Uninformed Voters and Corrupt Politicians

Abstract

Repeated studies have shown that voters in mature democracies often do not punish corrupt politicians. Most existing explanations focus on institutions and their effect on voters' ability to monitor politicians. I turn the focus to the electorate and examine the difference between voters with different levels of political awareness. The previous literature provides contradicting expectations, suggesting that both low- and high-awareness voters may be less tolerant of corruption. Drawing on several decades of data on corruption and voting in the U.S. congressional elections, I find that low-awareness voters are significantly more likely than highly politically aware to vote for corrupt incumbents. This association appears to stem both from high-awareness voters' greater knowledge and better understanding of incumbents' involvement in corruption. However, partisanship mitigates the differences between low- and high-awareness voters, since the highly aware are more partisan, and strong partisans are more willing to forgive corrupt co-partisan incumbents.

1 Introduction

Representative Charles C. Diggs Jr. was convicted to three years in prison on Oct. 7, 1978 for illegally diverting more than $60,000 – around $220,000 in present value – of his congressional employees' salaries to his personal use.[1] Exactly 30 days later, he won re-election to the U.S. House of Representatives with 79% of the vote. Less than a year later, he was censured by Congress, and agreed to repay more than $45,000, eventually resigning on June 3, 1980. Representative Diggs' case is far from the only one where a corrupt politician was able to win reelection. Repeated studies have shown that voters in mature democracies do not reliably punish corrupt politicians. For example, more than sixty percent of incumbent legislators in the U.S. House of Representatives alleged of or charged with corruption between 1968 and 1990 were reelected (Peters and Welch, 1980; Welch and Hibbing, 1997); similar reelection rates are found among corrupt legislators in Italy (Chang, Golden, and Hill, 2010) and Japan (Reed, 1999).

Why do voters often reelect corrupt politicians? Most existing explanations focus on how institutions may promote or constrain voters' ability to monitor and punish politicians (e.g. Chang and Golden, 2006; Kunicova and Rose-Ackerman, 2005; Persson, Tabellini, and Trebbi, 2003). These studies typically implicitly or explicitly treat the electorate as *homogenous*. With this assumption, our understanding of the puzzle is incomplete. In this article, I turn the focus away from institutions to the electorate itself. Based on a rich existing literature, we have reasons to believe that the large variation in political awareness in the electorate could be associated with the uneven propensity to punish incumbents' corruption. Intriguingly, the current body of theory and evidence provides conflicting expectations as to whether low- or high-awareness voters may be more likely to punish corrupt politicians. Some studies suggests that low-awareness voters may be more likely to respond to corruption

[1] "Ethics and Crimes." CQ Press Electronic Library, CQ Almanac Online Edition, `http://library.cqpress.com/cqalmanac/document.php?id=cqal78-1237462` (accessed February 28, 2014).

scandals, as they are more sensitive to campaign-specific conditions, less partisan and thus less biased than high-awareness voters in evaluations of incumbent performance (Dimock and Jacobson, 1995; Zaller, 2004). Other studies imply that high-awareness voters may be more likely to punish corrupt politicians than low-awareness voters, as they are more knowledgeable of the candidates, are better able to link retrospective judgements to vote choice, and are less susceptible to incumbent campaign appeals (Delli Carpini and Keeter, 1996). Finally, some studies suggest that there should be no differences between low- and high-awareness voters, as less attentive voters may compensate for the lack of information by using various heuristics and cues, as well as learning during campaigns (Lupia, 1994; Popkin, 1994).

Since it is difficult to credibly experimentally manipulate corruption scandals and habitual political awareness, this study is limited to describing correlations in the observational data, constructed by merging corruption charges brought against members of the U.S. Congress with individual-level survey data from the American National Elections Studies over several decades. Causal relationships are hard to establish because of such factors as politicians' strategic engagement in corruption in relation to their electorates' political awareness, or voters' strategic attentiveness to politics in relation to incumbent corruption. As is the case in most observational studies, it is also challenging to control for all the potential unobserved confounding variables.

I find that high-awareness voters are significantly less likely to support corrupt incumbents compared to clean incumbents than low-awareness voters in both the House and Senate elections. This association appears to stem from high-awareness voters' greater knowledge as well as better understanding of the details of incumbents' involvement in corruption. However, the positive association between awareness and corruption responsiveness is weaker among strong identifiers with a corrupt incumbent's party. Since high-awareness voters are more likely to be strong partisans, partisanship mitigates to a certain degree the strength of association between political awareness and punishment of corruption. Overall, however,

this negative association between corruption responsiveness and political awareness is quite stable across a number of different specifications, alternative measures of incumbent support, different definitions of corruption, and modeling choices.

2 Previous Research and the Argument

Corrupt incumbents in the U.S. Congress running for reelection on average lose votes compared to "clean" legislators, but have nonetheless been reelected more than sixty percent of the time in the past several decades (Abramowitz and Segal, 1992; Peters and Welch, 1980; Welch and Hibbing, 1997). Even incumbents implicated in the 1992 House Bank scandal, which brought about the greatest turnover in the House in forty years, were reelected at a rate of more than eighty percent (Alford et al., 1994; Dimock and Jacobson, 1995).[2] Scholars have found similar results in other developed democracies, such as among legislators in Italy (Chang, Golden, and Hill, 2010) and Japan (Reed, 1999), as well as mayors in Spain (Barbera, Fernandez-Vazquez, and Rivero, Forthcoming; Jimenez and Cainzos, 2006) and France (Lafay and Servais, 2000). Overall, these studies indicate that on average a corrupt politician is successfully reelected, losing only a relatively small fraction of the vote (Golden, 2010).

The majority of existing explanations of why corrupt politicians can maintain public support focus on institutions and their effect on voters' ability to monitor and punish politicians. Scholars have examined the effects on corruption of electoral rules (Kunicova and Rose-Ackerman, 2005; Persson, Tabellini, and Trebbi, 2003), institutions that affect the "clarity of responsibility" of incumbent governments, such as party cohesion (Tavits, 2007), or freedom of the press (Besley and Burgess, 2002; Brunetti and Weder, 2003), the effects of the level of decentralization (Fisman and Gatti, 2002; Treisman, 2000), as well as the

[2]While the scandal was associated with a higher rate of retirement, it is not considered the main cause (Groseclose and Krehbiel, 1994; Hall and van Houweling, 1995).

seniority rules in legislatures and other institutional sources of the incumbency advantage that may help insulate corrupt incumbents (Herrick, 2000; Nyblade and Reed, 2008; Peters and Welch, 1980; Reed, 1999).[3]

These studies typically assume that the electorate is homogeneous in its level of information about corruption, and that each voter is equally motivated and capable of assessing the significance and consequences of corruption. However, such assumptions obscure a potentially large heterogeneity in the electorate. Dimock and Jacobson (1995) showed that while more than ninety percent of respondents in the 1992 National Election Study claimed to be aware of the House Bank scandal, only 43 percent got it right as to whether their representative wrote any bad checks, and that even "some of them were clearly guessing" (p. 1152). In this vain, I examine the association between the voters' political awareness and support for corrupt incumbents relative to incumbents not facing corruption charges.

