

Prospects, Money, Candidate Entry, and Vote Share in U.S. House Elections:

What's Causing What?

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ABSTRACT

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What's Causing What?

Significant problems occur when political scientists attempt to estimate the effect of challenger or incumbent spending, quality-challenger entry, and incumbent retirement on vote share in U.S. House elections. The problems result from the fact that incumbents, challengers, contributors, and others act strategically by anticipating the outcome of the election if the incumbent runs for reelection. This creates an omitted-variables problem in the absence of an independent measure of prospects. Our solution involves employing incumbent and challenger prospects measures developed from surveys of politically savvy district informants and strong potential candidates in a national sample of House districts. We find that prospects affect quality challenger entry, incumbent retirement, challenger and incumbent spending, and vote share. With prospects included in the analysis, incumbent spending does not have a significant impact on vote share, whereas quality challenger entry and spending decrease incumbent vote share. Using the same model, we also provide an estimate of the impact of incumbency independent of incumbent prospects.

The lack of competition in many U.S. House elections poses a challenge to the ideal of American representative democracy. It is rooted in the advantages incumbents enjoy over challengers, as well as the strategic behavior of politicians, potential candidates and campaign contributors. One of the difficulties plaguing attempts to sort out the causes of competition in congressional elections has been separating incumbents' and potential candidates' expectations about electoral outcomes from the outcomes themselves.

Efforts to estimate the effect of candidate spending in House elections, for instance, have faced the difficulty of distinguishing cause from effect in relating spending to vote share. On the one hand, spending should increase a challenger's vote share, but the larger the challenger's expected vote share, the more willing contributors are to give to the candidate. As a result, it is unclear how much of the positive relationship between challenger spending and vote share reflects the impact of challenger spending on the outcome, and how much it reflects the ability of contributors and others to anticipate a positive outcome worth their investment.

A similar problem affects interpretations of incumbent spending. Incumbents increase their fundraising as their expectations of a tough reelection race increase. As a result, the simple relationship between incumbent spending and vote share is the reverse of that for challengers: as incumbent spending goes up their vote share goes down (Jacobson 1978; Jacobson 1980; Jacobson 2004). However, because incumbents spend more as they anticipate increasing electoral difficulty, we do not conclude that spending hurts them at the ballot box.

Table 1 presents results from the 1998 election, typical of House elections in recent decades, that illustrate the problem. Incumbent spending increases dramatically

with decreased incumbent vote share; challenger spending is associated with increases in their votes. Data such as these make it is easy to believe that incumbents are responding to a threatening situation (as evidenced by the level of challenger spending) by spending more. It is also plausible that they have already more or less saturated their districts in previous campaigns and have used the resources of their office that are not reflected in the expenditure data to generate name recognition and support. If they typically have already saturated their district with attention in previous campaigns and by using the perquisites of their office, diminished returns might make the marginal impact of additional spending difficult to detect (Jacobson 1978; Jacobson 1980; Green 1988; Green 1990; Jacobson 1990; Abramowitz 1991; Erikson 1998; Jacobson 2004).

(Table 1 here)

Popular critics of money in politics often point to the enormous advantage incumbents enjoy over challengers in their fundraising. That advantage appears to be reflected in election outcomes, as the typical incumbent wins by substantial margins and is able to outspend his or her challenger many times over. Table 1 shows that 44% of incumbents who were challenged in 1998 nonetheless managed to win with majorities of 65% or more. Fully 85% of challenged incumbents won by capturing at least 10% more of the vote than their challengers. Incumbents who won most comfortably did so while outspending their challengers by better than 40 to one. Among the next group who won with between 55% and 65% of the vote, incumbents outspent their challengers by almost 35 times. These enormous spending advantages coupled with election outcomes comfortably in favor of the incumbents make convenient targets for those decrying the distorting effects of money in politics.

Without denying the importance of the inequities reflected in the first two rows of Table 1 (and in the vast majority of U.S. House races in every election year), the conclusion that money produces the outcome is too easy. It may just as well be that the money *predicts* the outcome. Note that incumbents spent about 1.2 times what challengers spent in marginal races in which they won reelection, and in the handful of races lost by incumbents, challenger spending virtually matched that of incumbents. If money follows prospects for victory, challengers should raise almost as much as incumbents in races they come close to winning, and as much or more than incumbents in races they ultimately win. The problem, of course, is that the opposite causal story is also supported in these data: challengers come close or actually win in districts where they manage to raise the most money because their spending produces more votes.

An identical ambiguity, albeit one less in the public spotlight, troubles interpretations of the impact of challenger quality in House races. What is the impact of the entry of a quality challenger in a U.S. House race? In the six races lost by an incumbent in Table 1, all but one (83%) attracted a challenger with office-holding experience. The percentage of races with experienced challengers declines sharply in less competitive districts. Results such as these could mean that experienced challengers attract more resources and use these resources more effectively than their inexperienced counterparts in other districts, which explains why they do so much better on average. On the other hand, as the strategic politicians literature points out, experienced candidates tend to enter races they think they can win and to refrain from entering races they anticipate losing (Jacobson and Kernell 1983; Cox and Katz 2002). Thus, the correlation between challenger quality and vote share may reflect experienced candidates' acumen at

anticipating electoral outcomes as much or more than it indicates the consequences of challenger quality for the vote share they get against incumbents.

