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Partisanship and Voter Confidence, 2000–2012

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Abstract

To what degree is voter confidence in election procedures driven by satisfaction with the outcome of an election, as opposed to trust in government or objective features of the polling place, such as voting technology? Using approximately 30 national surveys over the past decade, we find a consistent relationship between voting for the winner and confidence in election administration. This confidence varies as a function of question wording and electoral context. Respondents are more confident in the quality of the vote count locally than nationally. They are responsive to electoral results at the state and national levels in forming their judgements. And, rather than being influenced by different types of voting technology, respondents lose confidence by virtue of change itself.

Keywords: Voter confidence, legitimacy, public opinion, winner effect, election administration

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To what degree does the practical experience of participating in an election — registering, casting a ballot, and watching the election returns — influence citizens' evaluations about the trustworthiness and fairness of election procedures? This question has lurked around the issues of election administration in the years following the 2000 presidential election. Indeed, some of the most prominent policy proposals and judicial pronouncements in the domain of election administration have been justified by reference to improving citizen confidence in the fairness of the vote. For example, the U.S. Supreme Court, in *Crawford v Marion County*, 553 U.S. 181 (2008), ruled that Indiana's interest in assuring the public of the integrity of the election process partially justified the passage of a photo identification requirement in order to vote.¹

As the improvement of voter confidence has been promoted as a goal of election reform, and as scholars have begun probing voter confidence through survey research, questions have arisen about whether expressions of confidence in these surveys are a product of voters' direct experience of voting, or whether they are a product of something else, such as the causally prior belief about the trustworthiness of government more generally. More troubling for democracy, there is also the possibility that expressions of confidence in how ballots are counted are no more than reflections of whether one's preferred candidate won or lost the election: if my preferred candidate won, then I think the election was conducted fairly. To the extent this is true, it not only calls into question the usefulness of confidence questions for guiding policy makers, but it also suggests that contentious disputes over election outcomes will be inescapable in an increasingly polarized society, no matter what administrative reforms are put in place.

¹ Gronke and Hicks (2009) contains a comprehensive review of recent studies that examine voter confidence as a dependent variable, as well as a summary of recent policy debates that center around the concept of voter confidence.

Our purpose in this paper is to explore this last possibility, by combining data from a number of survey research projects. Specifically, we focus on asking: to what degree is voter confidence driven by a respondent's satisfaction with the outcome of an election, as opposed to more general trust in government or objective features of the polling place, such as voting technology? While all the data will be observational, we are able to exploit several features of the data that help support a causal interpretation of our results, such as the dynamic nature of the data and the unpredictability of certain election results.

We find there is indeed a consistent relationship between voting for the winning candidate and the degree of confidence expressed in election administration. However, this relationship varies as a function of both the question wording and the electoral context. At the aggregate level, Democrats began the 2000s less confident than Republicans; but with Democratic victories in the 2006 and 2008 elections, the partisan gap narrowed considerably, then flipped in the wake of Barack Obama's re-election in 2012.

At the state level, confidence in local election administration varies predictably as a function of the vote share received by the respondent's favored candidate. Turning to the individual level results, we find the relationship between vote choice and confidence is unchanged when adjusting for general political trust or pre-election confidence. Finally, we show that the relationship is also robust to the inclusion of the type of voting technology used in the respondent's county. In so doing, we also show that specific technologies in themselves have less of an effect on confidence than *changes* in technology. In other words, voters seem to be more confident when the type of ballot technology used in their county remains the same from election to election, regardless of what that technology happens to be.

The remainder of the paper proceeds as follows. In Section I, we review the previous political science literature that takes on the issue of voter confidence. In Section II, we set the stage by exploring the aggregate results of approximately thirty national surveys taken between 2000 and 2012 that ask about confidence in the vote count nationally and confidence in one's own vote. We examine both aggregate trends and movements in partisan subgroups, showing that Democratic and Republican confidence both move as a function of the parties' electoral fortunes. We also demonstrate that the results of national elections have a greater influence on voters' confidence in the nation's vote than in their own personal vote. In Section III, we move to the state level and show that a party's vote share in a state influences the partisans' confidence in the fairness of vote counting in their own state.

Section IV moves to the micro-level, exploring the degree to which voter confidence is influenced by more general expressions of trust in government, pre-election confidence, and voting technology. We find that the inclusion of none of these variables as a control alters the strong influence of partisanship on confidence in any meaningful way. Section V leverages the panel nature of three of the surveys to estimate the effect of election outcomes on post-election confidence, controlling for confidence prior to the election. Section VI concludes by summarizing the findings from the paper and suggesting future directions for research.

I. Previous Literature

This paper contributes to two literatures under the broader heading of “political legitimacy.” The first is the literature on voter confidence in election administration, which was largely spawned by the aftermath of the 2000 election. As with most studies in this literature, the question we

focus on is generally asked in post-election surveys as follows: “How confident are you that your vote was counted as intended?”² The response categories tend to range from “very confident” to “not at all confident.” As we will discuss below, sometimes voters are asked to distinguish how *their own* vote was counted from how *votes in general* were counted nationwide.

Most of the existing research on this question has asked what types of election procedures make for more confident voters (Stewart 2009; Alvarez et al. 2008; Alvarez et al. 2009; Hall et al. 2009; Atkenson and Saunders 2007; Stein et al. 2008). For example, Gronke and Hicks (2009) show that responses to questions such as these on modules of the CCES are associated most strongly with the experience voters had on Election Day casting a ballot, compared to competing influences that include a measure for a generalized “active trust in government.” Thus, although voter confidence is associated with respondents’ general orientation toward government and policy positions, Gronke and Hicks argue it is most strongly influenced by their experience with specific features of the voting process, such as the quality of the interactions with poll workers and the overall Election Day experience.

Thus, we are not the first to look at this particular survey question. However, we are the first to take advantage of the fact that this question has been asked repeatedly over the past decade. We are also the first to probe more deeply the extent to which the interaction between partisan affiliations and election outcomes—as opposed to voters’ subjective experiences at the polls, which may themselves be affected by party—influence confidence; our data allow us to rely on shifts in the electoral fortunes of the parties at the national and state levels to assess the degree to which party loyalties drive assessments of electoral quality.

² Pre-election surveys typically ask a variant of the question how confident respondents are that votes *will be* counted accurately in the coming election.

Indeed, such an interaction between party loyalty and election outcomes has been found on many other measures of political legitimacy, and it is to this literature on the so-called “winner's effect” that we also contribute. This literature is somewhat older, dating back to at least Ginsberg and Weissberg's (1978) classic study. Considering the 1968 and 1972 elections in the U.S., Ginsberg and Weissberg detected both a “participation effect,” which resulted from simply participating in the election, and a “winner effect,” which resulted from having one's favored candidate win, on perceptions of legitimacy. Other notable works include Finkel (1985), who argued for a reciprocal relationship between participation and political efficacy; Clarke and Acock (1989), who found this reciprocal effect was limited to participants whose preferred candidate won; Anderson and LoTempio (2002), who examine pre- and post-election measures of political trust in the 1972 and 1996 U.S. presidential elections, and find that voting for the winner boosts political trust; and Craig et al. (2006), who pool data from the American National Elections Study from 1964 and 2004, and find that losers are always less politically trusting than winners. The “winner's effect” on trust and legitimacy has also been observed in House elections (Brunell 2008), state politics (Anderson et al. 2005), and cross-nationally (Anderson et al. 2005).

II. Macro-level Voter Confidence

We begin our analysis by studying responses to voter confidence questions asked in national surveys before and after each federal election from 2000 to 2012, with the exception of 2002, when no national survey (that we know of) asked this question. In general, there are two ways that polling houses have asked about confidence in election processes. The first is to ask about the belief concerning whether the respondent's “own” vote—as opposed to votes elsewhere in

the country—was counted correctly. The following are representative examples of questions that seek to assess this level of voter confidence:

- Given the kinds of problems that have been reported in Florida, how much confidence do you have that your [2000 presidential] vote was counted properly? (11/12/2000, CBS/N.Y. Times)
- Are you confident that your vote will be counted accurately, or are you doubtful? (11/1/2004, National Annenberg Election Study [NAES])
- How confident are you that your vote was accurately counted? (11/8/2004, 11/12/2006, 11/9/2008, 11/7/2010, Pew Research Center)

The second way is to ask about vote counting generally, or nationwide. The following are examples of questions taken from surveys conducted over the past decade that seek to assess voter confidence in the “country's” vote:

- All things considered, do you think we will have an accurate count of the votes in Florida and other close states, or not? (11/12/2000, Pew Research Center)
- How confident are you that, across the country, the votes will be accurately cast and counted in next year’s election? (12/2/2007, Gallup/USA Today)
- How confident are you that the votes across the country were accurately counted on Election Day? (1/31/2009, National Annenberg Election Study)

The top panel of Figure 1 summarizes answers to these two types of questions across a number of different public opinion polls from 2000 to 2012. The points in this plot are the

proportions of respondents who gave the “most confident” answer to the question posed.³ The trend lines represent moving averages constructed by median-splines.

