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What is This?

Electoral volatility, competition and third-party candidacies in US gubernatorial elections

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Abstract
Third-party participation in plurality elections should be rare, given the low probability of electoral success. In the United States, the entrenched two-party system makes third-party candidacies especially puzzling. We develop a general theory of these candidacies based on the electoral context, focusing on electoral competition and volatility. When electoral competition is either low or high we expect the number of third-party candidates to be high, due to the opportunities to raise attention to policy issues or affect the election outcome. Moderate levels of competition will produce low levels of third-party candidate participation, as there are fewer prospects of drawing votes or attention. Volatility is expected to have a positive effect, since high volatility signals a de-aligned electorate. We evaluate our claims using US gubernatorial elections, 1977–2005. The results support our claims, suggesting that third-party candidacies are shaped by the degree of electoral volatility and competition.

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Introduction

The participation of new or minor parties in elections can be puzzling, particularly when they stand little chance of winning the election. This puzzle is most likely to emerge under single-member-district plurality (SMD-p) electoral rules. The effect of electoral institutions on party system size is well established (Duverger, 1954; Ordeshook and Shvetsova, 1994; Rae, 1971; Riker, 1982) and SMD-p systems are known to place the most severe constraints on the number of viable candidates per electoral district (e.g. Cox, 1997). As Maurice Duverger astutely pointed out over 50 years ago, the use of SMD-p rules tends towards two-party systems (the Law), while the use of proportional representation (PR) often leads to multiparty systems (the Hypothesis). To explain the Law, Duverger argues that SMD-p rules discourage third parties due to (1) a mechanical effect, such that parties receiving less than a plurality of votes in a district receive no legislative seats, thereby increasing a candidate's incentives to run under a large party label, and (2) a psychological effect, where rational voters, recognizing their preferred (third-party) candidate will likely not win the election, cast their ballot for the ideologically closest (major-party) alternative.

The impact of SMD-p rules on the party system is probably most pronounced in the United States.[1] Since the critical election of 1860 established the current two-party system of Democrats and Republicans, third-party candidates, which we define as minor party candidates and independents, have generally been unsuccessful at capturing elected office; few have been elected to the House of Representatives, fewer to the Senate, and none has managed to capture the presidency. Similarly, with the exception of a few notable elections (e.g. Jesse Ventura in Minnesota in 1998, Lowell P. Weicker, Jr. in Connecticut in 1990 and Angus S. King in Maine in 1994 and 1998), state offices tend to be dominated by major parties and their candidates.

Despite the low probability of electoral success, however, individuals continue to contest elections at all levels of government under non-major-party labels. Perhaps even more surprising, many elections are contested by several third-party challengers. This observation begs the question, why do third-party candidates continually contest public office in American elections? While we acknowledge that these candidacies are influenced by individual idiosyncrasies, our argument focuses on the electoral conditions that encourage or discourage third-party contestation. Specifically, we argue that high levels of electoral competition and volatility may encourage would-be third-party candidates to contest elections, given that under these conditions third-party candidates may be able to maximize their visibility and draw attention to their issues. However, we expect a more nuanced relationship between electoral competition and third-party candidacies, as extremely uncompetitive elections may also provide third-party candidates with needed opportunities to draw attention to their preferred policies.

Our article proceeds as follows. First, we discuss the possible influences of the electoral context on third-party candidate emergence in the context of US elections. Next, we turn to a discussion of the data and methodology used to test our theoretical expectations. A discussion of the empirical results follows. Lastly, we conclude that, while there are

certainly structural barriers to third-party emergence, electoral uncertainty may encourage these candidates to participate in the electoral process despite the low probability of obtaining office.

Third-party participation in US elections

From a theoretical standpoint, understanding new (i.e. non-mainstream) party entry is important for democratic politics. Parties structure elections by providing voters with meaningful policy choices. From a practical standpoint, new party entry has had an impact on the politics of Western Europe. Since 1960, new parties have emerged and gained popularity and presence; over 54 percent have held seats in a national legislature, while 10 percent have participated in coalition government (Meguid, 2005). Despite the growing electoral success of new parties in Western Europe, third parties have not reached a similar status in the US. Rather, it is generally unlikely that a third-party candidate will emerge as a serious contender for an electoral seat in the US Congress; hence, third-party challenges pose no immediate threat to the strength of the party duopoly. For this reason, it was once widely held that third parties were largely inconsequential in US elections. These candidacies were considered a nuisance and received scant scholarly attention.

Following Ross Perot's strong showing in the 1992 presidential election, however, new interest in the role of third parties emerged as research demonstrated these candidacies could seriously affect the dynamics and outcomes of elections (e.g. McCann et al., 1999). Koch (1998) and Lacy and Burden (1999), for example, demonstrate that third parties can mobilize voters (i.e. increase voter turnout) similar to the two major parties. Furthermore, Lacy and Burden (1999) assess the effect of Perot's candidacy on the vote-shares received by the two major-party candidates and conclude that Perot's presence decreased Clinton's margin of victory over Bush by seven percentage points.