The problem is a general one of disentangling the effects of politicians', potential candidates' and campaign contributors' behavior, purged of their strategic component. Since incumbents, experienced potential candidates and campaign contributors are strategic, prospects powerfully influence their decisions. If incumbents, potential candidates, and contributors are reasonably good at assessing prospects, their entry and spending decisions will be strongly associated with election outcomes, and it will be difficult to determine the independent effect of candidate entry and spending¹. Cox and Katz (2002, 140) recognize the difficulty of assessing the independent effects of incumbent and candidate entry decisions. First, with respect to incumbents:

All current measures of the incumbency advantage risk overestimating how much incumbency matters by neglecting the possibility that incumbents tend to seek reelection when the prospects for their party are better, while retiring when those prospects are poorer. To the extent that incumbents are good at forecasting votes, one will find the incumbent party's vote share larger when there is an incumbent ... and smaller when there is no incumbent.

With respect to challengers:

When high-quality challengers ... enter the fray, they presumably do so partly on the basis of favorable vote forecasts. Their decisions to enter accordingly may bias estimates of how much the presence of a strong challenger boosts the challenging party's vote share.

The contaminated nature of the relationship between vote share and candidate entry and spending has led to increasingly inventive statistical machinations to address the problem, combined with extended debate about what the actual effects of incumbent

¹ The "entry" problem is the same for both incumbents and challengers, since incumbents retire or decline to run when their prospects are poor, and high quality challengers also decline to run when their prospects are low. Challengers, of course, do not retire, so the problem is usually framed as "entry," while the incumbent problem is usually framed as the decision to retire, or not run again.

and challenger spending are (Jacobson 1978; Jacobson 1980; Green 1988; Thomas 1989; Green 1990; Jacobson 1990; Abramowitz 1991; Bartels 1991; Ansolabehere 1994; Kenny and McBurnett 1994; Epstein and Zemsky 1995; Squire 1995; Erikson 1998; Gerber 1998; Goodliffe 2001; Cox and Katz 2002). The difficulty common to estimating the independent effect of money and candidate entry in House elections results from an omitted-variables specification problem. The omitted variables are incumbent and challenger electoral prospects. Without an independent measure of incumbent and challenger electoral prospects, problematic assumptions are necessary to estimate what everyone agrees is a key factor driving the behavior of central actors in House elections. With an independent measure of these prospects, the problem becomes a straightforward one of statistical estimation using standard multivariate techniques.

Figure 1 summarizes the relationships involved for incumbents and strong potential candidates. The better incumbent prospects are, the larger their vote share in the election, and the *less* they spend and the *less* likely they are to retire. These opposite effects of prospects on incumbent spending and the decision to run may produce the negative relationship between incumbent spending and election outcomes in Table 1. Likewise, as Cox and Katz (2002) point out, the “retirement slump” that occurs when incumbents quit the field may reflect their forecasting abilities rather than a decline in their party’s vote share because they retired. So long as “vote share” measures both the election outcome and the prospects incumbents are forecasting, difficult issues of simultaneous estimation will trouble attempts to estimate the independent effects of incumbent spending and incumbency on election outcomes.²

² See the controversy between Jacobson (1978, 1990, 2004) and Green and Krasno (1988, 1990) on the effects of incumbent spending. Cox and Katz (2002) estimate the effects of incumbency by comparing the

(Figure 1)

The relationships for challengers are different than they are for incumbents, but the inference problem is similar. Challenger prospects relate positively to their vote share, but they also relate positively to spending. As a result, the positive association between challenger spending and their vote share may be spurious, and significantly decrease or disappear altogether if the omitted variable of challenger prospects is taken into account. Likewise, the apparent relationship between entry by experienced challengers and vote share may reflect their ability to appreciate their electoral prospects, rather than entry having an independent effect on vote share. Again, Cox and Katz put the matter succinctly (2002, 160):

By neglecting the impact of vote forecasts on candidates' entry decisions, scholars have overestimated the impact of the two primary race-specific variables utilized in studies of postwar congressional elections: the presence (or absence) of an incumbent and the presence (or absence) of a high-quality challenger.³

The reason there is an omitted-variable problem is because of the difficulty of coming up with a measure that captures the perceptions of the incumbent, prospective challengers, and contributors in advance of the election when there is uncertainty about how well the incumbent will do in the next election. These perceptions motivate or deter experienced prospective challengers and incumbents, and drive the amount of money expended by both the challenger and the incumbent. The ultimate effect—the incumbent's or the challenger's vote share—is precisely the outcome variable and not the

vote share in the incumbent's party of elections in which incumbents retire voluntarily (presumably for strategic reasons, on average) with those where incumbents leave office unexpectedly (principally through death). As expected, the "slump" associated with voluntary retirement is significantly larger than it is with unexpected departures.