[Figure 1 about here]

We included these particular studies based on our own knowledge of polls that have been taken by various organizations over the past decade, augmented by a search of the Roper Center database to find other polls that asked questions about vote counting and confidence.⁴ The Appendix details the sources, the precise questions asked, the sampling frames, and the survey modes. The survey research organizations or projects include New York Times/CBS, the Los Angeles Times, ABC/Washington Post, the Pew Research Center, the National Annenberg Election Study, CNN, Gallup/USAToday, and the Survey of the Performance of American Elections.

The top pannel of Figure 1 reveals one important pattern right away: confidence in one's own vote has generally been about thirty percentage points higher than confidence in the country's vote, with the two series moving in parallel. The second noteworthy feature of the series is its variability: while voters have become much less confidence in the country's vote since 2000, aggregate confidence in one's own vote does not seem to have changed much overall since the 2000 election.

To begin an exploration of the partisan dimension of confidence, the middle and bottom panels of Figure 1 disaggregate the data by party identification of respondents.⁵ Doing so yields

³ This answer category was typically “very confident,” although in a few cases it was something else, such as “a lot” (CBS/N.Y. Times 11/12/2000).

⁴ A search of the Roper Center iPoll database that uses the terms “voter and count* and confide*” returned about 30 hits, most of which are relevant to this paper. In addition to the Roper database, we also searched the Pew Research Center web site.

⁵ We rely on the initial partisanship question asked by each survey house. Thus, “leaners” are not included in these series.

four patterns worth noting. First, for both parties, confidence in one's own vote is higher than confidence in the country's vote. Second, as in the plot for all voters, confidence in one's own vote is more stable over time. Third, until the 2008 presidential election, Republicans were more confident about the quality of the vote count than Democrats, both locally and nationwide. Since 2008, both sets of partisans have been much more similar in how they judge election counts. Finally, by 2012 Democrats had surpassed Republicans in their confidence on both measures.

Fourth, despite the fact that the top panel of Figure 1 paints a picture of relative stability for aggregate confidence, the next two panels reveal that this aggregate stability hides important countervailing shifts among the two partisan sub-aggregates. Across the decade, aggregate confidence in the country's vote declined about 30 percentage points. However, this overall decline is due almost entirely to a forty-point decline among Republicans during this period. The biggest change occurred between 2004 and 2008, which saw a shift, from Republicans being more confident in the nationwide vote count, to Democrats expressing more confidence. There was again a shift in partisan assessments between 2008 (with the election of a Democratic president) and 2010 (when the Republicans regained control of the House) that is masked if we only look at Figure 1.

We can begin to get a sense of the impact of election outcomes by focusing on shifts in the aggregate levels of confidence before and after elections. To do this, we compare the average confidence among winners—those who voted for the winning candidate — and losers — those who voted for the loser — before and after each election. For example, in the 2008 election, we calculate,

$$\{E[\text{confidence}_p \mid \text{Obama voters}_p, \text{post-election}_p] - E[\text{confidence}_p \mid \text{Obama voters}_p, \text{pre-election}_p]\} -$$

$$\{E[\text{confidence}_p \mid \text{Romney voters}_p, \text{post-election}_p] - E[\text{confidence}_p \mid \text{Romney voters}_p, \text{pre-election}_p]\}$$

where p indexes polls, and post- and pre-election are defined as 365 days after or before the election date. We construct this estimate for the 2004, 2006, 2008, and 2012 election, and average across elections. As we have only about 18 polls for each confidence measure, we obtain standard errors via the block bootstrap, blocking on polling house. The resulting “quasi-difference-in-differences” estimates are shown in Figure 2.

[Figure 2 about here]

Figure 2 reveals more clearly how aggregate confidence is affected by election results. In the top part of the figure, we see that among those who voted for the winning candidate, confidence in one's own vote increases by about 20 percentage points after an election. Among those who voted for the loser, confidence declines slightly, by about 2 percentage points. Subtracting the second difference from the first gives an overall effect of 0.22, with a standard error of 0.08. In the bottom part of the figure we see a similar, but larger effect for confidence in the country's vote: the estimate is 0.32, with a standard error of 0.09. Thus, just as there is more aggregate variability in voter confidence in the country's vote over time, this measure of confidence is also more affected by particular election outcomes.

III. Voter Confidence Macro Patterns

In the previous section, we examined the relationship between national election outcomes and voter confidence. We found evidence that voter confidence changes with the election returns — Democrats become more confident when Democrats prevail nationally. A similar pattern holds for Republicans. In this section we consider the state: do partisans base their confidence on which presidential candidate wins their own state? To answer this question, we rely on the 2012

Survey of the Performance of American Elections (SPAЕ), which surveyed 200 voters in each state. We construct average levels of confidence for each party subgroup in each state, and then estimate how state-level confidence varies as a function of Obama's voteshare in that state. Specifically, we estimate the change in confidence that occurs when Obama's voteshare exceeds the 50% mark, using a regression discontinuity estimator. And because we are interested in the party differential, we estimate this jump for both party subgroups, then taking the difference in the two jumps as our estimate of the state-level “winner's effect.”

The SPAЕ fortunately asked respondents about their confidence at the state level, as well as at the national and personal level. Given that state voteshare is a less relevant signal about the conduct of elections nationally, we would expect there to be less of a jump for confidence in the country's vote than for one's own vote. We would also expect there to be the largest jump for state voteshare. Finally, given that we have now documented that confidence in the country's vote tends to be much lower than one's own confidence, we would expect confidence in the state vote to fall somewhere in between.

Figure 3 shows that all of these expectations are supported by the data. In the first panel on the left, we plot the average level of confidence in one's own vote, among Republicans and Democrats for each state, on the y-axis; Obama's voteshare is plotted on the x-axis. As expected, there is both a slight jump up for Democrats at the 50% mark, and a slight jump down for Republicans; taking the difference in these two discontinuities gives an estimate of the winner effect of 0.13, with a standard error of 0.05 (we calculate standard errors using the block bootstrap, blocking on states). In the middle plot, which describes confidence in the state vote count, we see much larger jumps for confidence, for an overall effect of 0.28 (0.06). In the last

panel, there is no detectable jump for either partisan subgroup, with an overall effect no different from zero (-0.02, SE=0.03). Finally, we see a clear decline in average confidence levels as we move further from the voter's own experience, to the state level, and then the voting around the country.⁶

[Figure 3 about here]

IV. Voter Confidence Micro Patterns

The analysis thus far has all been at the macro level, so that we can orient ourselves to the overall contours of the data. However, macro analysis only gets us so far when trying to argue for causality, particularly if we are worried about omitted variables such as trust in government. As the aggregated analysis has suggested thus far, even if voter confidence is explained *in part* by general attitudes toward government, it is certainly amenable to being changed as a consequence of changing election outcomes. The question for us in this section is, how much is due to general attitudes toward government, and how much is due to following the election returns?

For each of our 28 surveys, we estimated a linear probability model, in which the dependent variable was the same binary voter confidence variable we explored before.⁷ The primary independent variables of interest were vote choice (1 = voted for Democratic candidate, 0 otherwise). We then add a battery of demographic controls, including education, income, age, gender, race, and state (or region if state is unavailable). All covariates are entered as indicators

⁶ The SPAE is one of the few surveys with enough respondents to conduct these analyses. However, we also replicate them using the 2004 NAES, 2008 NAES, and 2008 SPAE surveys in the Appendix.

⁷ As a reminder, the dependent variable is equal to one if the respondent gave the “most confident” response to the voter confidence items, zero otherwise. We show the results are unchanged when using probit regressions in the Appendix.

for each value of the categorical variable, except for age, which is entered linearly. Figure 4 plots the point estimates from these regressions for each of the surveys.