My focus on voters' political awareness is related to but different from two recent strands of the literature that examine the role of information about corruption in voter behavior. First, several recent studies have focused on the consequences of revealing information about corruption in low-transparency environments in developing democracies (Chong et al., 2011; Ferraz and Finan, 2008). Unlike these studies, I deliberately focus on instances of *publicized* corruption investigations that are more easily observable by the voters – to the extent that the voters are attentive to them.[4] Moreover, as explained in more detail in the next section, voters' political awareness may affect their support for corrupt incumbents not just through availability of information, but *how* this information is used in the wider context of

[3]Fearon (1999) makes an influential argument that when voters care about the type of candidate, be it competence or some other highly-valued quality, they may not be able to pre-commit to a performance standard and punish corruption committed by an incumbent who possesses such a quality. For example, co-ethnics of a dominant ethnicity may avoid punishment for corruption because of their ethnic identity (e.g. Banerjee and Pande, 2009).

[4]Representative Diggs' indictment, mentioned above, which took place almost eight months before the election, was widely reported in the contemporary press. See for example "U.S. Indicts Rep. Diggs for Fraud," *Chicago Tribune*, p. 2, March 24, 1978.

understanding politics.

Second, several studies have focused on the effects of randomly exposing citizens to hypothetical corruption scenarios in the context of survey experiments (Anduiza, Gallego, and Muñoz 2013; Banerjee et al. 2014; Doherty, Dowling, and Miller 2011; self-citation omitted). Unlike these studies, this paper draws on observational data derived from several decades of real-world corruption cases. While relying on an observational rather than an experimental approach limits this study's focus on correlations rather than causal relationships, real-world data provide external validity to the associations described in the analysis below.

3 Theoretical Expectations

Scholars have shown repeatedly that Americans' level of knowledge of politics is generally low and highly heterogeneous (e.g. Campbell et al., 1960; Converse, 1964; Delli Carpini and Keeter, 1996). Could low levels and high variance of political awareness contribute to the electoral impunity of corrupt politicians? The existing literature provides conflicting expectations. Some scholars argue that voters with low attentiveness to politics may compensate for the lack of information by using various heuristics, such as cues from reference groups (e.g. Lupia, 1994; Lupia and McCubbins, 1998; Sniderman, Brody, and Tetlock, 1991), "gut-level" reasoning (Popkin, 1994), or simple retrospective judgements of incumbent performance (e.g. Fiorina, 1981; Sniderman, Glaser, and Griffin, 1990). Publicized corruption charges are likely to be strong signals during an election campaign and may represent a ready heuristic device on incumbent performance available to low-awareness voters. Also, campaigns in modern democracies can help close the gap between the uninformed and the informed by the time of the election (Sekhon, n.d.). These arguments imply that low-awareness voters may withdraw support for corrupt politicians as much as the more politically attentive voters. In other words, the null hypothesis, H_0, is:

Hypothesis H_0: The variance in political awareness is not associated with support for corrupt incumbents relative to clean incumbents.

Some studies point to a potentially negative association between political awareness and support for corrupt incumbents. Less attentive voters tend to be less knowledgeable of incumbents and challengers (Zaller, 1992). Low-awareness voters may be less able than high-awareness voters to assess the relevance and quality of cues from reference groups (Kuklinski and Quirk, 2000; Luskin, 2002), or to link their retrospective judgements to vote choice (Delli Carpini and Keeter, 1996). A low-awareness voter may for example be less able to differentiate between law-breaking corruption and negative campaigning. Further, low-awareness voters are more susceptible to dominant incumbent campaigns (Kuklinski and Quirk, 2000; Zaller, 1992), and incumbents are likely to campaign particularly hard when facing corruption charges against them. Finally, high-informed voters may be better able to understand the consequences of corruption, such as the inability to be an effective representative in the face of corruption investigation. These mechanisms imply the following alternative to the null hypothesis:

Hypothesis H_{A1}: Support for corrupt incumbents relative to clean incumbents *decreases* as political awareness increases.

Other studies suggest that low-awareness voters may be more responsive to corruption charges than high-awareness voters. Zaller (2004) finds that low-awareness voters are more sensitive to campaign-specific events (in presidential elections), such as economic conditions, foreign policy crises, or candidates' ideological shifts. High-awareness voters, for their part, tend to be more ideological, and strong partisans have in turn been shown to form biased evaluations of incumbents' performance (e.g. Duch, Palmer, and Anderson, 2000; Krause,

1997), and to more heavily discount allegations of corruption of their preferred candidate (Dimock and Jacobson, 1995). Low-awareness voters may have less knowledge and understanding of the consequences of corruption, but they may be more responsive and more ideologically "innocent." Moreover, highly sophisticated voters tend to be more knowledgeable of and more concerned about policy issues. They may be more willing to accept a trade-off between policy and corruption than low-awareness voters if corrupt politicians are better able to provide such benefits as pork-barrel spending (Rundquist, Strom, and Peters, 1977). These arguments suggest a rival alternative to the null hypothesis:

Hypothesis H_{A2}: Support for corrupt incumbents relative to clean incumbents *increases* as political awareness increases.

4 Measures of Corruption and Awareness

I now describe how I measure incumbent corruption and voters' political awareness. Next, I discuss the main empirical specification and quantities of interest, followed by the presentation of the results.

4.1 Incumbent Corruption

In the main analysis, I define incumbent corruption as publicly observable charges of corruption involving House and Senate members which are followed by a subsequent action from the relevant authorities, such as federal prosecutors, congressional ethics committees, the Federal Election Commission, the Internal Revenue Service, etc. I prefer this definition of corruption as scandals not followed by investigative action are a more noisy measure of corruption, including for example instances of negative campaigning not necessarily related to actual corruption. Other scholars have shown that voters are considerably less sensitive

to scandals not involving actual abuses of power (Doherty, Dowling, and Miller, 2011; Zaller, 1998). Previous studies that have included corruption scandals not followed by investigations commonly relied on media accounts of scandals (Kiewiet and Zeng, 1993; Nyblade and Reed, 2008; Peters and Welch, 1980; Welch and Hibbing, 1997); however, media reports of corruption are often partisan and lack balance (Puglisi and Snyder, 2011). Of course, authorities such as congressional ethics committees and federal prosecutors may also lack balance. Therefore, in Table A8 in the Online Appendix, I also report the results when the definition of corruption is expanded to include scandals not followed by investigative actions. The results are substantively unchanged.[5]

The dataset of corruption cases covers the period 1968–2002, to correspond with the biannual National American Election Studies survey data I use to construct the measure of political awareness and other relevant variables, which I describe below and in Section A5 in the Online Appendix.[6] Drawing on a number of sources (Brown, 2006; Congressional Quarterly Almanac, Various; Congressional Quarterly, 1992; Hirano and Snyder, 2012; Noyer, 1995; Roberds, 1997), I identify a total of 470 corruption cases involving politicians from the House of Representatives and the Senate (406 and 64 cases, respectively). In the main analysis, I exclude the cases where the formal charges were made but then dropped during the same term in office of the politician involved, because the voters could observe that the investigation was closed.[7] I also drop cases where investigations were initiated only after a politician's departure from Congress, because the voters were unlikely to learn the details of a corruption case while a politician was in office.[8] The main dataset therefore includes 441

[5]Moreover, the results are not driven by any one scandal, as the findings are substantively the same when the model is re-estimated by dropping one scandal at a time, including the House Bank scandal, which accounts for approximately two-thirds of the corruption observations in the House sample.

