

**The Confidence Earthquake:
Seismic Shifts in Trust in the 2020 Election**

Jesse T. Clark
jc6039@princeton.edu
Princeton University

Charles Stewart III
cstewart@mit.edu
Massachusetts Institute of Technology

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Abstract

Using data from a variety of public opinion sources, we explore changes in trust in the vote count. A historic gap in confidence between Democrats and Republicans has grown, caused by two reasons: (1) an unusually big increase in Democratic confidence coupled with a modest decrease in Republican confidence and (2) a pre-election trust gap that already placed Democrats more confident than Republicans. Looking at confidence that votes in one's state were counted as intended, there is a sharp discontinuity in Republican responses at the 50% point in Trump two-party vote share. In addition, Republicans in states Trump lost were much less confident when more votes were cast by mail.

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The Confidence Earthquake: Seismic Shifts in Trust in the 2020 Election

Jesse T. Clark
Princeton University

Charles Stewart III
Massachusetts Institute of Technology

The aftermath of the 2020 election is unlike anything previously seen in American history.

Although elements of the public have been disappointed in the past with the result of presidential elections, in no previous election has the losing candidate and supporters attempted to overturn a properly certified result with the degree of persistence and violence seen in 2020.¹

The reaction to the election has had many consequences. We focus here on its effect on trust in the electoral system.

Counter-intuitively, we find that the result of the election was to increase overall voter confidence in the electoral process. However, the new-found confidence is due to a historic chasm that opened up between Democrats and Republicans, with Democrats becoming more confident to a greater degree than Republicans becoming less confident. We show that this chasm in confidence has a direct link to voting by mail, and that in states where absentee ballots were used the most, the confidence gap grew the most.

The remainder of this paper is organized as follows. We begin by reviewing previous studies of voter trust. We then focus on the 2020 election, calculating the “winner-loser” gap in

¹ This paper does not rest on 2020 being the most extreme example of “election rejection” in American history, but we do believe the claim made here is justifiable. The two closest contenders are the contested presidential election of 1876 and the congressional election of 1862. In the former case, partisan sentiments ran high, as did shenanigans, but the contest itself in Congress was over a set of electoral votes that were at least legitimately contestable. (On the 1876 contest, see Foley 2016.) In the latter case, the Democratic Clerk of the House contemplated ignoring the certificates of election from enough Republican members-elect to allow Democrats to organize the House and then maintain a majority by improperly denying duly elected Republicans their seats. On this episode, see Jenkins and Stewart (2012) and Foley (2016). As bad as these episodes were for the rule of law and impartial election administration, we maintain that 2020 is in a category of its own.

2020 (compared to 2016), using a difference-in-differences measure introduced by Sances and Stewart (2015), as well as exploring a tracking poll conducted by the Economist/YouGov in the months before and after the 2020 election. Analysis of data at the national level leads to analysis of variability in trust across the states. We discover that the closeness of the election in a state and the expansion of mail balloting had substantial impacts on levels of trust.

Previous Studies of Voter Trust

Voter confidence can be defined as “trust or faith in the political system, in political parties, or political outcomes, particularly before and after major changes in the method of allocating seats to votes” (Gronke 2014). While it has been well-studied in the comparative context, studies about voter trust and confidence in the United States did not become common until after the 2000 presidential election.

For purposes of this paper, voter confidence can be thought of as having two targets. One is the legitimacy of the electoral system and its general outcomes. The second is more focused on the process itself, including the operation of voting machines, the behavior of election officials, and the fairness of the rules related to casting a ballot. These two conceptualizations are obviously related, but are nonetheless distinct. Gronke and Hicks (2009) make the important point that the former target really addresses “a bundle of attitudes about government and institutions, that generally falls under the rubric of trust in government and confidence in institutions.” (Also see Atkeson, Alvarez, and Hall 2015.) Beliefs about the efficacy of democratic institutions seem to be little influenced by the fine points of election administration. Therefore, although the larger questions about democratic legitimacy that arose in the 2020 election are no doubt critical, we focus here on the narrower question of whether voters considered the voting process to have led to a correct outcome.

Sances and Stewart (2015) review the many ways in which the question of the accuracy of the voting process has been studied by public opinion research. Although there are various ways of asking the question, they tend to converge on the same results. In the literature, voter confidence is generally measured using a Likert scale, anchored by “very confident” and “not at all confident” in the vote count in an election.

To date, the literature has established three key influences on voter confidence. First, poor voting experiences may lower confidence in the vote count. Shocks to how voters cast their ballots, such as the implementation of new voter machines (Bullock, Hood, and Clark 2005) and vote by mail (Stewart 2011, Clark 2021), may lower voter confidence. Similarly, having a poorly trained or inadequate poll worker or enduring long wait times may cause a decrease in voter confidence (Hall, Monson, and Patterson 2009, King 2019). The second major influence on voter confidence is referred to as the “winner-loser effect” and is the tendency for people who supported the winner of an election to exhibit higher levels of confidence than people who voted for the loser (Sances and Stewart 2015; Sinclair, Smith, and Tucker 2018). Finally, elite cues may have an especially potent role in activating attitudes, thus reinforcing the winner-loser effect (Clayton et. al, 2021).

Prior research leads us to believe that voter confidence will be heavily influenced by political party identification, with Democrats more confident and more sanguine about fraud. This research also leads us to believe that levels of voter confidence will be especially volatile over time, because of its association with the winner-loser effect. Finally, the focus by Donald Trump and his followers on the fraud-potential of mail voting in the run-up to the election and afterwards leads us to expect that partisan attitudes will interact with mail ballot usage in 2020, but not in previous years.

Voter Trust since 2000

To set the stage, we begin by showing aggregate responses to voter confidence questions from 2000 to 2020, updating Figure 1 from Sances and Stewart (2015). Figure 1 in this paper summarizes responses from all polls that we could find in this period that have asked confidence questions. Although the various polling organizations ask questions that are worded slightly differently, they are nonetheless very similar. Polling organizations have regularly asked about confidence that the respondent's "own" vote and votes nationwide were counted properly. Polling organizations generally give respondents the option of using a 4- or 5-point scale. The quantities graphed in Figure 1 are the percentage of respondents who gave the "most confident" answer to the question posed.²

[Figure 1 about here]

Regardless of whether results are broken down by party identification, confidence in one's own vote has typically outpaced confidence in the nation's vote by approximately 40 percentage points. Among all voters, confidence in both one's own vote and in the nation's vote gradually declined in parallel in the years 2000 – 2016.

When we examine responses by identifiers of the two parties separately, we see that downward pressure on confidence — of both measures — has been exerted primarily by Republicans. If we fit a linear regression line to the points from 2000 to 2016 in the Republican "own vote" series, we get a result that suggests that confidence among Republicans declined by

² In this section, we define confidence as the percentage of respondents who gave the "most confident" response to this question, because we are conducting a metaanalysis across studies that use different scales. In subsequent sections, we convert to combining the top two responses ("very confident" and "somewhat confident") as the summary measure of confidence because we are relying on a series of surveys (the Cooperative [Congressional] Election Study and the Survey of the Performance of American Elections) that use the same question wording and response categories.

10.8 percentage points on average every presidential election during that time.³ The average decline in the “country’s vote” series was even greater, 14.9 points per presidential election cycle. Democrats, on the other hand, essentially showed no secular trend throughout this period, going up a little when Democrats were doing well nationally and down a little when they were doing poorly.⁴

These series took a turn in 2018 that accelerated in 2020. Nationwide, the average level of confidence in one’s own vote among all voters rose slightly from 53.9 percent in 2016 to 55.8 percent in 2020. For the country’s vote, it rose from 24.2 percent to 32.4 percent.⁵ After rising from 44.4 percent in 2016 to 56.5 percent in 2018, Republican confidence in their own vote fell back down to 37.4 percent in 2020. Confidence in the country’s vote was around 20 percent in both 2016 and 2018 before falling to 7.8 percent in 2020. In contrast, Democratic confidence grew to historic highs (at least for this twenty-year period). Confidence in one’s own vote grew from 62.4 percent in 2016 to 72.4 percent in 2020. Confidence in the nation’s vote rose a staggering amount among Democrats, from 29.1 percent in 2016 to 52.5 percent in 2020.