[Figure 4 about here]

Figure 4 shows that the effect of party on confidence is strongly robust to the inclusion of these individual-level characteristics. Indeed, the pattern is substantively the same as the simple bivariate comparisons included in Figure 1 previously: Democrats are between 20 and 50 percentage points less confident than Republicans for much of the decade; the gap then narrows, and flips to a 20 point advantage following the 2012 election. These effects are typically precisely estimated, with confidence intervals only crossing zero in one or two cases.

Next, we test whether the party effect is robust to the inclusion of trust in government (which we know is also effected by party and election outcomes), pre-election confidence, and voting technology.⁸ These regressions are shown in Table 1, using the smaller number of surveys that include one or more of these measures. In the top panel of Table 1, we show the results for confidence in one's own vote. Only rarely do our estimates change with the inclusion of these variables, and never in a consistent manner. For example, in the first two columns, adjusting for trust in the July 2004 CBS poll changes the winner effect from 0.19 to 0.17. Doing so in the 2004 NAES changes it from 0.23 to 0.21; adjusting for lagged confidence reduces it to 0.15 (SE=0.04). Similarly small changes are seen in the 2012 CCES regressions (final three columns). The exception is when we adjust for lagged confidence in the 2008 PEW survey (columns 6 and 7). Here the effect reduces from 0.08 (SE=0.07) to 0.01 (SE=0.06). The insignificance of the

⁸ Trust in government is typically measured using the question, "How much of the time do you think you can trust the government in Washington to do what is right -- just about always, most of the time, or only some of the time?" The response options were "Just about always", "Most of the time", and "Only some of the time", with some respondents volunteering the "Never" option. We rescaled this measure to lie between 0 and 1, where higher values indicate greater trust in government.

baseline effect, and the reduction when we adjust for lagged confidence, is likely due to the small subsample for which we have two waves of data (N=288).

[Table 1 about here]

We show results for confidence in the country's vote in the bottom panel of Table 1. As above, we see that the inclusion of trust or lagged confidence has no effect on the estimates of the winner effect. For example, in the 2000 NAES, the baseline effect is 0.38 (SE=0.02), which changes to 0.39 (SE=0.02) when we include trust in government as a control.

Finally, we show results adjusting for voting technology in Table 2. . The top panel of Table 2 uses confidence in one's own vote in the 2008 SPAE (first three columns) and 2012 SPAE (last three columns) as the outcome; the bottom panel uses confidence in the country's vote in the 2012 SPAE as the outcome. In columns 1 and 3 of Table 2, top panel, we show the baseline winner effects. In columns 2 and 4, we see these baseline effects are unchanged by the inclusion of voting technology; the same is true when looking at confidence in the country's vote in the first two columns of the bottom panel.

However, the direct effects of technology are also of interest. The episode that brought the issue of voter confidence to the fore a decade ago was the recount controversy in Florida that followed the 2000 presidential election. At the core of that episode was the malfunctioning of voting technologies, and the inability of the legal regime to dispassionately handle disputes that arose because of the failures of those technologies. If the Florida recount controversy had not occurred, then the Help America Vote Act (HAVA) would not have been introduced, much less passed. And if HAVA had not been passed, it is unlikely that the nation would have undergone a wholesale program of voting machine replacement on the scale witnessed during the 2000s.

Reformers anticipated that HAVA and the resulting replacement of antiquated voting machines would reassure voters that the best of American technology was guarding the sanctity of the ballot box. Unfortunately, the program of voting machine replacement that HAVA unleashed did quite the opposite, at least in some parts of America. Not only did HAVA provide funds to upgrade voting machines with the newest models, but the law also required that localities provide handicapped-accessible voting machines in each precinct in America. Even though the law required only one accessible machine per precinct, many jurisdictions reasoned that it would cause confusion to administer two types of voting machines in their towns and counties. Therefore, HAVA prompted many local jurisdictions to switch to direct electronic recording (DRE) machines for all voting, even though they could have complied with the law by using paper as the default technology, with DREs as the backup device for voters who required special accommodation. Many of these jurisdictions had always used paper, either hand-counted paper or paper ballots that were scanned. This change from paper to machine led to a strong political reaction against DREs, and a political movement against “black box voting” (Ansolabehere and Stewart 2008; Harris 2004). Thus, a natural question arises about whether the rapid diffusion of DREs into counties that had previously used paper technologies led to a decline in voter confidence among voters in those localities.

As a first cut at this question, we show raw means of confidence in Figure 6. As with Table 2, the top half of the figure pertains to confidence in one's own vote, and the bottom half displays means for confidence in the country's vote. On the x-axis, we vary voting technology from counties which used paper ballots (either hand counted or optically scanned) in both 2000

and the current-year election, to those that used paper then switched to electronic, to those that switched from electronic to paper, and finally those that used electronic ballots in both years.

Figure 6 shows that in 2008, the most confident voters resided in counties that used paper ballots in both 2000 and 2008; the next most confident groups were those that switched from paper to electronic, or that used electronic ballots in both years; and the least confident group was those who changed from electronic ballots in 2000 to paper ballots in 2008. In 2012, the most confident groups (whether we look at one's own vote or the country's vote) were those that used electronic ballots in both 2000 and 2012.

Next we test whether these patterns hold using regression specifications similar to those shown in Table 1. In columns 2 and 4 of the top half of Table 2, we include dummy variables for whether the voter's county used DREs for in-person voting in 2000, in the current election, and in both elections. Because of the presence of the interaction term, the coefficient on "DRE in 2000" measures the direct effect of living in a county that abandoned DREs between 2000 and the current year, almost all of which switched to optically scanned paper ballots. For 2008, the coefficient of this dummy variable is -0.12 (SE=0.05), which means that voters in counties that had *abandoned* DREs in favor of paper-based systems were much less confident their vote was counted as intended, compared to voters in counties that had kept their paper-based systems throughout the decade (the baseline category). The dummy variable that measures the direct effect of having a DRE in the Current Year pertains to voters who live in counties that had previously not used DREs. The coefficient of this dummy variable is -0.04 (SE=0.02), which means that voters in counties that had *adopted* DREs during the decade were also less confident

that their vote was counted as intended, compared to voters in counties that had kept their paper-based voting equipment.

Finally, the interaction term applies to voters who live in counties that used DREs throughout the decade. This is the only positive coefficient in the group, 0.07, but is not statistically different from zero ($SE=0.05$); thus, voters in counties that had DREs in both elections were no more or less confident than those that had paper ballots throughout this period. In contrast, in 2012 none of these patterns are statistically different from zero, for either measure of confidence. This may reflect that any changes between 2000 and 2012 were already in place by 2008, which means that any negative effects of change have since passed.

In short, our findings are at odds with much of the activist politics of this issue during the past decade. The most confident voters were those who started and ended the decade with the same voting technology. The least confident voters were those who started the decade with DREs and then switched to paper.

V. Voter Confidence Micro Patterns: Evidence from Panel Studies

All of the evidence adduced thus far has rested on the analysis of cross-sectional data. We have inferred that individuals change their assessments of how trustworthy the vote counting is, as a function of changing election returns. However, the aggregate analysis we have performed here is no more than correlational and suggestive of what the actual causal effects might be. In other words, aggregate analysis does not establish that the *individuals* we would expect to change, that is, supporters of the winning and losing candidates, actually change their impressions of election administration in predictable ways, once they are apprised of the results of an election.

Fortunately, three of the studies we gathered are panels that allow us to examine the voter confidence levels of individuals across time, as we move from the campaign period into the post-election period. These three studies were the 2004 NAES, the 2008 Pew survey, and the 2008 NAES. For each study, we conduct a difference-in-difference analysis similar to that presented in Figure 2 previously, but now at the individual level. Thus we estimate,

$$\{E[\text{confidence}_i | \text{winner, post-election}_i] - E[\text{confidence}_i | \text{losers}_i, \text{pre-election}_i]\} -$$

$$\{E[\text{confidence}_i | \text{winner, post-election}_i] - E[\text{confidence}_i | \text{losers voters}_p, \text{pre-election}_i]\}$$

separately for each survey, where i indexes individual respondents. We cluster standard errors by survey respondent. Figure 5 presents the analysis graphically.