[6]I do not use more recent corruption cases because the recent ANES data do not cover any of the constituencies involved.

[7]For example, in 1977 Rep. William Clay was under grand jury investigation for alleged tax evasion and fraud. The IRS terminated the investigation in July 1977, four months before the election.

[8]For example, in the Koreagate scandal that broke out in 1976, Rep. Otto Passman was indicted on March 31, 1978 on charges of receiving illegal payments from a Korean lobbyist, as well as tax evasion.

corruption cases with some form of investigation (377 in the House and 46 in the Senate).[9] Of these, 124 corruption cases (107 in the House and 17 in the Senate) are represented with at least one survey respondent in the ANES data. In the U.S. House elections, this gives 1,481 respondents from districts with an incumbent facing corruption charges, and 27,693 respondents from districts with an incumbent without any corruption charges. In the Senate, there are 1,276 respondents in elections with an incumbent facing corruption charges, and 15,436 respondents in elections with clean incumbents. The number of corruption cases represented in the analysis relative to the full dataset of corruption charges is lower because of the limited coverage of congressional districts and states in the ANES data, as well as the fact that some politicians implicated in corruption resign or retire. Summary statistics for all the corruption cases and short descriptions for those cases retained in the main analysis are given in Tables A1, A2, and A3 in the Online Appendix.

4.2 Political Awareness

I construct an individual-level measure of political awareness, following the established practice of using knowledge and policy issue questions from surveys (Althaus, 2003; Delli Carpini and Keeter, 1996; Zaller, 1992).[10] Specifically, I rely on a number of items from the biennial American National Election Study (ANES) time-series surveys conducted between 1968 and 2002. The items probe respondents' factual knowledge of politics and institutions (e.g. the

However, he lost the party seat primary in 1976. Including such cases does not affect the results.

[9]There are also several cases where members were acquitted or charges dropped after the election. For example, in 1968 *Life* magazine twice charged Sen. Edward Long with using his position to aid imprisoned Teamster Union President James Hoffa, but the charges were dropped after the investigations by the ethics committee and the grand jury. While I keep these cases in the sample, the results are entirely insensitive to their exclusion.

[10]I will therefore perform all the analysis at the individual level. Another approach is to focus on districts or states as the unit of analysis. However, this is difficult due to the lack of political awareness data at the aggregate level over a longer period of time. One potential solution is to estimate the aggregate-level political awareness from individual-level survey data through multi-level modeling and post-stratification (Lax and Phillips, 2009; Warshaw and Rodden, 2012). However, the American National Election Studies – the only long-running surveys containing political knowledge items – are not suitable for such an approach because of clustered sampling and small samples of respondents per district and state (Stollwerk, 2013).

party holding the majority in the House), their ability to recognize political figures (e.g. the name of the vice president), and the proper placement of parties and candidates on a left-right scale on policy issues. These items have been proven superior in measuring differences in political awareness to other proxies such as education, self-reported media use or political participation (Luskin, 1987; Zaller, 1992).[11] The political awareness score for each respondent from each survey is calculated using factor analysis on all the relevant survey items; the primary factor is large, and the construct validity of the scores is strongly confirmed with standard statistics such as the Cronbach's α. I rank the score of each respondent in a particular survey with respect to that survey's maximum; this procedure removes any time trends, and makes the scores comparable across the surveys. Section A2 in the Online Appendix provide more details on the coding of the knowledge items, the construction of the political awareness score, and its validity.

5 Empirical Model

To evaluate the competing expectations laid out above, I specify the following simple empirical model:

$$Y_{i,j,t} = \alpha_t + \beta_1 I_{i,j,t} + \beta_2 C_{j,t} + \beta_3 I_{i,j,t} \times C_{j,t} + \beta_4 PID_{i,j,t} + \epsilon_{i,j,t} \quad (1)$$

where i is an individual, located in a district or state j, surveyed in an election year t. In the main analysis, Y is the binary incumbent vote choice, coded as one if the respondent reported voting for the incumbent.[12] I is the respondent's political awareness score, C is the corruption indicator variable equal to one if the incumbent was facing a corruption

[11] Moreover, general knowledge of politics is less susceptible to short-term change in response to a corruption scandal than proxies like self-reported media use, thus alleviating one potential problem of endogeneity of the measure of political awareness to corruption.

[12] I discuss further below and show in Figure A1 in the Online Appendix that the results are very similar with the incumbent feeling thermometer rating and incumbent approval as alternative dependent variables.

investigation, $I \times C$ is the interaction between political awareness and the corruption variable; PID is the voter's partisanship, taking values $-3, -2, -1, 0, 1, 2, 3$, where 3 represents a self-reported strong identifier with the incumbent party, 0 represents an independent, and -3 represents a strong out-partisan. α_t are the election fixed effects, allowing to control for all election-specific factors that lead some incumbents to perform better than others. Tables A6 and A7 in the Online Appendix show that the results are substantively very similar when this specification is enhanced with a number of other potentially important individual and district- or state-level control variables, and if these variables are interacted with political awareness, respondents' partisanship, and corruption.[13]

Since ANES suffers from considerable item non-response, I use multiple imputation to handle the missing data, because discarding the missing data induces inefficiency and possibly bias (Rubin, 1987). All estimates presented below are combined across the imputed datasets using standard rules developed in Rubin (1987). The imputation process is discussed in more detail in Section A4 in the Online Appendix. All estimations are weighted by sampling weights, and standard errors are clustered by district or state. All election surveys are pooled together. Estimates are separately obtained for the House and the Senate.

Given the focus on observational data, the analysis in this paper is limited to describing associations rather than causal relationships, because both corruption and political awareness are potentially endogenous to voters' support for an incumbent. Moreover, it is possible that there are not enough observed control variables available in the data to plausibly assume that conditional on covariates, high-awareness voters are identical to low-awareness voters except for information or understanding of incumbent corruption.

[13]Section A5 in the Online Appendix contains more details about the coding of each variable included in various specifications. Despite the dependent variable in equation 1 being binary, the model is estimated with ordinary least squares because probit with fixed effects would drop districts in elections for which there is no variation in the dependent variable, creating biases away from zero. The results are substantively unchanged with various probit specifications without fixed effects. The results are also very similar if the data are preprocessed with propensity score matching, or when using a multi-level model with individuals nested in districts/states and election years. These results are available upon request.

That said, using simple formal reasoning in Section A7 in the Online Appendix, I show that an important non-random aspect of the data-generating process – politicians' potential strategic engagement in corruption in response to their electorates' political awareness – likely induces attenuation bias in rejecting the null hypothesis in favor of either H_{A1} or H_{A2}. Assuming for example that H_{A1} is true leads to the conclusion that we should observe fewer corruption cases among incumbents from districts with higher-awareness voters, making it harder to find a negative association between higher political awareness and support for corrupt incumbents (i.e. making it harder to find evidence consistent with H_{A1}). The same result about attenuation bias obtains if H_{A2} is assumed to be true (see Section A7 in the Online Appendix for more details).

