the U.S. House." *Legislative Studies Quarterly* 5(4):545–562.
- Thomsen, Danielle M. 2014. "Ideological Moderates Won't Run: How Party Fit Matters for Partisan Polarization in Congress." *Journal of Politics* 76(3):786–797.

A Appendix

Notes on Data Coding: Issues, Fixes, and Rationale

- For 1980-1996 Louisiana was coded to be a partisan primary state, meaning instead of having being coded as a jungle primary Democrats and Republicans were divided into different categories. Third-party candidates were omitted. Louisiana from 1980-1996 was recoded.
- Bernie Sanders is coded as a Democrat for simplicity, winner and incumbent primary codes reflect this change.
- Raceid variable was recoded so the party component was coded 9 for top-two primaries and Louisiana primaries. Non-partisan blanket primaries were kept the same because vote totals were provided by party and the top candidate from each party was chosen keeping enough elements of the traditional partisan primary to allow for the distinction to be included.
- For primaries that had to be re-held due to illegal voting or court-challenged district boundaries, the official (second) primary was included in the dataset. The first (unofficial) primary was not included. In the original data, these unofficial results were reported and not the official results.
- The seat variable pulled from Jacobsons data was incorrect for some years. Jacobsons variable captures the state of the seat as it enters the general election this is specifically problematic for years when the incumbent loses in the primary. For these instances the seat is marked open, held by x party however, in the primary election the seat is not open as the incumbent has not yet lost. This variable was recoded and updated in the current dataset. Further, some of Jacobsons coding options were consolidated for ease and simplicity.
- If a current member of Congress runs in another district in a given year that is not a redistricting year where the race is designated to have two incumbents that members incumbency is not coded 1, their quality is coded 30.
- If an incumbent is listed twice (was nominated in both primaries) the incumbent is deleted from their non-party primary

- For some years, the total of winners does not equal 435 (there are less winners listed than there should be). There are two potential explanations here: (1) the general election winner was a third party candidate that was not listed (ran outside of a non-partisan blanket, Louisiana, or top-two primary) (2) there was no candidate that ran in the primary and one was chosen by a local caucus.

Table A.1: Mean # Candidates per Contested Non-Incumbent Primary with at least One Experienced Candidate Running

	1980	1982	1984	1986	1988	1990	1992	1994	1996	1998
Overall	3.60	3.41	3.41	3.58	3.64	3.50	3.92	4.03	3.96	3.50
Experienced	1.41	1.55	1.60	1.54	1.42	1.63	1.59	1.61	1.66	1.64
Inexperienced	2.32	2.02	2.16	2.15	2.41	2.15	2.58	2.49	2.53	2.04
	2000	2002	2004	2006	2008	2010	2012	2014	2016	
Overall	3.47	3.97	3.41	4.15	3.45	4.28	4.32	4.29	4.84	
Experienced	1.52	1.69	1.53	1.70	1.54	1.60	1.73	1.91	1.86	
Inexperienced	2.16	2.42	1.93	2.61	2.08	2.80	2.86	2.55	3.18	

Table A.2: Candidate Classification by Profession

Experienced, Elected	Experienced, Non-Elected	Inexperienced, Non-Elected
State-wide Office Holders (Governor, Lieutenant Gov, Secretary of State)	Appointed State-wide Office Holders (Attorney General, Secretary of State, etc.)	Business Executive or Business-owner
State-wide Legislators (State Senator, State Representative)	Appointed District Attorney, Prosecutor, or State's Attorney	Medical Professional (doctor, dentist, veterinarian)
Elected District or Prosecuting Attorney	Local Appointed Official (Sheriff, Treasurer, Commissioner)	Journalist
Elected Judges	Appointed Judge	Farmer/Rancher
Mayor	Lawyer (Practicing and Non-Practicing)	Military Official
City Council Member	Local Party Leader / Activist	Educator (teacher or professor)
Previous Incumbent or Former Members of Congress	Other Governmental, Appointed Official*	Religious Leader
Former Senator		Other Experience (not electoral)
Attorney General		
States Attorney		
Commissioner		
Alderman		
Sheriff		
Treasurer		
Other Elected Officials*		

*Note**: Some government professionals are elected or appointed depending on state law, these include: prosecutor, district attorney, sheriff, state's attorney, treasurer, judge. For each state these professionals were classified as experienced candidates or preferred amateur candidates depending on the laws of that state.