³ Both incumbent spending and challenger spending are dependent upon these candidate-entry decisions. When a high quality challenger enters, incumbent and challenger spending goes up, relative to races where no high quality challenger runs. When an incumbent opts out, spending by both candidates competing for the seat goes up relative to races in which incumbents run for reelection.

cause of anything that precedes it in the process. However, it can only be treated as the outcome variable in our analysis if we have an independent measure of incumbent and challenger prospects.

The Candidate Emergence Study and Candidate Prospects

The Candidate Emergence Study (CES) was designed to assess strong potential candidates' assessments of their own electoral prospects and the prospects of the incumbent (Maisel, Stone et al. 2001; Stone and Maisel 2003; Stone 2004). The study surveyed two populations critical to the candidate emergence process in a sample of 200 congressional districts prior to the 1998 elections. The first survey targeted politically aware informants in the sample districts, requesting the identity of individuals in the district who would make strong House candidates if they were to run. We also asked informants about their district and about the incumbent Representative from the district, including the chances the incumbent would run for reelection, and the incumbent's chances of winning if he or she ran. Based upon the information provided by district informants, we identified and surveyed strong potential candidates in the sample districts.⁴ In addition to asking potential candidates questions about their own political ambitions and possible plans for a House run, we asked them the same battery of questions about incumbents' prospects that we put to district informants.⁵

⁴ Of 1399 potential candidates, we received usable responses from 452 for a response rate of 32.3%; 43% of informants responded. For additional details see (Stone and Maisel 2003; Stone, Maisel and Maestas 2004).

⁵ All questions were on 7-point scales with responses ranging from "Extremely Unlikely" through "Tossup" to "Extremely Likely." We have scored all items on pseudo-probability scales, ranging in value from .01 to .99. This scoring makes the data easier to understand and manipulate, but we do not think of the results as probability scores; rather, they are subjective measures of electoral prospects. We use these data to yield comparative results rather than absolute estimates of the probability of a particular event.

We employ these informant and potential candidate perceptions of incumbent prospects as our measure of incumbent prospects by the simple device of aggregating individual informant and potential candidate perceptions about their incumbent's prospects to the district/incumbent level. These (mean) perceptions reflect the advanced judgments of highly informed and engaged district elites about the chances the incumbent has of winning the next election, if he or she runs. We do not have the perceptions of incumbent prospects by the actual challengers in our sample districts in most cases, because in most districts the potential candidates named by our informants did not choose to run.⁶ Even if they did run, our informant and potential-candidate respondents did not know that at the time of our surveys. However, aggregating the opinions of strong potential candidates and district informants gives us a measure of incumbents' prospects based upon informed opinion in the district, which should relate closely to that of other informed observers, contributors, and potential candidates.

If we know the incumbent's prospects, it is a simple matter to determine challenger prospects, since they should be the reciprocal of the incumbent chances: $CEP = (1 - IEP)$, where CEP and IEP are challenger and incumbent electoral prospects respectively.⁷ Note that both incumbents' and challengers' electoral prospects may change as events leading up to the election unfold, including the identity and quality of the challenger who decides to run against the incumbent. By measuring incumbent prospects for reelection well before the election, we assess their chances against an

⁶ A major point of the CES, in fact, was to identify and study the decision process of strong potential candidates who choose not to run, a key to understanding incumbent deterrence (Stone, Maisel, and Maestas 2004).

⁷ This is true only for general election prospects. Both the incumbent and the challenger may face primary competition for their party's nomination. However, since incumbents are overwhelmingly likely to win renomination when they seek it, we define for purposes of this analysis incumbent reelection prospects as their general election prospects. Thus, we consider only challengers in the party opposite the incumbent, and only their prospects for winning the general election *if* they win their party's nomination.

unknown challenger of unknown quality.⁸ Thus, in most cases our measure of challenger prospects is not an estimate of the prospects for victory by the specific candidate who ended up running in the district against the incumbent. Our incumbent-centered measure of prospects is appropriate early in the process because they are likely to dominate both incumbents' and strong potential candidates' behavior in the period leading up to the election (Cox and Katz, 2002; Stone, Maisel and Maestas, 2004).

How good is our incumbent prospects measure? Table 2 presents evidence that our measure based on informants' and potential candidates' judgments about incumbents' prospects for winning the general election relates in expected ways to events in the district as they unfolded in the 1998 elections in our sample districts. District informants and potential candidates judged incumbents' prospects of winning the general election on average as high (.88), consistent with the high reelection rates incumbents have enjoyed in recent decades. Fully 71 percent of incumbents prior to the 1998 election cycle were judged to have prospects of .85 or better of winning their general-election bid.

(Table 2 here)

Incumbent prospects as assessed by our informant and potential-candidate respondents relate in expected ways to incumbent and challenger spending, and other indicators of strategic candidate behavior. As incumbents' prospects improved (and potential candidates' declined), absolute levels of spending by both incumbents and potential candidates also declined. Likewise, there is evidence of strategic entry by both potential candidates and incumbents in response to prospects. Experienced challengers were much more likely to run in districts where incumbents' prospects were relatively

⁸ We did ask respondents to assess the chances the incumbent would run for reelection, and the chances the incumbent would receive a strong challenge.

low than they were where incumbents were expected to win easily. As we would also expect, both in- and out-party primaries are more likely to be contested as incumbent prospects decline (Lazarus 2004). When incumbents are seen as more vulnerable, in-party primary challenges are more likely because incumbents in one-party districts are likely to be unseated only in the primary election. Out-party primaries are also more likely to be contested because the opposite party's nomination increases in value with incumbent vulnerability.⁹ Finally, just as we would expect, as incumbents' prospects increased, their vote share in 1998 increased.

