"If at First You Don't Succeed...": Repeat Challengers in State Legislative Elections"

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Scholars have long studied the strategic decision-making calculus of candidates and political parties as they relate to running for office (e.g. Jacobson and Kernell 1983; Jacobson 1989; Canon 1993; Krasno and Green 1988; Hall and Van Houweling 1995; Bianco 1984; Box-Steffensmeier 1996; Lublin 1994; see Born 1986 for a critique). Such work generally focuses on two key factors that influence the probability that an individual will seek elective office: the perceived probability of winning, and the perceived value of the seat. To this we add consideration of the goals and incentives of potential candidates and party organizations that extends beyond assuming that challengers and their parties are motivated simply by winning. In this paper, we develop a theory of strategic choice among potential challengers and their political parties based on these two key factors. We then test several implications of our theory by examining an under-studied phenomenon (challengers running in consecutive races) in an understudied context (state legislative elections). While our analysis focuses on repeat challengers, our theory and findings speak more broadly to how the context of an electoral environment influences the strategic decision making of parties and candidates.

Common folk wisdom suggests that sometimes a politician has to lose an election before winning one (Mack 1998). This implies that many candidates running for office ran and lost in the previous election. We label such candidates "repeat challengers." We know of no scholarly work on repeat challengers at the state legislative level. Only a few studies have been done on Congress, and they focus on the success rate of repeat challengers without serious consideration of their emergence. Both Born (1977) and Kazee (1980) find that repeat challengers fair slightly better that do first time challengers when running for Congress, but Squire and Smith (1984) find no such result. The only

recent study of repeat challengers of which we are aware is Mack's (1998) study of House elections from 1982 through 1990. During that period, less than 20 percent of House challengers were repeat challengers. However, nearly one-third of repeat challengers ran in districts where the incumbent won 60% of the vote or less in the previous election. Mack (1998) finds that repeat challengers who performed well in their first run typically raise more money for their second run than they did for their first, and they generally receive a larger share of the vote the second time around.

While we know little about the success of repeat challengers, we know next to nothing about the factors that predict their emergence. This study focuses precisely on the emergence of repeat challengers for the office of state legislator for elections from 1968 to 1989. Ideally, to test a model of candidate strategic decision making about whether to seek election, we would study the entire population, or at least a representative sample thereof, of those who *might* seek election to the state legislature. However, we have no data on most *potential* candidates, nor does it seem likely that such data could be gathered. Simply identifying the population of potential candidates is problematic given that some unknown (and probably unknowable) number of individuals in a particular district might run, but do not. A second option would be to study the population of all candidates who did run for state legislature. Even this is not possible, however, as we lack sufficient information on a representative sample of all candidates who ran in primaries. Thus, we are forced by data availability to restrict our analysis to candidates competing in general elections. In addition, we examine only elections that do not immediately follow legislative redistricting and that take place in single-member districts. We believe that the decision calculus for candidates and political parties likely

differs in fundamental ways in multi-member district elections as compared to singlemember district elections. Similarly, the disruption of redistricting likely changes individual candidate decision making from that which occurs during non-redistricting periods. Finally, we consider only major party candidates in the analysis presented here.¹ Again, the decision-making calculus of minor party candidates likely differs in fundamental ways from that of major party candidates.

In this paper, we focus on this more limited set of elections in order to develop a model of repeat challenger behavior. This leaves us with 19,108 challengers who ran and lost across 46 states during this time period. Of these candidates, 2,311 (about 12%) ran again in the next election. Of those who ran again in the next general election, about 17 percent won.

Before moving forward, we need to define some terms to simplify our presentation. We refer to candidates who ran in a general election for the state legislature and lost as "losers". The "losers" that run again in the next election in the same chamber we call "repeat challengers." We define "potential challengers" as those individuals other than the "losers" who consider seeking office during the next election. Finally, we use the term "potential candidates" to refer to both "losers" and "potential challengers." Our analysis is designed to predict who, among the pool of losers, will run again in the next election.

¹ There are about 7,500 minor party challengers in our data set after imposing the other restrictions noted above. Sixty-one percent of them receive 5% of the vote or less. Seventeen percent of them run again in the next election.

Theory

There are three main players to consider in modeling whether or not a loser runs again in the next election: the loser him/herself, the potential challengers for the next election from the loser's party, and the loser's party organization. As noted above, the literature points to two key factors that influence the behavior of these three actors: the probability of winning the election, and the value of the seat. In this paper, we construct a theory of rational strategic behavior that considers how these two key factors interact with the three actors we have identified to produce a set of expectations regarding the probability that a loser runs again in the next election.