[Figure 5 about here]

In two of the three elections, we see patterns that reflect the results shown earlier, including aggregate difference-in-difference analysis presented in Figure 2. The exception is the first panel, which shows results for the 2004 election. In this election, both winners and losers became more confident in their own vote once the election was over; however, the gain in confidence was actually smaller among those who chose the winner, for an overall effect of -0.05 (SE=0.04). This may be due to a ceiling effect: in 2004, Republicans (whose candidate won) were already about 85% likely to be very confident in the accuracy of the election, and thus did not have a lot of room to increase. In the 2008 and 2012 elections, in contrast, we see effects of 0.15 (SE=0.04) and 0.11 (SE=0.05), respectively, for confidence in one's own vote; and 0.47 (0.01) and 0.15 (0.04) for confidence in the country's vote. Thus, even looking within the same respondents before and after an election, we see the powerful impact that an election outcome has on perceptions of the fairness of the vote count.

VII. Discussion and Conclusion

We have cast our net widely in this paper, to capture general findings that emerge from over a decade of public opinion research into voter confidence. We show that respondents generally express greater confidence in the quality of the vote count that is undertaken locally, rather than nationally. Changes in national confidence are influenced by changing fortunes of presidential and congressional candidates in the national elections; changes in confidence in one's own vote are also influenced by national partisan control, but less so. These findings are robust in the face of controlling for a variety of alternative explanations, including more general attitudes about trust in government and changes in voting technology.

One purpose of any exploratory paper is to generate new speculations about the relationships among variables and to chart out new lines of research. In that spirit, we offer four comments as a way of concluding.

First, one of the reasons we are interested in the question of voter confidence is that responses to this survey item may potentially be used by policymakers and courts to judge the efficacy of particular election practices and reforms. Our findings suggest that confidence in the country's vote seems to be more responsive to partisan feelings than confidence in one's own vote. This suggests that the latter question may provide superior measures that are relevant in this policy setting than the former. Confidence in one's own vote appears less contaminated by partisanship than confidence in the country's vote.

Second, to the extent that confidence in the national vote varies more across time — and in response to changing election outcomes — it is consistent with a story wherein the less

information voters have about a government service, the more likely they are to use partisan cues to form an opinion about that service. Thus, since voters know more about the process behind “their own” vote, this question is less prone to partisan bias. This supposition is at least testable. For instance, one could conduct public opinion research in which voters are experimentally exposed to information about electoral administration institutions and practices nationwide, to probe the degree to which information about election administration practices drives out partisan judgments.

Third, our findings concerning the role of voting technology suggest some interesting interactions between election reform and voter confidence (Ansolabehere and Persily 2008). Those findings suggest that *change* in election procedures, rather than their substance, decreases confidence in electoral practices. Another electoral practice that comes to mind worthy of investigating is voter identification, which has been justified precisely on voter confidence grounds. Our findings here suggest that states which have recently adopted more stringent voter identification requirements may experience a *drop* in voter confidence afterwards, and not only among opponents of the requirement. In any event, this is an empirical proposition that we are now able to test after the 2012 presidential election.

Finally, although we do not want to claim that voter confidence can be completely explained by party, the fact that there is a substantial and robust partisan component to confidence should give reformers and others who judge the efficacy of reform some pause, if “boosting confidence” is the goal of election reform. At the very least, tests of whether election reforms do in fact boost confidence must be conducted controlling for changing election results. Failure to do so risks significant omitted variables bias in judging the effects of reforms — an

effect so strong that we could imagine it masking even the direction of the sign of a coefficient that measures the effect of reform on voter confidence.

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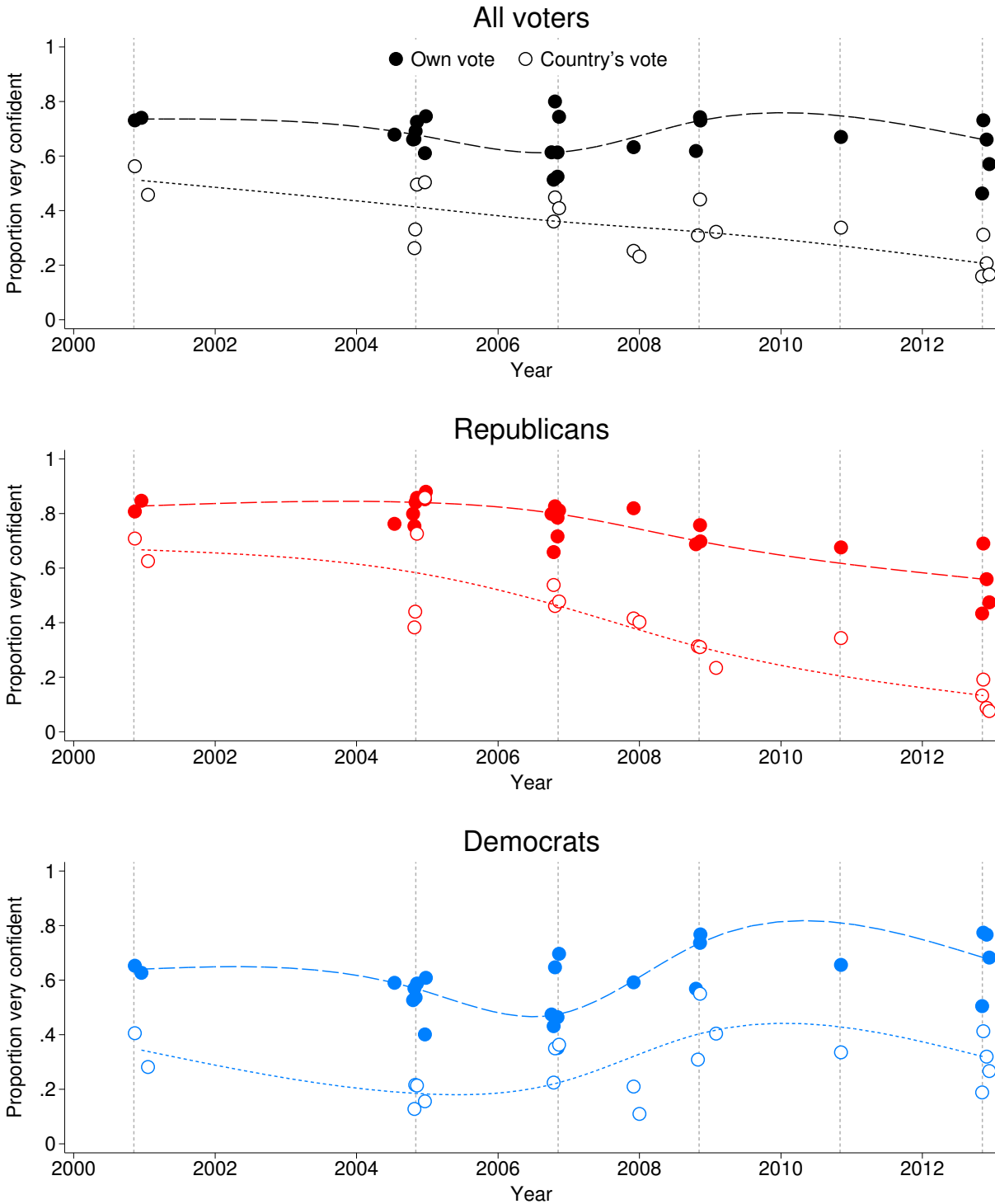
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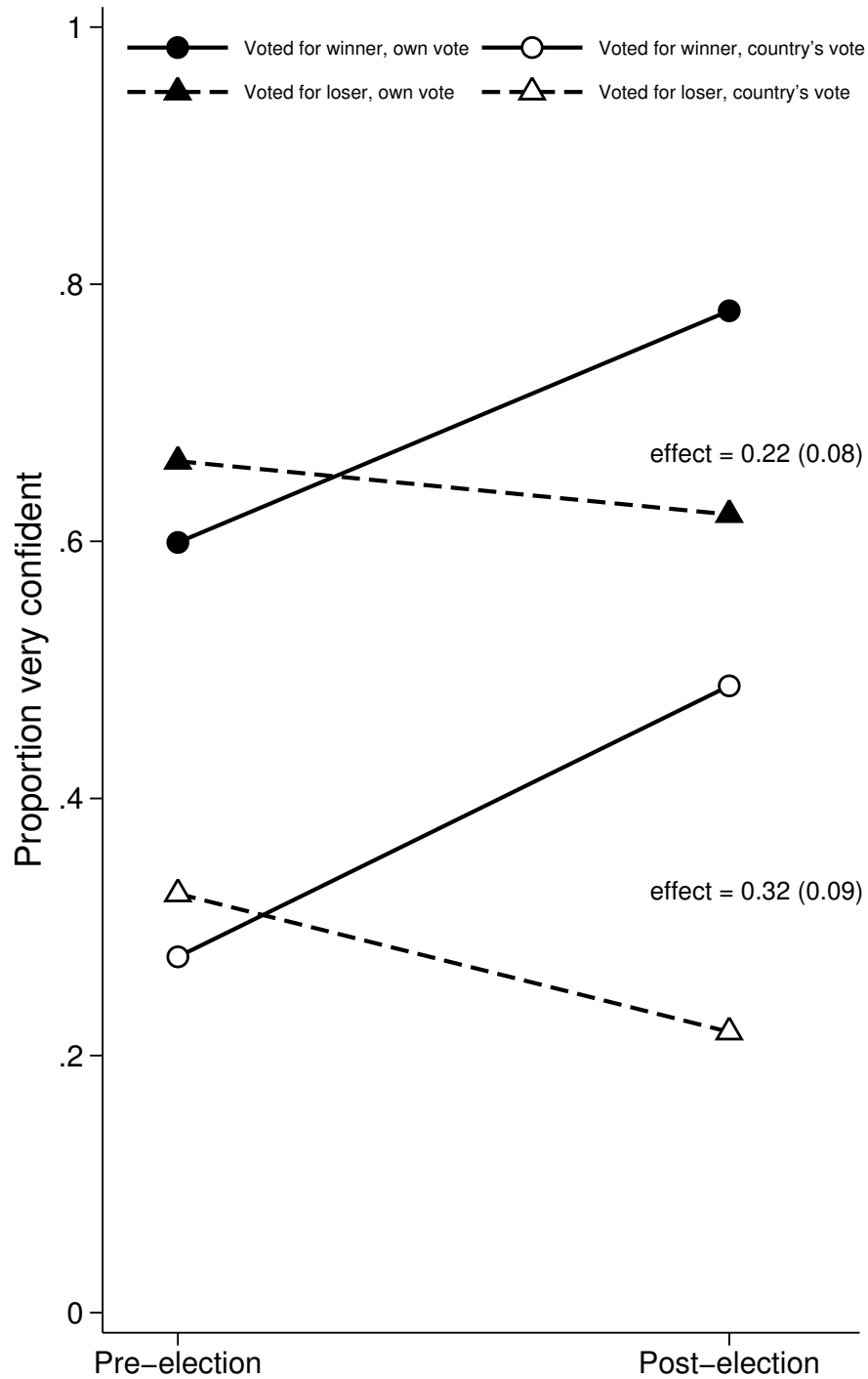
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Figure 1: Voter confidence in the accuracy of the vote count, 2000-2012.