While these studies demonstrate that third parties play an important role in US politics, it is still unclear when an individual would contest an election under a third-party label. If we assume candidates are rational actors, a potential candidate weighs the benefits of attaining office, discounted by her probability of winning, against the costs of running and decides to contest the election when the benefits outweigh the costs (Black, 1972; Carsey et al., 2003; Rohde, 1979; Schlesinger, 1966). Based on the decision-making calculus, what factors influence the costs and benefits of electoral contestation?

The few studies that examine third-party contestation in the US have typically focused on the structural barriers/costs of entry, namely, ballot access requirements. As Burden notes (2007: 669): '[N]early every state requires minor party and independent candidates to collect signatures on nominating petitions and submit them ... to appear on the ballot.' However, because state governments regulate access to the ballot, these requirements vary greatly across the US. For instance, Lem and Dowling (2006) report that 39,536 signatures were required to appear on the ballot in Alabama's 2002 election, while only 800 signatures were necessary in New Jersey.

Intuitively, one would expect that higher ballot access requirements would dissuade would-be candidates from contesting elected office under third-party labels, given running for office is already a costly endeavour. That is, campaigns require a great deal of

time, effort and money and the added costs of collecting signatures would only further tip the decision-making calculus towards not entering the electoral fray. This expectation has generally been echoed in scholarly research. Ansolabehere and Gerber (1996), Lewis-Beck and Squire (1995), Winger (1997), Stratmann (2005), Lem and Dowling (2006) and Burden (2007) all find evidence that ballot access requirements discourage third-party participation in US elections.[2]

While legal barriers such as ballot access will undoubtedly inhibit third-party participation, we emphasize that this is only part of the story. Between 1980 and 2006, Texas required an average of approximately 36,000 signatures to appear on the gubernatorial ballot while averaging 2.3 third-party candidates. North Dakota, on the other hand, required a petition of only 1000 signatures, but averaged only one candidate per election for the time period under investigation. Thus, the anecdotal evidence suggests that, in some cases, the presence of a political will outweighs the lack of a political way to participate in the electoral process.

Ballot access regulations play an important role in whether an individual contests an election under a third-party banner. Like most state regulations, however, most of the variation in ballot access laws tends to be cross-sectional rather than over time. In this regard, we must push our thinking further if we are to explain why third-party participation varies over time when ballot access requirements do not. We believe that changes in the electoral context provide a plausible explanation for the variation in third-party candidacies by affecting both the probability of winning office and the benefit attained from contesting the election. Specifically, we expect the degree of electoral competition and volatility to affect the number of third-party candidacies from election to election.

Electoral competition and third-party candidacies

The strong electoral bias and legal barriers to entry severely discourage third-party participation. However, third parties continue to contest elections, indicating that some incentives must exist that encourage participatory behaviour. In comparative context, scholars (Kitschelt, 1994; Shepsle, 1991) argue that rational parties' decision to enter is largely driven by electoral competition and the existing policy space. According to this framework, new parties may enter close to a specific competitor (i.e. accommodative strategy) hoping to draw votes from a more threatening competitor or enter away from their primary competitor (i.e. adversarial strategy) in an effort to encourage voter flight to the new party (Meguid, 2005).

This intuition can be applied to the US electoral context. Rosenstone et al. (1996: 130) argue: 'Third party voting is likely whenever there is an ideological hole unfilled by a major party candidate.' Relying on the standard Downsian framework, they propose that when competition for the median voter is high, the two major-party candidates 'run to the middle', leaving ideological gaps on either side of them. Hence, third-party candidacies and voting will ensue as long as a third-party candidate moves into one of those unfilled ideological holes.

Lem and Dowling (2006) relax the Downsian assumption (e.g. see Sullivan and Minns [1976] and Keech and Pak [1995] for a discussion of its validity), but continue to argue that major-party competition will facilitate third-party participation.

Specifically, they propose that if one is willing to relax the assumptions that third-party candidates engage in purely office-seeking behaviour and elections are one-shot events (see Carsey et al., 2003), it is during periods of high major-party competition that third parties can draw the most attention to their issues. Thus, individuals may be willing to declare under a third-party banner, despite losing, in an effort to force the major parties to consider or co-opt their policy concerns or face the risk of losing critical votes to a third-party competitor during crucial elections.

