INCUMBENCY RECONSIDERED:

PROSPECTS, STRATEGIC ENTRY, AND INCUMBENT QUALITY IN U.S. HOUSE ELECTIONS

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ABSTRACT

Efforts to estimate the magnitude of the incumbency effect in U.S. House elections and assess its political meaning have been complicated by two omitted-variables problems. First, in the absence of an adequate measure of incumbent prospects, estimates of the magnitude of the incumbency effect fail to control for selection effects associated with the decision incumbents make about whether to run for reelection. Strategic incumbents enter races they think they can win and withdraw when they expect to lose. The consequence is an upward bias in estimates of incumbents’ electoral advantages. Second, the normative implications of high reelection rates cannot be assessed without measuring incumbent quality, since a possible explanation for their electoral success is that incumbents are of high quality and doing a good job. We propose a strategy for measuring incumbent prospects and quality, demonstrate the strategic nature of incumbent and challenger entry, re-estimate the incumbency effect, and show that incumbent quality has an impact on electoral outcomes. Our conclusion is that incumbents’ advantages in House elections have been over estimated while the positive basis of incumbent safety is typically under appreciated.
“In 2002 and 2004, only 98 percent of incumbents were re-elected. Appalled, incumbents are working to eliminate that awful 2 percent.”

--George F. Will

Recent congressional elections have contributed to a prevailing cynicism about the state of competition in U.S. House races. Many observers conclude from high levels of incumbent security that House elections are inert, featureless affairs dominated by incumbents who have manipulated the district and the electorate to stifle competition. Needless to say, such assessments are not optimistic about representative democracy in contemporary American politics.

Assessing the normative implications of high reelection rates among U.S. House incumbents has proven remarkably difficult. Low levels of electoral competition, including many races that are not contested at all, seem inherently inconsistent with democratic principles. An extensive literature suggests that incumbents manipulate the electoral environment to enhance their own security, reduce competition, and create disadvantages for potential challengers (Cover and Brumberg 1982; Fiorina 1977; Mayhew 1974). On the other hand, if elections select high-quality candidates, elevated reelection rates should result. In keeping with this possibility, there is some evidence that incumbents succeed because they do a good job and are of high personal quality (Erikson and Wright 2000; Mondak 1995; Zaller 1998). This puzzle of how to interpret competition in House elections goes to the heart of our understanding of representative democracy.

One of the factors complicating our evaluation of incumbent electoral security is strategic decision making by incumbents and potential candidates. If incumbents run

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when their prospects are good and retire when they are poor, the apparent electoral advantage the incumbent’s party enjoys when individual incumbents run for reelection compared with when they retire may reflect incumbents’ ability to forecast their electoral security or vulnerability as much as it indicates a built-in advantage incumbents have over challengers. Gelman and King raise this issue in their classic article proposing an unbiased measure of the incumbency advantage (Gelman and King 1990, 1152): “If incumbents frequently decided not to run for reelection because they knew they would be likely to lose, [our] estimator would be inconsistent.” They go on to argue that the primary reason incumbents would be vulnerable is when they are tainted by scandal. Citing a study of corruption (Peters and Welch 1980), they contend that strategic retirement is of limited concern because corruption charges are rare and do not appear to be strongly related to incumbents’ decisions about running (Gelman and King 1990, 1152). In contrast to this claim, we demonstrate that incumbent retirement is highly responsive to prospects, and is therefore fundamentally a strategic decision by incumbents not to enter races when their electoral prospects are relatively poor.

The problem of strategic entry also raises questions about the effect of quality challengers, but the literature consistently assigns a significant electoral impact to the entry of experienced challengers. If experienced potential challengers are skilled at reading their electoral prospects and enter or avoid races accordingly, the appearance of a significant electoral impact of entry would result. Cox and Katz (Cox and Katz 2002, 160) recognize that this problem raises questions about many of the conclusions found in the literature:

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.

The charge that scholars have neglected vote forecasts may seem questionable since many studies, including Gelman and King, include t-1 incumbent vote share as a control to capture the incumbent’s ongoing electoral prospects; some studies also include a measure of district partisanship (e.g., Brady, D’Onofrio, and Fiorina 2000; Theriault 1998). Although these variables should relate to incumbents’ chances of reelection, questions remain about whether they provide adequate measures of prospects. Again, Cox and Katz describe the problem (2002, 144):

If we estimate the incumbency advantage simply by looking at the coefficient on an incumbency dummy variable in a single vote equation, a portion of the gap we find between the incumbent party’s performance with and without its incumbent candidate will be artifactual. It will be generated by the fact that all politics is local and the local politicians know it a lot better than we do [based on measures like previous vote share], so that incumbents’ entry and exit decisions reveal information about which way the electoral winds were blowing.

As a result, estimations without adequate measures of electoral prospects are subject to selection bias. ²

In addition to the estimation problems that arise in the absence of an adequate measure of prospects, our normative assessment of high incumbent reelection rates is suspect unless we measure incumbent quality. The incumbency literature, including all of the work by scholars who conclude that a strong incumbency effect indicates pathology in the representative system, implicitly assumes that incumbents do not vary in their quality. While scandal may make an incumbent vulnerable (Jacobson and Dimock

² Concluding that adequate instruments do not exist to specify a simultaneous-equations analysis of incumbent and challenger entry, Cox and Katz study districts where the incumbent’s departure was unexpected (by death or defeat in a primary). In such cases, the apparent incumbency effect is lower, presumably because the effects of strategic departure by the incumbent are controlled.
1994), as Gelman and King note, scandals are relatively rare. Moreover, it is reasonable to believe that variation in incumbents’ personal quality and job performance is not captured by a scandal measure. With the notable exception of Jeffery Mondak’s work (McCurley and Mondak 1995; Mondak 1995), scholars have implicitly assumed that incumbent quality is constant in the absence of scandal, with the only question being whether the incumbent runs. If the incumbent does not run for reelection, the seat is open, and the incumbent’s party normally suffers a loss. However, if we are to entertain the possibility that incumbent electoral security results in part because the electoral process filters out poor quality incumbents, we must consider the implications of variation in quality among incumbents for electoral success.