The relationships in Table 2 are reassuring about our measure of incumbent prospects in that they are consistently strong, in the expected direction, and they apply to a variety of relevant behaviors. Are they strong enough for us to conclude that the incumbent-prospects measure provides reasonable leverage on the omitted variables problem in estimating the effects of candidate spending? Exactly what the relationships should be in Table 2 is difficult to say if prospects were perfectly measured, other than the general direction and shape of the relationships we observe. For instance, it is reasonable to expect incumbents' vote share to decline as their prospects decline, but we did not ask respondents to estimate the incumbent's vote share in their district. Rather, we asked them to estimate the probability of victory. Because there are so few incumbents who actually lost, it is impossible to do quantitative analysis of whether the incumbent won or lost, and vote share is not the same thing as the probability of winning or losing. Thus, the positive relationship in Table 2 between incumbent prospects and

⁹ Other indications of "divisive primaries" are also associated with incumbent prospects in the same way, including the number of primary candidates who run, and the vote share they receive. For an excellent critique of the "divisive primary effect" from the perspective of incumbent vulnerability and challenger entry, see Lazarus (2004).

vote share is reassuring but not definitive. Likewise, there are surely other factors besides prospects driving candidates' spending, experienced challenger entry, incumbent retirement, and contested primaries. Thus, we would not expect a perfectly measured incumbent-prospect variable to relate perfectly to any of these variables, and the relationships we do observe are plausible evidence of the validity of the measure we have. The results seem strong enough to carry on, coupled with other evidence we have that informants' and potential candidates' perceptions provide valid indicators of district, incumbent, and potential candidate qualities, including their prospects for election (Stone and Maisel, 2003; Stone, Maisel and Maestas, 2004). We proceed with caution on the assumption that our prospects measures can resolve the omitted variables problem, in part because the design of the CES provides a unique approach to a vexing set of questions.

Candidate Spending and Entry

Table 3 presents analysis of the effects of incumbent prospects on incumbent and challenger spending, and on whether the incumbent retires and whether an experienced challenger enters the race. We expect negative relationships between incumbent prospects in all four equations. We include three indicators of incumbent prospects available to incumbents and potential candidates as they judge incumbents' prospects. These measures, of course, have also been the basis on which analysts have constructed instrumental variables to estimate simultaneous-equations models of the effects of incumbent and challenger spending (Jacobson, 1978, 1990, 2004; Green and Krasno, 1988, 1990).

(Table 3 here)

We would expect some combination of the incumbent's vote share in the 1996 election, the favorability of the district partisanship to the incumbent, and the incumbent's 1996 spending level to affect incumbent spending in 1998. With the exception of district partisanship, the effect of which is mediated by the other variables in the analysis,¹⁰ these expectations hold nicely in the first column in Table 3. Incumbent spending in 1998 increased with incumbent spending in 1996 and as 1996 vote share decreased. Note in addition, however, that incumbent prospects strongly affected incumbent spending over and above these factors from the previous election. This is compelling evidence of "value added" from the incumbent-prospects measure, and suggests that our informant and potential-candidate respondents provide a more grounded assessment of incumbent prospects than is possible from the 1996 and district characteristics.¹¹ Likewise, the regression in column 2 shows that challenger electoral prospects have a strong effect on challenger spending independent of 1996 vote division, incumbent spending, and district partisanship.¹² Thus, the more vulnerable the incumbent is, the more the incumbent and the challenger spend on their races in the district, just as Figure 1 depicts.

Figure 2 presents the partial effects of incumbent prospects on the probability the incumbent retires and that an experienced challenger enters the race. The effect of prospects, independent of district partisanship, the incumbent's vote share in the prior election, and the incumbent's prior spending level provide striking support for the power

¹⁰ The more unfavorable the district partisanship the greater the incumbent spending ($r = -.34$).

¹¹ Not surprisingly, when we regress prospects on the other three variables, incumbent prospects significantly relate to 1996 incumbent vote share and district partisanship. Other factors, of course, influence respondents' judgments of incumbents' prospects, as the $R^2 = .245$. As Cox and Katz (2002, 144) put it: "all politics is local and the local politicians know it [expected vote shares] a lot better than we do [based on previous vote share]."

¹² Including challenger spending in the previous year has no effect.

of the incumbent prospects measure. Incumbents in the sample were especially sensitive to their prospects, with an estimated near-certain probability of retiring (.99) if their chances of reelection are a tossup, declining sharply once prospects rise above about .65. Experienced-challenger entry is only slightly less responsive to incumbent prospects, declining steadily from about .77 when incumbents face even odds of reelection to .11 when incumbents' prospects are at their highest.