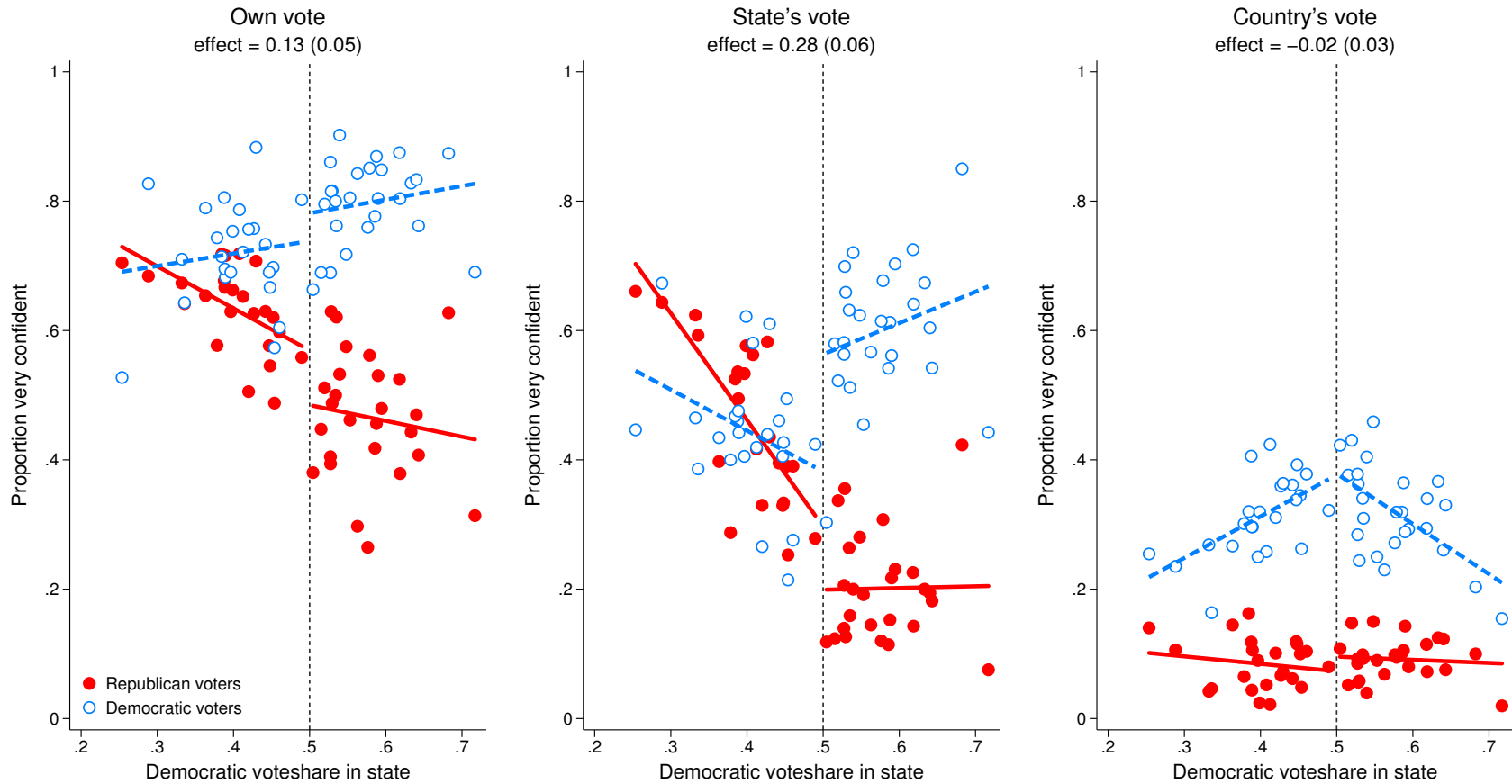
Notes: Each point represents an individual poll. Trend lines are calculated using median-spline regressions.

Figure 2: Effect of election outcomes on national-level confidence: quasi-difference-in-differences estimates.



