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Political Scandal and Bias in Survey Responses

Nicholas Goedert, Washington University in St. Louis

ABSTRACT
This article provides evidence for bias in the polling of American political candidates who are accused of personal or financial scandal, wherein the support of the accused candidate is understated. Evidence for this phenomenon is found in the analysis of a dataset of district-level polls of US House elections during the 2002–2012 election cycles. This bias helps to explain several unanticipated outcomes in recent American legislative elections, in which scandal-tarred incumbents unexpectedly were reelected or defeated by surprisingly narrow margins. The article also finds evidence of a smaller bias, previously observed by practitioners, wherein support is overstated for incumbents who are not accused of scandal.

On May 7, 2013, former South Carolina Governor Mark Sanford, accused of state-funded secret trips to visit a mistress in Argentina and of violating his divorce decree by trespassing at his ex-wife’s home, completed a remarkable political comeback, by winning a special election for US Congress in South Carolina’s First District by a 54% to 45% margin. That he could win at all was shocking to many, but perhaps the most surprising aspect of Sanford’s comeback was the ultimate ease of his victory in contrast to poll projections. In the weeks leading up to the election, three polls showed Sanford’s opponent leading by an average of 3%. Sanford not only won the election, he also outperformed the polls by 12 points. Although there may be several explanations for this unexpected result, it appears than many people who voted for Sanford were unwilling to express this preference in the polls.

Moreover, Sanford’s experience is far from unique among congressional candidates accused of personal or financial scandal during recent election cycles. Several prominent anecdotes suggest that these scandals did not prove as decisive in the minds of voters as public polling anticipated. In 2006, Pennsylvania Representative Don Sherwood attracted national attention when he was accused of strangling his mistress. His opponent, Chris Carney, ran a television ad titled “Father,” in which a former Sherwood supporter holds up a photograph of his daughter and asks, “How can I tell her I support Don Sherwood and feel good about myself?” Every poll projected that Sherwood would lose by double digits, but he lost by only 6%. Despite this narrow loss, it is clear that almost half of the voters in his district still “felt good about themselves” enough to vote for him in private. Two years later, both Republican Representative Don Young of Alaska and Democrat Representative Paul Kanjorski of Pennsylvania—accused of scandals involving oil-lobbyist bribery and earmarks to relatives, respectively—won reelection despite trailing significantly in all public polls.

These anecdotes suggest that perhaps voters actually are more willing to vote for a politician who is engulfed in scandal than they are willing to express in polls. This article provides evidence for this phenomenon, framing it within existing literature on polling bias in political campaigns.

SURVEY RESPONSE BIAS AND THE INCUMBENT RULE
Two categories of bias are of particular importance in evaluating the polling of scandal-tarred congressional candidates: (1) bias that generally benefits or hinders incumbents in legislative races; and (2) bias that may be specific to low-valence candidates, such as those accused of personal misconduct. This section reviews recent literature about the first category (i.e., “the incumbent rule”) because it has a potentially opposite effect than the hypothesized scandal effect. However, other well-known forms of polling bias, such as the social-desirability bias, also may be implicated as potential causes of a scandal effect. Possible causal explanations for a bias against scandal-tarred candidates, although not tested in this article, are described in the discussion section.

The incumbent rule that undecided voters tend to break in favor of the challenger is deeply ingrained in the conventional wisdom of the media and political professionals. Among academics, the widespread popular acceptance of the rule is frequently mentioned but its empirical truth rarely is tested. Van de Ven, Gilovich, and Zeelenberg (2010, 568) refer to the incumbent rule as “a regularity in U.S. elections” and Kaufman, Petrocik, and Shaw (2008, 71) call it “the received wisdom of political consultants.” However, both references cite a single article from practitioner’s newsletter (Panagakis 1989) as the only published empirical support for the rule. If there is truth to this rule, most incumbents would find their support overstated in polls relative to their challenger.