Burden (2005, 2007), on the other hand, points to the importance of major-party competition, but argues that it should have the opposite effect on third-party candidacies. Specifically, he states that strategic voting increases during periods of high competition between the two major parties, which hurts the electoral chances of third-party candidates. In his analysis, he finds that tight electoral contests decrease third-party vote-shares. An inference one can draw is that third-party participation is less likely to occur as party competition and strategic voting increase.[3]

We suspect that the discrepancy between these two lines of argument lies in the foci on office-seeking versus policy-seeking behaviour. If one places emphasis on the behaviour of voters and the importance of winning elected office (i.e. office-seeking behaviour), then one might suspect that major-party competition would deter would-be third-party challengers. If, on the other hand, one is willing to relax the assumption that third-party candidates are motivated solely by the spoils of office (i.e. they are policy-seeking), then candidates may be more likely to contest elections when they can maximize their visibility and draw attention to their issues. Thus, if one is willing to presume that the benefits of contesting the election and the probability associated with electoral success are not necessarily linked to office-holding, third-party participation in US elections may not be as enigmatic as originally suggested at the outset of this article.

In general, we concur with Rosenstone et al. (1996) and Lem and Dowling (2006) that high levels of electoral competition should increase the number of third-party candidacies. However, we also suspect that the relationship between competition and third-party candidacies is more nuanced than this simple depiction, since highly *uncompetitive* elections may also encourage policy-motivated third-party candidates to emerge.

We propose a positive curvilinear (U-shape) relationship between electoral competition and third-party candidacies. First, and following the above literature, high levels of electoral competition are likely to leave ideological holes and provide opportunities for third parties to exercise 'blackmail' potential over the two major parties. Second, when elections are decided by a small number of votes, the media are likely to devote more attention to a competitive electoral campaign than an uncompetitive electoral campaign. Increased media attention may stimulate the interests of voters in the campaign and, consequently, raise the visibility of third-party candidates. Thus, competitive elections may encourage policy-motivated third-party candidates to contest elections in the hope of having one of the major-party candidates adopt some of their policy positions.

While contestation under periods of high competition is intuitive, we also expect third-party candidacies to be relatively high when competition is very low; for example, when an entrenched incumbent is expected to win the election with a large margin of victory. The logic behind this argument follows the idea that large ideological holes are likely to encourage third-party candidacies. When one candidate dominates electoral

returns, it is likely that numerous issues are not making it on to the political agenda. A large margin of victory for one candidate suggests that the other candidate is not providing a competitive alternative, or that the winning candidate is effectively shutting out potential competitors (perhaps by virtue of being a popular incumbent). Would-be third-party candidates may then enter the electoral contest to draw attention to a diverse set of issues not offered by the current dominant political party candidate.

Finally, we expect that it is in the mid-range levels of electoral competition that third-party participation is least encouraged, since it is under these conditions that third-party candidates have the least to gain from entering the electoral race. Specifically, we posit that during times of moderate competition established parties will have a level of core supporters that are unlikely to be attracted by third-party platforms or promises. Furthermore, the losing major-party candidate is likely offering a competitive policy platform, just one that is not effective enough to beat the winning candidate. And the winning candidate will probably feel safe enough in victory to ignore the vote-stealing effects of third-party candidates. In the high competition case, third-party candidates rely on the ability to credibly threaten the major parties or raise attention to new issues. In the low competition case, we expect that some voters may be attracted to third-party candidates and their issues. Both of these possibilities are less viable under moderate levels of competition, since a favoured candidate weakens the credibility of third-party threats and a stable amount of core, two-party voters diminishes the allure of third-party issues.[4]

Electoral volatility and third-party candidacies

Assuming third-party candidates are motivated by more than simply the spoils of office, party competition will entice would-be candidates to declare under alternative banners. However, we also emphasize the effect of another electoral factor: volatility. Electoral volatility simply refers to the degree that vote-shares change from election to election. To illustrate the distinction between electoral competition and volatility, consider a hypothetical example using gubernatorial contests in two states over the course of three elections. Suppose that in the first state, party A's and B's candidates split the vote 51–49, 53–47 and 48–52 over the course of the electoral period. From these returns, one might conclude that party competition is high, since both parties have a reasonable chance of obtaining the office, but the election results are not volatile, since only a maximum of 5 percent of the vote changes between parties from election to election. Each party has a stable percentage of core supporters (e.g. > 40 percent) such that elections are decided at the margins. On the other hand, suppose that in a neighbouring state party A's and B's candidates split the vote 60–40, 15–85 and 75–25. In this case, both parties appear to have a reasonable chance of obtaining the office, but only across time. Electoral returns are more volatile since there are drastic shifts in the vote-shares of each party from election to election.

The effects of electoral volatility on third-party candidacies have received more attention in the literature on comparative electoral politics than in the US context (e.g. Gerring, 2005; Tavits, 2008), although surprisingly little attention has been devoted to the subject in general. For instance, Gerring (2005: 91) addresses minor-party contenders in a cross-national context and argues that 'minor parties will do best in circumstances of

high uncertainty, where there are no well-established parties and where the winner of an election – or at least the seat in question – is in doubt'. The explanation for this relationship is that, under periods of high uncertainty, voters will not be able to determine which choice (i.e. candidate or party) will emerge as the victor, thereby decreasing voters' incentive to engage in strategic voting (see also Cox, 1997).