Table A.3: Candidate Success in Primary Elections by Candidate Type

	<i>Dependent variable: Won Primary Election</i>			
	Republican Primary		Democratic Primary	
	2004-2010	2012-2016	2004-2010	2010-2016
Experienced, Non-Elected	-1.300 (0.930)	0.440 (0.620)	0.870 (0.590)	0.210 (0.820)
Experienced, Elected	1.500* (0.300)	0.920* (0.300)	1.700* (0.360)	1.300* (0.420)
Logged PAC Fundraising (Odd Year Q3 - Even Year Q1)	0.270* (0.046)	0.230* (0.051)	0.180* (0.073)	0.210* (0.078)
Logged Party Fundraising (Odd Year Q3 - Even Year Q1)	0.140 (0.190)	-2.700 (465.000)	0.290 (0.180)	0.029 (0.160)
Female	-0.260 (0.350)	-0.440 (0.360)	0.570* (0.310)	0.170 (0.320)
Previous Run for House	-0.015 (0.140)	0.033 (0.160)	0.330 (0.210)	0.120 (0.180)
Experienced, Non-Elected × Logged PAC Fundraising	0.210* (0.120)	-0.007 (0.093)	-0.039 (0.100)	0.088 (0.110)
Experienced, Elected × Logged PAC Fundraising	-0.050 (0.052)	-0.120* (0.054)	0.001 (0.080)	0.033 (0.075)
Experienced, Non-Elected × Logged Party Fundraising	1.500 (265.000)	5.000 (657.000)	-0.032 (0.290)	0.0003 (0.210)
Experienced, Elected Logged Party Fundraising	-0.150 (0.210)	2.900 (465.000)	-0.310 (0.210)	0.073 (0.190)
Observations	192	125	137	115
Log Likelihood	-152.207	-138.853	-95.556	-82.565

Note:

*p<0.1

Table A.4: Candidate Success in Primary Elections, Extending Fundraising Period

	<i>Dependent variable: Won Primary Election</i>			
	Republican Primary		Democratic Primary	
	2004-2010	2012-2016	2004-2010	2010-2016
Experienced Candidate	1.578* (0.288)	0.848* (0.284)	1.430* (0.314)	1.248* (0.382)
Logged PAC Fundraising (Odd Year Q1 - Even Year Q1)	0.299* (0.041)	0.241* (0.045)	0.181* (0.053)	0.271* (0.063)
Logged Party Fundraising (Odd Year Q1 - Even Year Q1)	0.151 (0.172)	-0.098 (0.192)	0.228* (0.132)	0.008 (0.096)
Female	-0.338 (0.342)	-0.440 (0.365)	0.553* (0.303)	0.158 (0.317)
Previous Run for House	-0.072 (0.145)	0.013 (0.161)	0.356* (0.208)	0.121 (0.184)
Experienced Candidate × Logged PAC Fundraising	-0.082* (0.046)	-0.126* (0.049)	-0.002 (0.061)	-0.014 (0.057)
Experienced Candidate × Logged Party Fundraising	-0.151 (0.188)	0.302 (0.233)	-0.268* (0.157)	0.078 (0.135)
Observations	192	125	137	115
Log Likelihood	-155.075	-141.381	-97.474	-83.943

Note: Independent and dependent variables are explained in the text. The unit of analysis is primary election; a conditional logit is used to account for dependence across candidates running in the same race. Independent variables are candidate-level covariates. *p<0.1