All three of the actors defined above have goals that we can assume guide their behavior. Scholars generally assume that the goals of all potential candidates are based on winning the election, or at least showing well at the polls. The specific goal might be the production of good policy, the desire for status and power, or more material benefits including salary and advertising one's name. Regardless of the specific goal, scholars generally assume that all of these goals are furthered by performing well in the election.

We agree that success at the polls likely motivates many, if not most, potential challengers. However, as a few scholars have noted (e.g. Canon 1993), candidates occasionally seek office for reasons that have nothing to do with winning. Such candidates run despite the knowledge that their chances of winning, or even showing well at the polls, are virtually zero. Sometimes labeled "sacrificial lambs," these candidates run for a variety of idiosyncratic reasons. Acknowledging the presence of this group of potential candidates is important to the broader theoretical argument we develop below.

The third actor of interest – the loser's party organization – has a two-level hierarchy of goals. The dominant goal of the party is to win. Parties have the desire to field strong candidates with the best chance of winning individual seats, with the ultimate goal of attaining majority status in the legislature. However, not every district offers a party a high probability of success. When winning is not a reasonable goal, the party still has the desire to recruit a candidate for each race. Parties need to contest races even if the odds of victory are low in order to remain visible and potentially viable in the district in the future. We argue that this hierarchy of party-based goals combines with the goals of individual potential candidates to produce an expected pattern of behavior regarding the probability of losers becoming repeat challengers.

As noted above, the two key factors that structure how all potential candidates (both the loser and potential challengers) and the out-party approach the next election are the probability of winning the next election and the value of the seat at stake. Conceptually, we can begin by assuming that these two factors operate similarly on all potential candidates. Holding the value of a seat constant, as a potential candidate's probability of winning increases, the probability that he/she will seek election should increase. All challengers should be more willing to absorb the costs of running if their chances of success are higher. Similarly, holding the likelihood of winning constant, the probability that a potential candidate will seek election should increase as the value of the seat increases. As we will see, however, we cannot treat losers and potential challengers equally. Specifically, losers should respond to changes in the probability of winning, and possibly to the value of a seat, differently than potential challengers from their party when deciding whether to seek office in the next election.

Regarding our first key factor – the probability of winning – the simple hypothesis is that as their perceived probability of winning increases, then all things equal, potential candidates should be more motivated to seek election. One measure that contains a great deal of information about the chances for success is the outcome of the previous election (Hall and Van Houweling 1995; Krasno and Green 1988; Lublin 1994). A simple and seemingly plausible assumption is that all challengers should be more likely to seek election if the winner of the previous election won by a relatively close margin - i.e., if the vote share of the loser was relatively large. However, we argue that this is not so. Rather, the impact of the vote share received by the loser of the last election is different for the loser than for other potential challengers. This is because the vote share of the loser in a particular election went specifically to that loser. This makes the loser of that election fundamentally different from the group of other potential challengers. Expressed differently, the vote margin of the previous election contains information about both the strength/weakness of the winning candidate and the strength/weakness of the loser.

We consider four different contexts based on the degree of success of the loser in the previous election. The first we call the *strong loser/vulnerable incumbent* scenario. When the loser receives a substantial share of the votes – say 45% or more – the winner will likely be viewed as vulnerable in the next election by all potential candidates.²

² In our discussion of the four contexts based on the share of votes received by the loser in the previous election, we often speak of the vulnerability of the winner in the next election, implying that the incumbent will invariably seek reelection and be no minated by his/her party. Of course, this is not always the case. Also, when we write "the degree of vulnerability of the incumbent," this should be read as shorthand for the "perceived degree of vulnerability (at the time potential candidates of the out-party are deciding whether to seek election) of the likely general election candidate of the incumbent's party." An important issue for our theory, then, is whether the winner's share of votes in the previous election is a go of surrogate for this perceived degree of vulnerability. We believe it is for several reasons. First, most incumbent state legislators do seek reelection. (Note that our empirical analysis is restricted to the period before states imposed term limits on state legislators.) Also, it is quite rare for incumbents to be defeated in a primary. Thus, in the vast majority of cases, the general election candidate of the incumbent's party will, in fact, be

However, the loser, based on his/her vote share, should be viewed by other potential challengers as strong. In this situation, the loser should view his/her chances of winning the next election as favorable, but other potential challengers should see their chances of defeating the previous loser in a primary as low. In addition, the loser's party organization may attempt to discourage potential challengers in order to present a unified base of support behind a strong loser's bid to seek office again. Under these circumstances, we would expect to see a relatively high probability of losers becoming repeat challengers.