These long-term trends frame the rest of our empirical analysis. The sudden turn in 2020 is striking, but it is important to consider the path taken by identifiers of the two parties. For Republicans, the decline in confidence in 2020 was part of a two-decade-long decline in confidence in the vote count, after an uncharacteristic uptick in 2018. For Democrats, the upward swing in confidence was uncharacteristic of the steady pattern of two decades. Perhaps the upswing was due to the euphoria over the victory of Joseph Biden over Donald Trump, but

³ The regression uses OLS to fit the observations from 2000 to 2016 on a counter such that 2000 = 0, 2004 = 1, etc. The slope coefficient is -0.108 (s.e. = 0.017). For the “country’s vote” series, the slope coefficient is -0.148 (s.e. = 0.020).

⁴ The regression coefficient of Democratic confidence on the counter from 2000 to 2016 is 0.0241 (s.e. = 0.0153). For the “country’s vote,” the slope coefficient is 0.0028 (s.e. = 0.0166).

⁵ These percentages were calculated from all polls in a calendar year, both pre- and post-election.

one also has to wonder whether responses to the confidence questions among Democrats in 2020 were influenced by a strong negative repudiation of Trump's calling the results of the election into question. At the very least, it bears underscoring that if the two parties diverged dramatically in how confident they are in the voting process, that divergence seems to be more because of changes in Democratic responses than to changes in Republican responses.

A Closer Look at 2020

It will come as a surprise to many that confidence in the vote, both nationally and locally, increased in 2020, but that is due entirely to the historic rise in positive Democratic sentiments. It also may come as a surprise that Republican confidence did not decline appreciably from 2016, but it is important to note that Republican confidence was already about as low as it could go, especially in judging how things were going nationwide.

Figure 1 reports the general level of confidence and its difference by party, but to understand the effect that the election result has on confidence, we must explore how confidence changes once the results of the presidential election are known. In the political science literature, this shift has come to be called the "winner-loser effect," because supporters of the winning candidate tend to gain confidence after the election, compared to the pre-election period, and vice versa. We begin our focus on 2020 by looking at this effect.

In 2020, the importance of understanding the winner-loser effect went beyond mere academic curiosity, as the outcome of the election seemed to divide supporters of Biden and Trump even further apart than is typical, with that gap being implicated in everything from the January 6 insurrection to debates in state legislatures over whether adding restrictions to voter laws would "restore confidence" in the election system. The question we explore here is whether the winner-loser effect was greater than in the past.

The evidence is that it was, at least as far as confidence in the national vote count goes. This is illustrated by Figure 2, where we report the results of a differences-in-differences analysis of the two confidence questions from 2016 and 2020. In particular, for each year and each question, we calculate

$$\{E[W_{q,y,T_2}] - E[W_{q,y,T_1}]\} - \{E[L_{q,y,T_2}] - E[L_{q,y,T_1}]\},$$

where q indexes the question (“own vote” or “nation’s vote”) and y indicates the year, T_1 is pre-election, T_2 is post-election, W indicates that the respondent voted for the winner, L indicates that the respondent voted for the loser. To aid in discussion, we call this difference-in-differences measure the “winner-loser gap.” The datasets we use are the MIT modules of the Cooperative [Congressional] Election Study for 2016 and 2020.

[Figure 2 about here]

As far as own-vote confidence is concerned, the winner-loser gap was virtually the same in 2020 as it was in 2016. The main difference was the levels of anticipated confidence that serve as the baselines. In 2016, 29.1 percent of Trump voters were very confident that their own vote would be counted as intended when asked before the election; this grew to 58.2 percent after the election. This difference is 29.1 points. The confidence of Hillary Clinton supporters also grew, but not by as much, from 58.0 percent to 64.7 percent, for a 6.7-point difference. The resulting winner-loser gap of 22.4 percentage points is shown in the left-hand panel of Figure 2.

In 2020, the winner-loser gap for own-vote confidence was nearly identical to 2016, 23 points. However, unlike 2016, when the loser’s supporters started out more confident than the winner’s supporters, in 2020, the loser’s supporters started out with less confidence than the winner’s supporters. The result is that own-vote confidence between the two groups converged in

2016 while diverging in 2020, even though the difference-in-difference calculation was virtually the same.

We performed this calculation in precisely the same way as Sances and Stewart (2015), which lends some context to these findings. Sances and Stewart found that the own-vote winner-loser gap was -5 points in 2004 (and statistically indistinguishable from zero), 15 points in 2008, and 11 points in 2012. Therefore, although the own-vote winner-loser gap was similar in 2016 and 2020, these levels were nonetheless much higher than in the previous three elections.

In contrast to own-vote confidence, the winner-loser gap in national confidence was much greater in 2020 than in 2016. However, and contrary to expectations, the greater gap was not due to Trump supporters being especially non-confident, but because of the soaring confidence of Biden supporters.

In 2016, 11.5 percent of Trump voters were very confident in the pre-election wave that votes nationwide would be counted as intended. This rose to 25.3 percent post-election, for a net gain of 13.8 points. For Clinton voters, national confidence declined 4.4 points, from 32.7 percent to 28.3 percent. The winner-loser gap for the country's vote was therefore 18.2 points. In 2020, Trump supporters similarly started with low levels of national confidence pre-election, at 8.0 percent. This rose to 8.5 percent post-election, for a 0.5-point increase. Biden supporters, on the other hand, had a 24.1 percent confidence level pre-election, which rose to 72.8 percent post-election, for an increase of 48.6 points. Together, this resulted in a winner-loser gap of 48.2 points, over two-and-a-half times greater than the gap in 2016.

This 48.2-point winner-loser gap is essentially equal to the 47-point gap reported by Sances and Stewart (2015) for the 2008 election. (The gap was only 15 points in 2012.) The main difference, however, is where the two candidates' supporters started and where they ended.

In 2008, 42 percent of John McCain's supporters were very confident that votes nationwide would be counted as intended in the pre-election wave; this declined to 23 percent post-election. At the same time, the percent of Barack Obama's supporters who were very confident grew from 11 percent to 39 percent. In effect, McCain and Obama supporters switched places, in terms of judging the nationwide vote count. In 2020, by contrast, Biden supporters were already more confident pre-election, so that in this election a similar winner-loser gap had the effect of pushing supporters of the two parties even further apart.

Evidence of a large winner-loser gap in 2020 also appeared in commercial polling that was conducted during the election season. This is illustrated in Figure 3, where we display the time series from the Economist/YouGov tracking poll that posed the confidence question we have been exploring several times before and after the election. The pattern here is broadly consistent with the analysis performed using C[C]ES data. It also suggests that the immediate overnight change in confidence after Election Day may have been greater than calculated using the C[C]ES responses, which were collected over the period of several weeks before and after the election.

[Figure 3 about here]

If we average all the pre- and post-election Economist/YouGov responses and run the difference-in-difference calculations as before, we get winner-loser gaps of 40.8 points for own-vote confidence and 57.6 points for national confidence. These are considerably greater than the results we get from using the C[C]ES data gathered during much of the same time period, especially own-vote confidence. However, consistent with the analysis using C[C]ES data, the gap was larger for national confidence.

This closer look at the national top-line results for 2020 is consistent with the conventional wisdom in some respects and inconsistent in others. It is consistent to the degree that the gap in confidence pre-election between identifiers of the two major parties opened up to a yawning divide post-election, which may be most consequential for the current state of American politics. However, it is not the first time in the past two decades that the nation has seen shifts of this magnitude pre- and post-election. A shift of similar magnitude occurred in 2008. However, in that election, Republican optimism was dampened by the results of the election while Democrats were bolstered. A small gap between the two parties remained, but one would not characterize it as “yawning.” In 2020, by contrast, Republicans were already primed pre-election to distrust the results of the election and were unmoved by the outcome. Democrats, on the other hand, displayed cautious pre-election optimism that transformed into post-election jubilation. Thus, the starting points of the parties’ followers pre-election may be just as responsible for the post-election partisan divide that opened up as the outcome of the election itself.

State Variation in Confidence

It is a commonplace to remark that there is no single presidential election, but fifty-one separate state elections for president. The reality of this statement came to the fore in 2020, as there was intense scrutiny of the details of election administration practices in the battleground states. Alterations to standard election practices because of the COVID-19 pandemic heightened political conflict over these details to a degree unprecedented in recent memory. At the extreme, many on the right rejected as illegitimate any accommodations to the virus that were not enacted

by state legislatures⁶ and agitated for legislatures to substitute their own slates of electors for those chosen by popular vote (Paul 2020). In the aftermath of the election, a historic number of bills have been filed to amend state election laws, most of them by Republicans to restrict access to mail ballots or similar measures, with 17 states enacting such laws as of this writing (Leonhardt and Philbrick 2021). However, some states, notably Vermont, have permanently expanded access to mail ballots (NCSL 2021). It should also be noted that most of the election-administration items contained in H.R. 1, which passed the U.S. House of Representatives, also would have the effect of remaking state election laws in the image of Democratic preferences (Brennan Center 2021a, b).