Based on the coefficient estimates from equation 1, the main quantity of interest is the difference in the predicted probability of voting for a corrupt incumbent relative to a clean incumbent, estimated for different levels of political awareness, while holding other variables constant. For ease of exposition, the results are presented graphically in the main text, while the coefficient estimates are given in the Online Appendix. To examine the full range of values of political awareness, I focus on the difference in the predicted vote probabilities from the 1st percentile to the 100th percentile of political awareness, in five-percentile steps – from the lowest to the highest observed levels of political awareness.

If the difference in the predicted vote probabilities for a corrupt incumbent relative to a clean incumbent does not change noticeably across different values of political awareness, then naturally the null hypothesis (H_0) of no difference between low- and high-awareness voters cannot be rejected. If the predicted probability of voting for a corrupt incumbent decreases relative to that for a clean incumbent as political awareness increases, then H_0 is rejected in favor of H_{A1}; that is, high-awareness voters are less likely to support corrupt incumbents (relative to clean incumbents) than low-awareness voters. On the other hand, if the difference in the predicted vote probabilities increases as political awareness increases,

H_0 is rejected in favor of H_{A2}.

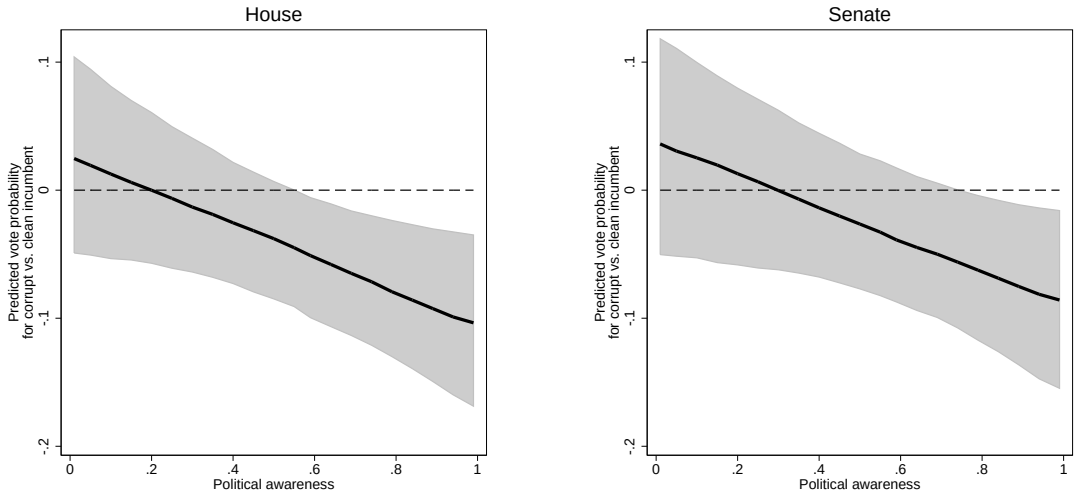
6 Results

As described in the previous section, the lines in Figure 1 represent the difference in the predicted probability of voting for a corrupt incumbent relative to a clean incumbent across different levels of political awareness – for House elections (left panel) and Senate elections (right panel). If the line is below zero, the predicted incumbent vote probability for a given level of political awareness is lower when an incumbent is corrupt. The shaded area represents the 90 percent confidence interval.[14]

The figure shows that the null hypothesis of no difference in support for corrupt incumbents between low- and high-awareness voters is clearly rejected in favor of H_{A1} for both the House and the Senate elections. That is, the predicted support for a corrupt incumbent relative to a clean incumbent declines as political awareness increases. In the House, a voter with the highest level of political awareness is about 12 percentage points less likely to vote for a corrupt incumbent compared to a clean incumbent. This is a non-trivial difference: the average unconditional propensity of voting for the House incumbent in the sample is 71 percent, and the estimated drop in the predicted probability at the highest political awareness represents about 17 percent of that unconditional propensity. On the other hand, individuals with the lowest level of political awareness, ceteris paribus, are about two percentage points more likely to vote for corrupt incumbents compared to clean incumbents, but this estimate is statistically indistinguishable from zero. In between the two extremes, support for a corrupt incumbent compared to a clean incumbent steadily declines with the increase

[14] I report the 90 percent rather than the 95 percent confidence intervals for two reasons. First, the inclusion of election fixed effects reduces the statistical power because the analysis only draws on within-election variation in political awareness. Second, scandals are rare events (comprising only 5 percent of observations in the House and 7.5 percent in the Senate), making it harder to precisely compare predicted responses for corrupt and clean incumbents.

Figure 1: Responsiveness to corruption across political awareness



The lines represent the difference in the predicted probability of voting for a corrupt incumbent relative to a clean incumbent for different levels of political awareness. Results are based on the model in equation 1. Negative values imply that the predicted vote probability for a corrupt incumbent is lower than for a clean incumbent at a given level of political awareness. Estimates are calculated for values of political awareness from the 1st percentile to the 100th percentile in five-percentile steps. The shaded area represents the 90 percent confidence interval. All quantities are averaged over fifteen imputed datasets.

in political awareness, and is statistically different from zero for roughly the upper half of the politically aware.

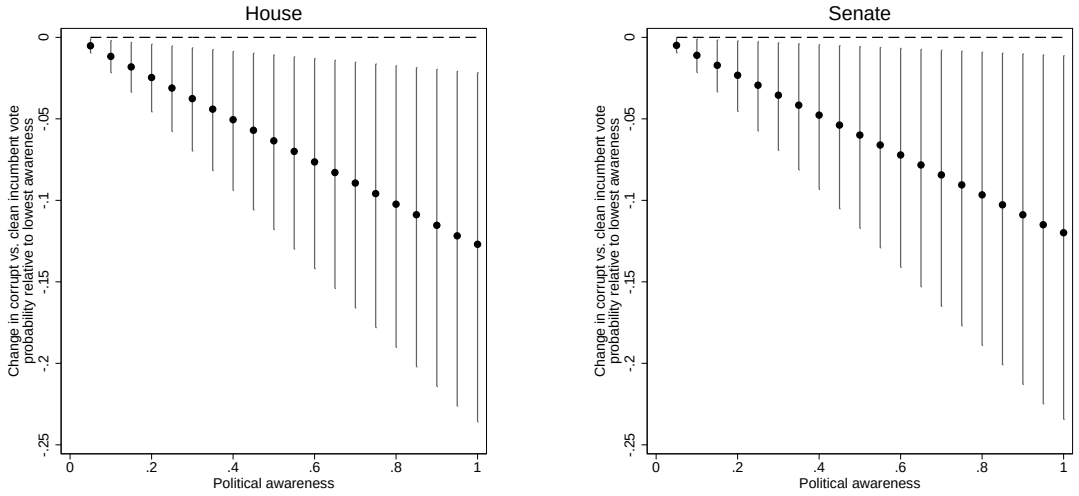
Estimates for the Senate are generally similar, albeit somewhat less precise. The most attentive voters are about 10 percentage points less likely to support corrupt incumbents than clean incumbents, which represents about 17 percent of the average sample unconditional probability of voting for the incumbent in a Senate race (60 percent).[15] However, estimates are statistically different from zero only for the top quintile of the electorate stratified by political awareness.