We extend and expand on this logic in reference to the number of third-party candidacies in the US. Electoral volatility is likely to be a powerful, positive influence on minor-party candidacies. The reason for this is that electoral volatility sends important signals to potential candidates about the loyalty of voters to the major parties and, consequently, when third-party candidates can draw attention to their issues and capture votes. Furthermore, the volatility of a state's electoral climate is known well in advance by would-be third-party contenders. High electoral volatility indicates weak voter alignment to the major parties. That is, significant shifts in the vote-shares of the major parties are an indication that voters are not relying on party identification to make their vote choice. Rather, vote selections are likely being influenced by election-specific salient issues and candidate-specific criteria (e.g. valence). These electoral conditions are beneficial to both vote-seeking and policy-seeking third-party candidates. Low levels of party attachment are likely to increase the probability that third-party candidates will gather some votes. Furthermore, increased attention to short-term factors such as issues and candidate appeals are likely to increase both the vote-share of third-party candidates (if they are attractive candidates) and also the responsiveness of the major-party candidates to the blackmail potential of third parties. Conversely, low electoral volatility signals an electorate with stable partisan identifications that is unlikely to support third-party contenders, or is simply less likely to change the pattern of the vote in general. Therefore, we expect that under high volatility would-be third-party candidates would be willing to enter the electoral fray in an attempt to draw attention to their issue areas and (potentially) capture some votes, while conditions of low volatility are inhibitive to third-party candidacies.

Data and measures

To test our claims, we analyse the number of third-party candidates in state gubernatorial elections. We focus on state gubernatorial elections and the count of third-party candidates for the following reasons. First, gubernatorial elections are an ideal electoral unit, since they provide important cross-sectional and over-time variation (e.g. ballot access requirements, electoral volatility), while minimizing idiosyncrasies that could affect candidacies in local elections.[5] Furthermore, much of the literature on new party entry focuses on explanatory variables that differ cross-nationally and emphasize institutional features such as the restrictiveness of the electoral system (Hug, 2001; Tavits, 2006). The use of US gubernatorial elections allows us to control for many features of the institutional and political system, while exploring the effects of variations in the electoral context. Second, we choose to focus on the number of third-party candidates to overcome some practical problems in identifying the pool of potential candidates. That is, since the potential candidates who considered running for the election but ultimately chose not to are never known, constructing individual utility equations (see, e.g., Fowler and

McClure, 1989) and comparing those who ran to those who did not is simply not possible.[6] By focusing on the count of third-party candidates, however, we can infer that conditions encourage third-party participation when we observe the number of candidates to be relatively high (conversely, hostile conditions should push the number of candidates towards zero). We operationalize our key variables as follows.

The number of third-party candidates

The number of third-party candidates was derived from Beyle and Jensen's *Gubernatorial Campaign Expenditure Database*, which contains data for all gubernatorial candidates from 1977 to 2004.[7] The party identification of each candidate is listed in the dataset; we included any candidate who was not affiliated with the Democratic or Republican Party in the count (i.e. the count includes minor-party candidates and independents).[8]

Electoral competition

Existing measures of electoral competition, such as the Ranney index or Holbrook and Van Dunk's (1993) measure of competition, may be useful for gathering a basic sense of different levels of competition from state to state; however, we consider them less appealing for our purposes. These indexes average several indicators of party competition to provide a summary measure of state-wide competition. This is problematic for our purposes for two reasons. First, the indexes are based on state legislative elections, whereas gubernatorial elections may have different patterns of competition. Second, and more importantly, the indexes are designed to be cross-sectional measures of political competition. As such, they capture state-to-state differences in competition, but do not capture changes in a single state over time. This is particularly problematic for our argument, since we expect the number of third-party candidates to change from election to election in response to election-specific contextual features.

    According to our propositions, the number of third-party candidates in each election should be affected by the level of competition between Democratic and Republican candidates. Therefore, we operationalize electoral competition as the absolute difference between the vote-shares of the Democratic and Republican candidates for each election (hereafter the two-party vote difference). This measure is preferable over potential alternative measures, such as the winning candidate's vote percentage or the difference between the winning candidate's vote percentage and 50 percent, because it directly captures the balance of power between the two major-party candidates in the election. Given this measurement of competition, we expect a U-shaped relationship between competition and the number of minor-party candidacies. We expect initially increasing two-party vote differences to have a negative effect on the number of third-party candidates, but then to have a positive effect when the balance of power grows exceedingly large in favour of one candidate.

