

The Effect of Partisan Poll Watchers in Presidential Runoff Elections

Francisco Pardo*
University of Texas at Austin
[Click here for the latest version](#)

Abstract

The legitimacy of election results is key to democracy and political stability and party poll-watchers play an important role in this. I study elections in Peru, where parties are allowed to assign poll-watchers to monitor the electoral process and vote count. I find effects of up to 0.4 percentage points on the vote margin, sizes that could be decisive in elections won by 0.2 percentage points like those studied. The results are consistent with poll-watchers engaging in legitimate behavior to defend the validity of their votes: the vote margin effect is null when both poll-watchers are present, the effect on null votes declines, and the time required to count votes increases, suggesting more discussions take place.

JEL Codes: D72, N46

Free and fair elections are foundational to democratic accountability. When citizens cannot trust that their votes are counted as cast, the legitimacy of elected governments and the responsiveness of politicians to their constituents are both undermined ([Besley and Case \(1995\)](#), [Ferraz and Finan \(2008\)](#), [Berman et al. \(2019\)](#)). Yet concerns about legitimacy of election results are widespread: in the most recent round of the World Values Survey, half of the countries had more than a third of respondents indicate that votes are often not counted fairly, with over 60% in Peru, one of the highest shares recorded globally.¹

Convincingly estimating the impact of poll-watchers on election outcomes is typically challenging because parties may recruit more poll-watchers in places where they have more support, making their presence correlated with party electoral outcomes. However, polling stations within a polling site are assigned voters by the electoral administration in a way unrelated to their preferences. I show that within-site variation in poll-watcher coverage is conditionally random, allowing me to identify their causal effect.

*Department of Economics, University of Texas at Austin. Email: fpardo@utexas.edu.

¹See [Figure 5](#).

I use data from official voting registries scanned and published by Peru’s electoral institution (Oficina Nacional de Procesos Electorales - ONPE) for three presidential runoffs: 2011, 2016, and 2021. From these registries, I extract handwritten information on poll-watcher and poll-worker presence, party affiliation, national ID numbers, and names, which I use to construct proxies for age and gender. I also extract timestamps that allow me to measure the duration of the voting process and ballot counting processes.

The empirical strategy exploits within-school variation in poll-watcher assignment, which I argue is plausibly random after controlling for first-round vote shares and the presence of the opposing party’s poll-watcher. The alphabetical assignment of voters to classrooms within schools ensures that classrooms are comparable, and the evidence for Peru confirms that poll-watcher presence and vote shares do not vary systematically by the first letter of voters’ last names.

I find that poll-watchers affect the vote margin in their favor by up to 0.4 percentage points when present alone, an effect that is large relative to the margins by which the 2016 and 2021 elections were decided. The effects are similar for both parties, with the vote margin widening by 0.31 percentage points in the winning party’s favor when their poll-watcher is present alone, and by 0.38 percentage points in the losing party’s favor when theirs is. When both parties’ poll-watchers are present, their effects offset each other and the vote margin is not significantly different from that of classrooms with no poll-watchers. I also find significant cross-party effects: poll-watchers not only reduce their rival’s vote share but also affect the count of null votes.

The evidence suggests that poll-watchers primarily operate through the legitimate contestation of ballots during the count. When both poll-watchers are present, the share of null votes falls and the duration of the count increases by 3.6%, consistent with longer deliberations over disputed ballots. By contrast, I find no significant effects on blank votes or turnout, which argues against fraud or turnout buying as relevant mechanisms. The effect on the duration of the voting process is smaller than half of a percentage point, which is consistent with no major interventions during this process. Unlike the effects documented for Argentina [Casas, Díaz and Trindade \(2017\)](#) and Mexico [Ascencio and Rueda \(2019\)](#), which are more closely linked to the disappearance of rival party ballots and turnout buying, the effects found

here operate through a different channel, the discretionary contestation of ballots during the count, suggesting that poll-watchers can influence electoral outcomes even in settings where more overt forms of manipulation are less prevalent. The results are robust to a number of alternative samples, including restricting to classrooms that opened on time and those whose poll-workers were the same in both the first and second round.

This paper makes two contributions to the literature. First, I contribute to the literature on partisan poll-watchers,² arguing that they can affect electoral outcomes through legitimate efforts. This adds to prior literature which focuses on illegitimate means such as disappearance of rival party ballots [Casas, Díaz and Trindade \(2017\)](#), vote-buying enforcement [Ascencio and Rueda \(2019\)](#), or discretion over voter eligibility [Neggens \(2018\)](#).³ I show evidence consistent with poll-watchers influencing outcomes through the more legitimate channel of defending their party’s votes during the count, and I extend the exploration of mechanisms by introducing a novel outcome: the duration of ballot counting processes, constructed from timestamps in official voting registries. Results are consistent with longer deliberations when both parties’ poll-watchers are simultaneously present.