While the predicted vote probability for corrupt incumbents decreases relative to clean

[15]There is some indication in the existing literature that political awareness may have non-monotonic effects on political behavior (Zaller, 1992). Adding higher-order terms for political awareness and to the baseline regression specification does not change the substance of the results. Details are available upon request.

incumbents as political awareness increases, Figure 1 does not fully reveal the extent to which high-awareness voters are different from low-awareness voters. In other words, the slope of the line in Figure 1 may be statistically indistinguishable from zero. Figure 2 explicitly examines the estimated difference in the predicted vote probabilities for each level of political awareness relative to the lowest-awareness voters. It shows that the slope of the line is statistically significantly steep for both the House and Senate elections. For example, voters in the House elections with the average level of political awareness are about six percentage points less likely to vote for a corrupt incumbent compared to a clean incumbent than the least attentive respondents, and about 6 percentage points less likely to do so than the most politically aware voters. In the Senate, the association between the increase in political awareness and the responsiveness to corruption is slightly less steep, but nevertheless substantively and statistically similar.

Figure 2: Responsiveness to corruption for high vs. low-awareness voters



The dots show the difference in the predicted vote probability for a corrupt incumbent and a clean incumbent, for respondents at a given level of political awareness compared to respondents with lowest political awareness (at 1st percentile). Results are based on the model in equation 1. Estimates are calculated for values of political awareness from the 1st percentile to the 100th percentile in five-percentile steps. The shaded area represents the 90 percent confidence interval. All quantities are averaged over fifteen imputed datasets.

Figures 1 and 2 strongly suggest that high-awareness voters are less likely to support corrupt incumbents than low awareness voters. However, the dependent variable – the self-reported vote for the incumbent – is potentially a problematic measure of incumbent support because voting for the election winner is typically over-reported (Wright, 1993), and incumbents are overwhelmingly the winners. To guard against this concern, Figure A1 in the Online Appendix shows that the results are qualitatively very similar if two alternative dependent variables are used: the incumbent feeling thermometer score and incumbent approval.

6.1 Mechanisms

What may explain the difference in support for corrupt incumbents among low- and high-awareness voters? While political awareness reflects general knowledge of politics, it implies at least two things in relation to incumbent corruption. First, while low- and high-awareness voters may be equally responsive to incumbent corruption, more attentive voters may simply be more familiar with incumbent corruption than less attentive voters, and thus more likely to react to it. In other words, high-awareness voters may differ in their response to corruption from low-awareness voters because they are more attentive to corruption.

Second, low- and high-awareness voters may respond differently to corruption even when they are equally informed about it. Prior studies have shown that more highly educated Americans are more likely to consider things like bribery and illegal influence-peddling as corrupt (Gardiner, 2002; Johnston, 1986; Redlawsk and McCann, 2005), perhaps because they are more likely to be socialized into politics in such a way that their views conform to the common negative view of corruption, or because they stand to lose more from it than less educated citizens. Given that education is positively correlated with political awareness, the results shown in the previous section may derive not from the gaps in familiarity with incumbent corruption, but from the differences in how low- and high-awareness voters under-

stand political corruption. Of course, the two explanations need not be mutually exclusive – less attentive voters may be both less familiar with incumbent corruption and understand it differently than high-awareness voters when they are aware of it.

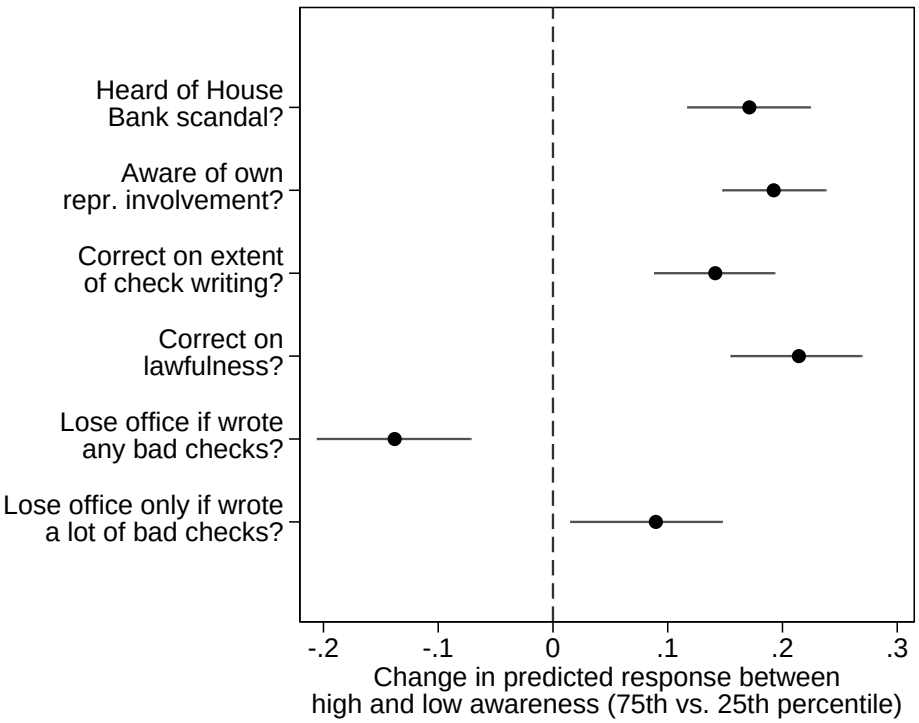
Testing these expectations is constrained by the lack of systematic survey questions about voters' knowledge and understanding of specific corruption cases covered in the analysis. However, the 1992 National Election Study includes a battery of questions directly related to the 1992 House Bank scandal, which is included among the corruption cases in the House Sample. There are both advantages and drawbacks from focusing on the House Bank scandal. On the one hand, it was a big scandal involving a very large number of representatives (275 members wrote at least one bad check). Because of such magnitude, this scandal is likely a relatively hard case for examining the difference in familiarity with corruption among voters with different levels of political awareness. On the other hand, except for several cases, writing bad checks did not involve breaking of any laws per se.[16] Moreover, there was a very large variation in the extent of check writing among members, from 920 bad checks written by the office of Robert Mrazek (D, NY-3) to 33 members writing only one bad check. These nuances make the House Bank scandal a good case to test the variation in the understanding of the details by respondents with different levels of political awareness.