All this attention to state election laws and practices raises the question of whether confidence in state-level election administration took a hit in 2020 compared to past years. The answer is, “yes,” although the verdict is not open-and-shut.

The dataset we use in this analysis is the Survey of the Performance of American Elections (SPAЕ), which has been conducted immediately post-election every presidential election since 2008. The sampling scheme is oriented to the state level, which makes it especially appropriate for addressing variation in attitudes across states. In previous years, 200 registered voters were interviewed in each state and the District of Columbia.⁷ In 2020, 200 interviews were conducted in 40 states and the District of Columbia, while 1,000 were conducted in ten others (Arizona, Florida, Georgia, Iowa, Michigan, Nevada, North Carolina, Ohio,

⁶ This was a major argument made in the petition to the Supreme Court filed by Texas Attorney General Ken Paxton. See *State of Texas v. Commonwealth of Pennsylvania, State of Georgia, State of Michigan, and State of Wisconsin*, Motion for Leave to File Bill of Complaint, https://www.supremecourt.gov/DocketPDF/22/22O155/162953/20201207234611533_TX-v-State-Motion-2020-12-07%20FINAL.pdf.

⁷ D.C. was not included in the 2008 study.

Pennsylvania, and Wisconsin), making for 18,200 observations total. In effect, the SPAE can be seen as 51 state-representative surveys that may be re-weighted to observe national trends.

Confidence in the state-level vote count: a general view

We start by exploring responses to the state-confidence question by aggregating results at the national level. Figure 4 shows the percentage of respondents reporting that they were either “somewhat” or “very” confident that votes were counted as intended in their state from 2008 to 2020, both overall and by party.⁸ For comparison, the bottom panel shows the answers for the nation’s vote.

[Figure 4 about here]

In the two previous presidential elections, there was some evidence of a winner-loser effect in state-level confidence, although when compared to national-level confidence, the differences are slight. Democratic respondents were slightly more confident than Republicans in 2012; the results of the 2016 election are associated with a slight decline in Democratic confidence and larger (though modest) increase in Republican confidence. The 2020 results were different, however. Eighty-seven and seven-tenths percent of Democrats had already expressed confidence in the state-level vote count in 2016. That rose to 95.4 percent in 2020. Republicans, on the other hand, fell from 90.9 percent expressing some degree of confidence in 2016, to 61.6 percent in 2020.

Figure 5 disaggregates these results to the state level, showing the results for 2012, 2016, and 2020; it also shows results for Democrats and Republicans separately in each state. There

⁸ In the previous section, we confined ourselves to the percentage of respondents who reported they were “very confident” that votes would be/were counted as intended. This was to allow for comparison with Sances and Stewart (2015). In this section, we switch to those who reported they were either “very” or “somewhat” confident, because the responses provide greater interstate variability.

are a number of patterns to explore in this figure, but one stands out immediately. Although average overall state-level confidence did not change much in most states across these years,⁹ divergence in opinions among Democrats and Republicans in 2020 compared to 2016, and even 2012, is obvious in virtually every state. In 2012, the mean absolute intrastate difference between Democrats and Republicans was 16.8 points (s.d. = 13.8). It shrank to 12.2 points in 2016 (s.d. = 7.7), but then ballooned to 28.0 points (s.d. = 23.) in 2020.

[Figure 5 about here]

Confidence in the state vote count and closeness of the presidential race

At first blush, it appears that the main story about state confidence simply concerns party. Democrats have retained high levels of confidence in the vote count of their state in each of these years, regardless of the national winner, while Republicans have been fickle, depending on who won.

However, one thing was different about Republican state-level confidence (or lack of it) in 2020 compared to either 2012 or 2016: the strong dependence of Republican confidence on the closeness of the election within the state. We illustrate this in Figure 6, which displays scatterplots of the percentage of Democrats and Republicans who were confident that votes had been counted as intended in their state against the percentage of the two-party vote received by the Republican presidential nominee. Loess curves have been fit to the data, with a discontinuity allowed at the 50 percent mark of Republican vote share.

[Figure 6 about here]

There are notable discontinuities for the losing party in each year, of roughly 15 points in 2012, 20 points in 2016, and 40 points in 2020. There is evidence that confidence may have

⁹ The averages were 86.2, 88.5 and 84.8 in 2012, 2016 and 2020, respectively. The average intercorrelation is .477.

been depressed somewhat in states narrowly won by the Republicans in 2012 (Republicans only) and 2016 (both Republicans and Democrats). But, the influence of the closeness of the race and the confidence of Republicans stands out dramatically in 2020, particularly in the states Trump barely lost, and perhaps even in the states he barely won.¹⁰

We use linear regression to start measuring the precise size of the discontinuities. For respondents from party p in state s in year y , we fit the following equations using OLS:

$$C_{sy p} = \beta_0 + \beta_1(R_{sy} - 50) + \beta_2(R_{sy} - 50)^2 + \beta_3(R_{sy} - 50)^3 + W_{sy}[\beta_4 + \beta_5(R_{sy} - 50) + \beta_6(R_{sy} - 50)^2 + \beta_7(R_{sy} - 50)^3] + \varepsilon_{sy p},$$

where

$C_{sy p}$ = confidence in state s in year y for party p ,

$R_{sy p}$ = two-party vote share for the Republican presidential candidate in state s in year y for party p , and

$W_{sy} = 1$ if $R_{sy} > 50$, 0 otherwise.

In words, for each year, we regress the confidence measure for party p in state s on a third-degree polynomial formed by subtracting the Republican two-party share of the vote in state s from 50.¹¹ We allow the fit to differ depending on whether the Republican won the state ($W_{sy} = 1$) or not ($W_{sy} = 0$). The coefficient β_0 measures the value of the function at the left-hand-side of the discontinuity; $\beta_0 + \beta_4$ is the value of the function at the right-hand-side. The standard

¹⁰ The one state Trump barely won where Republicans were notably non-confident is North Carolina. Removing North Carolina Republicans from the plot would have a dramatic influence on the shape of the loess curve, to a degree that would not happen if one of the five states Trump barely lost was removed.

¹¹ We chose a third-degree polynomial because that is clearly needed to accommodate the discontinuity for 2020. As the results show, a third-degree polynomial was not necessary to fit the relationship in 2012 and 2016.

error associated with β_4 allows us to test whether $\beta_0 = \beta_0 + \beta_4$, in other words, if confidence jumps because of the Republican winning the state.

The results of these regressions are reported in Table 1. The coefficient to focus on is associated with W_{sy} , which is bolded in the table. The coefficients confirm the visual assessment of Figure 6. On the Republican side, the discontinuities in 2012 and 2016 are not statistically significant.¹² The discontinuity in 2020, of nearly 30 points, is significant, both statistically and substantively. On the Democratic side, the discontinuity in 2016 was statistically and substantively significant, but not so for 2012 and 2020.

[Table 1 about here]

We augmented this analysis by using a parametric method of regression-discontinuity design to measure the local average treatment effect of living in a state won by Trump compared to one lost by Trump. Here, we treat being on one side of the 50/50 vote-share line as being “as if random.” We adopt a bandwidth of 5 percentage points around the 50 percent threshold, which essentially confines the analysis to the set of states that were regarded as “battleground,” or nearly so, before the election.¹³ We also used a triangular kernel.

We report the results of this estimation in Table 2 (parametric method), alongside the comparable coefficient from Table 1 (non-parametric method). These results are consistent with Table 1. Indeed, the coefficients associated with Republicans in 2020 and Democrats in 2016 are nearly identical to those estimated using the non-parametric method.

[Table 2 about here]

¹² Visually, there is a large gap at the 2012 discontinuity. However, close inspection of Figure 6 reveals that there is considerable variability near the discontinuity among states that Romney lost. Therefore, although the size of the coefficient (9.45) is substantively large, it is measured with a low level of precision.

¹³ The states within 5 points of the 50/50 threshold were Arizona, Florida, Georgia, Iowa, Maine, Michigan, Minnesota, Nevada, New Hampshire, North Carolina, Ohio, Pennsylvania, Texas, and Wisconsin.