Table A.5: Range of Party Fundraising in Logged and Dollar Values

	<i>Republican</i>		<i>Democrat</i>	
	2004-2010	2012-2016	2004-2010	2012-2016
Logged Value	0 - 10.07323	0 - 9.04782	0 - 10.66122	0 - 10.43658
Dollar Value	\$0 to \$23,700	\$0 to \$8,500	\$0 to \$42,669	\$0 to \$34,084

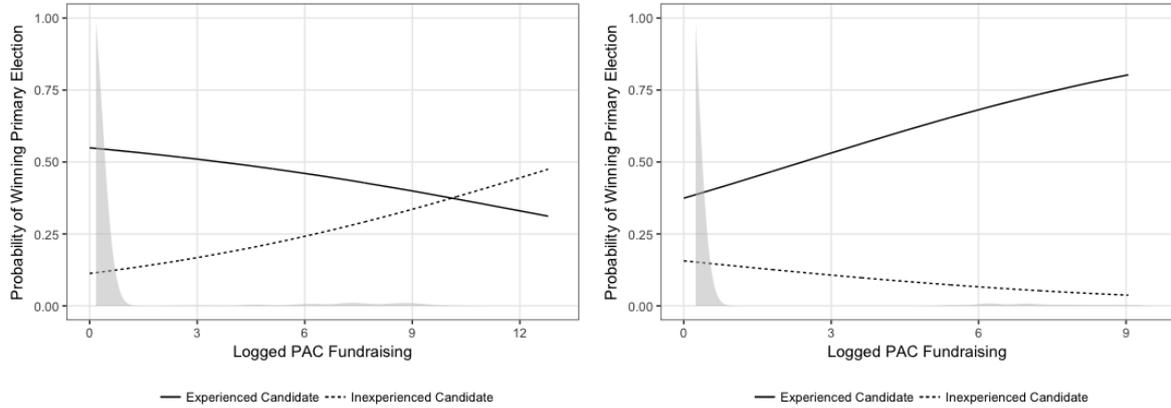
Table A.6: Range of PAC Fundraising in Logged and Dollar Values

	<i>Republican</i>		<i>Democrat</i>	
	2004-2010	2012-2016	2004-2010	2012-2016
Logged Value	0 - 12.79094	0 - 12.16449	0 - 12.85594	0 - 13.46847
Dollar Value	\$0 to \$358,952	\$0 to \$191,854	\$0 to \$383,058	\$0 to \$706,778

Table A.7: Example Simulated Data for Predicted Probability Plot

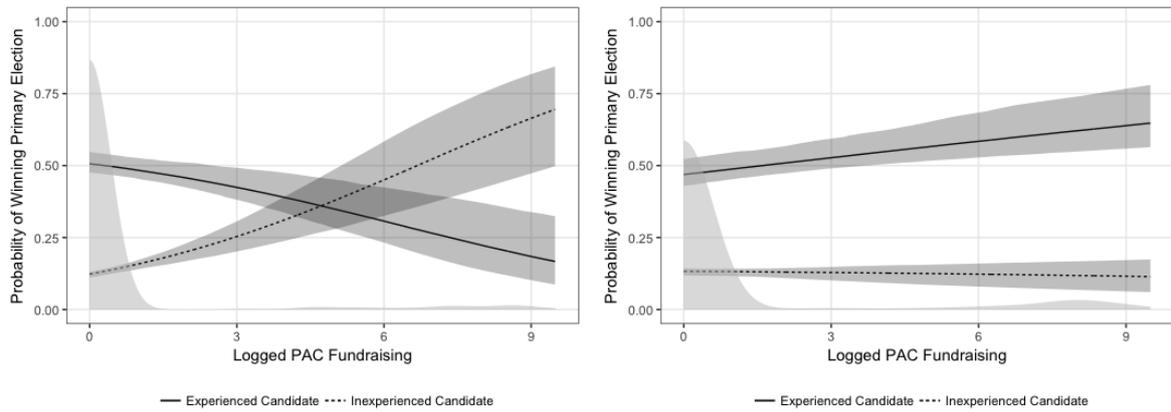
Race	Option	Experienced	Logged PAC	Logged Party	Female	Previous Run
1	Candidate #1	1	2.5345	0	0	0
1	Candidate #2	0	2.5345	0	0	0
1	Candidate #3	0	0	0	0	0
1	Candidate #4	0	0	0	0	0
1	Candidate #5	0	0	0	0	0
2	Candidate #1	1	3.4647	0	0	0
2	Candidate #2	0	3.4647	0	0	0
2	Candidate #3	0	0	0	0	0
2	Candidate #4	0	0	0	0	0
2	Candidate #5	0	0	0	0	0
...