The 1992 ANES asked respondents if they had heard of the House Bank scandal and if so, whether they knew if their representatives wrote any bad checks, approximately how many, and whether it involved breaking of any laws. The survey also elicited respondents' attitudes toward the proper electoral punishment of the overdrafts. Cross-checking with the data on the actual involvement of the respondents' own representatives, Figure 3 evaluates how the knowledge and understanding of the details of the case differ among respondents

[16]Twenty two current and former members were reprimanded by the House Ethics Committee as having abused their privileges at the House Bank, and several members subsequently faced felony charges and convictions. For example, Carl C. Perkins (D, KY-7) was sentenced to 21 months in prison on three felony charges, including bank fraud connected to the checks overdrafts at the House Bank and several other financial institutions (see `http://library.cqpress.com/cqalmanac/document.php?id=cqal94-1102400#H2_10`).

with low and high political awareness. Each estimate shown in the graph represents the difference in percentages in the predicted probability of a response between respondents at the 75th percentile and the 25th percentile of the distribution of political awareness, controlling for a number of important respondent characteristics such as partisanship, education and income.[17]

Figure 3: Knowledge and understanding of House Bank scandal for low- vs. high-awareness voters



The dots show the difference in the predicted probability of a response between respondents at the 75th percentile and the 25th percentile in the distribution of political awareness, controlling for a number of important respondent characteristics such as partisanship, education and income. More details on the regression specifications are given in the Online Appendix. The caps represent the 90 percent confidence intervals. All quantities are averaged over fifteen imputed datasets.

The results in Figure 3 appear to support both notions as to why low- and high-awareness

[17]More details about regression specifications and coding of the dependent variables underlying Figure 3 are given in Section A3 in the Online Appendix.

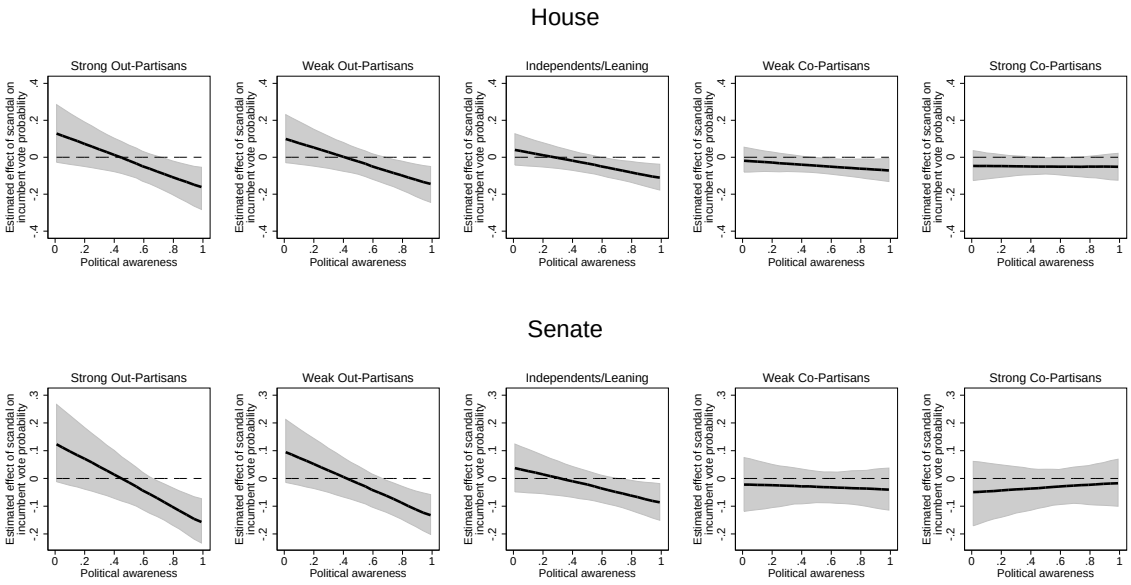
voters respond differently to corruption. The highly politically aware are more likely than the less attentive voters to have heard about the House Bank scandal (top estimate). Conditional on having reported to have heard about the scandal, high-awareness respondents are more likely to have correctly identified the involvement and the extent of check writing by their own representative (second and third estimates from the top). Moreover, high-awareness voters have a much more nuanced understanding of the nature of the House Bank scandal than low-awareness voters. They are more likely to have understood that most representativeness did not break any laws (third estimate from the bottom of Figure 3). Also, high-awareness voters were less indiscriminate in their attitudes about electoral punishment than low-awareness voters. They were less inclined than low-awareness voters to believe that all members who wrote any bad checks should be voted out of office (penultimate estimate), but were more inclined to support electoral punishment of the representatives with a lot of overdrafts.

6.2 The Mitigating Role of Partisanship

The results presented so far indicate that high-awareness voters are more likely to punish corrupt politicians than low-awareness, possibly because high-awareness voters posses greater knowledge and better understanding of incumbent corruption. These results favor hypothesis H_{A1}, which states that support for corrupt incumbents should be decreasing in political awareness. However, an important argument against H_{A1} (whether in support of H_{A2}, that high-awareness voters may be more likely than low-awareness voters to support corrupt incumbents, or H_0 of no difference between low- and high-awareness voters) is that high-awareness voters are more likely to be strongly partisan (Zaller, 1992), and that partisans are more forgiving of corrupt officials from their own party (e.g. Anduiza, Gallego, and Muñoz, 2013; Rundquist, Strom, and Peters, 1977). If true, this argument implies that there are counter-veiling forces at work that may mitigate the difference in corruption responsiveness between high- and low-awareness voters.

Figure 4 evaluates this possibility. Going from left to right, the figure plots the same quantity of interest as in Figure 1 – the difference in the predicted vote probability for corrupt vs. clean incumbent across political awareness – but splits the sample by voter partisanship.[18] The two panels on the left show the results for strong and weak out-partisans (identifiers with the opposition party), the panel in the middle shows the results for independents and leaners, and the two panels on the right show the results for weak and strong co-partisans (identifiers with the incumbent party), respectively. The top panel shows the results for the House, and the bottom panel for the Senate.

Figure 4: Responsiveness to corruption across political awareness for different partisan groups



The lines represent the difference in the predicted probability of voting for a corrupt incumbent relative to a clean incumbent for different levels of political awareness. Results are based on the model in equation 1. Negative values imply that the predicted vote probability for a corrupt incumbent is lower than for a clean incumbent at a given level of political awareness. Estimates are calculated for values of political awareness from the 1st percentile to the 100th percentile in five-percentile steps. The shaded area represents the 90 percent confidence interval. All quantities are averaged over fifteen imputed datasets.

[18]The estimates are based on a specification that adds a triple interaction between political awareness, partisanship, and corruption to the model in equation 1.

Figure 4 clearly illustrates that the greater responsiveness to corruption by high-awareness voters is mitigated by the strength of co-partisanship. While the negative association between political awareness and support for corrupt incumbents (relative to clean incumbents) clearly exists for out-partisans and independents, it is smaller for weak co-partisans (in the House, virtually zero in the Senate), and disappears completely for the strongest co-partisans. At the same time, there is no evidence that high-awareness voters are more likely to support corrupt incumbents than low-awareness voters for any partisan group (i.e. there is no evidence strictly consistent with H_{A2}). In all, partisan attachments trump political awareness for the strong identifiers, suggesting that the positive correlation between political awareness and the strength of partisan attachments likely lessens the difference between high- and low-awareness voters in terms of punishing corrupt incumbents.