(Figure 2 here)

Election Outcomes

Our analysis of incumbent vote share is presented in Table 4. We begin with a baseline model (1), which does not include incumbent prospects. It explains incumbents' vote share as a result of their vote in the previous election, district partisanship, their spending in the previous and current year, challenger spending and quality, and party. The spending effects, and the effects of an experienced challenger are consistent with earlier analysis relying on OLS. That is, challenger spending and quality have strongly significant effects depressing incumbents' vote in November. However, as with previous studies, we also see that incumbent spending during the election appears to have a negative effect, although it just misses the conventional cutoff for significance ($p = .086$).

(Table 4 here)

At this point, if we were following the usual approach, we would proceed with a simultaneous equations approach based upon instrumental variables in an attempt to purge incumbent spending of the "reciprocal effect" of vote share or, more properly, of incumbent prospects. However, we can simply add our prospects measure to the analysis (Equation 2). Doing so eliminates any significant effect of incumbent spending in the

current year ($t = -1.10$; $p = .274$). Note, however, that introducing incumbent prospects has no effect whatsoever on challenger spending, which remains identical to Equation 1. The additional effect of an experienced challenger in the race independent of spending is reduced somewhat, dampening incumbent's vote share by 2.2% compared with almost 3% in Equation (1). Incumbent prospects, for its part, has a strong independent effect on incumbents' November vote. By comparing the beta weights (not shown), incumbent prospects has the third-strongest independent effect (.259), after challenger spending (-.286) and incumbents' previous vote share (.273). Indeed, the effect of a change in the prospects measure from its observed minimum to its observed maximum (about .5 to 1.0) amounts to a bit more than a 12% difference in the actual outcome in votes! We take these results to support the validity of district political experts as assessors of incumbent chances, *and* as demonstrating the importance of capturing prospects in our analysis rather than attempting to circumvent the omitted-variable problem.

Equation (3) replicates Green and Krasno's (1988) finding that the challenger quality interacts with challenger spending to magnify the impact of spending. The main effect shows that spending among amateurs significantly reduces incumbents' vote share, although as Figure 3 demonstrates, the effect of spending by inexperienced challengers is substantially weaker than the experienced-challenger spending effect.¹³ An inexperienced challenger who spent a modest amount of money on his race (say, \$10,000) would be expected to lose only about 2.2% more of the vote to the incumbent than a similar challenger who spent \$240,000 on her race. Thereafter, the effect weakens further. For instance, if our inexperienced challenger could manage to spend \$700,000 in an equivalent race, she would realize only a .5% gain in vote share; if she spent \$1M, she

¹³ Figure 3 is based on Equation (4), with the incumbent-retired dummy set to 0.

could expect a gain of only another .2%. While there is a detectable impact of high spending among challengers who lack office-holding experience, diminished returns make for a modest effect at higher levels of spending.

(Figure 3 here)

Experienced-challenger spending is a different story. Challengers with an elective office on their resume get an additional 2% gain in vote share for each (logged) dollar increase in spending, an effect almost four times stronger than the impact of spending among their amateur fellow challengers. Experienced challengers are in a much better position to raise money for their campaigns, so most inexperienced challengers are at the low end of spending in the figure, while experienced challengers spend considerably more on average.¹⁴ Figure 3 shows a substantial gap in electoral impact between experienced and inexperienced challengers opening up at relatively low levels of spending, continuing with higher expenditures. An experienced challenger who spent \$240,000 would be expected, other things being equal to get about 41.8% of the vote, 1.8% more than a challenger with no record of office holding. Increase the spending to \$700,000 and the gap between experienced and inexperienced challengers grows to 4.1%; increase it again to \$1M, and the experienced challenger can expect to do 5% better than an amateur challenger who spends the same amount.

These results forcefully remove questions about the impact of challenger spending on election results. Challenger spending matters, and it matters a great deal what kind of challenger is doing the spending. Note again that these conclusions are not burdened by concern about whether experienced challenger entry and spending merely reflect their

¹⁴ The median expenditure by inexperienced challengers was \$26,000; the median expenditures by experienced challengers was \$320,000.

prospects. Table 3 and Figure 2 demonstrate that experienced challenger spending and entry *are* affected by their prospects. But the results take full account of these prospects, by including them explicitly, independent of spending, entry, and the outcome of the election. Thus, we have confidence that the effects we observe result not from the money chasing expectations, but from the effect of money, especially in the hands of skilled candidates. Likewise, we can conclude that the quality of the challenger has a substantial effect on depressing incumbents' vote share, especially when challengers can raise credible amounts.