Figure A.1: Predicted Probability of Candidate Success as a Function of Early Party Money and Candidate Experience, 2015 Q3 - 2016 Q1



(a) 2004-2010, Republican Candidate

(b) 2012-2016, Republican Candidate

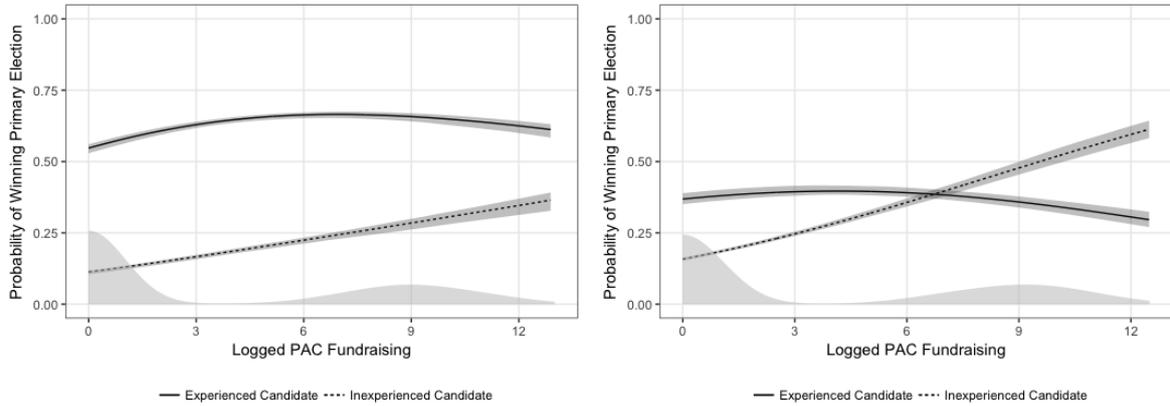


(c) 2004-2010, Democratic Candidate

(d) 2012-2016, Democratic Candidate

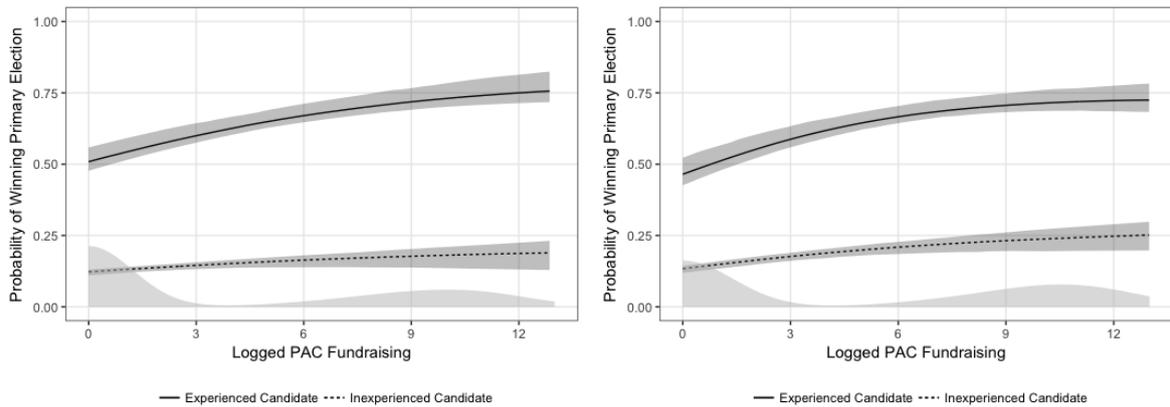
Note: Early money is defined as money raised by a candidate in Quarter 3 and Quarter 4 of the FEC filing period for the year prior to the election, and Quarter 1 of the year of the election. For example, early money in the 2016 election is defined as money raised from July 1st through December 31st of 2015 and January 1st through March 31st of 2016. The density plot in each figure is on the same scale as the plotted predicted probabilities, where the x axis denotes logged party fundraising and the y axis denotes the density of observations who raised that given amount. Predicted probabilities have 99% bootstrapped confidence intervals generated with 1000 simulations.