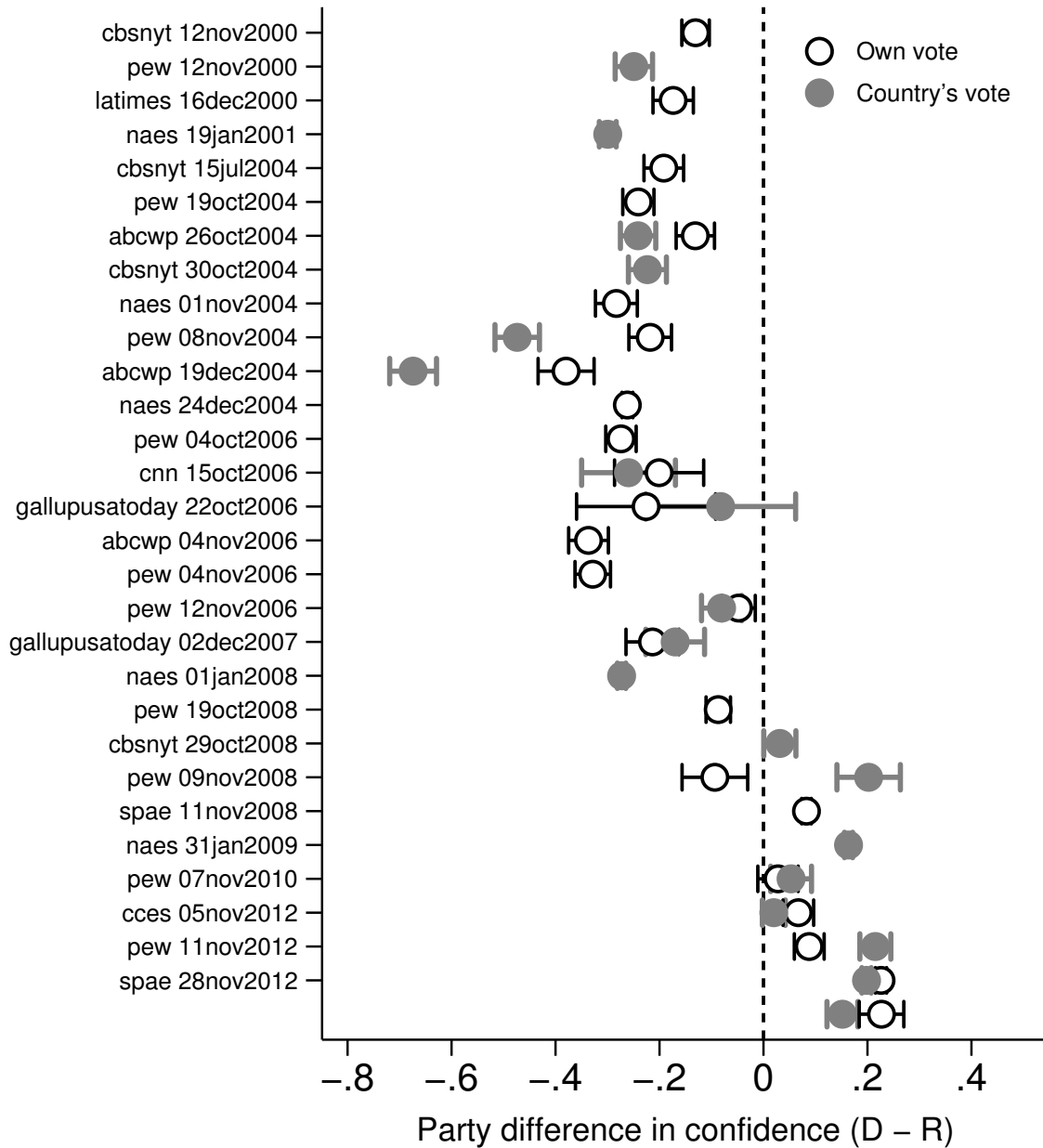
Notes: Plot combines data from surveys around the 2004, 2006, 2008, and 2012 elections, in a 365-day window around each election. Estimates are difference-in-differences, with standard errors in parentheses calculated via block bootstrap (blocking on survey house). There are 21 polls for confidence in own vote, and 16 polls for confidence in the country's vote.

Figure 3: Effect of election outcomes on voter confidence in the 2012 CCES: regression discontinuity estimates.



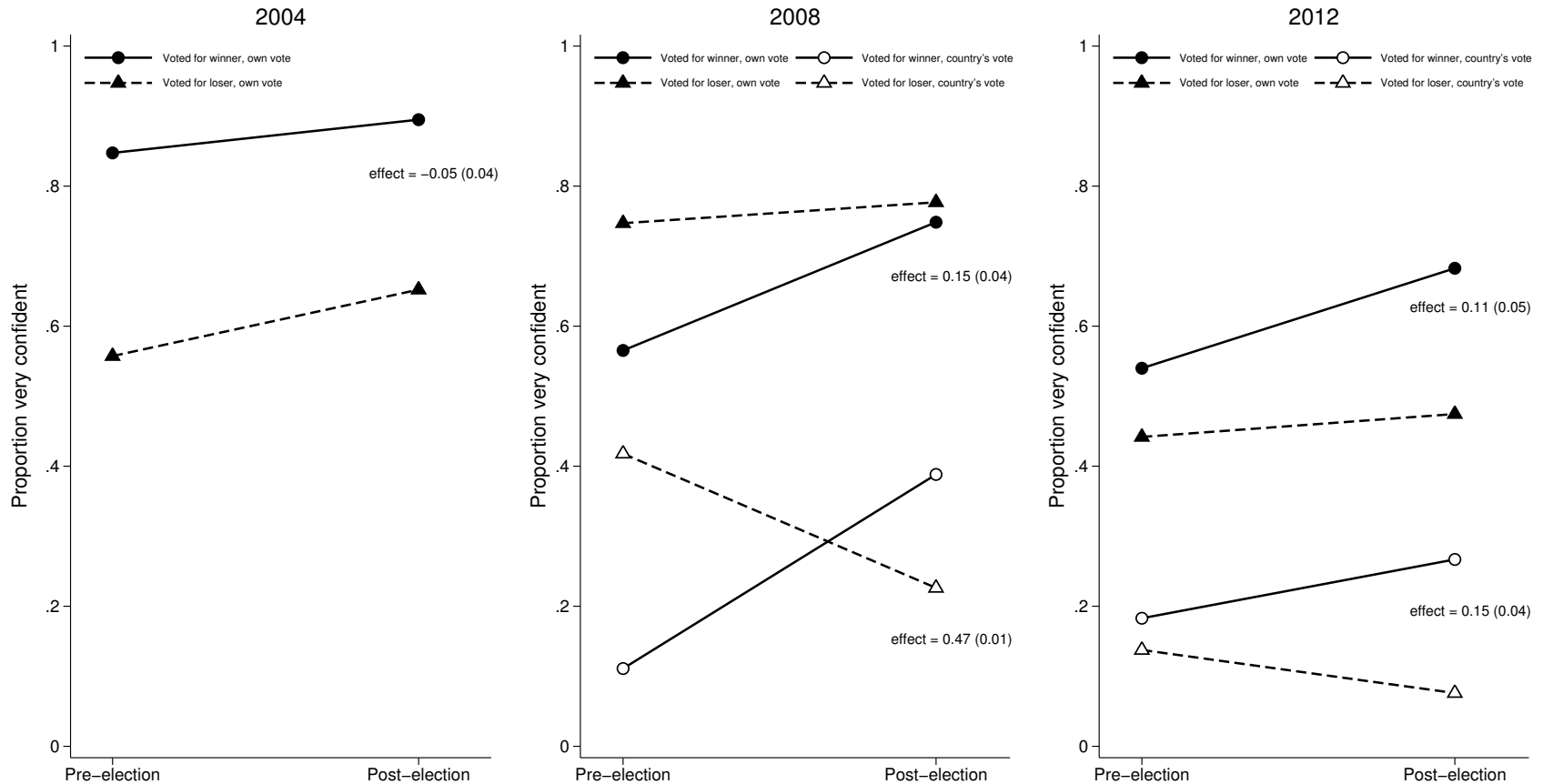
Notes: Effects are calculated as the difference in regression discontinuity estimates for Democratic and Republican voters, using 2012 Democratic voteshare as the forcing variable. Standard errors calculated using block bootstrap, blocking on states.

Figure 4: Effect of election outcomes on individual-level confidence: regression estimates.