    Measuring competition as the margin of victory avoids the problems of static measures of political competition in that it changes from election to election, but introduces potential problems of causality into the model. If we include the margin of victory in the

current election in a model that predicts the number of third-party candidates, then our dependent variable occurs *prior* to our independent variable, since we know the number of candidates in the election before we know the outcome of the election. This may not be problematic if we assume that third-party candidates can accurately assess the level of competitiveness between the top two candidates prior to the outcome of the election, but we believe this to be a dubious assumption. It is more likely that third-party candidates gain a sense of the degree of competition by looking not only at the likely outcome of the current election, but also at the outcome of past elections. Thus, we construct a three-election moving average of the two-party vote difference, where the last election included in the average is the election held directly prior to the current election. We also include a squared measure of two-party vote difference to capture the expected curvi-linear relationship.

Electoral volatility

We operationalize electoral volatility as the sum of the absolute value of all changes in vote percentages from the prior election to the current election, then divide this figure by two. This follows conventional measurements of electoral volatility (see Pederson, 1979) and simply measures the percentage of the vote that changes across all candidates from election to election. We expect higher levels of volatility to result in higher numbers of third-party candidates.

Similar to the two-party vote difference, including a measure of electoral volatility in the current election introduces problems of inference. First, third candidacies themselves may influence the degree of electoral volatility we see in any given election. Second, it is unlikely that potential third-party candidates can accurately predict the degree of volatility in any election. Consequently, we also use a three-election moving average for our measure of electoral volatility.

Additionally, we included several control variables in our model. These are coded as follows.

Ballot access laws

We utilize Lem and Dowling's (2006) signature requirement variable to access the effect of legal restrictions on third-party participation. The variable is coded as the percentage of signatures required from the total state population to appear on the ballot. We assume that as signature requirements increase, the number of third-party candidacies will decrease.

Incumbency

The advantage incumbents enjoy when seeking re-election is well documented (Cox and Katz, 2002; Erikson, 1971; Fenno, 1978; Fiorina, 1977; Jacobson, 1987, 1990; Mayhew, 1974). Therefore, we follow the literature and control for the presence of an incumbent with a dichotomous indicator (coded 1 if an incumbent sought re-election, 0 otherwise).

Given the incumbency advantage, we expect there to be fewer third-party candidates contesting the election when an incumbent seeks re-election.

Pool of potential candidates

The propensity of third-party candidacies may simply be a function of how many unrepresented interests there are in a given electoral unit. In their influential work, Dahl and Tufte (1973) argue that larger populations equate to more diverse preferences within democracies. Therefore, one might expect that larger electoral units, which contain more diverse preferences, will have more potential than smaller units for third-party contestation.[9] Additionally, electoral units may have different propensities to support third-party candidates. To account for this possibility, we include three measures: state population, population density and the percentage of presidential votes cast for third-party candidates in the previous election. The population data are available from the State Politics and Policy Quarterly (SPPQ) Data Resource and were updated with data from the US Census Bureau's *Statistical Abstracts*. The percentage of third-party presidential votes was taken from *The Book of the States* (various years).

Gubernatorial salary

We include gubernatorial salary to control for the potential effect of the desirability of office. These data, too, were taken from *The Book of the States* (various years).

Statewide competition

We also include Holbrook and Van Dunk's (1993) index of political competition in legislative elections as a control for the overall competitiveness of a state. This index is constructed as an average of four legislative district-level measures of competition: (1) the winning candidate's percentage of the popular vote, (2) the winning candidate's margin of victory, (3) whether or not the seat is 'safe' (defined as a winning percentage of 55 percent or more), and (4) whether or not the race was contested. The index ranges from a theoretical low value of zero (no competition) to a theoretical high of 100 (perfect competition).

Election year

We also add election-year fixed effects into our model of the number of third-party candidates to control for any temporal effects and/or idiosyncratic factors that might result in a higher or lower number of third-party candidates in any given year.

Table 1 reports summary statistics for the dependent variable as well as our two independent variables of interest: the two-party vote difference and electoral volatility.[10] The number of third-party candidacies in gubernatorial elections is unsurprisingly low, with an average of about two third-party candidates competing in each election. However, there is a noticeable degree of variation in the number of third-party candidates in gubernatorial elections, ranging from a low of zero to a high of 11 in Alaska. While Alaska can boast the highest number of minor-party candidates, it is not uncommon

Table 1. The number of minor-party candidates, two-party vote difference and electoral volatility: summary statistics, 1980–2005[a]

Variable	Mean	Std. Dev.	Minimum	Maximum
Minor-party candidacies	2.3	2.2	0	11
Two-party vote difference	18	8.6	2.6	53.7
Volatility	13.1	6.1	2.8	32.7

[a]Summary statistics for two-party competition and volatility reflect three-election moving averages.

to see more than five or six minor-party candidates competing in states such as Alaska, Arizona, Hawaii, Michigan, Minnesota, New Jersey, New York and Vermont.[11]

Our data also provide interesting variation in our independent variables of interest. The three-election average of two-party vote difference ranges from only a couple of percentage points to a high of about 54 percent. Our three-election average of electoral volatility also varies significantly, ranging from two to three percentage points to a high of about 33 percent.