As the vote share received by the loser decreases somewhat, the situation should change. We refer to this context as *vulnerable loser/vulnerable incumbent*. Say, for example, the loser receives 30% of the vote. In this situation, the winner of the election shows some potential vulnerability, but the loser him/herself can also be viewed as vulnerable within his/her own party. The loser may be motivated to seek election again, but potential challengers see a better opportunity for success in this circumstance since both the winner and the loser from the previous election show signs of weakness. The role of the party organization in this circumstance is also less clear. It should see the

the incumbent. However, some state legislators do voluntarily retire (to pursue activities in the private sector or seek higher office). In some such cases, it will not be evident to potential out-party candidates that the incumbent will be retiring at the time they are deciding whether to pursue their party's nomination, and so they will likely be making their decisions assuming that the incumbent will run. The remaining question is: when an incumbent announces early that he/she will not be seeking reelection, do potential candidates of the out-party still gauge the likely vulnerability of the in-party's candidate by the vote share received by the incumbent in the previous election? Although, in general, successors to incumbents are likely to be perceived as more vulnerable than the candidates they replace, we believe that there is a strong positive relationship between the vote share of the winning party in an election and the perceived vulnerability of the successor candidate the party is able to field in the next election. When a party wins a seat by a landslide, it should be able to attract strong candidates to compete for its nomination even when the incumbent chooses to retire. On the other hand, when an incumbent who wins by a narrow margin retires, the chance to compete for that seat is far less attractive; thus the expected quality of the successor candidate should be lower, and he/she should be perceived as quite vulnerable. Finally, while this is an important conceptual issue in its own right, our statistical model controls for the incumbency context of the next election.

winner as vulnerable, but it is not clear if it should back the loser in a second attempt or seek to support a new candidate with a better chance of winning. Indeed, the party organization may simply step aside and avoid any active recruitment or endorsement until a nominee is selected. The net effect of these motivations should be a lower probability of losers becoming repeat challengers in this context than in the strong loser/vulnerable incumbent context.

Moving further down the range of the vote share received by the loser, to what we label the *weak loser/strong incumbent* context, changes the calculus for losers, potential candidates, and party organizations again. For example, imagine a loser who wins only 15% of the vote in a general election. Certainly in this circumstance, the winner of the election looks quite strong. The loser him/herself and potential challengers should see little chance of winning, and would thus be discouraged from seeking election. The loser's party would also be unlikely to view its dominant goal of fielding a candidate that can win as unattainable in that district, at least in the short run. However, the party's secondary goal of at least fielding a candidate to maintain an electoral presence in the district would push the party to recruit someone to place on the ballot. Even if the candidate will be a "sacrificial lamb," the out-party would likely prefer that to not contesting the race at all. The question then becomes, where would the party look to find such candidates? We suspect that one of the first places they would look would be at the most recent loser. The decisive defeat that the loser endured in this circumstance was probably not a surprise, which means the loser in this situation is likely someone who was sparked or recruited to run based on motives unrelated to the probability of winning in the first place (i.e. Canon 1993). This is exactly the sort of person the out-party will

need if they are going to recruit a sacrificial lamb. Thus, absent any motivation to run among other potential challengers, we expect a relatively higher probability of a loser becoming a repeat challenger in such circumstances than in the vulnerable loser/vulnerable incumbent context.

Finally, at the very lowest end of the loser's vote share, we have the *flawed loser/powerful incumbent* context. Here, the loser (and his/her party) is defeated so overwhelmingly that the loser may not even be perceived as a credible sacrificial lamb. Consider a major party candidate who garners only 5 percent of the vote. Such outcomes are rare in state legislative elections, but they do occur.³ When a major party candidate does this poorly, regardless of their motivation for running, it would seem that they would be unlikely to run again in the next election. While other potential challengers may not be motivated to run either because of the winner's overwhelming victory, if the out-party is going to recruit even a sacrificial lamb for the next election, it will probably look elsewhere than to the loser. In fact, at such low levels of vote share, the out-party organization may simply conclude that running such hopelessly flawed candidates is actually worse for the party's credibility than not contesting the next election at all. Thus, while our prediction is less certain given the relative infrequency of this situation, we would expect that the probability of a loser running again after receiving such a low share of the vote would be lower than in the previous context.

These various predictions suggest that as we move across the four contexts from the highest loser vote share values to the lowest, the probability that the loser will run again in the next election starts relatively high (in the strong loser/vulnerable incumbent context), decreases (moving to the vulnerable loser/vulnerable incumbent context), then

³ One percent of the challengers in our data set received 8 percent of the vote or less.

increases (with movement to the weak loser/strong incumbent context), and finally decreases again (moving to the flawed loser/powerful incumbent context).