The incumbent rule was named in a Polling Report article, in which Panagakis (1989) compiled a dataset of 155 polls showing that undecided voters broke predominantly for the challenger more than 80% of the time. Practitioners subsequently confirmed this rule and estimated its effect. Mellman (2006) analyzed the 1994–2004
From the anecdotal evidence, we would expect to observe bias in comparing public polling with actual election results for races that involve incumbent candidates accused of personal or financial scandal; I refer to these candidates as “scandal-tarred.”
The incumbent’s lead in the poll as a percentage of the two-party vote; it is a negative number if the challenger was leading) and an “incumbent vote margin” (i.e., the incumbent’s final election margin as a percentage of the two-party vote). I then subtracted the vote margin from the poll margin to calculate the IPU, which is the amount by which the incumbent did worse than expected by the poll.

The following results were generated by examining the raw IPU scores and by regressing the IPU on a set of controls including incumbency and scandal dummies. The regression equation that predicts the IPU was modeled as follows for each poll $p$ and congressional race $r$:

$$\text{Incumbent Party Underperformance}_{pr} = \beta_1 (\text{Incumbent Dummy}_r) + \beta_2 (\text{Scandal Dummy Margin}_r) + u_p + v_r$$

In this model, the $u$ disturbance term represents the sampling error of the poll. The $v$ term represents the change in the race $r$ between the time of the poll and election day, when this change was chaotic and not predictably biased toward either party. To accommodate these two distinct error terms, the data were clustered by congressional race. For certain specifications, additional controls were added for the date on which the poll was taken and then interacted with incumbency and scandal for insight about the following two questions. First, when interacted with incumbency, this addresses the extent to which the “incumbent rule” is the result of the challenger simply gaining name recognition over the course of the last weeks of the campaign. If this were true, we would anticipate earlier polls to overestimate the margin for the incumbent more than later polls. Second, when interacted with scandal, this addresses one theory for the cause of bias: if bias were the result of scandals being prominent in the media in earlier points of the election, but fading from memory as the election approached, we would expect bias to decrease in polls close to the election.

### Table 2

#### Regression Results of Model, Including Incumbency and Scandal

<table>
<thead>
<tr>
<th>IPU</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NO SCANDAL</td>
<td>+ SCANDAL</td>
<td>+ DATE</td>
<td>FIXED EFFECT</td>
<td>FIXED EFFECT + DATE</td>
</tr>
<tr>
<td>Incumbent Running</td>
<td>2.720**</td>
<td>4.120***</td>
<td>5.330***</td>
<td>2.810***</td>
<td>4.610***</td>
</tr>
<tr>
<td></td>
<td>(1.050)</td>
<td>(1.040)</td>
<td>(2.040)</td>
<td>(1.040)</td>
<td>(1.660)</td>
</tr>
<tr>
<td></td>
<td>(1.400)</td>
<td>(2.670)</td>
<td>(1.370)</td>
<td>(2.600)</td>
<td></td>
</tr>
<tr>
<td>Days before Election</td>
<td>−0.059</td>
<td>−0.089</td>
<td>0.088</td>
<td>−0.089</td>
<td>0.120*</td>
</tr>
<tr>
<td></td>
<td>(0.072)</td>
<td>(0.065)</td>
<td></td>
<td>(0.075)</td>
<td></td>
</tr>
<tr>
<td>Days before Election Incumbent</td>
<td>−0.059</td>
<td>−0.089</td>
<td>0.011</td>
<td>−0.097</td>
<td>0.0094</td>
</tr>
<tr>
<td></td>
<td>(0.084)</td>
<td>(0.075)</td>
<td></td>
<td>(0.097)</td>
<td></td>
</tr>
<tr>
<td>Days before Election Scandal</td>
<td>−0.059</td>
<td>−0.089</td>
<td>0.011</td>
<td>−0.097</td>
<td>0.0094</td>
</tr>
<tr>
<td></td>
<td>(0.084)</td>
<td>(0.075)</td>
<td></td>
<td>(0.097)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>−0.650</td>
<td>−0.650</td>
<td>−2.410</td>
<td>−0.950</td>
<td>−3.300</td>
</tr>
<tr>
<td></td>
<td>(0.870)</td>
<td>(0.870)</td>
<td>(1.860)</td>
<td>(1.980)</td>
<td>(2.320)</td>
</tr>
<tr>
<td>Interacted Year/Party Fixed Effect</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>551</td>
<td>551</td>
<td>551</td>
<td>551</td>
<td>551</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.022</td>
<td>0.089</td>
<td>0.094</td>
<td>0.139</td>
<td>0.147</td>
</tr>
</tbody>
</table>