We assume that incumbents make the first move when they decide whether to run for reelection or retire. Although incumbents’ exit decisions may not be entirely strategic (Hall and Houweling 1995), we provide a direct test of the claim that they are driven by prospects. To our knowledge, ours is the first such test that goes beyond a reliance on standard indicators of previous vote share and district partisan makeup. The incumbent’s prospects also relate directly to challengers’ prospects since \( CEP = 1 - IEP \), where \( CEP \) and \( IEP \) are challenger and incumbent electoral prospects respectively. In

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3 It is possible that incumbents are sometimes pushed out by strong challengers, but this is far more unusual than the reverse (cf. Carson 2005). Incumbents have survived at least one election, with most having passed the electoral filter multiple times. As a result, it is reasonable to believe that most incumbents are formidable candidates in their own right, apart from the built-in advantages of their office (Erikson 1971; Zaller 1998). Our assumption that incumbents make the first move does not preclude a vulnerable incumbent attracting a strong challenger, or a weak incumbent retiring because she anticipates a strong challenge. The key in both of these situations where it may appear the incumbent is being pushed out by a strong challenger is that strong-challenger entry is driven by the incumbent’s poor prospects. Therefore, the appearance of a strong challenger is evidence of a vulnerable incumbent, not that the emergence of the strong challenger per se made the incumbent vulnerable.

4 Strictly speaking this is true only for general election prospects when the incumbent runs for reelection. Both incumbents and challengers may face primary competition for their party’s nomination, which affect their overall prospects of winning the seat if they run. However, since incumbents are overwhelmingly likely to win renomination when they seek it, we define incumbents’ prospects for reelection as their
In this formulation, challenger prospects apply to any of an incumbent’s potential
candidates from the opposing party, and depend on incumbent prospects.

Our approach is to treat both the prospects and incumbent-quality questions as
omitted-variables problems because neither variable is adequately measured in studies of
the incumbency effect in U.S. House elections. Absent an adequate measure of
prospects, we are unable to estimate the incumbency effect because of selection bias;
absent an incumbent-quality measure, our attempts to assess incumbency reelection rates
is impaired because we fail to address the possibility that the electoral process rewards
high-quality incumbents and punishes those of lesser quality.

We make four contributions in this paper: We demonstrate that (1) previous
tests to measure incumbent prospects have been inadequate and that a district-
informant based measure provides substantial additional information about incumbent
prospects; (2) incumbent re-entry is more strategic than heretofore appreciated; (3) these
results have important implications for our estimation of the magnitude of the
incumbency effect in House elections; and (4) incumbent quality has a significant
independent effect on vote share.

**A NEW APPROACH TO MEASURING PROSPECTS AND QUALITY**

We surveyed district elites and activists early in the 1998 election cycle to
measure incumbent prospects and quality on the premise that district informants
understand the local conditions of their districts and have the information necessary to
assess the performance and personal quality of the incumbent. We compute district
means of informants’ perceptions to provide aggregated measures of quality and
prospects that we treat as attributes of incumbents. Needless to say, this approach requires careful assessment to determine whether it is a reasonable way to address the omitted-variable problems in research on candidate entry and competition in U.S House elections.

Our incumbent prospects and quality data were generated by the Candidate Emergence Study (CES), which was based on two surveys in a national random sample of 198 U.S. House districts. Incumbent reelection rates were typical in 1998 – 98% of incumbents who sought reelection won – which provides the opportunity to reassess incumbent safety and electoral competition in House elections. The first survey was of Democratic and Republican activists, most of whom were national convention delegates, selected in equal numbers in each district as informants knowledgeable about the district and the incumbent and about individuals in the district who would make strong House candidates if they were to run. The second survey was of potential House candidates in each district identified by the informants along with state legislators whose constituencies overlapped substantially with the U.S. House districts in our sample.5 We treat all respondents to both surveys—informants as well as potential candidates—as informants, since we asked the relevant questions in both surveys.6

INCUMBENT PROSPECTS

We measure prospects by asking district informants to estimate the incumbent’s chances of winning reelection if he or she runs and wins the primary.7 The measures

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5 We received usable responses from 32% of named potential candidates and state legislators, and from 43% of informants.
6 The size of our samples averages 13.7 informants per district, but varies according to the response rate of the activist informants we contacted in the first wave of the study, and the response rate and number of potential candidates (named by informants or as state legislators).
7 Questions were scored on 7-point scales with responses ranging from “Extremely Unlikely” through “Tossup” to “Extremely Likely.” We scored the items on pseudo-probability scales ranging in value from
were taken well in advance of the 1998 election, as our informant survey was in the field almost a year and a half before the 1998 elections, and the potential-candidate surveys were timed for 3-6 months before the filing deadline in their states.

We assume that perceptions of local elites prior to the election season were shared by the individual incumbents and potential candidates who were deciding whether to run in the upcoming election in their district. 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 state legislators and potential candidates named by our informants chose not to run. However, aggregating the opinions of politically sophisticated and highly engaged district activists and potential candidates gives us a measure of incumbents’ prospects well ahead of the election cycle, which should relate closely to the perceptions and judgments of other informed observers, including the potential challengers and incumbents themselves. Our method takes advantage of the judgments of individuals in each district, each of whom has incomplete information. Aggregated assessments of individuals who make independent judgments about complex phenomena can be remarkably accurate (Surowiecki 2004). Of course, incumbents’ and challengers’ electoral prospects change as events leading up to the election unfold, but

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.01 to .99, with “Tossup” coded .5. This scoring makes the data easier to understand and to manipulate, but we do not think of the results as probability scores. Rather, they are subjective measures of electoral prospects. We use the data to make comparative statements rather than as absolute estimates of the probability of a particular event. The incumbent-prospects items included a question about the chances the incumbent would run for reelection, the chances the incumbent would win the party’s nomination if he or she ran, and the chances the incumbent would win the general election if he or she won the primary. The prospects measure employed in this paper is based on the general-election item.