The perceived probability of winning should also be affected by the incumbency context of the election. The obvious hypothesis here is that potential candidates from the out-party would be most likely to seek election when the seat is open, less likely when facing a freshman incumbent, and least likely when facing an "entrenched" veteran incumbent (e.g. Mack 1998; Jacobson 1997). However, capturing the effects of incumbency on the probability of a loser becoming a repeat challenger is not that simple. In our analysis, there are four distinct incumbency contexts: (A) an incumbent defeats the loser and that incumbent runs again in the next election; (B) an incumbent defeats the loser but that incumbent does not run again in the next election; (C) the loser is defeated in an open-seat race and the new (freshman) incumbent runs again in the next election, and (D) the loser is defeated in an open seat race but the new (freshman) incumbent does not run in the next election. As will become clear, we cannot simply combine the categories above into whether or not an incumbent runs in the next election. The reason is that losers and potential challengers will respond differently to some of the above contexts.

The worst time for losers to seek election again is in situation C.⁴ In this context, the loser ran in an open seat in the previous election and lost. A rematch would involve facing the same candidate as before, but who now has all the advantages of incumbency and the expected sophomore surge that comes with it. There is little reason for the loser

⁴ Our hypotheses about incumbency context assume that potential candidates of the out-party can accurately predict whether they would face an incumbent in the general election at the time they are deciding whether to seek election. This seems like a very safe assumption. Incumbents would risk the wrath of their own party if they were to delay announcing the intention to retire until close to the filing dead line. Thus, potential candidates from the out-party generally know whether the incumbent will be seeking reelection well in advance of when they have to make their decision to file for candidacy.

to think that he/she could do better in the next election. Furthermore, the loser's party should draw the same conclusion, and therefore, may look for a new candidate to be the party's standard barer. In short, losers in context C face an incumbency context that has gotten worse for them from one election to the next.

Conversely, the best time for a loser to consider seeking office again should be situation B. Here, the loser ran against an incumbent and lost, but that incumbent is gone in the next election. As a result, the loser could reasonably expect to perform better in the next election. Furthermore, there may be a tendency among party organizations to support candidates who were willing to take on an incumbent in one election if that incumbent is not there the next time around. Thus, in this situation (B), losers face an incumbency context that improves from one election to the next.

Scenarios A and D fall in between for losers. In both A and D, the loser is facing an incumbency context identical to the one he/she experienced in his/her previous race. Thus, in both contexts there should be no systematic expectation that the next election should be easier or harder than was the previous one. In other words, the loser should be equally motivated to seek election in contexts A and D; ceteris paribus, he/she should be indifferent between these two contexts. To summarize, the incentive for a loser to seek election again should be highest in context B, lowest in context C, and in between these extremes in contexts A and D. Moreover, the incentive should be the same in contexts A and D.

The same ordering, however, does not hold for other potential challengers. Unlike the loser, they were not part of the contest in the previous election, and thus do not evaluate their prospects in the next election in light of their performance in the

previous election.⁵ For potential challengers, the most appealing scenarios should be contexts B and D. In both of these settings, the potential challenger is considering running in an open seat race rather than against an incumbent. But if they must face an incumbent, potential challengers should prefer to run against a freshman than an entrenched incumbent. Thus, potential challengers should prefer context C to context A.

In order to generate predictions regarding the effect of incumbency context on the probability of a loser becoming a repeat challenger, we must take both sets of preference orderings outlined above into account. For some comparisons, our expectations are clear. In comparing context A to context C, losers prefer A to C and potential challengers prefer C to A. Thus, we can unambiguously predict a higher probability of losers becoming repeat challengers in context A than in context C.

A prediction is also clear in comparing context A to context D. We argued above that the loser is indifferent between A and D, but that potential challengers would prefer D to A. Thus, we would expect losers to have a lower probability of running again in context D than in context A. Finally, we predicted that losers have a clear preference for B over D, while potential challengers are indifferent between the two. The net effect should be a higher probability of losers running again in context B than in to context D.

In comparing context A to context B, both losers and potential challengers are predicted to prefer B over A. Thus, a shift from context A to context B increases the motivation of both the loser and potential challengers to seek election. The effect of this shift in context on the probability that the loser will run again depends on the net effect of the change in motivations by the multiple players. Unfortunately, our theory is silent on

⁵ Of course, the group we call potential challengers may include people who ran in general elections prior to the previous election, or in the primary for the previous election. We do not have the data to explore this potential complication.

the relative effects of these motivation changes, though a naïve prediction would be that they are equal, resulting in no observable difference in the probability of losers running again when comparing these two contexts.⁶ Comparisons of context B to C and of context C to D are similar. In both, the preferences of losers and potential challengers work in the same direction.