Figure A.2: Predicted Probability of Candidate Success as a Function of Early PAC Money and Candidate Experience, 2015 Q1 - 2016 Q1



(a) 2004-2010, Republican Candidate

(b) 2012-2016, Republican Candidate



(c) 2004-2010, Democratic Candidate

(d) 2012-2016, Democratic Candidate

Note: Early money is defined as money raised by a candidate in Quarter 1 thru Quarter 4 of the FEC filing period for the year prior to the election, and Quarter 1 of the year of the election. For example, early money in the 2016 election is defined as money raised from January 1st through December 31st of 2015 and January 1st through March 31st of 2016. The density plot in each figure is on the same scale as the plotted predicted probabilities, where the x axis denotes logged PAC fundraising and the y axis denotes the density of observations who raised that given amount. Predicted probabilities have 99% bootstrapped confidence intervals generated with 1000 simulations.

B Online Appendix - Codebook for the Congressional Primary Candidate Database

Coding Resources and Information

All election returns were collected from the America Votes book series, FEC official reported election results, and CQ Press Congressional Election Archive. Data were supplemented with district-level variables from Gary Jacobson's House general election dataset. Garys data is often a useful starting for coding a specific year since you already have the general election outcome coded for both sides (which reduces the amount of data that needs to be coded at the primary stage).

Information about candidate quality and experience for the 2000-2010 elections was collected by searching for news records about the candidates. Specifically, it started with a Google News search for '[candidate name] [state name] Congress' and restricted the dates of the results to be only from the calendar year of the election in question. Then a similar search was conducted using Lexis Nexus Academic. Finally, simple Google searches were utilized.

Information about candidate quality and experience for the 1980-1999 elections was collected using Newspapers.com online archive of local and national newspapers. Specifically, candidate names were searched, restricting results to only include those for the specific state the candidate ran in and the election year of interest. The later dates (2012-2016) were generally conducted using a simple Google search, being that most campaign information for candidates were readily available on the Internet.

There might be times when you are unable to find any information relating to a candidates quality. If, after you have exhausted the searches from above you are unable to find any information on a particular candidate, code them as a 0 for quality. Our reasoning follows along with that of Gary Jacobson, meaning that if there is no information relating to a candidate then it is probably safe to assume that they held no previously elected position. Given the extensive amount of hand-coding in this data, there are likely some coding errors. If you find any, please let us know.

Note on Candidate Experience Coding

Candidates sometimes possessed multiple types of experience. If a candidate has elected office experience it trumps all else if a candidate has held multiple offices, her code

should be the most high-ranking office (ex. if the candidate was a State Senator and then a City Councilman, code the candidate as a State Senator). A candidate could also hold multiple types of non-elected experience. For example: Joan Smith is an ex-Marine and businesswoman from Grand Rapids, MI. This candidate could be classified as a military official *or* the candidate could be coded for her business experience. Our approach for coding these types of candidates was most significant, most recent. Coding decisions were made by considering (1) how recent the experience was, (2) the length of their experience, and (3) the significance of their experience. Consider this example:

- Joan Smith served in the military and for the past 20 years has owned a hardware store. The candidate could be considered a military official or business owner. Her military service was a long time ago and does not seem noteworthy, her business experience is considered more recent and significant therefore we would code her as a business owner.
- Joan Smith served was a Lieutenant Colonel and for the past 10 years has worked in finance. Once again, the candidate could be considered a military official or business owner. In this instance her business experience is not significant and her rank in the military was prestigious, therefore the candidate would be coded for her military experience.
- Joan Smith served in the military and for the past 7 years has worked as a customer service representative. Neither aspect of the candidates experiences is particularly noteworthy. She would not consider her a businesswoman because of her low-ranking role in a company. Even though her military service was not noteworthy it is her most “significant” experience, therefore the candidate would be coded for her military experience.