7 Conclusion

The results in this study show considerable differences in responsiveness to corruption between low-awareness and high-awareness voters. These differences appear to stem from high-awareness voters both having better information and a better understanding of the details of corrupt incumbents' misdeeds. While these differences are descriptive and need not represent the causal effect of political awareness, they potentially point to the importance of a well-informed electorate for electoral accountability. It may be the case that incumbents in the U.S. Congress are able to maintain public support partly because large sections of the electorate ignore or under-appreciate their incumbents' involvement in corruption.

Previous studies have shown that corrupt incumbents can maintain support when institutions force trade-offs between corruption and some other important dimension of vote choice, or when they make it harder for voters to clearly ascribe responsibility to the incumbent. But while institutions affect the ability of voters to monitor politicians, the results presented in

this study potentially suggest that improving the incentives of voters and their motivation to engage in monitoring may also be important. Since corruption typically represents a waste of public resources, less attentive electorates may suffer a real cost from insufficient oversight. Steps to improve voters' political awareness, such as civic education, public broadcasting, or get-out-the-vote campaigns may potentially facilitate electoral accountability in the context of corruption.

The results presented here raise several questions potentially worth exploring in the future. Most directly, it may be useful to examine the differences between low- and high-awareness voters in other developed democracies with only a meagre punishment of corrupt politicians, such as Japan, Spain and France. Moreover, while I have presented evidence suggesting that political awareness is correlated with both knowledge and understanding of corruption, future work could examine further whether low-awareness voters are more likely to support corrupt incumbents because they are unaware of corruption, or if they vote differently than high-awareness voters even conditional on knowing about and understanding the consequences of corruption.

References

Abramowitz, Alan I., and Jeffrey A. Segal. 1992. *Senate Elections*. Ann Arbor, MI: University of Michigan Press.

Alford, John, Holly Teeters, Daniel S. Ward, and Rick K. Wilson. 1994. "Overdraft: The Political Cost of Congressional Malfeasance." *The Journal of Politics* 56 (3): 788–801.

Althaus, Scott L. 2003. *Collective Preferences in Democratic Politics: Opinion Surveys and the Will of the People*. New York: Cambridge University Press.

Anduiza, Eva, Aina Gallego, and Jordi Muñoz. 2013. "Turning a Blind Eye: Experimental Evidence of Partisan Bias in Attitudes Towards Corruption." *Comparative Political Studies* 46 (12): 1664–1692.

Banerjee, Abhijit, Donald P. Green, Jeffery McManus, and Rohini Pande. 2014. "Are Poor Voters Indifferent to Whether Elected Leaders are Criminal or Corrupt? A Vignette Experiment in Rural India." *Political Communication* 31 (3): 391–407.

Banerjee, Abhijit, and Rohini Pande. 2009. "Parochial Politics: Ethnic Preferences and Politician Corruption." Manuscript.

Barbera, Pablo, Pablo Fernandez-Vazquez, and Gonzalo Rivero. Forthcoming. "Rooting Out Corruption or Rooting For Corruption? The Electoral Consequences of Corruption Scandals in Spain, 2003-2011." *Political Science Research and Methods* (June). Manuscript.

Besley, Timothy, and Robin Burgess. 2002. "The Political Economy of Government Responsiveness: Theory and Evidence from India." *Quarterly Journal of Economics* 117 (4): 1415–1451.

Brown, Lara M. 2006. "Revisiting the Character of Congress: Scandals in the US House of Representatives, 1966-2002." *Journal of Political Marketing* 5 (1): 149–172.

Brunetti, Aymo, and Beatrice Weder. 2003. "A Free Press is Bad News for Corruption." *Journal of Public Economics* 87 (7): 1801–1824.

Campbell, Angus, Philip E. Converse, Warren E. Miller, and Donald E. Stokes. 1960. *The American Voter*. New York: John Wiley and Sons.

Chang, Eric C. C., and Miriam A. Golden. 2006. "Electoral Systems, District Magnitude and Corruption." *British Journal of Political Science* 37 (1): 115–137.

Chang, Eric C.C., Miriam A. Golden, and Seth J. Hill. 2010. "Legislative Malfeasance and Political Accountability." *World Politics* 62 (2): 177–220.

Chong, Alberto, Ana L. De La O, Dean Karlan, and Leonard Wantchekon. 2011. "Looking Beyond the Incumbent: The Effects of Exposing Corruption on Electoral Outcomes." NBER Working Paper No. 17679.

Congressional Quarterly. 1992. *Congressional Ethics: History, Facts, and Controversy*. Washington, D.C.: Congressional Quarterly Press.

Congressional Quarterly Almanac. Various. "Online Editions, `http://library.cqpress.com/cqalmanac/`.".

Converse, Philip E. 1964. "The Nature of Belief Systems in Mass Publics." In *Ideology and Discontent*, ed. David E. Apter. New York: Free Press.

Delli Carpini, Michael X., and Scott Keeter. 1996. *What Americans Know about Politics and Why It Matters?* New Heaven: Yale University Press.

Dimock, Michael, and Gary C. Jacobson. 1995. "Checks and Choices: The House Bank Scandal's Impact of Voters in 1992." *The Journal of Politics* 57 (4): 1143–1159.

Doherty, David, Conor M. Dowling, and Micheal G. Miller. 2011. "Are FInancial or Moral Scandals Worse? It Depends." *PS: Political Science & Politics* 44 (4): 749–757.

Duch, Raymond M., Harvey D. Palmer, and Christopher J. Anderson. 2000. "Heterogeneity in Perceptions of National Economic Conditions." *American Journal of Political Science* 44 (4): 635–652.

Fearon, James D. 1999. "Electoral Accountability and the Control of Politicians: Selecting Good Types versus Sanctioning Poor Performance." In *Democracy, Accountability and Representation*, ed. Susan C. Stokes Przeworski, Adam and Bernard Manin. Cambridge, UK: Cambridge University Press.

Ferraz, Claudio, and Frederico S. Finan. 2008. "Exposing Corrupt Politicians: The Effects of Brazil's Publicly Released Audits on Electoral Outcomes." *Quarterly Journal of Economics* 123 (2): 703–745.

Fiorina, Morris P. 1981. *Retrospective Voting in American National Elections*. New Haven, CT: Yale University Press.

Fisman, Raymond, and Roberta Gatti. 2002. "Decentralization and Corruption: Evidence across Countries." *Journal of Public Economics* 83 (3): 325–345.

Gardiner, John A. 2002. "Defining Corruption." In *Political Corruption: Concepts and Contexts*, ed. Arnold J. Heidenheimer and Michael Johnston. New Brunswick, NJ: Transaction Publishers.

Golden, Miriam A. 2010. "Puzzles of Political Corruption in Modern Advanced Democracies." In *Democracy and Accountability: Globalized Political Responsibility*, ed. Hideko Magara. Tokyo: Fukosha.

Groseclose, Timothy, and Keith Krehbiel. 1994. "Golden Parachutes, Rubber Checks, and Strategic Retirements from the 102nd House." *American Journal of Political Science* 38 (1): 75–99.