Notes: Errors are clustered by congressional race. ***p < 0.01, **p < 0.05, *p < 0.10 (two-tailed test). In Specifications (4) and (5), the excluded year and party fixed-effects categories are for 2012 and Democratic seats.
For robustness tests, I also used specifications with interacted fixed effects for year and incumbent party and another specification to match polls involving scandal-tarred and non-scandal incumbents. Matching is a statistical technique used to create balance in observational data between treated and control groups. The method used in this study, Coarsened Exact Matching (CEM), assigns all units to discrete categories before matching the treated and control units. CEM has been recently advanced as providing improvements over other matching methods with respect to balancing the desire to reduce bias while retaining as much data as possible (Iacus, King, and Porro 2009). In this case, matching was used to achieve balance between the sample of polls of scandal races (i.e., the treated units) and those of non-scandal incumbents (i.e., the control units). This was done with respect to year, incumbent party, and competitiveness of electoral outcome, matching 73 of the 78 scandal polls to 104 non-scandal polls in categories corresponding to year, incumbent party, and competitiveness. This was done with respect to year, incumbent party, and competitiveness of electoral outcome, matching 73 of the 78 scandal polls to 104 non-scandal polls in categories corresponding to year, incumbent party, and competitiveness.

RESULTS

Preliminary evidence of a scandal effect can be observed first by examining the raw subgroup means for IPU. As shown in table 1, non-scandal incumbents underperformed by a mean of 3.5% over the sample of 295 polls, whereas scandal-tarred incumbents overperformed by an average of 3.2%—a difference of 6.7 points. Figure 1 displays a kernel-density function of IPU for the polls of scandal-tarred and non-scandal incumbents.

Table 2 shows the results of regressing IPU on dummies for incumbency and scandal under several specifications. Table 3 limits the results to the matched sample, as described previously. For comparison purposes, column 1 in table 3 shows the unmatched sample with open seats excluded because polls of these races are all unmatched to scandal polls. Columns 2 and 3 replicate the results from the same column in table 2, using weights returned by the CEM algorithm. Returning to the two hypotheses, the incumbent rule predicts a positive coefficient for the incumbent dummy and the scandal effect predicts a negative coefficient for the scandal dummy.

In the first specification, when races are undifferentiated with respect to scandal, we observe that incumbents systematically underperform their polls by an average of 2.7%. Additionally, the constant is near 0, which suggests no bias with respect to the incumbent party in open seats. However, specification 2, which adds the scandal dummy, reveals an even stronger opposing scandal effect. The coefficients in this column suggest that polls of incumbents not accused of scandal overestimate incumbent support by 4.1%, whereas polls of scandal-tarred incumbents underestimate incumbent support by 2.6%; the total scandal effect is 6.7%. In this case, there is strong evidence of bias understating incumbent support in scandal-tarred races, as well as evidence of the incumbent-rule hypothesis (i.e., both effects are significant at \( p < 0.01 \), two-tailed).

Column 3 includes a polling-date variable, operationalized as days before the election that the poll was completed and ranging between 1 and 40. Here, there is little support for the theory that name recognition explains the incumbent rule; the coefficients for both date and date interacted with incumbency are close to 0, and no support for the causal theory that scandals fade in importance as the election draws closer. The coefficient for the date interacted with scandal is not significant and is in the opposite direction than would be posited by this causal theory.

These results are unchanged when fixed effects are included (columns 4 and 5) or open seats are excluded (i.e., column 1 in table 3); all show a scandal effect of 6% to 7%. Finally, these results are replicated in the smaller matched samples (i.e., columns 2 and 3 in table 3), showing a scandal effect of approximately 5%.