If we expand our focus in two directions — going back in time and exploring all levels of government — we find two things, one expected and the other surprising. The expected thing is that the winner/loser discontinuity in state-level confidence among Republicans in 2020 exceeds any other discontinuity we can estimate. In addition, this discontinuity among Republicans extended to confidence in votes counted in one's own county or city in 2020, where it had not existed before. In other words, among Republicans in 2020, distrust in the election count extended down to the county level, especially in states Trump barely lost, although the same cannot be said of trust in the count of one's own vote or the count nationwide.

The surprising finding is that this winner-loser discontinuity actually first appeared among *Democrats* in 2016, where it extended to the national count as well. We show this in Table 3, where we report the results of repeating the analysis reported in Table 1 for 2012 and 2016, and for all levels of government. Here we report only the discontinuity coefficient associated with W_s .

[Table 3 about here]

Living in a state that was lost by one's own co-partisan presidential candidate had no effect on confidence that the respondent's own vote was counted as intended for any of these years. However, when we look at confidence that votes in the *state* were counted as intended, Democrats in 2016 who lived in states that Clinton barely lost were 19 points less confident than Democrats living in states that Clinton barely won. At 19 points, the effect is less than the corresponding effect for Republicans in 2020, however, it is by far the second-biggest effect in the table.

Examining the rest of Table 3, we see other places where living in a state where one's candidate barely won or lost may have had knock-on effects related to confidence. For instance,

Democrats living in states that Obama or Clinton barely lost in 2012 and 2016, respectively, were about 8 points less likely to be confident in the nationwide vote count than voters in states that these Democratic candidates barely won.

Vote-by-mail volume and state-level confidence

The major election-administration issue dividing the parties in 2020 was voting by mail. Viewed in the early phases of the pandemic as simply a way of maintaining the election calendar in the midst of voting during the public health emergency, the expansion of mail balloting eventually took on a significant partisan cast (Lockhart, et al 2020). We can push this interstate analysis further by exploring the relationship between state-level confidence and use of mail ballots in the states.

The relationship for 2020 is illustrated in Figure 7. Here, we divided states according to whether a majority of voters cast ballots by mail in 2020.¹⁴ The data tokens indicate responses from Democrats and Republicans in these two groups of states. (Solid data tokens represent states in which more than half of voters cast ballots by mail, based on responses to the SPAE.) The graph also indicates OLS fits to these data points.¹⁵

[Figure 7 about here]

Republican respondents in states lost by Trump expressed less confidence in the state-level vote count if more than half of the votes were cast by mail, compared to those in states where fewer than half were cast by mail. Among the states that Trump won, the difference in answers among respondents in the two groups of states is less clear visually, because a majority of votes were cast by mail in only three states that Trump won.

¹⁴ We based this classification on answers to Q4 in the SPAE.

¹⁵ Unlike the previous analysis, we chose to model this relationship as a simple linear function because of degrees of freedom.

To assess more precisely the influence that high levels of voting by mail had on voter confidence in 2020, Table 3 reports the results of a regression that reflects the visual display in Figure 7. In particular, we estimate the following equation:

$$C_{sp} = \beta_0 + \beta_1(R_s - 50) + \beta_2M_s + W_{sy}[\beta_3 + \beta_4(R_s - 50) + \beta_5M_s] + \varepsilon_{sp}, \text{ where}$$

C_{sp} = confidence in state s for party p ,

R_{sp} = two-party vote share for the Republican presidential candidate in state s for party p ,

M_s = percent of ballots cast by mail in state s , and

W_s = 1 if $R_s > 50$, 0 otherwise.

In words, we regress the confidence measure for party p in state s on the net margin for Trump in a state and the percent of ballots cast by mail.¹⁶ We allow the fit to differ depending on whether Trump won the state, as before. The coefficient β_0 can be interpreted as measuring the state-level confidence at the left-hand-side of the discontinuity in a state that had no mail ballots. The sum $\beta_0 + \beta_3$ is the estimate of the state-level confidence at the right-hand-side of the discontinuity in a state that had no mail ballots. The coefficient β_2 can be interpreted as the difference between a state with no mail ballots and one with all mail ballots if Trump lost a state. The sum $\beta_2 + \beta_4$ can be interpreted as the difference in a state Trump won.

Table 3 reports the results of the estimation. Starting with Republican respondents, the coefficient associated with M_s indicates that for a Republican in a state lost by Trump, moving from a state with no mail ballots to one that was 100 percent vote-by-mail reduced confidence by 23.9 points, which is close to the direct effect of being in a state that Trump lost, as measured by the coefficient associated with W_s . The sum of the coefficients associated with M_s and $W_s M_s$ is

¹⁶ The percentage of votes cast by mail was estimated from responses to the SPAE.

as close to zero as one ever gets in this type of estimation, which means that in states that Trump won, there was no variation in confidence based on the degree of mail-ballot usage.

The Democratic results are the mirror image of the Republicans', although the sizes of the effects are much smaller. Among Democrats, if Trump lost a state, there was no correlation between confidence and either Trump's vote share or the percentage of votes cast by mail. If Trump won, Democrats were more confident if Trump won by a large margin or if a large fraction of votes were cast by mail. This latter effect is quantified by the sum of the coefficients associated with M_s and $W_s M_s$, which in this case is 0.102. Substantively, this can be interpreted as the effect of moving from no mail ballots to 100 percent vote-by-mail in the states being 10.2 percentage points. Although this effect is smaller than the one for Republicans, the fact that Democratic confidence in states Trump won was so high to begin with, the size of the coefficient cannot be dismissed.

To wrap up this discussion, we replicated the same estimation strategy for all four confidence questions from 2012 to 2020. We report the results associated with the variable measuring mail-ballot usage and its interaction with whether Trump won the state in Table 5. In 2020, Republicans in states lost by Trump were less confident that votes were counted as intended if they lived in a state with a large volume of mail ballots for all levels of government, except for nationwide. In other words, living in a state that Trump lost and that had a high volume of mail ballots was associated with lower confidence among Republicans that their own ballot was counted as intended, that ballots in their county were counted as intended, and that ballots in the state were counted as intended. However, it did not affect their opinion about votes in the rest of the nation outside the state.

[Table 5 about here]

In addition, for Republicans living in states that Trump won, the volume of mail ballots was uncorrelated with confidence for all the measures. Indeed, in every case, the absolute values of the coefficient associated with M_s and W_sM_s are strikingly similar.

As an aside, the results reported in Table 5 suggest that Republicans in states that Romney lost in 2012 were less confident of the vote count if the mail volume was high, but not in states that Romney won. Because so few ballots were cast by mail in 2012 than in 2020, and only three states had mail-ballot usage rates approaching 100 percent in that election, it may well be that these results are actually picking up Republican dissatisfaction with the vote-by-mail laws in Colorado, Oregon, and Washington specifically, rather than tapping into a generalized aversion to voting by mail throughout the nation.

Finally, Democrats in states that Biden won in 2020 were even more confident of their state's vote count and the vote count of the whole nation if the state had a high volume of mail ballots. In the case of judging confidence in the state vote count, the size of the coefficient is small compared to the Republicans. However, again, because Democratic confidence in almost every state was above 85 percent, the size of the effect is impressive.

The results reported here are primarily useful for documenting that Republicans were not uniformly distrustful of the vote count in 2020. One consequence of the intense campaign focus on battleground states in 2020 may very well be that election administration issues became much more salient to partisans in these states than the rest of the country. Surrounded by rhetoric that election administration issues could determine the outcome of the election, it is unsurprising that voters in the battleground states were more likely to form their opinions about the trustworthiness of their state's vote count based on issues such as mail-ballot usage.

Conclusion

The issue of trust in the electoral process has become particularly salient following the contentious postelection period in 2020, in which the losing presidential candidate and his surrogates actively stoked doubts about whether the results were an accurate reflection of votes cast in the election. In much of the post-election commentary spawned by the election about the “crisis of legitimacy,” there has been a laser-like focus on attitudes of Republicans and their rejection of the legitimacy of the outcome. This is an important phenomenon that deserves both popular and academic attention. However, the findings in this paper suggest that the dynamics of public opinion concerning the legitimacy of the electoral process, attitudes about fraud, and preferences for reform are more nuanced than popular media accounts would lead one to believe.