Additionally, I study three closely contested runoffs with no incumbent participating, in contrast to [Casas, Díaz and Trindade \(2017\)](#) and [Ascencio and Rueda \(2019\)](#), who study elections with incumbents in settings where landslide margins and incumbent organizational advantages are more common. Extending these results to a high-stakes, low-state-capacity context is particularly relevant as razor-thin electoral margins become increasingly frequent [Geruso and Spears \(2026\)](#), [Levine and Martinelli \(2024\)](#). Importantly, the joint presence of both parties’ monitors may itself enhance the perceived legitimacy of the count [Cohen and Sheagley \(2024\)](#); [Mbozi \(2025\)](#), an outcome of independent value in polarized electoral environments.

The rest of the paper proceeds as follows. Section 1 describes the Peruvian election system, and Section 2 describes the data used. Section 3 presents the empirical strategy. Section 4 presents the main results and Section 5 the mechanisms. Section 6 concludes.

²For studies on non-partisan poll-watchers, see [Buzin, Brondum and Robertson \(2016\)](#), [Asunka et al. \(2019\)](#), [Hyde \(2007\)](#), [Hyde \(2010\)](#), [Leeffers and Vicente \(2019\)](#), [Sjoberg \(2012\)](#), [Ichino and Schündeln \(2012\)](#), and [Sjoberg \(2016\)](#).

³This last channel operates in contexts like India where multiple valid identity documents give poll-workers latitude to question eligibility. In Peru, a single national ID leaves little room for such discretion, limiting the relevance of this mechanism in our setting.

1 Elections and Poll-Watchers in Peru

This section describes the institutional features of Peruvian elections relevant to this paper: the electoral rules, how votes are cast, and the role of party poll-watchers. The three elections studied were all closely contested runoffs. The 2011 runoff was won by fewer than half a million votes, a margin of 2.7%. The 2016 and 2021 elections were razor-thin, both decided by fewer than 50,000 votes, corresponding to a margin of 0.2% of votes cast. Notably, the same party lost all three elections, while the winning party was different in each.

1.1 Election Rules

In Peru, voting is compulsory,⁴ and the presidency is generally decided in two rounds. In the first round, voters choose among multiple presidential candidates: 11 parties competed in 2011, 14 in 2016, and 18 in 2021. If no candidate receives more than 50% of the vote, the two leading candidates advance to a runoff. The second round determines only the presidency, as congress has already been elected by that point.⁵ Presidential reelection is not permitted in Peru, and given the high degree of party fragmentation, no incumbent party participated in any of the three runoffs studied in this paper.

1.2 How Votes are Cast: Polling Sites and Polling Stations

Elections are held at electoral sites, which in Peru are typically schools. Each voter must vote within their district of residence, but may select their school ahead of the election, typically choosing one near their home.⁶ Within each school, voters are assigned to a polling station (a classroom) by the electoral institution (ONPE), primarily in alphabetical order. Each classroom generally serves between 200 and 300 voters and is presided over by one poll-worker, assisted by two others, all drawn from the registered voters of that classroom and assigned by ONPE ahead of the election. These poll-workers are responsible for setting up and reviewing election materials, verifying voter IDs, and conducting the count. Additionally, parties may

⁴Fines for not voting are between 5 USD and 25 USD

⁵Because there are no strong parties in Peru, votes are highly disperse and hence, it is often the case that no candidate has won a majority in congress before heading to the second round

⁶Around 10% of voters choose their own school; the rest are assigned to a school within their district by the electoral institution.

assign poll-watchers to supervise this process and raise concerns or contest decisions during the vote count. Upon entering the room, a voter approaches the poll-workers, presents their ID, and receives a ballot listing all candidates. The voter then casts their ballot behind a private booth and deposits it in a ballot box.

1.3 Party Poll-Watchers

Each party may assign poll-watchers to any classroom to monitor the voting process and the vote count at the end of the day. Because parties generally do not have enough poll-watchers to cover all classrooms, they must allocate them selectively, leaving some classrooms unmonitored. My identification strategy relies on this allocation being conditionally random within a school, which I discuss in Section 3. During the vote, poll-watchers are seated alongside the poll-workers inside the classroom. Figure 4 illustrates this setup, showing the exterior of a school, voters lined up inside a classroom, and the key actors present during the vote: poll-workers, a voter at the booth, and party poll-watchers.

Poll-watchers have an official role before, during, and after the election. Before voting begins, they verify that the voting booth is properly set up and that the classroom has all the necessary ballots. During voting, they may verify that the voting booth has no marks and raise observations if irregularities arise. After voting closes, they ensure that the total number of ballots matches the total number of voters, and may contest poll-workers' rulings on individual ballots, arguing that a vote deemed null should be counted for their party, or vice versa.