That said, it is worth noting that the model does not offer great comfort even to experienced challengers seeking to spend their way into the House. Indeed, the model estimates that an experienced challenger would have to raise almost \$11M to expect to win the election, under the assumptions driving the results in Figure 3. This is a level of spending well beyond anything that we observed in our sample districts from the 1998 elections. However, it is important to recognize the importance of incumbent prospects, both in the estimates driving our examples from Figure 3, and in the real world. In calculating the effects for Figure 3, we set incumbent prospects at their mean value for the sample, or .86. This high value, of course, reflects the excellent chances most incumbents have for reelection. However, when incumbent prospects are this high the likelihood that an experienced challenger would run, or if one did run, that he or she could raise large amounts of money, is low. If we shift incumbent prospects from .86 to .55, imagining a situation that would be very attractive to high quality challengers and contributors seeking to unseat the incumbent, the curves in Figure 3 shift downward reflecting the lower incumbent prospects. Under those conditions, a high quality

challenger would have to spend over \$2M to boost her expected vote share above 50%. This is still a forbidding amount of money to raise, but it is a more realistic goal, made possible by an incumbent who is much more vulnerable than average. Table 5 provides estimated incumbent vote shares by three levels of incumbent prospects and varying spending amounts by high quality challengers. While vote share is related to both prospects and quality challenger spending, it is also clear that challengers must be prepared to make heavy investments, even in districts where incumbents are vulnerable, in order to have a reasonable chance of winning the seat.¹⁵

(Table 5 here)

A final conclusion can be drawn from the analysis in Table 4. The effect of incumbent retirement (a 5.4% decline in vote share for the incumbent's party) is an estimate of the "retirement slump" independent of prospects. As Cox and Katz (2002) point out, the problem with the standard retirement slump measure is that incumbents are most likely to retire when their reelection prospects are poor. Recent estimates based on a variety of measures have placed the incumbency effect as high as over 8%, and as low as just below 3% (Gelman and King 1990; Cox and Katz 2002; Jacobson 2004). Our estimate, which is the first based upon analysis that includes an independent measure of incumbent prospects, is between these extremes (at least for 1998—other methods vary for any given year). Rather than fix on the specific magnitude of the estimate, we note that it is highly significant statistically and potentially significant substantively and

¹⁵ The computations for Table 5 are for the direct effect of challenger spending only, and do not take into account the full impact of incumbent prospects, because incumbent prospects affect high quality challenger entry and fundraising. In a future version of this paper we will perform the computations necessary to estimate the full impact of incumbent prospects on vote share, directly (as in Table 5) and indirectly through challenger entry and expenditures. We estimate that about half of the total effect of incumbent prospects is mediated by challenger quality and spending, and incumbent entry.

politically. That is, the advantages incumbents enjoy are apparent, not based simply on false interpretations of the losses their party suffers when they leave office because they are able to forecast their own political difficulties. We agree completely with Cox and Katz when they worry about the confounding effects of incumbents' perceptions of their prospects. Our informant and potential candidate measures strongly suggest that incumbents are also good at interpreting their prospects, and our results in Tables 2 and 3 and Figure 2 show that they are much more likely to retire when their prospects are low than when they are good. Taking these prospects into account *and* taking account of the effects of prospects on the probability of a strong challenger, however, still leaves a significant loss to the incumbent's party when the Representative decides not to run for reelection. The accoutrements and resources of their office is an obvious possible explanation for this loss.

Conclusion

We have attempted to sort out the strategic and direct effects of decisions made by politicians, potential candidates and contributors. Do entry and spending decisions affect electoral outcomes, or are the effects of these actions merely a reflection of expectations about the outcome? For instance, do candidates and campaign contributors essentially "bet" on the winner, putting smart money on the candidate expected to do the best? Or does candidate spending help determine election outcomes, independent of expectations? While previous analyses have attempted to parse the strategic component of elite decisions from their effects, ours is unique in that we measure electoral prospects of the

incumbent and challenger directly, using informed local observers. Our analysis confirms the “value added” by our measure of electoral prospects from the CES.

Our findings corroborate Jacobson’s argument that incumbent spending has scant impact on incumbents’ electoral performance. We agree with Jacobson that incumbent spending has very little effect on incumbent vote share due to saturation in voter awareness. Incumbents’ skill at utilizing their perquisites of office means that voters are already familiar with the incumbent in a way that most challengers find enviable. Spending aimed at generating voter awareness of the incumbent reaches diminishing marginal returns due to incumbents’ use of congressional perquisites. Challenger spending, on the other hand, has substantial effects on voter awareness, due to the relatively low level of voter recognition of challengers (Jacobson 2004, 132-3). Nevertheless, our findings also demonstrate that it matters a great deal what kind of challenger is doing the spending. While spending by inexperienced challengers erodes incumbent support, challengers with office-holding experience realize greater returns on their investment. Typical amateur challengers will have great difficulty spending their way to success.

The strategic calculations incumbents, potential candidates, and other key actors make shape the context and choices that voters react to on Election Day. Getting straight which decisions and investments influence voters’ responses and by how much is a difficult problem, but it is central to our ability to comprehend representative institutions and processes. While we do not see this paper as the final word on these questions, it does offer a new point of departure with the potential for substantial payoffs and new insights.