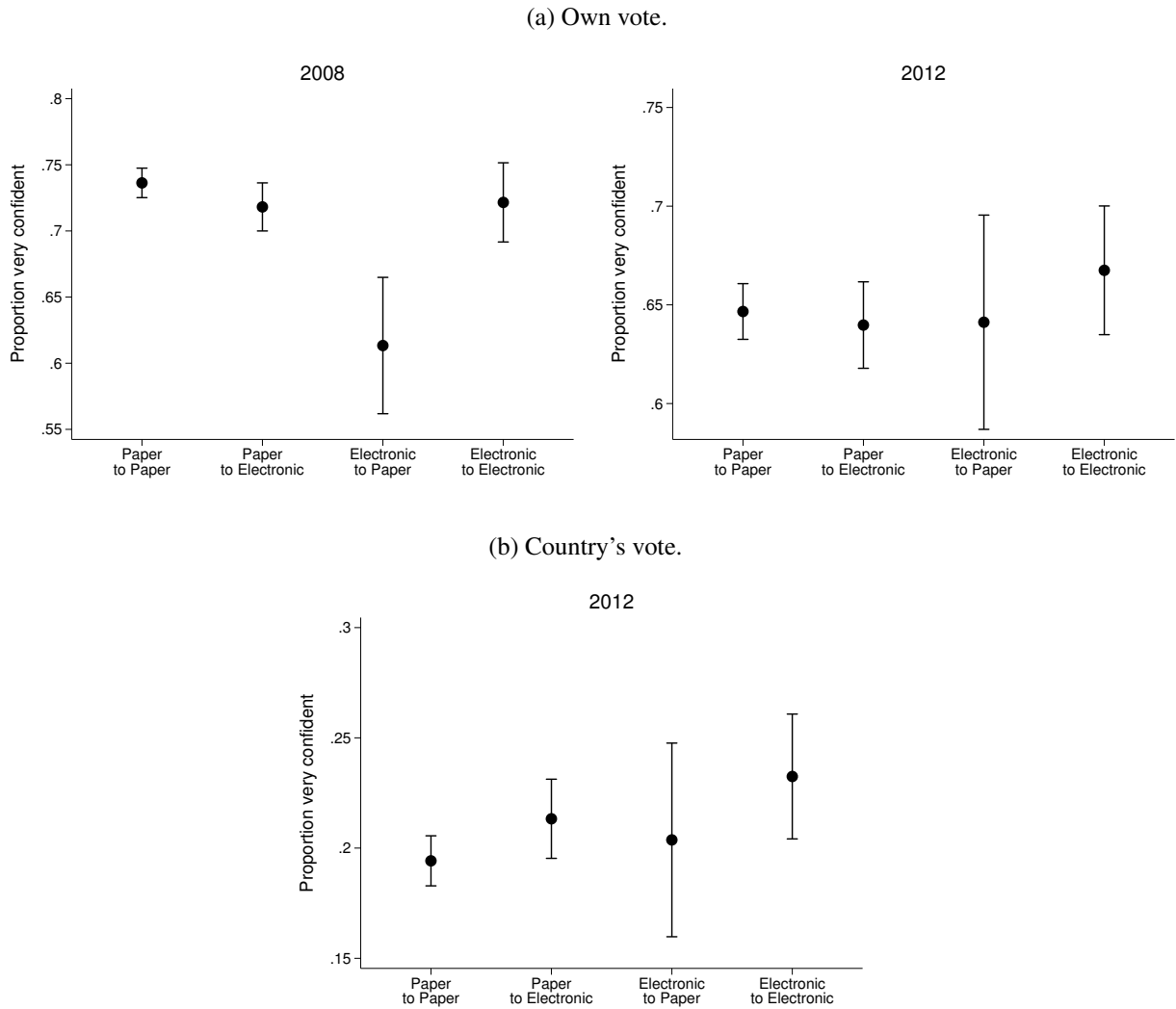
Notes: Plot shows coefficients from linear probability models where the outcome is the probability of a “very confident” response and the key independent variable is whether the respondent voted for the Democratic candidate in the most recent national election. Regressions also adjust for education, income, age, gender, race, and state (or region if state is unavailable). All covariates are entered as indicators, except age which is entered linearly. Horizontal lines span 95% confidence intervals constructed from robust standard errors.

Figure 5: Effect of election outcomes on individual-level confidence: difference-in-differences estimates.



Notes: Estimates shown are difference-in-differences, with standard errors in parentheses (clustering on respondent). The data from the first panel are from the 2004 NAES (N=548); the data in the second panel are from the 2008 Pew survey for own-vote confidence (n=586) and the 2008 NAES for country-level confidence (N=7,409); the data from the third panel are from the 2012 CCES (n=1,847).

Figure 6: Voter confidence by voting technology in the 2008 and 2012 elections.



Notes: Points are raw means with vertical bars spanning 95% confidence intervals (1.96 standard errors of the group means). All data are from the 2008 and 2012 SPAE surveys.

Table 1: Effect of election outcomes on individual-level confidence: regression estimates adjusting for trust and lagged confidence.

(a) Own vote.

	2004 CBS		2004 NAES			2008 Pew		2012 CCES		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Voted for winner	0.19 (0.04)	0.17 (0.04)	0.23 (0.02)	0.21 (0.03)	0.15 (0.04)	0.08 (0.07)	0.01 (0.06)	0.30 (0.05)	0.27 (0.06)	0.26 (0.05)
Trust		X		X					X	
Lagged confidence					X		X			X
Observations	745	745	1,327	1,327	554	288	288	578	578	578
SER	0.45	0.44	0.41	0.41	0.36	0.43	0.41	0.48	0.47	0.45
R-squared	0.17	0.18	0.17	0.17	0.35	0.23	0.33	0.21	0.23	0.30

(b) Country's vote.

	2000 NAES		2008 NAES		2012 CCES		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Voted for winner	0.38 (0.02)	0.39 (0.02)	0.16 (0.01)	0.24 (0.01)	0.18 (0.03)	0.14 (0.04)	0.17 (0.03)
Trust		X				X	
Lagged confidence				X			X
Observations	2,966	2,966	7,819	7,819	574	574	574
SER	0.45	0.44	0.45	0.43	0.34	0.34	0.33
R-squared	0.22	0.23	0.06	0.13	0.27	0.29	0.31

Notes: Cell entries are coefficients from linear probability models where the outcome is the probability of a “very confident” response and the key independent variable is whether the respondent voted for the victorious candidate in the most recent national election. Regressions also adjust for education, income, age, gender, race, and state (or region if state is unavailable). All covariates are entered as indicators, except age which is entered linearly. Robust standard errors in parentheses.

Table 2: Effect of election outcomes on individual-level confidence: regression estimates adjusting for voting technology.

(a) Own vote.

	2008 SPAE		2012 SPAE	
	(1)	(2)	(3)	(4)
Voted for winner	0.08 (0.01)	0.08 (0.01)	0.22 (0.01)	0.22 (0.02)
DRE Current Year		-0.04 (0.02)		-0.01 (0.02)
DRE 2000		-0.12 (0.05)		-0.02 (0.04)
DRE 2000 X DRE Current Year		0.07 (0.05)		0.02 (0.04)
Observations	9,318	9,318	7,302	7,302
SER	0.44	0.44	0.46	0.46
R-squared	0.04	0.05	0.09	0.09

(b) Country's vote.

	2012 SPAE	
	(1)	(2)
Voted for winner	0.19 (0.01)	0.19 (0.01)
DRE Current Year		0.01 (0.02)
DRE 2000		0.01 (0.03)
DRE 2000 X DRE Current Year		-0.00 (0.03)
Observations	7,227	7,227
SER	0.38	0.38
R-squared	0.13	0.13

Notes: Cell entries are coefficients from linear probability models where the outcome is the probability of a “very confident” response and the key independent variable is whether the respondent voted for the victorious candidate in the most recent national election. Regressions also adjust for education, income, age, gender, race, and state (or region if state is unavailable). All covariates are entered as indicators, except age which is entered linearly. Robust standard errors in parentheses (clustered at the county level when voting technology is included).

Appendix 1: Data Sources and Question Wordings

Polls used in the analysis

Table A1: Confidence in own vote.

Date	House	Mode	Sample
11/12/2000	CBS / New York Times	Telephone	Voters
12/16/2000	LA Times	Telephone	Registered Voters
07/15/2004	CBS / New York Times	Telephone	Voters
10/19/2004	Pew	Telephone	Registered Voters
10/26/2004	ABC / Washington Post	Telephone	Voters
11/01/2004	National Annenberg Election Study	Telephone	Likely Voters
11/08/2004	Pew	Telephone	Registered Voters
12/19/2004	ABC	Telephone	Voters
12/24/2004	National Annenberg Election Study	Telephone	Voters
10/04/2006	Pew	Telephone	Registered Voters
10/15/2006	CNN	Telephone	Registered Voters
10/25/2006	Fox News	Telephone	Likely Voters
11/04/2006	Pew	Telephone	Registered Voters
11/04/2006	ABC / Washington Post	Telephone	Voters
11/12/2006	Pew	Telephone	Registered Voters
12/02/2007	Gallup / USA Today	Telephone	Eligible Voters
10/19/2008	Pew	Telephone	Registered Voters
11/09/2008	Pew	Telephone	Voters
11/11/2008	Survey of the Performance of American Elections	Internet	Voters
11/07/2010	Pew	Telephone	Voters
11/05/2012	CCES	Internet	Eligible Voters
11/11/2012	Pew	Telephone	Voters
11/28/2012	Survey of the Performance of American Elections	Internet	Voters
12/12/2012	CCES	Internet	Eligible Voters

Table A2: Confidence in country's vote.