If poll-watchers succeed in affecting electoral outcomes, I would expect their presence to increase vote share for their own party and decrease it for the opposition, widening the margin between the two. This goal can be pursued through legitimate or illegitimate means, each of which leaves a different empirical trace. Broadly, poll-watchers can influence results through three channels: (i) legitimate contestation of vote validity,⁷ (ii) fraud, such as altering blank ballots or filling in votes that have not been cast, and (iii) turnout buying or voter intimidation.

The first channel operates through *valid votes*. During the count, poll-watchers may dispute

⁷It is unclear whether poll-watchers are correcting errors or introducing a pro-party bias that deviates from the intended vote

poll-workers' rulings when a ballot cast for their party is wrongly deemed null, for instance when a voter marked the candidate's picture instead of the party logo. If a poll-watcher successfully convinces poll-workers that the vote should count, this increases their party's vote share. Conversely, they may argue that a ballot counted as valid for the opposing party should be invalidated, for instance when a voter circled rather than crossed their party of preference, or when there is handwritten text on the ballot. This would reduce the rival's vote share. However, poll-workers may be more receptive to arguments in favor of counting a vote than to arguments for invalidating one, as the latter can be perceived as suppressing a voter's expressed choice. If so, I would expect poll-watchers to have a larger effect on their own party's vote share than on their rival's. A further implication is that when both parties' poll-watchers are present simultaneously, both vote shares could rise as the overall share of null votes falls.

The second channel is *fraud*, which would occur if ballots left blank or unclaimed by absent voters are filled in for one of the candidates. Evidence of this would appear as an increase in turnout or a reduction in blank votes. Poll-watchers can play either role here: facilitating fraud or preventing it.

The third channel is *intimidation or vote-buying*. This typically operates at the district or school level, and most of the literature studying this mechanism relies on variation in poll-watcher presence across schools rather than classrooms. At the classroom level, where the vote is secret and multiple witnesses are present, this channel is unlikely to be relevant. An exception is noted by [Ascencio and Rueda \(2019\)](#), who find that in their setting, reading voters' names aloud as they approach the classroom facilitates monitoring of voting behavior by party poll-watchers, which is reflected in the positive effects on turnout they report.

Importantly, the Peruvian context lacks some of the features that have been identified as key mechanisms in prior work. In Argentina, each party is responsible for printing and distributing its own ballots, and [Casas, Díaz and Trindade \(2017\)](#) argue that poll-watchers removing opposition ballots is the main channel through which they affect results. In India, poll-workers exercise discretion over voter eligibility in areas with low identity document coverage, which [Neggers \(2018\)](#) finds to be a source of electoral bias. In Peru, by contrast, a single official ballot lists all candidates, and voters must present a national ID to vote. These

institutional features rule out both of the above mechanisms and make the Peruvian setting more comparable to elections in higher-capacity democracies.

2 Data

My data come from two official sources from ONPE, the Peruvian electoral institution.⁸ The first source is the official vote counts, which ONPE publishes publicly at the classroom level for both rounds of each election. These provide vote totals by party, blank votes, null votes, and turnout for each of the classrooms. The amount of schools, classrooms per school, and voters per classroom varies by year as shown in the first panel of [Table 1](#). The second source is the official voting registries, one per classroom, which are scanned and uploaded by ONPE after each election. After the count is completed, the three poll-workers destroy the ballots and record the total votes received by each party on the registry. Any poll-watchers present also sign the sheet and write down their party affiliation.

This handwritten information is my primary source of data on poll-worker and poll-watcher presence and party affiliation. In addition, both poll-workers and poll-watchers are required to write down their national ID number and full name, which I use to construct proxies for age and gender. From these records, I also extract timestamps that log the opening and closing times of both the voting period and the vote count, which allow me to construct the duration of each for every classroom. Further details on the data collection and processing procedure are provided in [Appendix A](#).

[Table 1](#) reports descriptive statistics for all three elections studied in this paper, which were decided by narrow margins. The 2011 runoff was won by fewer than half a million votes, a margin of 2.7%. The 2016 and 2021 elections were razor-thin: both were decided by fewer than 50,000 votes, corresponding to margins of just 0.2% of votes cast. With narrow margins like these, even small differences in how votes are counted could plausibly determine the outcome.