District & Candidate-Level Variables

raceid:	Form: [year(XXXX)jacobson_district(XXXX)party(X)] For example, if primary elections are being observed in 1990, for the first district in Alabama the raceid would be as follows: 199001010 (Republican) 199001011 (Democrat) 199001019 (Top-two / jungle primary no partisan primary)
year:	Year of the election
stcd:	First two numbers are the state code (i.e. 01: Alabama, 02: Alaska, 50: Wyoming), second two numbers are the district number
state:	Name of state
incub_party:	0 = Republican incumbent 1 = Democratic incumbent 2 = Open seat held by Republicans 3 = Open seat held by Democrats 4 = Open seat, new (redistricting) 5 = Two incumbents (redistricting)
cand_party:	0 = Republican 1 = Democrat 9 = not one of the two major parties
redist:	1 = Redistricted boundaries 0 = Not redistricted
fr:	0 = Incumbent is not a freshman 1 = Freshman elected in previous general election 2 = Freshman elected in special election more than 1 year earlier 3 = Freshman elected in a special election less than one year ago 9 = Seat not defended by majority party incumbent 99 = New seat / two incumbents For redistricting years (years ending with a 2), fr variable is coded 99 for districts with two incumbents or an open seat.
primary_type:	0 = Race used an open primary system 1 = Race used a closed primary system 2 = Race used a semi-closed primary system 3 = Top-Two Primary 4 = Louisiana-style primary (used in LA and special cases) 5 = Non-partisan blanket primary

candnumber:	Total number of two-party candidates running in each partys primary. For Louisiana-style primaries and top-two primaries total candidates are listed because primaries have no partisan distinctions. Write-in candidates are omitted for the candnumber because they are not reported consistently in FEC election returns or state election archives.
dem_pres:	Democratic presidential two-party vote in the district for the previous election. Code “.” indicates third-party or redistricting.
dem_vote:	Democratic congressional two-party vote in the district for this general election. Codes 100 & 0 indicate previous primary was unopposed (100 incumbent party unopposed or top-two single party; 0 no out-party challenger). Code “.” indicates third-party, redistricting, or Louisiana.
prev_vote:	Democratic congressional two-party vote in the district for the previous general election. Codes 100 & 0 indicate previous primary was unopposed (100 incumbent party unopposed or top-two single party; 0 no out-party challenger). Code “.” indicates third-party, redistricting, or Louisiana.
incname:	Name of the seats incumbent at the time of the primary.
contest_type	0 = Race used an open primary system 0 = Primary 1 = Caucus/convention, no sufficient opposition 2 = Caucus/convention, with sufficient opposition 3 = Caucus/convention/committee, no oppositional primary 4 = Other Primary Type Convention distinction made because in certain states (Virginia and Connecticut) there is a pre-vetting process before the primary. Primaries are not fully open for all candidates to enter. Candidates must receive a specific percentage of the vote for a primary to occur.
contested	0 = Unopposed primary 1 = Opposed primary 4 = No primary, convention
candidate	Name of the candidate in the election