8 A major point of the CES was to identify and study the decision-making process of strong potential candidates who choose not to run, a key to understanding incumbent deterrence. Elsewhere (Authors’ cite 2) we provide an individual-level analysis of the effects of potential candidates’ perceptions of incumbent prospects on their perceptions of their own chances and on the chances they would run in their district.

9 Our approach contrasts with Abramowitz (1991) and Erikson and Palfrey (2000) who employ Congressional Quarterly ratings of competitiveness to measure incumbent prospects. While their measure is also based on elite perceptions, it is taken after incumbent- and challenger-entry decisions, and is therefore endogenous to the phenomena of interest.
the point of measuring incumbent prospects before the electoral cycle begins is to capture the exogenous effects of prospects before they are influenced by candidate and incumbent entry decisions.

**INCUMBENT QUALITY**

While there is an extensive literature on the effects of challenger quality in House elections, relatively little attention has been paid to incumbent quality. Jeffery Mondak’s (1995) work on incumbent quality stands alone as providing empirical assessments of incumbent quality and its electoral consequences. Mondak coded descriptions of incumbents in the *Almanac of American Politics* to arrive at his measure of incumbent quality, which he conceived as composed of integrity and competence. Our concept is similar, although our measurement strategy is quite different. Incumbent quality is composed of personal traits, qualities, and skills that most people value in political leaders (described in more detail below). District informants evaluated incumbents on items designed to capture these qualities. We compute district mean perceptions based on all informant and potential-candidate respondents in the district in the same way we did for incumbent prospects, and we employ a summary index of overall incumbent quality based on the individual items.10

**ASSESSING THE INFORMANT-BASED MEASURES**

Insofar as we are aware, ours is the only study that relies on district informants to measure incumbent prospects and quality. We asked respondents to rate incumbents and

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10 Informant assessments of incumbents’ personal qualities and skills are particularly susceptible to partisan bias. Prior to aggregation, therefore, we purge informants’ ratings of the effects of partisanship (authors’ cite 1).
their districts on a variety of dimensions, which give us informant-produced indicators that we can compare with other measures of the phenomena in question. What evidence can we provide that our approach produces valid measurements? The simplest way to test the validity of a measure is to compare it with another indicator of the same concept that is widely accepted as valid, or with a variable that should relate to the measure in question. Perhaps the most obvious such comparison in our data is between informants’ perceptions of incumbents’ ideology and the D-Nominate scores (first dimension) (Poole and Rosenthal 1997). First-dimension D-Nominate scores have been subjected to extensive analysis and are widely accepted by congressional scholars as valid and reliable measures of representatives’ liberal-conservative positions. The correlation between the D-Nominate scores of incumbents in our sample with district informants’ perceptions on the left-right scale is .94. While this is reassuring, the correlation between informants’ perceptions of district voters’ ideological preferences and the average two-party district presidential vote in the 1992 and 1996 elections is only .53, whereas the correlation between informants’ assessments of incumbent prospects and the CQ measure of district competitiveness is .57.

What should we make of these results? We might speculate, for example, that although districts’ presidential vote share is often employed as a measure of district ideology, its precision is itself open to question. Our aggregated informants’ perceptions of the average voter’s ideological preference in their district may be a more accurate measure than the districts’ vote division in recent presidential elections, but such speculation does not settle the question of whether using district informants as sources to measure key district or incumbent attributes constitutes an advance. Instead of relying on
such (admittedly self-serving) speculation, we explore in detail the relationship between the prospects measure and election outcomes. Additional support for our approach will be provided if the informant-based measure of prospects has a significant impact on electoral outcomes and candidate entry independent of standard indicators of incumbent electoral chances.

**INCUMBENT PROSPECTS AND ELECTORAL OUTCOMES**

Figure 1 presents the bivariate relationship between the mean informant rating of incumbent prospects and the vote share the incumbent’s party received in the fall election. For now, we exclude districts in which no challenger ran. It is clear from the figure that prospects are far from perfectly related to vote share. Indeed, only about 32% of the variance in vote share is accounted for by prospects ($r = .57$). One possible explanation for the error is that we measure prospects well in advance of the election itself, and much can change between the point in the cycle that we tapped informant judgments and Election Day. Another possible explanation is that prospects are not the same thing as vote share, and had we asked informants to forecast the vote share incumbents would capture, the fit would be considerably better. Finally, it is also worth noting from Figure 1 that the relationship between vote share and prospects is essentially linear. While this is not necessarily what we would expect a priori, conceiving the relationship as non-linear does not seem warranted nor does it alter or enhance any of the results reported in this paper.

(Figure 1 here)

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11 However, it is interesting that the CQ ranking of the competitiveness of districts, which is taken much later in the cycle when challengers have declared and a variety of investments in races have been made, is no more strongly correlated with vote share than our prospects measure ($r = .55$ on the same districts).
The median value of incumbent prospects in our sample is .88. While we do not interpret this value as a probability estimate that the average incumbent would get reelected if she/he ran in 1998, it is consistent with the expectation that the typical incumbent had strong prospects. In keeping with the electoral security of incumbents in 1998, only six (3.3%) had their prospects rated lower than .65, with another 8% categorized by informants as having prospects between .65 and .75. Two thirds of incumbents in our sample had their prospects of reelection rated at .85 or better. District informants understood that the average incumbent in 1998 was a safe bet for reelection.

Table 1 examines the relationship between a grouped version of the prospects measure and a variety of indicators of the election outcome and of candidate entry. Median vote share, the percentage of incumbents defeated, and the CQ competitiveness all relate strongly to prospects. Likewise, incumbent retirement and the appearance of an experienced (or any) challenger appear to be highly responsive to prospects. The incidence of incumbents receiving primary challenges declined as their prospect ratings improved, as did contested primaries in the opposition party. Vulnerable incumbents should attract in-party challenges, especially in one-party districts, because winning the primary is the only reasonable avenue to taking the seat. Out-party primaries are also more likely to be contested when incumbents are vulnerable because the value of the opposite party’s nomination increases as the incumbent’s chances of general-election victory decline.  