Analysis and discussion

Given that our dependent variable is a count of the number of third-party candidates in state gubernatorial elections, linear regression is inappropriate, leading to inefficient, inconsistent and biased estimates (Long, 1997). Therefore, this study fits the model to the data using negative binomial regression, which relaxes the mean-variance equality assumption that the Poisson distribution places on the data. The alpha parameter will capture any overdispersion in the model due to positive contagion, which in reference to third-party candidates would suggest that the presence of one third-party candidate increases the likelihood of seeing more third-party candidates. In the case of no overdispersion, the model reduces to the Poisson.

We report the estimates of two models in Table 2. The first (Model 1) reports the results of the negative binomial regression without any controls for time. Model 2 reports the results for our substantive variables when we include year fixed effects (not shown). Since our substantive variables of interest vary over time, we report the results of both models to inspect the degree to which our findings for the substantive variables capture temporal trends.

Turning first to the two-party vote difference, our expectations were that the number of third-party candidates would decline initially as the two-party vote difference increased, and then increase at very high values of the two-party vote difference. The results of both models suggest that this is precisely what occurs, given the negative and significant coefficient of the two-party vote difference variable and the positive and significant coefficient on the squared term. However, the results of the negative binomial regression do not allow for an easy interpretation of the substantive effects of the two-party vote difference. Consequently, we predict the expected mean number of third-party candidates while varying the two-party vote difference and holding all other variables constant at their means or modes. These predicted values are displayed in Figure 1, along with a 95 percent confidence interval, for all values of the two-party vote

Table 2. Negative binomial regression of the number of minor-party candidates

Variable	Model 1 Coefficient (Robust SE)	Model 2 Coefficient (Robust SE)
Two-party vote difference (3-election moving average)	–0.049* (0.023)	–0.053* (0.025)
Two-party vote difference (3-election moving average)	0.001* (0.000)	0.001* (0.000)
Electoral volatility (3-election moving average)	0.025* (0.013)	0.020* (0.012)
Political competition (Holbrook and Van Dunk measure)	0.022** (0.006)	0.022** (0.007)
Signatures required (% of population)	–0.001* (0.000)	–0.001** (0.000)
Presidential minor-party vote percentage	0.129 (0.873)	1.69 (1.93)
Population (in 100,000s)	–0.000 (0.001)	0.000 (0.001)
Population density	–0.0004* (0.0002)	0.0002 (0.0002)
Incumbent candidate	–0.084 (0.132)	–0.027 (0.123)
Salary of governor	0.007* (0.003)	0.001 (0.004)
Constant	–1.201 (0.493)	0.672 (0.791)
Alpha	0.230** (0.066)	0.167** (0.056)
N	178	178
Wald statistic – χ^2	62.08	962.31
Pseudo log-likelihood	–329.359	–318.744

*$p \leq 0.05$; **$p \leq 0.001$. All significance tests are one-tailed. Model 2 reports the results after including year fixed effects.

difference that occur in our sample. The highest expected numbers of third-party candidates are found at very high levels of two-party competition. Highly competitive elections, where the two-party vote difference is less than 5 percent, produce an expected mean number of third-party candidates greater than three. As two-party competition declines, and as the two-party vote difference increases, the expected number of third-party candidates drops slightly below two. Only at very high values of the two-party vote difference (very low levels of two-party competition) – upward of 40 percent – does the expected mean number of third-party candidates exceed two.

As predicted, two-party competition influences the number of third-party candidacies. We can expect to see higher numbers of third-party candidates when two party competition is abysmally low, giving third parties ideological opportunities to contest elections, and lower numbers of third-party candidates when two-party competition is more moderate. We see the highest numbers of third-party candidates when competition is fierce; when third-party candidates have strong prospects of influencing major-party candidates.