The research in this paper shows that Republicans became especially skeptical of the vote count in 2020, regardless of who was doing the counting. This skepticism is much more extensive among Republicans than it has ever been before. The gap between Democrats and Republicans is historically high. At the same time, the findings we have reported here remind us that the growing polarization over the quality of election administration in the United States has its sources in changes to both Democratic and Republican attitudes. Democrats become more confident that votes were counted as intended in the 2020 election. What has gone unremarked until now is how Democratic identifiers responded to the loss by Hillary Clinton by increasing their doubts about the accuracy of the vote count in 2016.

Of course, Clinton supporters in 2016 did not resort to violence to overturn the result of that election. Still, Clinton herself flirted with election rejection of the 2016 results (Itkowitz 2019). The fact that Trump supporters in 2020 expressed a more virulent brand of election rejection than Democrats in 2016 should not blind us to the possibility that we have entered an

era in which partisans of both sides are both unwilling to accept losses and willing to be overconfident when they win.

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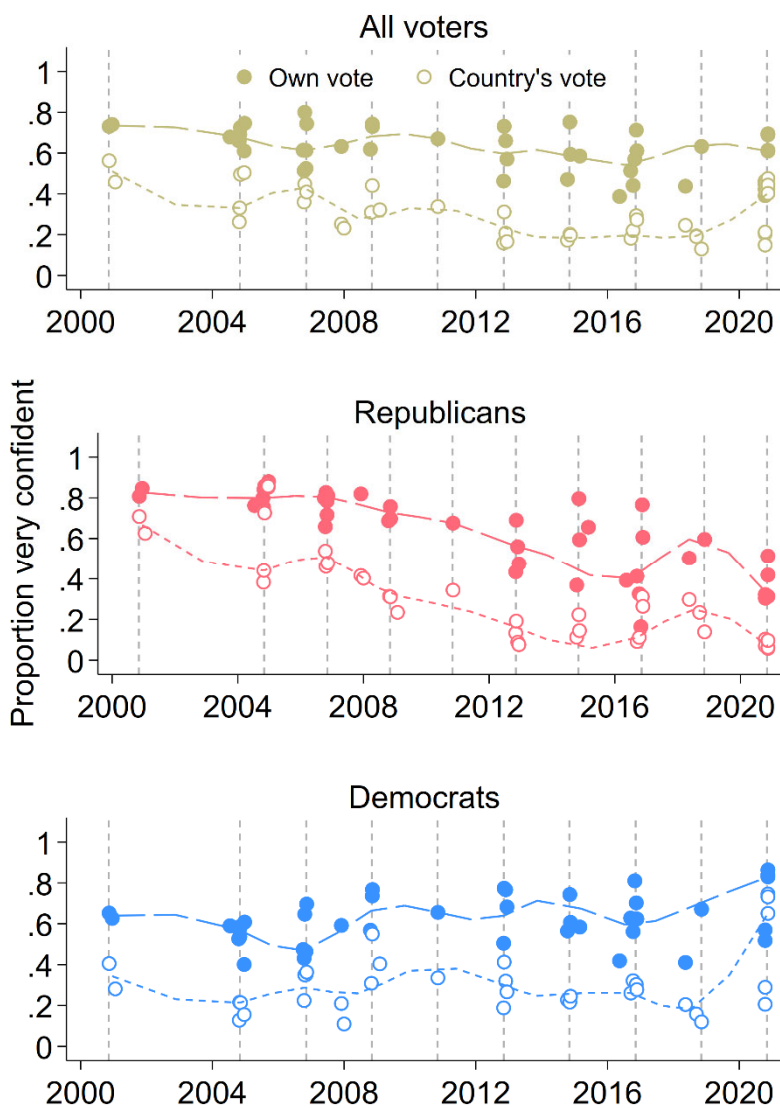
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Figure 1. Voter confidence in the accuracy of the vote count, 2000 — 2020.



Note: Data updated from Sances and Stewart (2015).

Figure 2. Effect of election outcomes on individual-level confidence: difference-in-differences estimates, 2016 and 2020.