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Figure 1. Incumbent and Challenger Prospects, Spending, Entry, and Vote Share

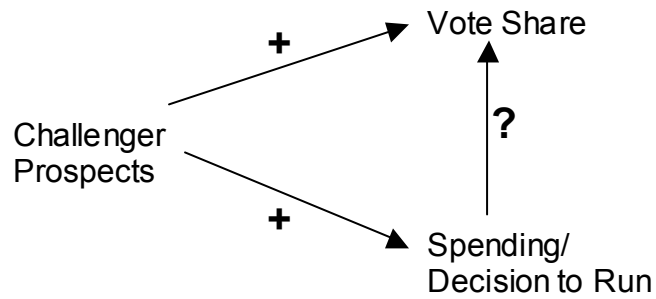
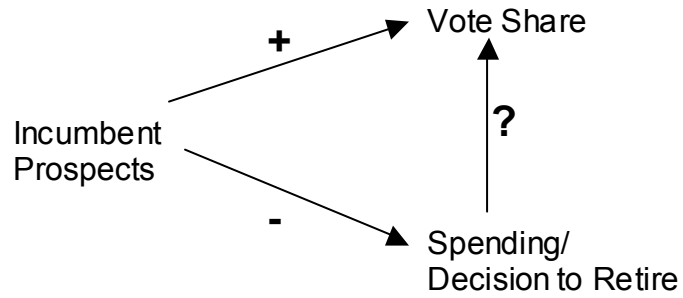
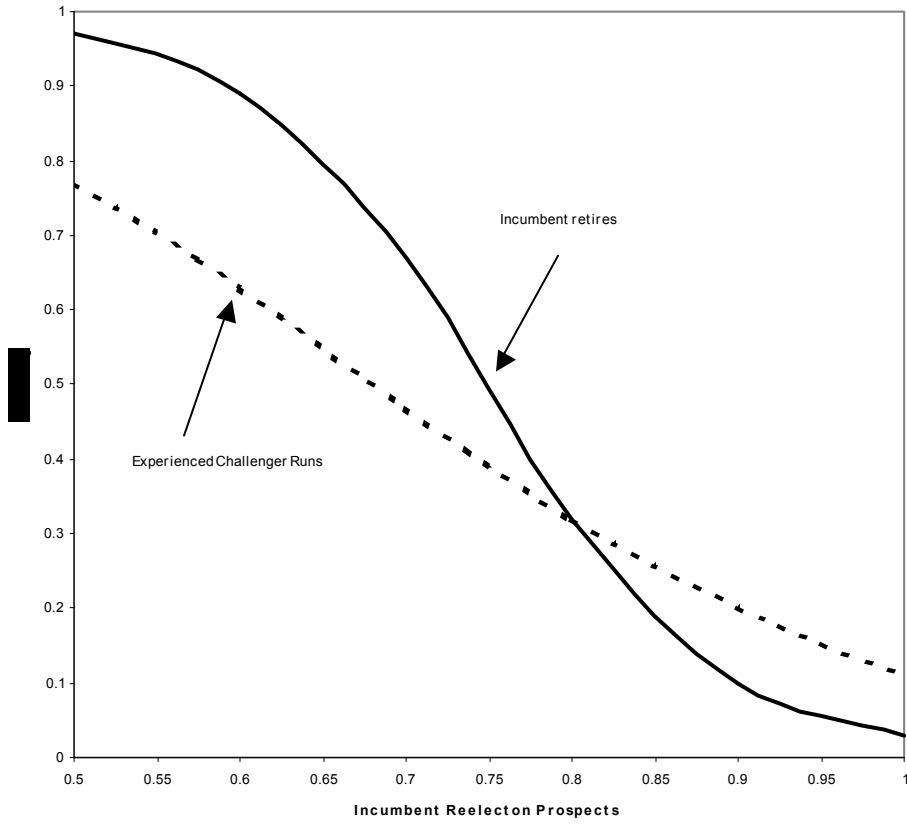
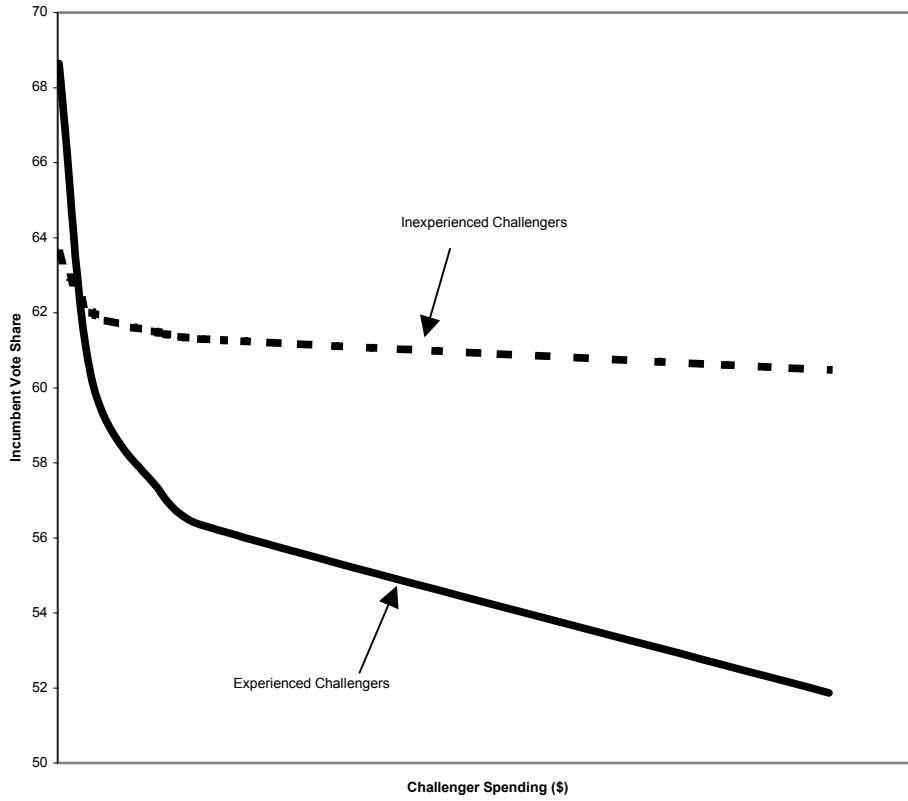