Turning now to electoral volatility, the estimated coefficient for the volatility measure displays the expected positive and significant relationship with the number of third-party candidacies. Figure 2 plots the expected mean number of third-party candidates over increasing levels of electoral volatility. There is a strong linear relationship between electoral volatility and the number of third-party candidates. As elections grow more and more volatile, the expected number of third-party candidates grows from a little above
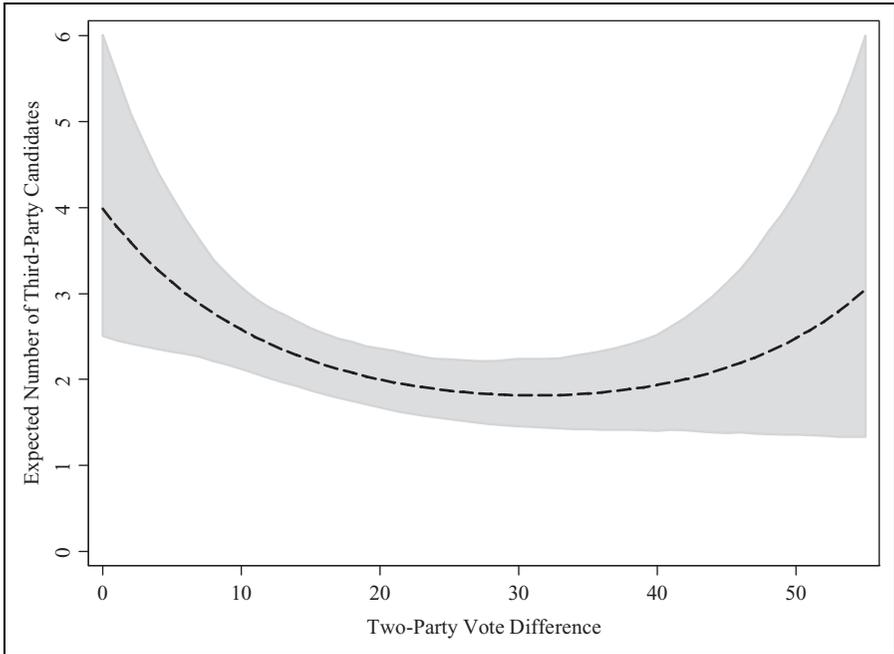
Figure 1. Difference in the two-party vote-share and in the number of third-party candidates

one to almost four. Electoral volatility appears to be a powerful predictor of the number of third-party candidates we observe participating in gubernatorial elections, supporting our position that volatile electoral contexts provide the best opportunities for third-party candidates to throw their hat into the electoral ring.

We have found empirical support for our argument that aspects of the electoral context, specifically two-party competition and electoral volatility, affect the number of third-party candidacies we observe in gubernatorial elections. Interestingly, the other election-specific variable in the model – incumbency – fails to reach even modest levels of statistical significance. The two-party vote difference and electoral volatility appear to subsume any effects of incumbents on the number of third-party candidacies, perhaps since incumbents are often notable for their high margins of victory.

Regarding the other variables in the model, most perform as expected. The Holbrook and Van Dunk measure of political competition is positive and significant even after controlling for the two-party vote difference. Generally speaking, this suggests that the competitiveness of the state's political culture also affects the propensity of third-party candidates to contest gubernatorial elections. Ballot access requirements also affect the number of third-party candidates as expected: the more restrictive the signature requirement, the fewer candidates contest elections. States that are more inclined to support third-party presidential candidates also appear to have higher numbers of third-party candidates participating in gubernatorial elections, although the estimated coefficients fail to reach conventional levels of statistical significance. We do not, however, find any support for the effects of population size.
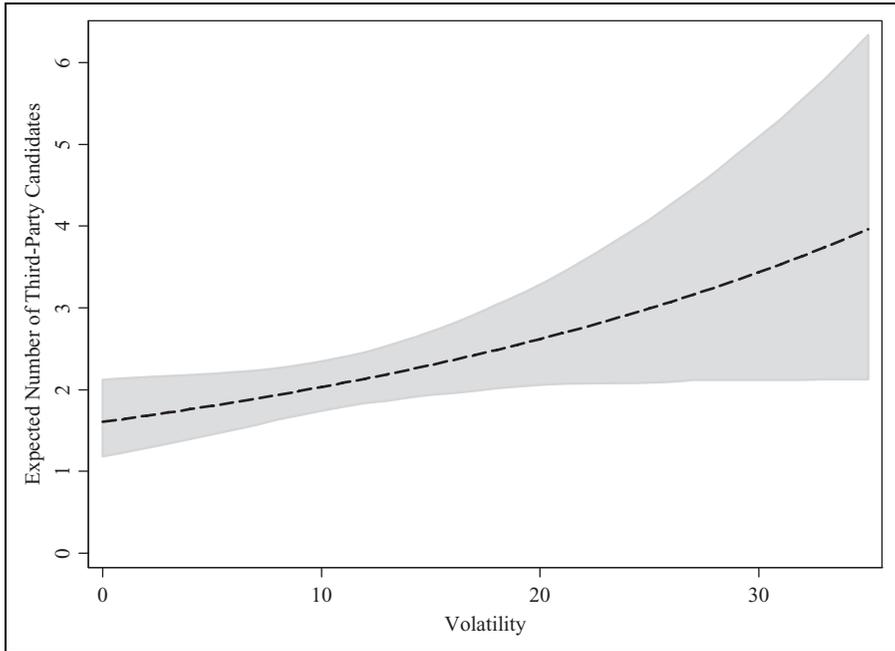
Figure 2. Electoral volatility and the number of third-party candidates

The two remaining control variables – population density and the salary of the governor – have estimated coefficients that are in the expected direction and significant in Model 1, but insignificant in Model 2. In Model 1, densely populated states have a negative effect on the number of third-party candidates, while gubernatorial salary has a positive effect. However, these effects disappear in Model 2. Therefore, we suspect that these two variables are capturing trends in the numbers of third-party candidates, rather than strong substantive effects, since the values of both of these variables increase over time.