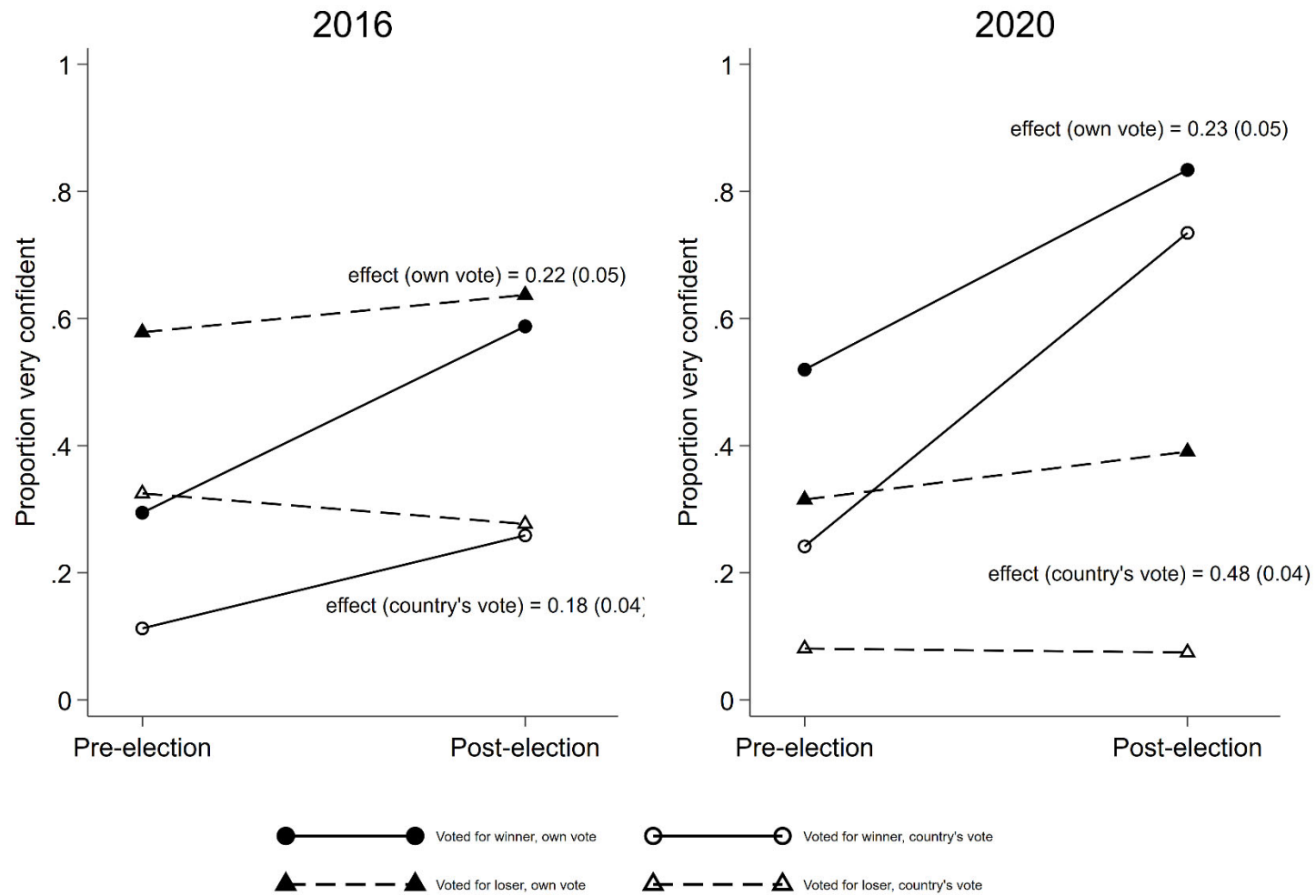


Figure 3. Time series of voter confidence in 2020. Source: YouGov poll

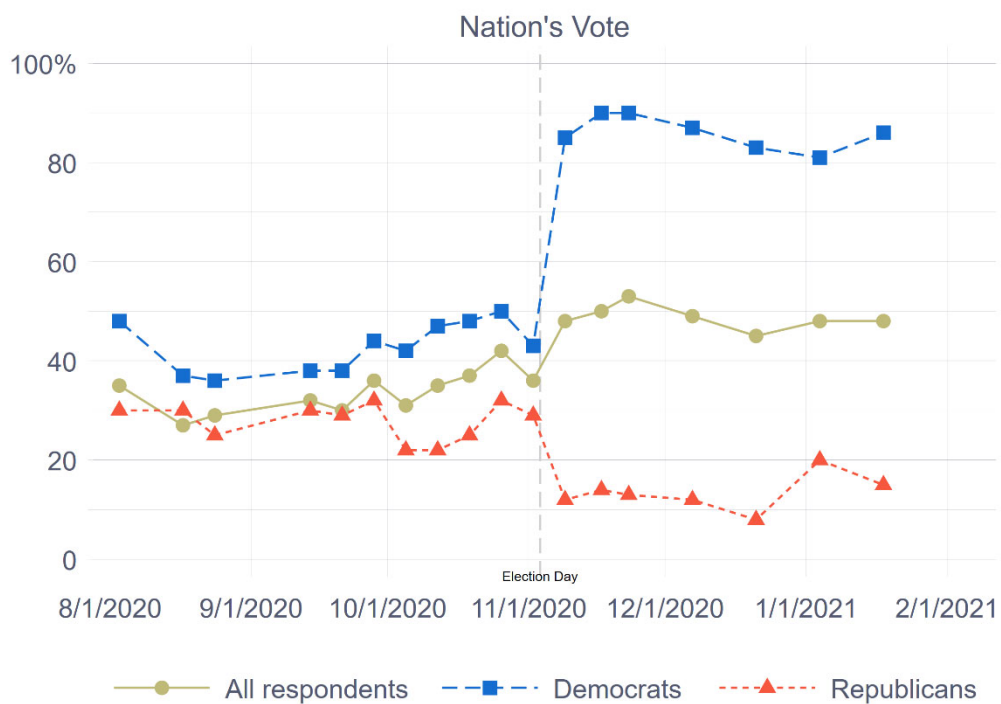
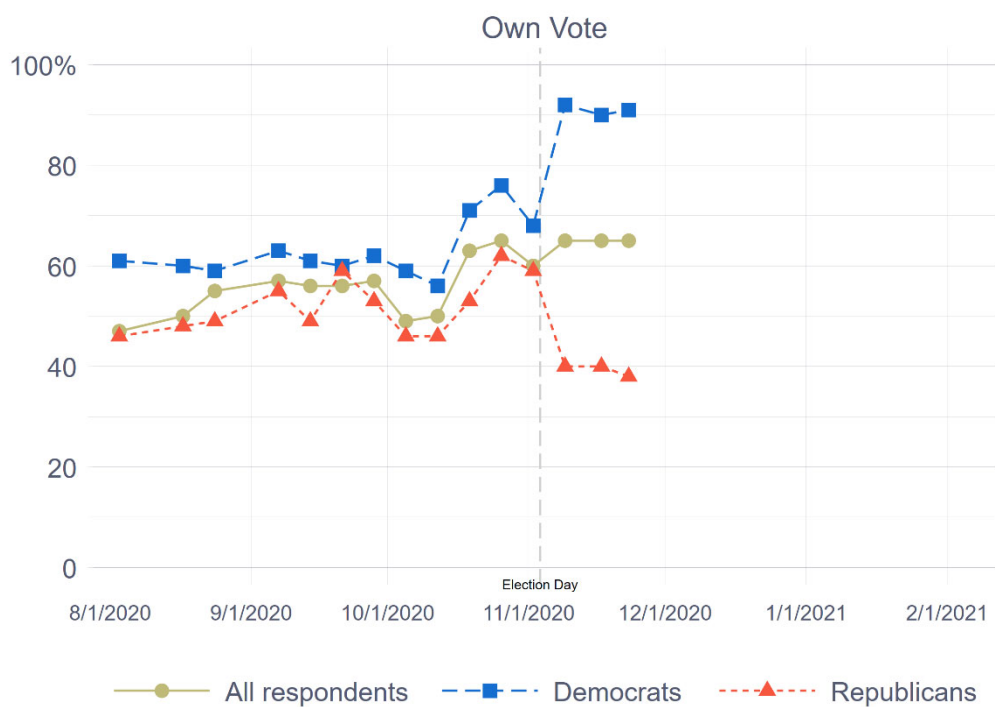


Figure 4. Percentage of respondents reporting they were “very” or “somewhat” confident that votes were counted as intended.

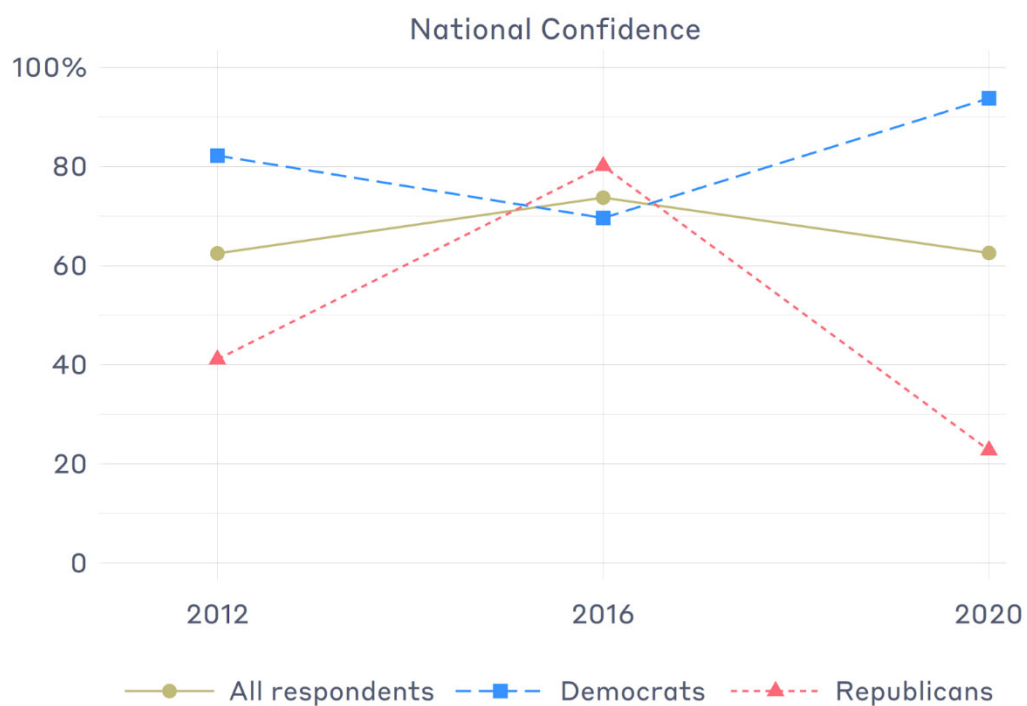
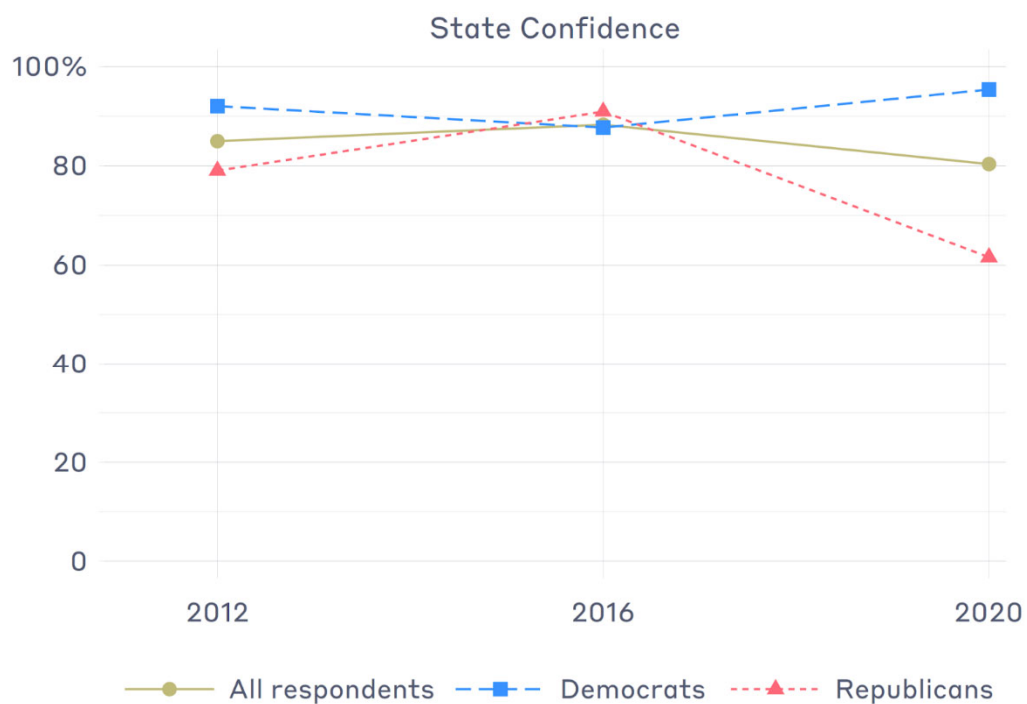


Figure 5. Percentage of respondents reporting they were “very” or “somewhat” confident that votes were counted as intended in their state.