(Table 1 here)

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12 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 share of the vote they receive. Lazarus (2005) provides an excellent critique of the literature on the “divisive primary effect” from the perspective of incumbent vulnerability and challenger entry.
Table 2 explores in greater detail the relationship between informants’ perceptions of incumbent prospects and incumbent vote share in the 1998 elections. Equation 1 shows a strong bivariate relationship, such that over the range of observed variation in incumbent prospects in the sample (between .57 and .99) the difference between the incumbent judged most vulnerable and the safest incumbent is about 39% vote share in the general election. Equation 2 includes additional variables that should relate to the fall election results: the incumbent’s vote share in the previous election, the partisan makeup of the district, and the party of the incumbent. Not surprisingly, the effect of prospects drops when these indicators are included. However, even with these often-used surrogates for prospects included, a strong and significant independent effect of prospects on incumbents’ vote share remains. The expected difference between the most vulnerable and the most secure incumbents in our sample is approximately 20% in vote share, independent of how well the incumbent ran in 1996 and of the partisan makeup in the district. This is strong evidence that the district activists and elites we employed as informants had access to local information that was highly relevant to their incumbents’ electoral prospects, and that our measure provides substantial leverage beyond the standard indicators of prospects employed in previous studies.

(Table 2 here)

One possible concern is that the results in Equation 2 are produced by “easy” cases such as invulnerable incumbents who routinely dissuade a challenge. These cases might produce outliers that drive the effect of prospects, inflating our confidence in the

13 District partisanship is measured as the average two-party presidential vote share in 1992 and 1996, coded to reflect the partisanship of the incumbent. The bivariate relationship in Equation 1 is slightly different from Figure 1 because Table 2 includes districts in which the incumbent was not challenged, but is restricted to districts where the same incumbent ran in both 1996 and 1998.
measure. To address this and the related possibility that the results are produced by outliers on the other side of the distribution composed of a handful of incumbents who are inordinately vulnerable, Equation 3 includes a dummy variable for districts in which no challenger ran against the incumbent in 1998 and the Congressional Quarterly district-competitiveness rating. This provides a stiff test for the prospects measure because both the unwillingness of challengers to run against an incumbent and the CQ ranking of races are endogenous to incumbent prospects, but over-controlling in this way does not eliminate a strong and significant independent effect of prospects.\footnote{Of course, 1996 incumbent vote share and district partisanship also affect incumbent vote share independent of prospects. Some of these effects are undoubtedly due to measurement error in our prospects measure, but some also reflect the fact that incumbent vote share at $t-1$ and district partisanship are better criterion variables for incumbent vote share at $t$ than even an error-free incumbent-prospects measure. To be on the conservative side we include them as additional controls in subsequent analysis.}

We are optimistic from Table 2 that our informant surveys add significantly to our ability to measure incumbent prospects for reelection, beyond the information contained in other generally available indicators. We take comfort in these results as supporting our informant-based approach to solving the omitted-variables problem in assessing incumbent safety. While informant perceptions are not error free, the evidence thus far suggests advancing the analysis employing these measures is warranted, provided we proceed with caution.

**Candidate Entry**

Table 3 presents a probit analysis of incumbent retirement and experienced-challenger entry in the 1998 elections. It is striking how much prospects dominates the explanation of challenger and incumbent entry. In the equation for the emergence of an experienced challenger, prospects and 1996 vote share are the only variables that have a significant
effect; in the incumbent-entry equation, prospects and seniority are the only significant explanatory factors. Aside from these effects, electoral prospects dominate. As Figure 2 shows, incumbents who were relatively vulnerable were unlikely to run, with the probability increasing dramatically as electoral security increased. The emergence of experienced challengers is also responsive to prospects, though somewhat less so than incumbent re-entry, a difference that may reflect the fact that office-holding experience is inevitably a relatively noisy measure of challenger-quality variable.

(Table 3; Figure 2 here)

In short, prospects matter—a lot. We have good theoretical and empirical reason to believe that candidate entry decisions are dominated by strategic calculations, and our ability to include an explicit measure of the heretofore under-specified effects of prospects confirm that incumbents and experienced challengers enter races they think they can win and opt out when they expect to lose. Evidence from district informants supports the Cox and Katz claim that local politicians know their district (and their incumbent) far better than we can based upon the sorts of indicators typically employed to tap prospects. As a result of including this previously omitted variable, we have direct evidence of the strategic nature of entry decisions, and indirect evidence consistent with the view that standard assessments of the electoral impact of incumbency and experienced challengers are inflated.

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15 If we drop prospects from the analyses, 1996 vote share and district partisanship are significant in both equations. With the other variables set at their means, we estimate that an incumbent thirteen terms more senior than a freshman experiences only .040 decrease in the probability of running for reelection. The effect of seniority accelerates among the most senior members, such that a 15-term member is about .2 more likely to retire than a freshman, and a 20 term member is more than .4 more likely not to run for reelection.
INCUMBENCY AND ELECTION OUTCOMES

Can we use the prospects measure to improve our estimate of the incumbency effect in U.S. House elections? A problem hampering attempts to estimate the incumbency effect without a measure of prospects has been the exclusion of uncontested elections. Although Gelman and King base their estimate of the electoral impact of incumbency on an analysis that excludes uncontested seats, they are aware of the potential selection bias associated with this approach (Gelman and King 1990 1158):

“The ability of some incumbents to scare away all challengers is probably the biggest advantage of incumbency, and yet no measure—including ours—completely captures this phenomenon.” As they appreciate, excluding uncontested seats introduces selection bias since the absence of a challenger reflects the anticipated electoral advantage of the incumbent. When incumbents are at their most invulnerable, the absence of any challenger is most likely, as Table 1 demonstrates. Gelman and King defend their approach on the grounds that their analysis includes most of what explains whether an incumbent is challenged, but we have seen that analyses relying on lagged vote share without an explicit measure of prospects are seriously lacking. Moreover, if we conceive of the absence of a challenge as a reflection of the incumbent’s strong prospects, there is no reason to exclude districts in which there is no challenger now that we have a prospects measure to include in the analysis.

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16 A multivariate analysis using the same model as in Table 3 to explain the absence of a challenger indicates a strong effect of incumbent prospects.