I tested the robustness of these findings in several ways. Online appendix table C lists the results of specification 2 for subsamples by incumbent party and individual year. The table shows that scandal has a significant negative effect (i.e., \( p < 0.01 \)) in each subsample, which indicates understated support for scandal-tarred incumbents. I also examined specifications that included random effects for individual races, as well as those that incorporate controls and/or weighting for the sample size or polling-firm quality. The effect of incumbency and scandal was substantively unchanged in all of these robustness checks (see the online appendix for complete results).

Concerns that the observed scandal effects are the product of collinearity between scandal and race competitiveness were addressed in three ways. First, the correlation between scandal and vote outcome was -0.10, which is not close to the levels that are statistically problematic. Second, all specifications were replicated with the poll result as the dependent variable, including the vote result as an independent variable with substantively identical results (see the online appendix). Third, the matching method used in these results matched polls on vote outcome; the correlation between scandal and vote outcome among the matched sample was 0.01.

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**Table 3**

Regression Results of Model, Including Scandal (Matched Sample with Open Seats Excluded)

<table>
<thead>
<tr>
<th>IPU</th>
<th>UNMATCHED</th>
<th>MATCHED SAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Scandal</td>
<td>-6.970***</td>
<td>-4.580***</td>
</tr>
<tr>
<td></td>
<td>(2.670)</td>
<td>(1.620)</td>
</tr>
<tr>
<td>Days before Election</td>
<td>0.029</td>
<td>-0.033</td>
</tr>
<tr>
<td></td>
<td>(0.042)</td>
<td>(0.090)</td>
</tr>
<tr>
<td>Days before Election *Scandal</td>
<td>0.011</td>
<td>-0.033</td>
</tr>
<tr>
<td></td>
<td>(0.097)</td>
<td>(0.120)</td>
</tr>
<tr>
<td>Constant</td>
<td>2.920***</td>
<td>2.200**</td>
</tr>
<tr>
<td></td>
<td>(0.840)</td>
<td>(1.070)</td>
</tr>
<tr>
<td>Observations</td>
<td>373</td>
<td>177</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.012</td>
<td>0.079</td>
</tr>
</tbody>
</table>

Notes: Errors are clustered by congressional race. ***\( p < 0.01 \), **\( p < 0.05 \), *\( p < 0.10 \) (two-tailed test). Data in the Matched Sample model are matched on party, year, and incumbent vote margin, with scandal as a treatment variable using CEM.
DISCUSSION

This article exposes a bias in the polling of scandal-tarred candidates that is substantively large in the context of other observed polling biases as well as the actual campaign effects of scandal, while also finding robust evidence of the incumbent rule. Various studies have found that scandal accusations cost congressional incumbents between 5% and 10% of the general-election vote (Basinger 2013; Hendry, Jackson, and Mondak 2009; Hirano and Snyder 2012). My results suggest that about as many voters were induced by scandal accusations to incorrectly tell pollsters that they would oppose a candidate as were actually induced to vote against the same candidate.

Although the evidence that scandal-tarred incumbents overperform their polls is strong, aggregate-level data from public polling do not explain this phenomenon at the individual level. One possible explanation is social-desirability bias, which manifests as a bias in polling because people over-report socially desirable views and under-report undesirable views and behaviors in a conscious or subconscious effort to be viewed favorably by the pollster (e.g., Gibson, Hudes, and Donovan 1999; Tourangeau and Yan 2007; Wyner 1980). A well-known example in political polling is the Bradley Effect, wherein poll respondents express a preference for an African American candidate or an undecided preference when, in fact, they intend to vote for a white candidate, to conceal what could be perceived as a racist choice (see, e.g., Berinsky 1999; Finkel, Guterbock, and Borg 1991; Hopkins 2009). In this case, however, social-desirability bias might lead some voters—who genuinely support the policies or ideology of a scandal-tarred candidate—to suppress the public reporting of their support for fear that it will signal enthusiasm for socially undesirable behavior. Carney’s “Father” ad against Sherwood certainly played exactly to this sentiment by suggesting that voters should feel bad about telling others they voted for the scandal-tarred candidate. Also of particular relevance, Winters and Weitz-Shapiro (2011) found that respondents in Brazil expressed less tolerance for political corruption in a survey than was indicated by their voting patterns; however, the researchers attributed this gap to a lack of voter information rather than bias in their own survey. Thus, whether electoral approval of corrupt or scandal-tarred candidates might be subject to social-desirability bias remains a largely open question. The literature suggests that automated voice polling may reduce the social-desirability bias (Tourangeau, Steiger, and Wilson 2001); the recent increase in Interactive Voice Response (IVR) polling in campaigns may provide a future avenue to test this theory.9