The previous discussion highlights the difficulty in generating predictions of the effect of incumbency context on the probability that a loser will run again in the next election because some contexts push both losers and potential challengers in the same direction. The same problem occurs when we shift our attention to the influence the value of the seat has on the probability of losers running again. In this analysis, we examine three characteristics of seats reflecting their value to a potential candidate. The first is state legislative salary, assuming that seats with higher salaries are more valuable than seats with lower salaries. Our model also includes variables reflecting the partisan control of state government, based on the assumption that the value of a seat to a potential candidate is greater if that person's party is in the majority rather than the minority (e.g. Canon 1993). Finally, we consider whether the seat being pursued is in a state's upper or lower chamber, presuming that a seat in the upper chamber is more valuable because of the greater prestige and visibility afforded the upper house.

The challenge in making predictions about the effect of the value of a seat on the probability that a loser will be a repeat challenger stems from the fact that greater seat value is expected to positively motivate both losers and potential challengers to want to

⁶ We hesitate here for two reasons. First, a prediction of no difference between these two contexts may stem either from losers and potential challengers both responding to their preferences, but doing so equally, or because neither losers nor potential challengers respond at all to the difference between these two contexts. Second, we do not incorporate here the differential effects of increasing the *number* of potential challengers with increasing the *quality* of them, though Lublin (1994) suggests that quality might be the most important consideration.

seek election. A reasonable expectation, then, is for no consistent pattern to emerge in our analysis regarding the effects of variables measuring alternative aspects of seat value on the probability of observing a repeat challenger. If a clear pattern does emerge, such that higher seat values are consistently associated with an increase (decrease) in the probability of a loser running again, that would suggest that the impact of seat value on losers is stronger (weaker) than it is for potential challengers.

Finally, as a control variable, we include the length of the legislative term, which in American state legislatures can be either two or four years. In predicting the probability that a loser will become a repeat challenger, we view the length of the legislator's term as a "distraction" factor. While the pool of potential challengers is constantly in flux, the individual loser faces a longer time between elections in districts with four-year terms compared to those with two-year terms. As a result, losers faced with waiting four years will, on average, have more career and/or personal opportunities and events that may distract an otherwise likely repeat challenger from running again.

Empirical Analysis

To test the hypotheses outlined above, we estimate a model using data on challengers who ran and lost in general election races for state legislature between 1968 and 1989.⁷ The dependent variable is a dummy variable, coded 1 if a challenger who ran and lost in a particular election ran again in the next election (in the same chamber) and zero otherwise. As noted above, we limit our analysis to those races that take place in single-member districts, to races where there was not a redistricting between the current and next election, and to major party (Democrat and Republican) candidates.

⁷ However, races from the last election held in each state during the period are not included in the analysis since we lack the information to know whether the loser ran again in the next election.

The data set employed is ICSPR's State Legislative Election Returns data, part 1 (ICPSR #8907). This data set includes basic information on all candidates running in general elections for state legislature during this time period. Importantly, this data set includes a variable that records each candidate's name. This is necessary for tracking individual candidates across successive elections, which we need to do to be able to reliably code our dependent variable. However, a significant problem exists with this data set: the names of candidates that appear more than once in the data set are often recorded in a different manner.⁸ Failure to account for this would result in treating a substantial number of observations in the data set as if they were different individuals when in fact they are not. Thus, before conducting our analysis, we implemented a two-stage process of "cleaning" the candidate name variable so as to be able to correctly identify those observations in the data set that refer to the same candidate.⁹

We include several independent variables that capture the hypotheses presented in the previous section. Regarding the probability of winning, the most important factor to consider is the vote share received by the loser in the current race. Our predictions above suggest a fairly complex relationship between the loser's vote share and the probability of a loser running again. Going from the highest levels of loser vote share to the lowest levels, we predicted that the probability of a loser running again would start relatively

⁸ Berry et al. (2000) estimate that about 35% of all incumbent legislators in the same data set for which there are at least two observations have at least one observation in the data set in which their name is recorded differently. Although this error rate might be expected to be lower in the case of challengers, since the average number of instances of individual incumbents in the data set is greater than the average number of instances of candidates who never won a general election, the error rate is still substantial even among challengers.

⁹ The first stage was based on a computer program that made systematic comparisons between candidate names that appeared next to each other when the data set was sorted by state and then by the name as it originally appears. The second stage employed three graduate students to review the entire data file manually, using a series of formal decision rules to inspect changes suggested by the computer program as well as to make additional changes not made by the program. Additional details about the name cleaning process are available from the authors.

high, decrease, then increase, and then decrease again. To capture these twists and turns empirically requires modeling the loser's vote share as a third-order polynomial – i.e., we must include the measure of vote share, but also a measure of vote share squared and vote share cubed. To measure the incumbency context faced by the loser, we construct three dummy variables to capture variation across the four contexts described above.