Interestingly, alpha's significance indicates overdispersion in the data. This suggests that the entry of one third-party candidate increases the likelihood that we observe more third-party candidates. Our model includes a significant number of control variables designed to capture general levels of propensity to support third-party candidates. Thus, we suspect this finding reflects a 'copycat' process, whereby third-party candidates are more likely to contest the election after others have already decided to contest.[12] Although a full exploration of this finding is beyond the scope of this article, it may be that the simple presence of one or more third-party candidates serves as an informational cue to other potential third-party candidates.

Conclusions

Given the restrictive nature of the SMD-p electoral system, it is puzzling why third-party candidates would participate in elections. In the US context, of course, not many do. On average we might expect to see two third-party candidates in US gubernatorial elections,

but sometimes we may see many more than two. We have argued that although the electoral prospects of third-party candidates may look bleak, there are electoral circumstances that can provide useful opportunities for third-party candidates seeking to gain at least some votes, draw attention to their policy issues and/or influence the platforms of major-party candidates. If third-party candidates are primarily policy-seeking, hoping to direct the attention of the public and the major-party candidates to their political agenda, then their best chances occur at very low or very high levels of political competition between the two major parties and high levels of electoral volatility. If third-party candidates are vote-seeking, then they are best off under volatile electoral conditions. The results of the model presented here lend support to these two claims and stress the importance of the electoral context in explaining third-party candidate emergence.

We have demonstrated that two-party competition and electoral volatility affect the emergence of third-party candidacies in US gubernatorial elections. Furthermore, we believe the basic logic of our theory is applicable well beyond the context of US gubernatorial elections. By analysing the number of third-party candidates under the most restrictive electoral rules, we hope to have shed light on the factors that influence the emergence of new parties beyond prospects of winning the present election. As we have shown, small parties often emerge even when representational prospects are at their most bleak. Fluctuations in the numbers of parties contesting elections are commonly viewed as characteristics of newer democracies (e.g. Tavits, 2006), but we have shown that features of the electoral context, such as volatility, can also affect new entrants in established democracies. Perhaps more importantly, our theoretical focus on the electoral context illustrates how the incentives for new parties to emerge can vary from election to election. Thus, cross-national analyses of new party entries should also pay attention to election-specific characteristics. Small or minor parties are likely to have better prospects of influencing policy or gaining votes when the nature of electoral competition is in their favour.

Notes

1. Furthermore, since presidential elections in the US utilize SMD-p electoral rules at the national level, presidentialism further reinforces the two-party system by providing an electoral incentive for candidates to pool under two national party banners (Cox, 1997).
2. Despite these findings, others (e.g. Hirano and Snyder, 2007; Rosenstone et al., 1996; Winger, 2006) argue and find that ballot access requirements do not sufficiently deter or inhibit third-party candidates from electoral participation.
3. Burden, however, finds that different factors drive the number and vote-share of third parties.
4. While our argument hinges on the policy motivations of would-be third-party candidates, other arguments could lend themselves to the production of a curvilinear relationship between electoral competition and third-party candidacies. In particular, if one views third-party participation and voting as protest behaviour, office-seeking parties will contest elections in

low-competition elections to capitalize on protest votes from the major party. Policy-motivated candidates, on the other hand, would mainly present themselves in high-competition elections. We thank an anonymous reviewer for this contribution.

5. For example, some scholars (e.g. Fiorina, 1994; Hibbing, 1999; McCormick and Tollison, 1978) point to office-specific differences (e.g. salary and professionalism of the office) as incentives for individuals contesting the election. These tend to be relatively small when comparing governorships.

6. We should note that Stone and Maisel's Candidate Emergence Study (CES) solves this problem by identifying the pool of potential candidates in House elections by surveying 'politically informed individuals'. While this is a commendable approach, we would need to replicate this approach for several electoral cycles and states, which is currently not feasible.

7. Our data cover an additional year, 2005, as coded by Dowling and Lem (2009).

8. Candidates who switched their affiliation from a major party to a minor party or independent were not included. Additionally, candidates who were cross-listed with a major party were excluded from our count.

9. Following Lem and Dowling (2006), we also include a measure of population density. According to their rationale, higher population density may decrease the propensity of third-party candidacies as it may reflect higher costs of media markets and campaigning.

10. Table 1 reports the summary statistics for our sample that includes the three-election moving averages and, therefore, ranges from 1986–2005.

11. Louisiana also typically has a relatively high number of third-party candidacies; however, we exclude Louisiana from our analysis owing to the use of the majority run-off election system.

12. We are indebted to an anonymous reviewer for suggesting that we emphasize this finding as a 'copycat' phenomenon.

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