Moreover, it is likely that the effect is not confined to US House races. Congressional elections have the advantage of being sufficiently numerous to observe a significant response bias in scandal races; however, the same patterns emerge in anecdotal evidence from statewide contests. For example, in 2006 and 2008, respectively, Senators Conrad Burns and Ted Stevens substantially overperformed their polls in narrow defeats despite multiple serious scandal allegations. Apparently, the basic ideological disposition of the electorate—not personal misconduct—again may have been more influential in the result than the polls anticipated.

The findings in this article have implications for both the future polling of elections involving scandal accusations and the evaluation of strategic entry and exit decisions of candidates involved in such elections. It is possible that some incumbents who chose to retire or resign based on poll evidence that a race was unwinnable due to scandal would have been reelected if the polls were calibrated appropriately. The results also suggest a possible expansion to the contexts in which we might observe social-desirability bias or priming, but additional exploration of these issues on an individual level is necessary. Thus, the research described in this article only hints at the several avenues that remain available to explore this phenomenon.

NOTES

2. The ad can be viewed online at http://www.youtube.com/watch?v=KA4MqfTncM&url=http://tpmelectioncentral.com/paso.
3. Although it is not the central finding of this article, the dataset allows a more robust test of the incumbent rule than previous tests by other practitioners.
4. Because noncompetitive races are polled infrequently and rarely involve scandal-tarred incumbents, the results are substantively unchanged if this restriction is relaxed. See the online appendix for further discussion about this restriction and how potential issues of selection on the dependent variable are addressed.
5. Because the 2014 edition of the Almanac of American Politics was not yet published as of this writing, the scandal designation for the 2012 races was determined by an online news search of campaign stories.
6. More precisely, each disturbance term would be potentially heteroskedastic. The poll sampling-error terms would have a variance correlated with sample size, and the disturbance reflecting changes in the campaign between the time of the vote and the election would have a variance correlated to the date of the poll. The sample sizes of the polls are sufficiently similar to not be of concern; however, the results are robust to weighting by or controlling for poll precision (see the online appendix). As we might expect the v terms to converge toward 0 as the poll date approaches the election date, controls are added for the poll date in some specifications.
7. Matching was accomplished using the CEM software in Stata (see Blackwell et al. 2008). Using CEM, treated and control units are not matched on a one-to-one basis. Rather, treated units may be matched to multiple control units or multiple treated units with a different number of control units; the control units are assigned varied regression weights to achieve balance among the groups.
8. Matching on vote competitiveness also addresses an alternative explanation that the observed scandal effect is actually a “floor effect” that should be observed more generally among all incumbents who have particularly weak support.
9. Under this theory, we should see more scandal bias in live-interview polls than those using the IVR technique. I tested this on a smaller subset of IVR polls with inconclusive results: the observed scandal effect among those polls was approximately half of that observed among a comparable subset of live-interview polls—but not significantly different from either 0 or the live-interview effect. The coefficient value is consistent with the social-desirability explanation, but the dataset is not large enough to generate statistical confidence. Additionally, some research in social-desirability bias (e.g., Berinsky 1999) suggests that it may manifest in lower poll-response rates. I tested this theory on the dataset (with respect to percentage of undecided voters), with a null result, which suggests that scandal does not significantly impact nonresponse. Full results of both analyses are available from the author.
References