We include several indicators of seat value in the model. One is a measure of the salary state legislators received in a particular state in the year the loser ran.¹⁰ We also include a dummy variable coded 1 if the loser was running for a seat in a state's upper chamber and 0 otherwise.¹¹ Finally, we assume that partisan control of any state government is in one of four ordinal categories. We assume that the most valuable party control context is when a potential candidate's party has unified control of the state government (i.e., the governorship and both houses of the legislature). The next most valuable context is when one's party controls the house for which one would be running, but does not control one or both of the other house and the governorship. Still less attractive is a context in which one's party does *not* control the house for which one would be running, but the opposition does not have unified control of government. Finally, the least valuable context is when the opposition party has unified control.

Lastly, we control for the "distraction" factor by including a dummy variable coded 1 if the loser ran for an office with a two-year term and zero for a four-year term.

The dependent variable is dichotomous, which suggests the use of a logit or probit model. Here we employ logit. The model is estimated via maximum likelihood. Given

¹⁰ The specific measure is the average of the annual salary of a state legislator during the year in which the legislator seeks election and the previous year. The measure has been adjusted for inflation using the state cost of living index created by Berry, Fording and Hanson (2000).

¹¹ Nebraska's unicameral legislature is coded as an upper chamber.

the likely non-independence of observations within states and legislative chambers, we estimate robust standard errors accounting for the clustering of observations at the state and chamber level.¹²

Results

Table 1 reports coefficient estimates for our logit model and their associated levels of significance. Direct interpretation of the coefficients from logit models, however, is often not intuitive or particularly informative. Therefore, we used the coefficients in Table 1 to compute estimates of the effects of independent variables on the probability of a loser being a repeat challenger.¹³

We turn first to the effect of the perceived probability of winning. Recall that we predicted that the probability that a loser would run again as a function of the vote share received by the loser should follow an up and down pattern. The empirical results offer evidence consistent with our prediction. We plot the predicted probability of a loser running again as a function of the vote share that loser received in Figure 1, holding all other variables constant at their means.¹⁴ [Indeed, all analyses below of the effects of independent variables on the predicted probability that a loser will run again assume that all other independent variables are fixed at their means.]

Note that the predicted the probability of a loser running again is highest when the vote share received by the loser is high, in what we call the strong loser/vulnerable incumbent context. Specifically, losers who receive 49% of the vote in an election have a predicted probability of running again in the next election of about .24, the highest

¹³ All analysis reporting predicted probabilities used the CLARIFY software developed by Tomz et al. Information on this program is available online at http://Gking.Harvard.Edu.

¹² All analysis was performed using the logit routine in STATA 7.0

¹⁴ While the mean value of a dummy variable is a value that is not assumed by any case, the result of holding all dummies at their mean is a probability curve reflecting average conditions in cases observed (where averages are weighted by the proportion of cases in the sample that have a particular characteristic).

probability on the graph. This is consistent with our argument that losers who are just narrowly defeated have the incentive to run again and that their performance discourages other potential challengers. Also as predicted, the probability of running again declines as the loser's vote share decreases from 49%, as the loser seems more vulnerable to an intra-party challenge while the incumbent still seems vulnerable in the general election. We estimate that the probability that a loser will run again declines over the range in seat shares from 49% to 35%, eventually reaching a low of .084.

We predicted that as the loser's seat share declines further and we move from the vulnerable loser/vulnerable incumbent context to the weak loser/strong incumbent context, the probability that the loser will run again rises. In this circumstance, no potential candidate sees a realistic chance of winning the general election, but the loser from the previous election is the most likely candidate to be willing to run as a sacrificial lamb. This turns out to be true; in particular, as the loser's seat share decreases from 35% to 13%, the probability that the loser will be a repeat challenger increases from .084 to .133. Finally, our results indicate that in the range of seat shares below 13%, the probability that a loser will run again declines. This is consistent with our hypothesis that the probability of running again will be very low in the flawed loser/powerful incumbent context; here the loser performed so poorly in the previous election that he/she is probably unwilling to run again, and the party will likely be forced to either find another sacrificial lamb or to not contest the seat at all. Recall, however, that relatively few observations exist in this seat share range, and thus our conclusions here are more tentative. In sum, however, our expectations regarding the complex nonlinear

relationship between loser vote share and the probability of observing a loser running again in the next election are supported by our analysis.