17 Rather than, say, an under-supply of quality potential challengers, a possibility that we have considered and for which we have found no evidence (Authors’ cite 3).
Table 4 shows our estimations of a slightly altered version of the Gelman-King equation. Models 1 and 3 estimate the Gelman-King equation for districts where the incumbent received a challenge and on the full sample of districts, including those where the incumbent was not challenged. The magnitudes of the incumbency effect estimates in both of these regressions are biased, since we have seen that whether incumbents ran was strongly affected by their general-election prospects, which are omitted. The Gelman-King equation produces estimated gains associated with an incumbent running as compared with districts in which the incumbent chose not to run of just over 9% in contested seats, and 13.3% in all districts. These estimates are upwardly biased because they do not adequately reflect incumbents’ expectations about their prospects in the next election. Since incumbents who were most vulnerable declined to run in 1998 and those who were most secure did not attract a challenge, a selection bias inflates these incumbency-effect estimates.

(Table 4 here)

If this argument is correct, inserting our prospects measure into the Gelman-King equation should reduce the estimate of the impact of incumbency by removing the selection effect associated with incumbent chances of winning (equations 2 and 4). Incumbent prospects, as expected, has a strong independent effect on vote share in contested seats and an even stronger impact when uncontested seats are included in the analysis. Also as expected, the impact of incumbents running on their party’s vote share

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18 Gelman and King (1990) do not control for district partisanship, presumably because the data were not available for their full series. In addition, we code the variables to reflect incumbency rather than partisanship to be consistent with analysis we present below.

19 Selection bias is removed only if our prospects measure is free of measurement error. Thus, a more accurate claim is that we reduce the effect of selection bias. Our main point is that our estimate of the incumbency effect improves on previous estimates by including a measure of incumbent prospects (we reject the hypothesis that Model 4 is not an improvement over Model 2; $F = 14.26; p < .001$).
is reduced substantially once we take prospects into account. The impact of the incumbent running in the second equation, which includes prospects, reduces the estimated effect of incumbency on vote share by about 31% from 9.0% to 6.2% in contested seats, and by 34% when uncontested seats are included in the analysis (from a 13.3% loss to the incumbent party’s vote share when the incumbent exits to 8.8% when prospects are included). This indicates a substantial upward bias in the canonical estimate of the electoral impact of incumbency because of the selection effects associated with the omission of incumbent prospects. The strategic component of incumbent-entry decisions is substantial and significantly distorts estimates of the electoral impact of incumbency if it is not adequately accounted for in the analysis.

**ASSESSING INCUMBENT QUALITY**

Thus far we have demonstrated the utility of a new measure of incumbent prospects that allows us to confirm that prospects strongly affect incumbent and challenger entry. However, our ability to address the selection bias associated with estimates of the electoral impact of incumbency does not directly address the normative questions surrounding low levels of competition in House elections. This is true in part because our estimates suggest that incumbency still has an effect even when we include prospects in the analysis.

Incumbent quality may help explain incumbent safety by at least two mechanisms. First, incumbents of lesser quality may have lower electoral prospects and thus be deterred from running by virtue of their reduced prospects. Second, incumbents of relatively high quality may be rewarded at the polls while incumbents of lesser quality
are punished. Both mechanisms are linked to electoral sanctions: the first by virtue of anticipated reactions of the electorate to variation in quality, and the second in the actual reactions of voters on Election Day. If either or both mechanism is at work, high incumbent reelection rates would not be as disturbing as they would be in their absence. Indeed, a quality effect would suggest that high reelection rates are due in part to the electoral process working exactly as it should in a healthy democracy.

As noted, we asked informants to evaluate incumbents on a number of personal qualities that most citizens would regard as important for the job of Representative, including integrity, dedication to public service, grasp of the issues, ability to work with other leaders, and problem-solving ability. Each informant rated the incumbent on 7-point scales ranging from “Extremely Weak” (-3) through “Extremely Strong” (+3). Likewise, we constructed a job-performance scale from items rating incumbents’ record of keeping in touch with the district, attracting federal funding to the district, service to the constituency, and legislative accomplishment. Because the personal-quality and job-performance scores are highly correlated ($r = .78$), we combined them into a general incumbent-quality measure for this analysis. Thus, our measure of quality emphasizes the “valence” characteristics of incumbents rather than the ideological proximity or policy representation they provide their districts.

Despite the potential range, the observed variation in the sample is considerably less. This is due in no small measure to the fact that incumbents have the respect of district informants, even from those of the opposite party. Indeed, incumbents on average received positive ratings from out-party informants and potential candidates, although in-

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20 A principal components analysis does not cleanly differentiate between a personal quality and performance dimension, but suggests a single quality dimension, with all items loading >.6 (rotated varimax solution).
party respondents rated them significantly higher (Authors’ cite 2). That incumbents receive positive marks is consistent with the idea that the electoral process selects for individuals with the qualities and skills people value. Despite the positive cast to the incumbent-quality ratings, there is considerable variation in incumbent quality in our sample as measured by the combined personal quality and job performance index. The mean score among incumbents running for reelection was 1.01, with a standard deviation of .49; scores ranged from -.19 to 2.14.

THE IMPACT OF QUALITY ON PROSPECTS

If incumbent quality affects prospects, we should see an effect of quality independent of the same variables that political scientists typically employ to estimate incumbents’ chances of reelection. Table 5 shows that incumbent quality does have the expected effect on prospects, as do district partisanship, the incumbent’s vote share in the previous election, and the party of the incumbent. The other significant effect is for the size of the incumbent’s war chest.

(Table 5 here)

Incumbents judged high on personal quality and job performance had more secure reelection prospects—the difference between the lowest-rated and highest-rated incumbents’ prospects is almost .10. A difference that large could affect the decision to run as well as depressing the vote share that an incumbent thinking about running for reelection might anticipate receiving. This effect, therefore, is consistent with the idea
that the electoral process might reward higher quality incumbents, and by virtue of anticipated electoral difficulty, discourage those of lesser quality.21

THE IMPACT OF INCUMBENT QUALITY ON VOTE SHARE

A stronger and more direct test of the claim that incumbent quality has an electoral effect is to look for an impact of incumbent quality on vote share. Table 6 provides this test based on a Heckman model of incumbents’ vote share in the 1998 election conditioned on the incumbent’s decision to run. With this setup we recognize the potential importance of the incumbent’s entry decision in shaping the campaign that follows, including the entry of quality challengers and the resources they are able to attract. Moreover, factors that affect incumbents’ decisions about running or retiring may also influence their vote shares in the general election, and these factors may be excluded or imperfectly measured in our analysis. If we fail to account for the selection effects associated with incumbent entry, estimates of other factors of interest will be biased.