candvotes	Actual number of votes for the candidate in the primary. “1” indicates uncontested primary; certain state election laws do not require votes to be counted in uncontested elections.
tvotes	Total number of votes cast in this partys primary. “1” indicates uncontested primary; certain state election laws do not require votes to be counted in uncontested elections.
candpct	Percentage of votes received by the primary candidate (candvotes/tvotes). “1” indicates uncontested primary; certain state election laws do not require votes to be counted in uncontested elections.
runoff	0 = Candidate did not garner enough votes to participate in runoff 1 = Candidate participated in runoff election . = No runoff election
runoff_winner	0 = Candidate lost runoff election 1 = Candidate won runoff election . = Candidate did not participate in runoff election
winner	0 = Candidate lost election 1 = Candidate won election Winner variable does not include the runoff winner; winner is the winner(s) of the initial party primary.
winwin	0 = Candidate lost election 1 = Candidate won election Winwin variable includes the runoff winner; winwin is the candidate who proceeded to the general election.
inc	0 = Candidate is a challenger 1 = Candidate is the incumbent Note: if there is another current representative running in a race that has not been designed a “two incumbent” race through redistricting, this “incumbent” is not coded 1. Their quality is coded “30”.
gender	0 = Candidate is male 1 = Candidate is female
qual_chall	0 = Has not held elected office previously 1 = Has held elected office

quality

- 30 = Current incumbent
- 29 = State wide elected office (governor, lieutenant governor)
- 28 = State senator
- 27 = State representative
- 26 = Mayor
- 25 = Judge (elected)
- 24 = District or prosecuting attorney
- 23 = City council member
- 22 = Other elected office
- 21 = Previous incumbent in most recent Congress who lost
- 20 = Former House member (not most recent Congress)
- 19 = Former senator
- 18 = Attorney general
- 17 = States attorney
- 16 = Commissioner
- 15 = Alderman
- 14 = Sheriff
- 13 = Treasurer
- 12 = Business/business owner
- 11 = Journalist
- 10 = Lawyer
- 9 = Judge (non-elected)
- 8 = Minister
- 7 = Farmer/rancher
- 6 = Military
- 5 = Local party leader/activist
- 4 = Doctor/Dentist/Vet
- 3 = Teacher/professor/educator
- 2 = Other government-non-elected/former congressional aide or adviser
- 0 = Indicates no electoral experience / political novice
- 999 = no information found

Notes on States with “Odd” Primaries

Louisiana

In most instances, only one election is held there is not separate primary and general election. If one candidate garners 50% of the vote the candidate is declared the winner; if not candidate garners 50% of the vote a runoff election is held. All candidates are listed on the same ballot, including third party candidates. Louisiana did not use its typical primary system in 2008 and 2010.

Because there are no partisan primaries, we have taken several steps to accurately represent Louisianas unique primary system. The party component of the raceid variable is coded as 9 because there is no separate democratic or republican primary. Louisianas primary type is coded as 5 because it does not accurately fall into any other category. Unlike other states, with the exception of states with top-two primaries, third party candidates are included. This code is used in the dataset in one other instance for some Texas primaries in 1996 where court-mandated district changes required a Louisiana-style election to be held.

Washington

Until a 2002 Supreme Court decision, Washington used a non-partisan blanket primary system where all candidates were listed on the same ballot without party affiliation. The top Democrat and Republican advanced to the general election along with third party candidates who garnered a specific percentage of the vote. No major coding changes; third party candidates are not included in the dataset.

Hawaii

For several elections Hawaii utilizes a non-partisan blanket primary. No major coding changes; third party candidates are not included in the dataset.

Alaska

For certain elections Alaska utilizes a non-partisan blanket primary. In the early 1990s challenges from the Republican party fractured Alaskas election laws instituting separate systems for Democrats and Republicans these disparities are included in the dataset. In non-partisan blanket primaries there are no major coding changes; third party candidates are not included in the dataset.

Connecticut & Utah

For all election years Connecticut and Utah use a modified convention system where party conventions nominate an official party candidate; however, if a non-winning convention participant garners a specific percentage of the vote a primary is held between the non-winner and official party candidate. The necessary percentage varies between states and across years. See the FEC for specific information by year. Information on Connecticut and Utahs use of a convention and/or primary is found in the `contest_type` variable.

Virginia

Local parties in each district determine if a convention or a primary is held. These determinations vary by year and by party. If a party chose to utilize a convention-only the `contest_type` if coded 4. If a party chose to utilize a primary the `contest_type` if coded 0 or 1. Virginia does not have oppositional primaries like Connecticut and Utah; there is no mix of convention and primary types.