The other factor we examined that reflects the probability of winning is the incumbency context of the election. We described four incumbency contexts (A through D). The predicted probability that a loser runs again when he/she lost to an incumbent but the incumbent does not run again in the next election (Context B) is highest: .104. The probability of observing a repeat challenger when the loser lost to an incumbent and the incumbent runs again (context A) is a bit lower: .092. When a loser lost in an open seat race and the winner does not run again (Context D), the probability that he/she runs again in the next election is still lower: .073. Finally, the estimated probability that a loser becomes a repeat challenger it at its lowest (.063) when that loser lost in an open seat race and the winner of that race – the freshman incumbent – runs again (Context C). These predicted probabilities are depicted in the diagram below:

open seat \rightarrow	open seat \rightarrow	incumbent \rightarrow	incumbent \rightarrow	
incumbent	open seat	incumbent	open seat	
С	D	А	В	
·	•		·	
.063	.073	.092	.104	

We generated a series of predictions based on the incentives of both losers and repeat challengers regarding the relative impact of different incumbency contexts on the probability of a loser running again in the next election. In three comparisons of incumbency context -- A versus C, A versus D, and B versus D -- we made a prediction that the probability of a loser running again would be higher in the first context than in the second. The diagram makes clear that all three predictions are supported. Furthermore, the differences in probabilities reported for all three of these comparisons are statistically significant.¹⁵

Assuming the incumbent is running in the next election, the probability of the loser running again is higher if he/she would be facing the same incumbent as in the previous race (A) than if his/her previous loss was for an open seat (C) and he/she would now be facing the same candidate in a more powerful role as an incumbent. The difference in the predicted probabilities comparing these two contexts is .092 - .063 =.029, which is statistically significant at the .05 level. Assuming the next election is for an open seat, the probability that the loser will run again is greater if he/she lost to an incumbent in the previous race (B) than if his/her previous loss was for an open seat too (C). The difference between these two predicted probabilities is .041, which is significant at the .05 level. Also, the probability of the loser running again is higher when the loser lost to an incumbent and the incumbent is running again (B) than when the loser lost in an open seat race and the winner does not run again (D). This is consistent with our hypothesis that the loser is indifferent between these contexts, but potential challengers prefer to compete for an open seat than to run against an incumbent. The difference between these two predicted probabilities is .031, and it is significant at the .05 level.

For the three other possible comparisons – A vs. B, B vs. C, and C vs. D – we did not have a strong a prior prediction because the two contexts involved in each comparison influence both losers and potential challengers in the same direction. We

¹⁵ Concluding that this difference is statistically significant at the .05 level is based on computing the difference between these two predicted probabilities, then constructing a 95% confidence interval around that difference using Clarify and noting that zero is not contained within that interval. All subsequent claims regarding statistically significant differences in predicted probabilities are based on similar calculations.

offered a naïve prediction that this may result in no significant differences in the probability of observing a repeat challenger among these comparisons if losers and potential challengers respond to these differences in context roughly equally. This turns out to be what we found in comparing A to B and C to D, as these two differences were not statistically significant at the .05 level. The difference between B and C, however, is significant, showing that repeat challengers are more likely to emerge in context B than in context C. A post hoc conclusion would be that losers respond more strongly than do potential challengers in this particular comparison because it involves the loser's most and least preferred contexts. Again, however, any conclusions drawn based on these three comparisons are necessarily tentative.

Our findings, like our predictions, for the impact of the value of a seat on the probability that a loser will run again are more mixed. We believe this is because both losers and potential challengers are more likely to want to seek office when the value of the seat increases. Looking first at the impact of legislative salary, we find that the probability of a loser running again increases when the legislative salary increases. Moving from one standard deviation below the average annual salary (\$6,500) to one standard deviation above (\$49,000), the predicted probability of a loser running again increases from .073 to .099, for a difference in probability of .026 (significant at the .12 level). The significance of the logit coefficient is also borderline (p = .115). Taken together, we have somewhat weak evidence that an increase in legislative salary operates somewhat more strongly on the motivations of losers than it does on the motivations of potential challengers.

Looking next at partisan control of state government, the predicted probability of observing a repeat challenger gradually increases as we move from a situation when the loser's party has unified control of state government to one where the opposition party has complete control. Specifically, the probability changes from .072 to .091, a difference of .019 (which is significant at the .05 level). Thus, we see evidence here that as the policy value of a seat decreases due to partisan control of state government, the probability of a loser running increases.

Our third measure of seat value, whether the seat is in the state's upper chamber or not, has no appreciable impact on the predicted probability of a loser running again, with predicted probabilities for the two chambers that are virtually indistinguishable (.088 for upper chamber races, .084 for lower).