Figure 2. Incumbent Retirement and Experienced Challenger Entry



Note: Partial estimates from Table 3.

Figure 3. Effect of Challenger Spending on Incumbent Vote Share by Challenger Experience



Note: Partial effects from Table 4, Equation (4).

Table 1. Candidate Spending and Challenger Quality, 1998

Outcome:	Incumbent Spending	Challenger Spending	Percent of Districts	Percent Districts with Experienced Challengers
Incumbent won 65%+	\$414	\$10	44	13
Incumbent won 55%-65%	\$760	\$22	41	35
Incumbent won < 55%	\$981	\$785	13	72
Incumbent lost	\$1,197	\$1,121	2	83

Note: Cell entries median spending in \$1,000; districts in which incumbent had no major-party challenger dropped from the analysis.

Table 2. Incumbents' Prospects for Winning, Candidate Investment, and Election Outcomes.

	Incumbent General Election Prospects				
	< .65	.65 - .749	.75 - .849	.85-.949	.95+
Median incumbent spending (\$1000)	\$882	\$1040	\$852	\$466	\$378
Median challenger spending (\$1000)	\$742	\$792	\$291	\$9	\$8
Experienced challenger ran	83%	62%	37%	19%	10%
Incumbent retired	67%	12%	4%	4%	0
In-party primary contested	67%	38%	16%	22%	10%
Out-party primary contested	67%	75%	33%	23%	23%
Median incumbent vote share	52%	55%	62%	69%	72%
<i>N</i> of districts	(6)	(8)	(45)	(106)	(29)

Note: Incumbent general election prospects mean informant and potential candidate estimates of incumbent prospects for winning 1998 general election.

Table 3. Explaining Incumbent and Challenger Behavior, 1998

	Incumbent Spending [#]	Challenger Spending [#]	Incumbent Retired	Experienced Challenger
Incumbent vote share, 1996	-.021***	-.147***	-.120	-.038*
District partisanship ^{##}	-.034	-.884***	.375	-.300*
Incumbent spending, 1996 [#]	.118***	.280	.015	-.165
Incumbent's prospects, 1998	-1.465***	-11.154**	-14.366***	-6.461***
Constant	14.242***	24.367***	9.478**	9.316**
Adjusted R ²	.359	.333	--	--
% correctly predicted	--	--	95.1	79.8
-2LL			65.556	170.180
<i>N</i> of districts	178	178	178	178

[#]Logged.

^{##}Mean informant judgment of district partisanship coded to favor incumbent.

*** $p < .01$; ** $p < .05$; * $p < .10$; two-tailed tests.

Table 4. Incumbent Party Vote Share in the 1998 Elections

	(1)	(2)	(3)	(4)
Incumbent vote share, 1996	.238***	.199***	.214***	.239***
District partisanship [#]	.604	.017	.254	.414
Incumbent spending, 1996 (logged)	-1.047**	-.948**	-1.050***	-1.108***
Incumbent spending, 1998 (logged)	-1.923*	-1.161	-.537	-.554
Challenger spending, 1998 (logged)	-.584***	-.583***	-.538***	-.495***
Experienced challenger	-2.982***	-2.219**	22.134***	25.075***
Democratic incumbent	2.144**	2.791***	2.343***	2.460***
Incumbent prospects		24.665***	18.916***	13.046**
Experienced challenger X spending			-2.010***	-2.173***
Incumbent retired				-5.441***
Constant	93.827***	63.224***	60.351***	64.312***
Adjusted R^2	.605	.653	.684	.705
N	138	138	138	138

Note: unchallenged incumbents dropped from analysis.

[#]Mean informant rating of district partisanship coded to favor incumbent.

*** $p < .01$; ** $p < .05$; * $p < .10$; two-tailed tests.

Table 5. Estimated Incumbent Vote Shares (%) by Incumbent Prospects and Experienced Challenger Levels of Spending

Challenger Spending:	Incumbent's General Election Prospects		
	.45	.50	.55
\$500K	52.9	53.5	54.2
\$1M	51.0	51.7	52.3
\$1.5M	49.9	50.6	51.2
\$2M	49.2	49.8	50.5
\$2.5M	48.6	49.2	49.9

Estimated from Equation (4) Table 4.