Date	House	Mode	Sample
11/12/2000	Pew	Telephone	Voters
01/19/2001	National Annenberg Election Study	Telephone	Registered Voters
10/30/2004	CBS / New York Times	Telephone	Voters
11/08/2004	Pew	Telephone	Registered Voters
12/19/2004	ABC	Telephone	Voters
10/15/2006	CNN	Telephone	Registered Voters
10/22/2006	Gallup / USA Today	Telephone	Eligible Voters
11/12/2006	Pew	Telephone	Voters
12/02/2007	Gallup / USA Today	Telephone	Eligible Voters
01/01/2008	National Annenberg Election Study	Internet	Voters
10/29/2008	CBS / New York Times	Telephone	Registered Voters
11/09/2008	Pew	Telephone	Voters
01/31/2009	National Annenberg Election Study	Internet	Voters
11/07/2010	Pew	Telephone	Voters
11/05/2012	CCES	Internet	Registered Voters
11/11/2012	Pew	Telephone	Voters
11/28/2012	Survey of the Performance of American Elections	Internet	Voters
12/12/2012	CCES	Internet	Registered Voters

Question wordings

Confidence in own vote

11/12/2000 CBS / New York Times Given the kinds of problems that have been reported in Florida, how much confidence do you have that your (2000 presidential) vote was counted properly—a lot, some, not much, or no confidence at all?

12/16/2000 LA Times Do you personally have a lot of confidence that your (2000) vote for president was counted, or some confidence, or no confidence at all that your vote for president was counted?

07/15/2004 CBS / New York Times How much confidence do you have that the votes in your state will be counted properly this November – a lot, some, not much, or no confidence at all?

10/19/2004 Pew How confident are you that your vote will be accurately counted in the upcoming election?

10/26/2004 ABC / Washington Post And how confident are you that your own vote for president (in 2004) will be accurately counted this year: very confident, somewhat confident, not too confident or not confident at all?

11/01/2004 National Annenberg Election Study Are you confident that your vote will be counted accurately, or are you doubtful?

11/08/2004 Pew How confident are you that your vote was accurately counted?

12/19/2004 ABC How confident are you that your own vote for president (in 2004) was accurately counted this year: very confident, somewhat confident, not-too-confident or not confident at all?

12/24/2004 National Annenberg Election Study Are you confident that your vote has been counted accurately, or are you doubtful?

10/04/2006 Pew How confident are you that your vote will be accurately counted in the upcoming election?

10/15/2006 CNN How confident are you that your vote and the votes cast by people in your family will be counted accurately in this year's (2006) election—very confident, somewhat confident, not too confident, or not confident at all?

10/25/2006 Fox News How confident are you that your vote will be accurately counted in this year's (2006) election?

11/04/2006 Pew How confident are you that your vote will be accurately counted in the upcoming election?

11/04/2006 ABC / Washington Post How confident are you that your own vote in this election will be accurately counted this year (2006): very confident, somewhat confident, not too confident or not confident at all?

11/12/2006 Pew How confident are you that your vote was accurately counted?

12/02/2007 Gallup / USA Today Thinking about the general election for president to be held in November 2008, How confident are you that, at the voting facility where you vote, the votes will be accurately cast and counted in next year's election—very confident, somewhat confident, not too confident, or not at all confident?

10/19/2008 Pew How confident are you that your vote will be accurately counted in the upcoming election?

11/09/2008 Pew How confident are you that your vote was accurately counted?

11/11/2008 Survey of the Performance of American Elections How confident are you that your vote in the General Election was counted as you intended?

11/07/2010 Pew How confident are you that your vote was accurately counted?

11/05/2012 YouGov/Polimetrix How confident are you that your vote in the General Election was counted as you intended?

11/11/2012 Pew How confident are you that your vote was accurately counted?

11/28/2012 Survey of the Performance of American Elections How confident are you that your vote in the General Election was counted as you intended?

12/12/2012 CCES How confident are you that your vote in the General Election was counted as you intended?

Confidence in country's vote

11/12/2000 Pew As you may know, the outcome of this year's presidential election will be decided by a very narrow margin in Florida and several other states. All things considered, do you think we will have an accurate count of the votes in Florida and other close states, or not?

01/19/2001 National Annenberg Election Study Are you confident that the votes in this {through 30 Dec 00: year's | starting 2 Jan 01: past} presidential election {through 12 Dec 00: are being | starting 13 Dec 00: have been} counted fairly, or don't you feel this way? Q410 (Yes or No)

10/30/2004 CBS / New York Times How much confidence do you have that the votes for president will be counted properly this November (2004)—a lot, some, not much, or no confidence at all?

11/08/2004 Pew How confident are you that the votes across the country were accurately counted?

12/19/2004 ABC On another subject, how confident are you that the votes for president across the country were accurately counted this year?

10/15/2006 CNN How confident are you that, across the country, the votes will be accurately counted in this year's election – very confident, somewhat confident, not too confident, or not

confident at all?

10/22/2006 Gallup / USA Today How confident are you that, across the country, the votes will be accurately cast and counted in this year's election?

11/12/2006 Pew How confident are you that the votes across the country were accurately counted?

12/02/2007 Gallup / USA Today How confident are you that, across the country, the votes will be accurately cast and counted in next year's election

01/01/2008 National Annenberg Election Study When Election Day comes, how confident are you that the votes across the country will be accurately counted?

10/29/2008 CBS / New York Times How much confidence do you have that the votes for president will be counted properly this November (2008)—a lot, some, not much, or no confidence at all?

11/09/2008 Pew How confident are you that the votes across the country were accurately counted?

01/31/2009 National Annenberg Election Study How confident are you that the votes across the country were accurately counted on Election Day?

11/07/2010 Pew How confident are you that the votes across the country were accurately counted?

11/05/2012 YouGov/Polimetrix Think about vote counting throughout your county or city, and not just your own personal situation. How confident are you that votes in your county or city were counted as voters intended?

11/11/2012 Pew How confident are you that the votes across the country were accurately counted?

11/28/2012 Survey of the Performance of American Elections Think about vote counting throughout your county or city, and not just your own personal situation. How confident are you that votes in your county or city were counted as voters intended?

12/12/2012 CCES Think about vote counting throughout your county or city, and not just your own personal situation. How confident are you that votes in your county or city were counted as voters intended?

Appendix 2: Additional Specifications

Figure A1: Replication of Figure 3 using alternative election samples.

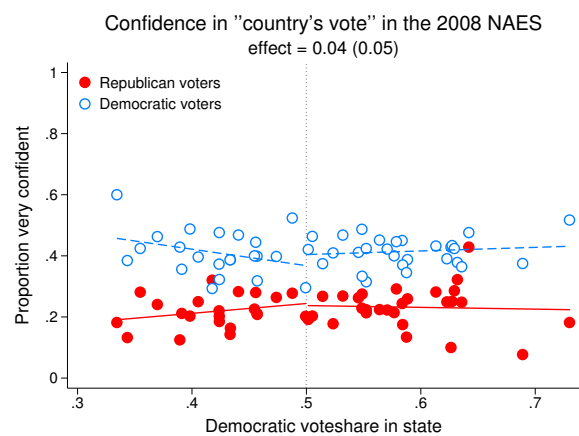
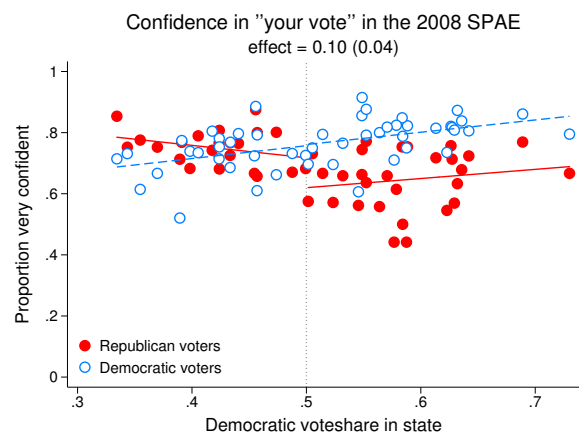
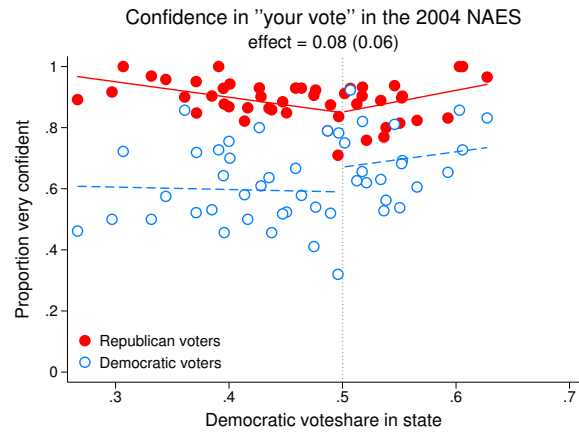


Figure A2: Replication of Figure 4 using Probit regressions.