Take together, our three indicators of seat value show evidence in one instance of higher seat value producing a higher probability of losers running again, one instance of higher seat value producing a lower probability of losers running again, and one instance of no effect. One possible interpretation is that losers respond more strongly to the personal value of the seat (salary) than do potential challengers, while potential challengers respond more strongly than do losers to the policy value of the seat (party control). However, we have no a priori reason to expect that this is true. An interpretation that is probably more plausible is that an increase in the value of a seat in the legislature encourages *both* losers and potential challengers to seek election, leading to unpredictable and inconsistent relationships between alternative measures of seat value and the probability of losers running again.

Finally, term length has the anticipated negative impact on the probability that a loser will run again. Losers who must wait four years before the next election have a lower predicted probability of running again (.043) than losers who must wait only two years (.097). This probability difference of .054 is easily significant at the .05 level, as is the logit coefficient estimate for the term length dummy variable.

Discussion and Conclusion

In this paper, we examine the factors that predict whether or not a loser in a state legislative general election will run again in the next general election. In so doing, we construct a theory of challenger behavior that considers the motives of losers, other potential challengers within the loser's political party, and the party organization. Building on the idea that the behavior of these three actors is shaped by the perceived probability of winning of the next election and the value of the seat at stake, we generated and tested several hypotheses.

The principle source of information for potential candidates about their chances of winning the next election – the vote share received by the loser – plays a key role in whether or not a loser will run again. When the loser is narrowly defeated, the relative weakness of the winner and strength of the loser leads to the highest probability of that loser running again in the next election. As the loser's vote share begins to decrease, the incumbent continues to look somewhat weak, but so does the loser. This encourages potential challengers to seek office in the next election, lowering the probability that the loser will be on the ballot again. As the loser's vote share decreases further, potential challengers are discouraged from running by the strong showing of the winner. However, the party still seeks to maintain an electoral presence in the district and the

loser becomes more likely to run again as "sacrificial lamb." Finally, when the loser is crushed at the polls, both the loser and the loser's party may reasonably conclude that the loser running again would not further anybody's goals, leading to a low probability that the loser will run again.

We also find evidence suggesting that the incumbency context faced by losers and potential challengers influences their perceptions of the probability of winning, and thus has a relationship with the probability that a loser appears as a repeat challenger in the next election. All three specific predictions of our theory about the relative probabilities of a loser running again in different incumbency contexts receive empirical support.

The empirical evidence about the impact of seat value on the probability of a loser running again is mixed. This most likely stems from the fact that higher seat value increases the motivation of both losers and potential challengers to seek election. Thus, our problem here is with our inability to model separately the effect of seat value on the decisions of losers and potential challengers – something that cannot be done without data on potential challengers.

In conclusion, we have shown that the study of repeat challengers offers unique insights into the strategic calculus used by all potential candidates of the out-party, and the party's organization, when deciding whether or not to pursue elective office. Descriptively, we show that a significant number of state legislative election losers do run again in the next general election, and that of those, a substantial percentage win. Theoretically, we have shown that political scientists should conceive of potential repeat challengers as distinct from other potential challengers because these two types of

potential candidates interpret how the electoral context (previous vote share and incumbency context) influences their chances of winning differently.

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Table 1

Independent Variable	Coefficient	Robust SE	Z-value		
Vote Share at Last Election	0.163*	0.050	3.26		
Vote Share at Last Election ²	-0.00847*	0.00168	-5.04		
Vote Share at Last Election ³	0.000119*	0.000017	6.90		
Mean Legislator Salary	0.0000078	0.0000049	1.57		
Incumbency Context					
Incumbent \rightarrow Open Seat (B)	0.129	0.080	1.61		
Open Seat \rightarrow Incumbent (C)	-0.412*	0.062	-6.62		
Open Seat \rightarrow Open Seat (D)	-0.254*	0.113	-2.26		
Party Control of Government					
Own Party Controls Chamber,					
Control of State Divided	0.152	0.103	1.47		
Opposition Party Controls Chamber,					
Control of State Divided	0.240*	0.115	2.09		
Own Party Unified Control of State	0.256*	0.075	3.43		
Two Year Term	0.897*	0.232	3.87		
Upper Chamber	0.034	0.205	0.16		
Constant	-3.894*	0.613	-6.35		
Number of Cases	19 108				
Log Likelihood	6702.003				
	-0792.093				
Pseudo K-square 0.036					
^a All results were obtained using the logit procedure in Stata (version 7.0)					
[•] Standard Errors adjusted for clustering by state and chamber					
Indicates coefficient estimate significant at .05 level in two-tail test					

Logit Coefficient Estimates for Probability of Repeat Challenge