Hall, Richard L., and Robert P. van Houweling. 1995. "Avarice and Ambition in Congress: Representatives' Decisions to Run or Retire from the U.S. House." *American Political Sceince Review* 89 (1): 121–136.

Herrick, Rebekah L. 2000. "Who Will Survive? An Exploration of Factors Contributing to the Removal of Unethical House Members." *American Politics Research* 28 (1): 96–109.

Hirano, Shigeo, and James M Snyder. 2012. "What Happens to Incumbents in Scandals?" *Quarterly Journal of Political Science* 7: 447–456.

Jimenez, Fernando, and Miguel Cainzos. 2006. "How Far and Why do Corruption Scandals Cost Votes?" In *Scandals in Past and Contemporary Politics*, ed. John Garrard and James L. Newell. Manchester, UK: Manchester University Press.

Johnston, Michael. 1986. "Right & Wrong in American Politics: Popular Conceptions of Corruption." *Polity*: 367–391.

Kiewiet, D. Roderick, and Langche Zeng. 1993. "An Analysis of Congressional Career Decisions, 1947-1986." *American Political Science Review* 87 (4): 928–941.

Krause, George A. 1997. "Voters, Information Heterogeneity, and the Dynamics of Aggregate Economic Expectations." *American Journal of Political Science* 65 (4): 131–143.

Kuklinski, James H., and Paul J. Quirk. 2000. "Reconsidering the Rational Public: Heuristics, Cognition, and Mass Opinion." In *Elements of Reason: Understanding and Expanding the Limits of Political Rationality*, ed. Arthur Lupia, Matthew D. McCubbins, and Samuel L. Popkin. New York, NY: Cambridge University Press.

Kunicova, Jana, and Susan Rose-Ackerman. 2005. "Electoral Rules and Constitutional Structures as Constraints on Corruption." *British Journal of Political Science* 35 (4): 573–606.

Lafay, Jean-Dominique, and Marie Servais. 2000. "The Influence of Political Scandals on Popularity and Votes." In *How France Votes*, ed. Michael S. Lewis-Beck. New York, NY: Chatham House.

Lax, Jeffrey R, and Justin H Phillips. 2009. "How Should We Estimate Public Opinion in the States?" *American Journal of Political Science* 53 (1): 107–121.

Lupia, Arthur. 1994. "Shortcuts versus Encyclopedias: Information and Voting Behavior in California Insurance Reform Elections." *American Political Sceince Review* 88 (1): 63–76.

Lupia, Arthur, and Matthew D. McCubbins. 1998. *The Democratic Dilemma: Can Citizens Learn What They Need to Know?* New York, NY: Cambridge University Press.

Luskin, Robert. 1987. "Measuring Political Sophistication." *American Journal of Political Science* 31 (4): 856–899.

Luskin, Robert C. 2002. "From Denial to Extenuation (and Finally Beyond): Political Sophistication and Citizen Performance." In *Thinking About Political Psychology*, ed. James H. Kuklinski. New York, NY: Cambridge University Press.

Noyer, Mary Ann. 1995. *Catalog of Congressional Ethics Cases, 1976-1992*. Washington, D.C.: Brookings Institution.

Nyblade, Benjamin, and Steven A. Reed. 2008. "Who Cheats? Who Loots? Political Competition and Corruption in Japan." *American Journal of Political Science* 52 (4): 926–941.

Persson, Torsten, Guido Tabellini, and Francesco Trebbi. 2003. "Electoral Rules and Corruption." *Journal of the European Economic Association* 1 (4): 958–989.

Peters, John G., and Susan Welch. 1980. "The Effects of Charges of Corruption on Voting Behavior in Congressional Elections." *American Political Science Review* 74 (3): 697–708.

Popkin, Samuel L. 1994. *The Reasoning Voter: Communication and Persuasion in Presidential Campaigns*. Chicago, IL: University of Chicago Press.

Puglisi, Ricardo, and James M. Snyder. 2011. "Newspaper Coverage of Political Scandals." *Journal of Politics* 73 (3): 931–950.

Redlawsk, David P., and James A. McCann. 2005. "Popular Interpretations of Corruption and their Partisan Consequences." *Political Behavior* 27 (3): 261-283.

Reed, Steven A. 1999. "Punishing Corruption: The Response of the Japanese Electorate to Scandals." In *Political Psychology in Japan: Behind the Nails which Sometimes Stick Out (and Get Hammered Down)*, ed. Ofer Feldman. Commack, NY: Nova Science.

Roberds, Stephen C. 1997. "Sex, Money, and Deceit: Incumbent Scandals in U.S. House and Senate Election, 1974-1990." Ph.D. diss. Graduate School of the University of Missouri-St. Louis.

Rubin, Donald B. 1987. *Multiple Imputation for Non-Response in Surveys*. New York, NY: John Wiley and Sons.

Rundquist, Barry S., Gerald S. Strom, and John G. Peters. 1977. "Corrupt Politicians and Their Electoral Support: Some Experimental Observations." *American Political Science Review* 71 (3): 954–963.

Sekhon, Jasjeet S. N.d. "The Varying Role of Voter Information Across Democratic Societies." Manuscript.

Sniderman, Paul M., James M. Glaser, and Robert Griffin. 1990. "Information and Electoral Choice." In *Information and Democratic Processes*, ed. John A. Ferejohn and James H. Kuklinski. Urbana, IL: University of Illinois Press.

Sniderman, Paul M., Richard A. Brody, and Philip E. Tetlock. 1991. *Reasoning and Choice: Explorations in Political Psychology*. Cambridge, UK: Cambridge University Press.

Stollwerk, Alissa F. 2013. "The Application of Multilevel Regression and Poststratification to Cluster Sampled Polls: Challenges and Suggestions." Paper Presented at the 2013 Annual Conference of the Midwest Political Science Association, Chicago.

Tavits, Margit. 2007. "Clarity of Responsibility and Corruption." *American Journal of Political Science* 51 (1): 218–229.

Treisman, Daniel. 2000. "The Causes of Corruption: a Cross-National Study." *Journal of Public Economics* 76 (3): 399–457.

Warshaw, Christopher, and Jonathan Rodden. 2012. "How Should We Measure District-Level Public Opinion on Individual Issues?" *Journal of Politics* 74 (1): 203–219.

Welch, Susan, and John R. Hibbing. 1997. "The Effects of Charges of Corruption on Voting Behavior in Congressional Elections, 1982-1990." *The Journal of Politics* 59 (1): 226-239.

Wright, Gerald C. 1993. "Measuring Vote Choice in the National Election Studies, 1952-88." *American Journal of Political Science* 37 (1): 291–316.

Zaller, John R. 1992. *The Nature and Origins of Mass Opinion*. New York: Cambridge University Press.

Zaller, John R. 1998. "Monica Lewinsky's Contribution to Political Science." *PS: Political Science and Politics* 31 (2): 182–189.

Zaller, John R. 2004. "Floating Voter in U.S. Presidential Elections, 1948-2000." In *Studies in Public Opinion: Attitudes, Nonattitudes, Measurement Error, and Change*, ed. Willem E. Saris and Paul M. Sniderman. Princeton, NJ: Princeton University Press.