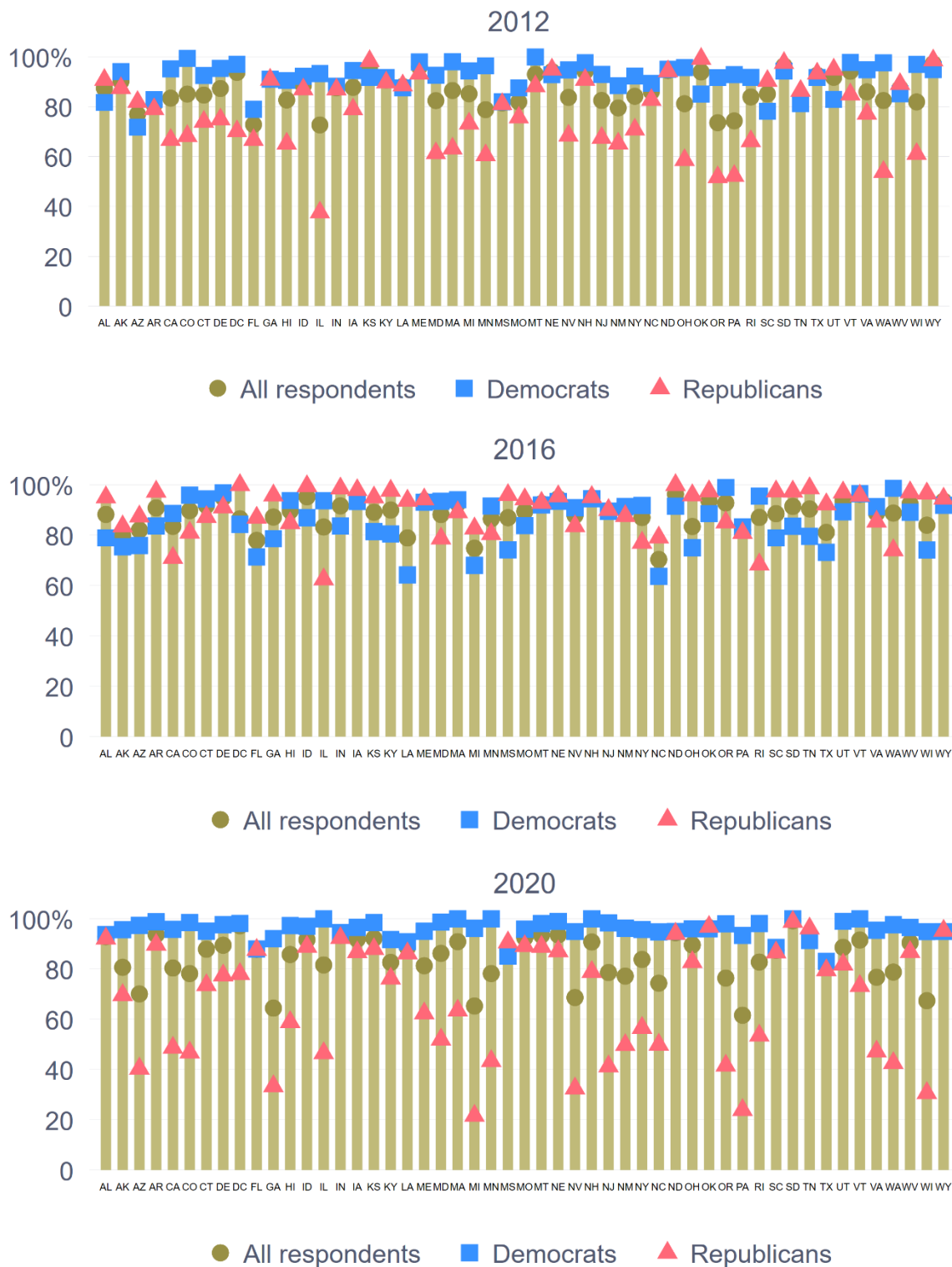


Figure 6. Comparison of state vote-count confidence with Republican presidential vote margin.

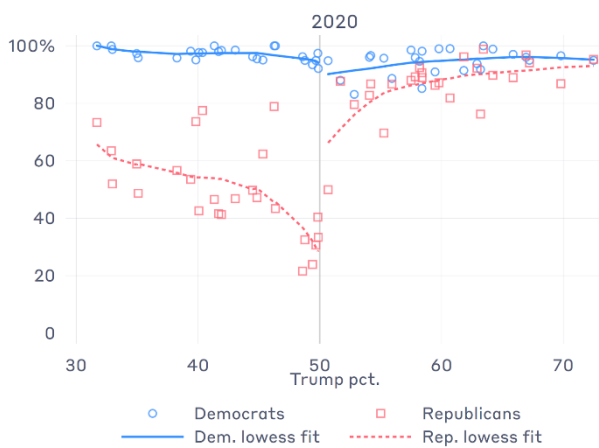
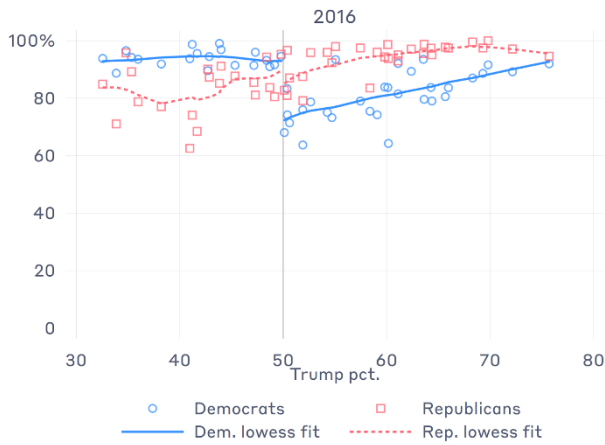
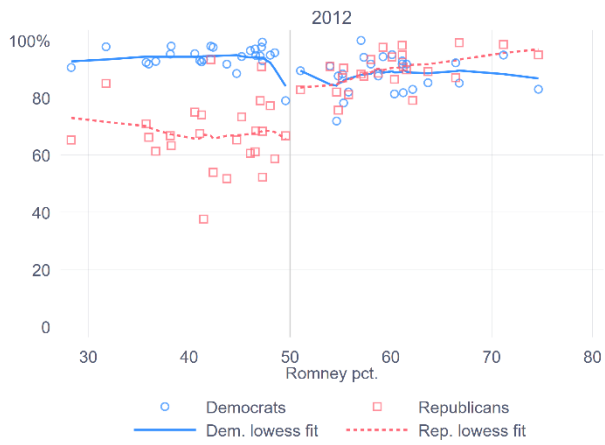


Figure 7. Comparison of state vote-count confidence with Republican presidential vote margin and mail-ballot usage, 2020.