(Table 6 here)

The positive effect of the incumbent-quality measure on vote share in 1998 supports the expectation that incumbents are rewarded when they are of high personal quality, and punished when they are of lesser quality. Over the observed range of variation in incumbent quality in the sample, the difference in expected vote share won by the highest quality incumbent is more than 7% higher than the vote share won by the lowest quality incumbent. Thus, the impact of variation in the quality of incumbents

21 Of course, this says nothing about whether incumbents are aware of how their personal quality is perceived by others or how it might affect their prospects. Moreover, we do not want to make too much of the results in Table 5 because they could result from rationalization effects, if district informants collectively judge incumbents whom they rate positively on quality as also having stronger prospects. Our purging the estimates of partisan bias does not necessarily remove this sort of rationalization effect.
running for reelection in this analysis is approximately equal in magnitude to the effect on a party’s vote share of the incumbent running for reelection.

The results in Table 6 show that incumbent prospects have no independent effect on vote share, once their impact on incumbent entry, challenger entry, and challenger expenditures is taken into account. This is appropriate, since incumbents’ prospects ought not have any causal impact on their vote share apart from the mediating effects of candidate entry and other investments in the race.

That we find an impact of incumbent quality on vote share over and above prospects and incumbent and challenger entry is remarkable evidence that the electoral process registers variation in the personal quality and job performance of Representatives in the form of reduced vote shares as the quality of incumbents running for reelection declines. The average vote share among incumbents in our sample who were challenged was 64%, so it is plausible that the lowest quality incumbents would slip into the marginal category because of their relatively low quality and job performance. In a year when other factors worked against low-quality incumbents, their vulnerabilities could easily cumulate in electoral defeat.²²

There are a variety of mechanisms whereby an effect of incumbent quality could depress vote share. If lower quality incumbents have reduced prospects and therefore attract stronger challengers, such challengers should be in a better position to exploit vulnerabilities in the incumbent’s character or record. This mechanism should be largely accounted for in our analysis, to the extent that lesser-quality incumbents have reduced prospects for victory, attract stronger challengers, or provide leverage for challengers to

²² It is also worth noting that there were only three incumbents in our sample had any whiff of scandal during the 105th Congress. A scandal dummy has no effect on vote share, nor does it relate significantly to the incumbent quality measure. Including it in Table 6 does not affect the results.
raise more money against them. However, challenger quality is not precisely measured by an office-holding dummy, so it is possible that with a better measure of challenger quality, the direct effect of incumbent quality would be reduced or disappear altogether.

In other work, we are exploring the possibility that voters themselves pick up on variation in incumbent quality, a finding that would further corroborate McCurley and Mondak’s (1995) observation that voters’ affect toward incumbents is influenced by quality. These and other possible mechanisms for a direct effect of incumbent quality on vote share implicitly assert that, although informants may take into account quality when they assess their Representative’s prospects for reelection, they miss some significant part of the process, perhaps because it is not directly rooted in a strategic calculation by potential candidates and/or other key players in the process.

**Conclusion**

What are we to make of high reelection rates by incumbents to the U.S. House of Representatives? Because the behavior of incumbents and potential challengers is strategic, answering this question at the core of the functioning of American representative democracy has been difficult, perhaps to a surprisingly degree. While we cannot pretend to offer a definitive answer, our results do suggest a more optimistic reading of the state of electoral competition in House elections than is provided by previous research.

---

23 Incumbents who attracted an experienced challenger in our sample were somewhat lower in quality than those who did not, although the effect is not statistically significant. Nonetheless, there is support for the deterrence effect of incumbent quality (Mondak 1995).

24 Elsewhere, we report a direct effect of incumbent quality on strong potential challengers’ chances of running, even by potential candidates in the party opposite the incumbents’ (authors’ cite 2). This sort of deterrence effect could easily be missed by informants asked to estimate incumbent prospects, although if it reduces the quality of challengers to high quality incumbents, it would increase these incumbents’ vote share compared with colleagues of lesser quality.
In the first place, the fact that incumbents are reelected at overwhelming rates must be set in the context of their strategic calculations about whether to run at all. We have found that incumbent retirement is highly sensitive to their prospects for reelection. Therefore, if incumbents are good at forecasting their own electoral fates, when they opt out of running for reelection they forestall the electoral competition that would occur if they ran. In other words, if all incumbents were compelled to run for reelection, their rate of electoral defeat would go up and the apparent electoral advantage of incumbency would shrink. Our estimate of the incumbency advantage that takes account of reelection prospects and includes incumbents who were not challenged at all, demonstrates a substantial upward bias in the best estimate that does not include an explicit measure of prospects.

Having seen that strategic re-entry by incumbents inflates their apparent advantages since we observe the results only of elections that incumbents choose to enter, what more can be said about the quality of competition for those incumbents who do run? If incumbents were perfect prognosticators of their electoral fate, we might never observe incumbents suffering electoral defeat. But incumbents sometimes are defeated, and they do more or less well at the polls, even when they are reelected. Part, though not all, of the explanation for how well they do is in the quality and vigor of the challenge they draw. However, our measure of personal quality and job performance reveals significant electoral consequences of incumbent quality, independent of their prospects and the quality and strength of the challenge against them.