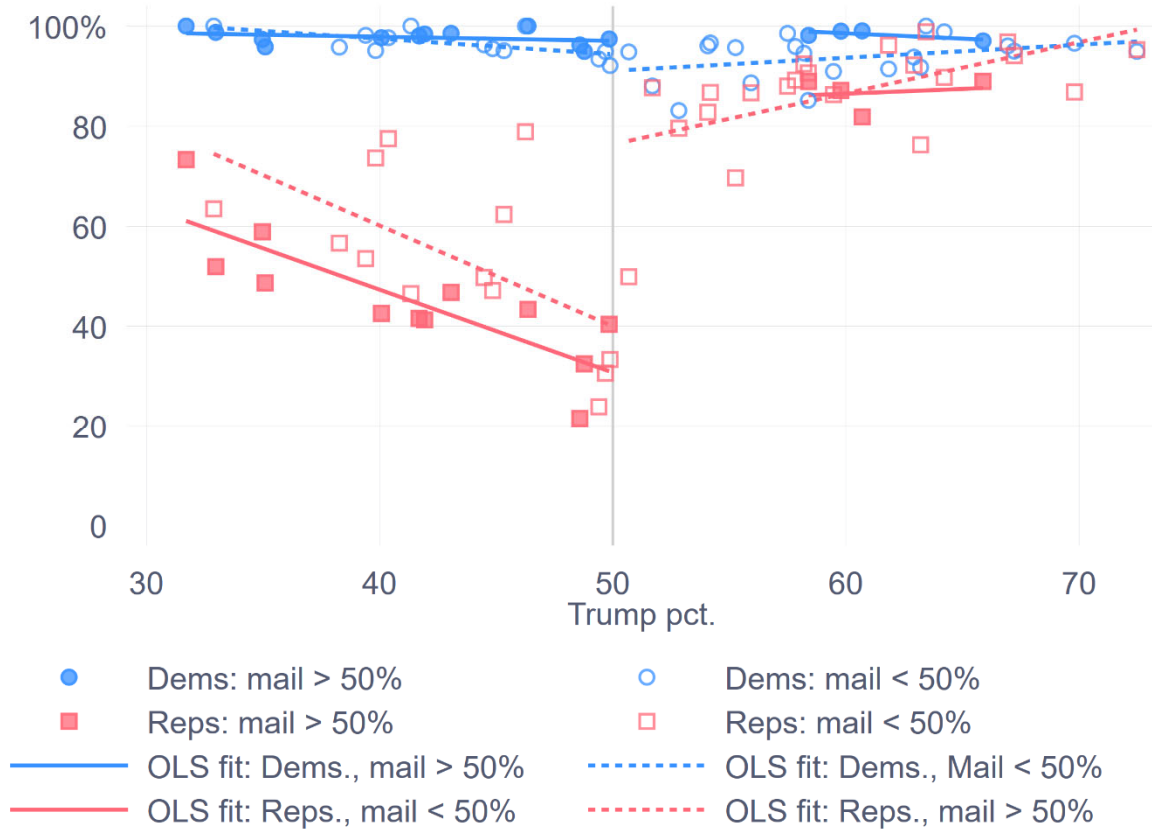


Table 1. Estimate of discontinuity in state-level confidence, 2012, 2016, and 2020. (Robust standard errors)

	Republicans			Democrats		
	2012	2016	2020	2012	2016	2020
$R_{sy} - 50$	1.34 (2.17)	2.63 (1.69)	-4.19* (1.54)	-1.14 (1.13)	-0.705 (0.530)	-0.466 (0.285)
$(R_{sy} - 50)^2$	0.106 (0.159)	0.166 (0.134)	-0.198 (0.134)	-0.0815 (0.0727)	-0.0520 (0.0433)	-0.0206 (0.0216)
$(R_{sy} - 50)^3$	0.0017 (0.0026)	0.00228 (0.00218)	-0.00286 (0.00225)	-0.00137 (0.00115)	-0.000720 (0.000709)	-0.000264 (0.000356)
W_{sy}	9.45 (7.48)	-5.24 (5.18)	29.6* (14.1)	-4.47 (6.87)	-18.9*** (3.4)	-4.74 (4.37)
$W_{sy} (R_{sy} - 50)$	0.08 (2.51)	-1.29 (1.99)	10.6* (4.2)	1.04 (2.01)	1.51 (1.42)	0.959 (1.301)
$W_{sy} (R_{sy} - 50)^2$	-0.153 (0.203)	-0.201 (0.162)	-0.268 (0.363)	0.136 (0.172)	0.0478 (0.130)	0.026 (0.122)
$W_{sy} (R_{sy} - 50)^3$	-0.0010 (0.0043)	-0.00201 (0.00312)	0.0140 (0.0090)	-0.00076 (0.00415)	0.00081 (0.00311)	-0.00055 (0.00317)
Intercept	70.6*** (6.4)	91.5*** (4.1)	31.7*** (4.2)	90.8*** (4.4)	74.7*** (1.2)	95.0*** (1.0)
N	51	51	51	51	51	51
R^2	.604	.539	.809	.301	.672	.294

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 2. Comparison of local average treatment effect of Republican candidate winning on state voter confidence using two methods.

Method	Republicans			Democrats		
	2012	2016	2020	2012	2016	2020
Non-parametric	9.45 (7.48)	-5.24 (5.18)	29.6* (14.1)	-4.47 (6.87)	-18.9*** (3.4)	-4.74 (4.37)
Parametric	14.7 (9.4)	-1.40 (5.00)	28.2*** (3.4)	10.7 (6.3)	-18.4*** (4.1)	-0.543 (1.777)

* $p < .05$, ** $p < .01$, *** $p < .001$

Note: Non-parametric method is from the analysis reported in Table 1. The parametric method is from estimates using the method developed by Calonico, Cattaneo, and Titiunik (2014).

Table 3. Estimates of winner/loser discontinuity for confidence at all levels of government, 2012 – 2020.

a. Your vote

	Republicans	Democrats
2012	7.84 (4.57)	-0.126 (4.410)
2016	-1.04 (1.73)	-2.13 (3.03)
2020	5.08 (5.80)	-0.489 (0.965)

b. Votes in the city or county

	Republicans	Democrats
2012	2.72 (6.85)	-4.90 (6.22)
2016	-1.02 (2.68)	-8.66*** (2.38)
2020	14.2* (6.8)	0.123 (1.176)

c. Votes in the state

	Republicans	Democrats
2012	9.46 (7.48)	-4.47 (6.87)
2016	-5.24 (5.18)	-18.9*** (3.41)
2020	29.6* (14.1)	-4.74 (4.37)

d. Votes nationwide

	Republicans	Democrats
2012	7.80 (7.27)	-8.42** (2.87)
2016	2.55 (4.48)	-7.94* (3.84)
2020	7.09 (3.63)	-1.18 (1.69)

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 4. Estimate in discontinuity of state-level confidence in 2020, controlling for use of mail ballots.

	Rep.	Dem.
$R_s - 50$	-1.25*** (0.31)	-0.0767 (0.0452)
M_s	-0.239* (0.100)	0.0208 (0.0157)
W_s	23.4* (10.3)	-7.17* (2.7)
$W_s (R_s - 50)$	2.23** (0.52)	0.350* (0.142)
$W_s M_s$	0.241* (0.115)	0.0816* (0.0349)
Intercept	53.1*** (8.0)	95.2*** (1.3)
N	51	51
R ²	.790	.422

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 5. Estimates of the effect of the influence of mail-ballot usage in a state on confidence, 2012 – 2020.

a. Your vote

	Republicans		Democrats	
	M_s	$W_s M_s$	M_s	$W_s M_s$
2012	-0.126* (0.053)	0.0903 (0.0678)	-0.0010 (0.0158)	-0.0415 (0.0954)
2016	-0.0375 (0.0263)	0.0075 (0.0285)	0.0092 (0.0175)	0.0469 (0.0390)
2020	-0.352*** (0.071)	0.319 (0.091)	0.0002 (0.0188)	0.0355 (0.0248)

b. Your county's vote

	Republicans		Democrats	
	M_s	$W_s M_s$	M_s	$W_s M_s$
2012	-0.0985* (0.0486)	0.161 (0.086)	0.0012 (0.0211)	-0.055 (0.159)
2016	-0.0108 (0.0261)	0.0117 (0.0345)	0.0121 (0.0219)	0.0227 (0.0486)
2020	-0.327*** (0.047)	0.307 (0.070)	-0.013 (0.020)	0.0613 (0.0318)

c. Your state's vote

	Republicans		Democrats	
	M_s	$W_s M_s$	M_s	$W_s M_s$
2012	-0.107 (0.067)	0.111 (0.090)	0.0094 (0.0249)	-0.011 (0.198)
2016	-0.0643 (0.0489)	0.0632 (0.0611)	0.0468** (0.0156)	0.105 (0.058)
2020	-0.239* (0.100)	0.241* (0.115)	0.0208 (0.0157)	0.0816* (0.0349)

d. The nation's vote

	Republicans		Democrats	
	M_s	$W_s M_s$	M_s	$W_s M_s$
2012	-0.024 (0.028)	0.083 (0.176)	-0.0460 (0.0383)	0.113 (0.088)
2016	-0.0360 (0.0361)	-0.0356 (0.0566)	0.0286 (0.0376)	0.0777 (0.0485)
2020	-0.0681 (0.0616)	0.0939 (0.0931)	-0.0124 (0.0220)	0.113*** (0.032)