One might take our findings to indicate that electoral trouble or defeat of an incumbent reflects behavior by the incumbent that is out of equilibrium (cf. Buchler
If an incumbent is defeated, he or she failed to anticipate the defeat and retire. A certain number of such miscalculations occur in any given year because politicians cannot perfectly forecast how national conditions might play in their districts, or how strong the challenger might prove to be, or how local conditions will play out in the election. Incumbents who ran for reelection in 1998 enjoyed a high rate of success—98% were reelected while 2% were defeated.25 In districts where the incumbent retired, 36% changed party hands, which suggests the incumbents who retired not only faced tough reelection battles, some would in fact have been defeated had they run. Incumbents of relatively low quality also may skate on the edge of electoral defeat, especially if other factors in the election reduce their vote share to the point that the votes lost because of their low quality produce their downfall. Surely one reason some incumbents venture into the arena even when defeat awaits them is that they fail to appreciate how their job performance and personal quality will be perceived and judged by voters. However, if the electoral process filters out politicians (including incumbents) of poor quality, the average incumbent will be of relatively high quality and most will win reelection.

Even in an apparently placid year like 1998 when the number of incumbent defeats appears to justify George Will’s sarcastic view of incumbent safety, we find evidence of the push and pull of electoral politics beneath the surface that reflects systematic variation in the quality and performance of incumbents. While it may be too much to claim that incumbents win reelection because they do a good job, it does not seem extravagant to conclude that their quality as Representatives stimulates electoral reward and sanction consistent with a more optimistic reading of how the electoral

25 Unfortunately for our ability to analyze defeat statistically, the raw number of incumbents who suffered general-election defeat in our sample was only 8.
process works. Strategic withdrawal by incumbents, strategic entry and deployment by challengers, and the impact of observed variation in the quality of incumbents means that a substantial amount of electoral competition is avoided not necessarily or only because incumbents manipulate the process to create an unfair advantage, but because they reap electoral rewards for doing their jobs well and have learned to anticipate the reactions of the electorate and avoid defeat when it is likely. Our re-assessment of incumbency and electoral competition in elections places more weight on the positive consequences of candidate entry and incumbent quality, and less on the cynical manipulation of the electoral process by incumbents hell-bent on reelection, whatever the cost.
REFERENCES


Buchler, Justin. 2006. A Deterrence Model of Candidate Positioning and Electoral Competition: An Alternative to the Spatial Voting Model. Midwest Political Science Association annual meeting, Chicago.


Figure 1. Incumbent Party Vote Share by Incumbent Prospects, 1998

Note: Analysis limited to districts in which the incumbent had a major-party challenger.
<table>
<thead>
<tr>
<th>Election outcomes:</th>
<th>&lt; .65</th>
<th>.65 - .749</th>
<th>.75 - .849</th>
<th>.85-.949</th>
<th>.95+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median incumbent party vote share</td>
<td>50.8%</td>
<td>55.2%</td>
<td>62.2%</td>
<td>69.1%</td>
<td>73.3%</td>
</tr>
<tr>
<td>Incumbent/party defeated</td>
<td>20.0%</td>
<td>20.0%</td>
<td>6.7%</td>
<td>1.1%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Mean CQ competitiveness rating(^a)</td>
<td>+.60</td>
<td>+1.00</td>
<td>+2.42</td>
<td>+2.78</td>
<td>+2.95</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Candidate entry:</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Incumbent retired</td>
<td>80.0%</td>
<td>13.3%</td>
<td>2.2%</td>
<td>3.2%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Experienced challenger ran</td>
<td>100%</td>
<td>53.3%</td>
<td>37.8%</td>
<td>16.8%</td>
<td>10.5%</td>
</tr>
<tr>
<td>No challenger ran</td>
<td>0%</td>
<td>0%</td>
<td>13.3%</td>
<td>28.4%</td>
<td>28.9%</td>
</tr>
<tr>
<td>In-party primary contested</td>
<td>80.0%</td>
<td>33.3%</td>
<td>11.1%</td>
<td>23.2%</td>
<td>10.8%</td>
</tr>
<tr>
<td>Out-party primary contested</td>
<td>80.0%</td>
<td>53.3%</td>
<td>31.1%</td>
<td>24.2%</td>
<td>21.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>N of districts</th>
<th>(5)</th>
<th>(15)</th>
<th>(45)</th>
<th>(94)</th>
<th>(38)</th>
</tr>
</thead>
</table>

\(^a\)Coded on 7-point scale from -3 (safe for challenger party) through 0 (no favorite) to +3 (safe for incumbent’s party).
Table 2. Incumbent Prospects and Incumbent Vote Share (OLS)

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b$</td>
<td>SE</td>
<td>$b$</td>
</tr>
<tr>
<td>Incumbent vote share, 1996</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>District partisanship (favor incumbent)</td>
<td>.347**</td>
<td>.079</td>
<td>.161**</td>
</tr>
<tr>
<td>Democratic incumbent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CQ competitiveness rating (favor incumbent)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No challenger, 1998</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.240</td>
<td>.433</td>
<td>.788</td>
</tr>
<tr>
<td>$F$</td>
<td>54.828**</td>
<td>33.489**</td>
<td>106.054**</td>
</tr>
<tr>
<td>$N$</td>
<td>171</td>
<td>171</td>
<td>171</td>
</tr>
</tbody>
</table>

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

Note: Analysis restricted to districts in which the same incumbent ran in 1996 and 1998.
**Table 3**  Candidate Entry in the 1998 Elections (Probit)

<table>
<thead>
<tr>
<th></th>
<th>Incumbent</th>
<th></th>
<th>Experienced</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Run for Reelection</td>
<td></td>
<td>Challenger</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$b$</td>
<td>$SE$</td>
<td>$b$</td>
<td>$SE$</td>
</tr>
<tr>
<td>Incumbent vote share, 1996</td>
<td>-.026</td>
<td>.035</td>
<td>-.041*</td>
<td>.019</td>
</tr>
<tr>
<td>District partisanship (favor incumbent)</td>
<td>-.017</td>
<td>.030</td>
<td>-.019</td>
<td>.018</td>
</tr>
<tr>
<td>Democratic incumbent</td>
<td>.573</td>
<td>.633</td>
<td>.033</td>
<td>.266</td>
</tr>
<tr>
<td>Logged incumbent spending, 1996 (logged)</td>
<td>.635</td>
<td>.330</td>
<td>-.013</td>
<td>.192</td>
</tr>
<tr>
<td>Logged challenger spending, 1996 (logged)</td>
<td>-.524</td>
<td>.344</td>
<td>-.088</td>
<td>.118</td>
</tr>
<tr>
<td>Experienced challenger ran, 1996</td>
<td>.582</td>
<td>.584</td>
<td>.118</td>
<td>.267</td>
</tr>
<tr>
<td>Incumbent war chest, 1996 (logged)</td>
<td>-.470</td>
<td>.233</td>
<td>.064</td>
<td>.102</td>
</tr>
<tr>
<td>Incumbent’s number of terms served</td>
<td>-.148**</td>
<td>.051</td>
<td>.023</td>
<td>.027</td>
</tr>
<tr>
<td>Incumbent’s prospects, 1998</td>
<td>11.874**</td>
<td>3.311</td>
<td>-4.142**</td>
<td>1.417</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.101</td>
<td>5.399</td>
<td>6.616*</td>
<td>2.955</td>
</tr>
<tr>
<td>Log Likelihood</td>
<td>-24.268</td>
<td>-91.329</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pseudo R$^2$</td>
<td>.427</td>
<td>.180</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$N$</td>
<td>196</td>
<td>196</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** $p < .01$; * $p < .05$; two-tailed tests.
Figure 2.

Probability of Incumbent and Experienced Challenger Running

- Incumbent Runs
- Exp. Chall. Runs
Table 4. Estimating and Re-Estimating the Incumbency Effect (OLS)

<table>
<thead>
<tr>
<th></th>
<th>Contested Seats Only</th>
<th>All Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>1996 incumb. vote</td>
<td>.332** .045</td>
<td>.251** .045</td>
</tr>
<tr>
<td>Dist. partisanship</td>
<td>.402** .060</td>
<td>.388** .056</td>
</tr>
<tr>
<td>Democratic inc.</td>
<td>-.979 1.048</td>
<td>-.614 .979</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>.650</td>
<td>.696</td>
</tr>
<tr>
<td>$F$</td>
<td>72.026**</td>
<td>71.068**</td>
</tr>
<tr>
<td>$N$</td>
<td>154</td>
<td>154</td>
</tr>
</tbody>
</table>

** $p < .01$; * $p < .05$; two-tailed tests.
Table 5. OLS Analysis of the Effect of Incumbent Quality on Electoral Prospects

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incumbent personal quality</td>
<td>0.042**</td>
<td>0.011</td>
</tr>
<tr>
<td>District partisanship (favor incumbent)</td>
<td>0.002*</td>
<td>0.001</td>
</tr>
<tr>
<td>Incumbent vote share, 1996</td>
<td>0.002*</td>
<td>0.001</td>
</tr>
<tr>
<td>Democratic incumbent</td>
<td>-0.027*</td>
<td>0.012</td>
</tr>
<tr>
<td>Experienced challenger, 1996</td>
<td>-0.018</td>
<td>0.014</td>
</tr>
<tr>
<td>Challenger spending, 1996 (logged)</td>
<td>0.002</td>
<td>0.006</td>
</tr>
<tr>
<td>Incumbent spending, 1996 (logged)</td>
<td>-0.016</td>
<td>0.008</td>
</tr>
<tr>
<td>Incumbent cash on hand, 1996 (logged)</td>
<td>0.010*</td>
<td>0.004</td>
</tr>
<tr>
<td>Incumbent number of terms served</td>
<td>-0.002</td>
<td>0.001</td>
</tr>
<tr>
<td>Constant</td>
<td>0.736**</td>
<td>0.132</td>
</tr>
</tbody>
</table>

Adjusted $R^2$: 0.299

$F$: 10.23**

N: 196

** $p < .01$; * $p < .05$; two-tailed tests.
Table 6. Selection Model of Incumbent Vote Share Conditioned on the Decision to Run, 1998

<table>
<thead>
<tr>
<th></th>
<th>$b$</th>
<th>$SE$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome model:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incumbent vote share, 1996</td>
<td>.107</td>
<td>.063</td>
</tr>
<tr>
<td>District partisanship</td>
<td>.244**</td>
<td>.090</td>
</tr>
<tr>
<td>Democratic incumbent, 1998</td>
<td>-.662</td>
<td>1.548</td>
</tr>
<tr>
<td>Experienced challenger, 1998</td>
<td>-1.456</td>
<td>1.815</td>
</tr>
<tr>
<td>Challenger spending, 1998 (logged)</td>
<td>-4.440**</td>
<td>.458</td>
</tr>
<tr>
<td>Incumbent prospects, 1998</td>
<td>1.978</td>
<td>12.044</td>
</tr>
<tr>
<td>Incumbent personal quality</td>
<td>3.201*</td>
<td>1.509</td>
</tr>
<tr>
<td>Constant</td>
<td>94.809**</td>
<td>12.630</td>
</tr>
<tr>
<td><strong>Selection model:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incumbent vote share, 1996</td>
<td>-.014</td>
<td>.040</td>
</tr>
<tr>
<td>District partisanship</td>
<td>-.043</td>
<td>.037</td>
</tr>
<tr>
<td>Democratic incumbent</td>
<td>.847</td>
<td>.743</td>
</tr>
<tr>
<td>Incumbent spending, 1996 (logged)</td>
<td>.704</td>
<td>.371</td>
</tr>
<tr>
<td>Experienced challenger, 1996</td>
<td>.774</td>
<td>.664</td>
</tr>
<tr>
<td>Incumbent war chest, 1996 (logged)</td>
<td>-.516*</td>
<td>.248</td>
</tr>
<tr>
<td>Challenger spending, 1996 (logged)</td>
<td>-.553</td>
<td>.384</td>
</tr>
<tr>
<td>Incumbent’s number of terms</td>
<td>-.136*</td>
<td>.056</td>
</tr>
<tr>
<td>Incumbent’s prospects</td>
<td>13.945**</td>
<td>4.042</td>
</tr>
<tr>
<td>Incumbent quality</td>
<td>-.908</td>
<td>.516</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.519</td>
<td>5.640</td>
</tr>
</tbody>
</table>

$N$ = 196  
$\chi^2$ = 331.08**  
$\rho$ = -.661

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