Poll-watcher coverage is considerably lower than in comparable settings. Across the three elections, between 37% and 54% of classrooms had any poll-watcher present, meaning

⁸I have only considered votes by citizens within Peru, excluding those cast in a foreign country. This is due to difficulties in obtaining some of the information from foreign registries due to the differences in format.

that in a large share of classrooms the vote count was conducted with no party supervision at all.⁹ Additionally, when poll-watchers are present, they tend to cluster together rather than monitor classrooms independently. Both poll-watchers are present in around a third of classrooms, much more frequently than either party alone, suggesting that parties respond to each other’s assignments. As I will show in the next section, the identification strategy relies on poll-watcher allocation being unrelated to potential outcomes within a school, after controlling for predicted second-round vote shares based on first-round results and the presence of the opposing party’s poll-watcher.

3 Empirical Strategy

The main empirical challenge to identify the poll-watcher effect on electoral results is that poll-watcher assignment is not random across the country. Because poll-watchers are volunteers, parties find it easier to recruit them in areas where they have more support. Panel (a) of [Figure 1](#) plots poll-watcher presence against party support at the district level and shows this relationship clearly. At the district or school level, poll-watcher presence is therefore likely to be correlated with electoral outcomes, making a simple comparison across schools uninformative.

Within a school, however, voters are assigned to classrooms primarily in alphabetical order, which produces groups of voters with similar ideological preferences across classrooms within the same school. Differences in poll-watcher presence across classrooms within a school are therefore unlikely to reflect differences in the underlying electoral preferences of voters.¹⁰ I therefore leverage within-school variation in poll-watcher presence to estimate its causal effect on the vote margin.

$$VoteMargin_{sc} = \alpha_s + \delta_W Obs_{sc}^W + \delta_L Obs_{sc}^L + \delta_{both} Obs_{sc}^{both} + \beta X_{sc} + \epsilon_{sc} \quad (1)$$

⁹This stands in contrast to settings like Argentina [Casas, Díaz and Trindade \(2017\)](#) and Mexico [Ascencio and Rueda \(2019\)](#), where coverage is substantially higher. In both countries, the party with greater coverage had poll-watchers present in around 90% of classrooms.

¹⁰[Cantú \(2014\)](#) and [Casas, Díaz and Trindade \(2017\)](#) find evidence consistent with this in the Mexican and Argentinian contexts respectively

Where $VoteMargin_{sc}$ ¹¹ is the vote share margin between the two parties in classroom j of school s , and Obs_{sc}^W , Obs_{sc}^L , and Obs_{sc}^{both} are indicators for whether a poll-watcher from the winning party alone, the losing party alone, or both parties are present in the classroom. α_s denotes school fixed effects and X_{sj} includes controls for other variables that may be related to poll-watcher assignment, discussed below. I expect δ_W to be positive, δ_L to be negative, and δ_{both} to be smaller in magnitude than either, as the two poll-watchers would offset each other to some extent.

The key assumption is that poll-watcher presence is unrelated to potential outcomes within a school. From conversations with electoral officials and party coordinators during election day, it appears that poll-watcher assignment does not follow any sophisticated or nationally coordinated strategy at the within-school level.

Below, I discuss some potential threats to identification and how I address them. First, although voters are assigned to classrooms alphabetically, classrooms within a school may not be perfectly homogeneous. Parties could observe some differences across classrooms that, if correlated with poll-watcher assignment, could introduce bias. [Figure 7](#) plots vote shares and poll-watcher presence by the first initial of the lead poll-worker’s surname and shows no systematic variation across initials, consistent with the alphabetical assignment producing groups of voters with similar underlying preferences. However, because classrooms have the same group of voters in both the first and second round, parties could in principle use first-round results to inform their poll-watcher assignments within a school. Panel (b) of [Figure 1](#) shows that even within a school, first-round vote shares are a strong predictor of second-round vote shares. If parties exploited this and assigned their poll-watchers to classrooms where they expected to perform better, estimates would be biased away from zero. I address this by controlling for predicted second-round vote shares based on first-round results in all specifications, which also accounts for any residual differences across classrooms within a school that parties could plausibly observe and act on. As a further check, I perform a placebo test of poll-watcher assignment on predicted second-round vote shares. [Figure 2](#) plots, for each of the three assignment types, the estimated effect on the actual vote share margin alongside the placebo estimate on the predicted margin, shown in gray, across a range

¹¹Defined as the winner’s vote share minus the loser’s vote share in percentage points

of sample restrictions. The main estimates remain stable throughout.

Second, poll-watchers can observe the presence of the other party’s poll-watcher on election day and may respond to it. Panels (c) and (d) of [Figure 1](#) show this clearly: panel (c) plots the observed share of classrooms with both parties’ poll-watchers against the share expected under independent random assignment, and panel (d) compares the actual distribution to both the random and maximum poll-watcher match benchmarks. Both panels indicate that poll-watchers from both parties are considerably more likely to be present in the same classroom than would be expected under independent random assignment. If both parties assigned poll-watchers independently of each other, one would expect both to be present in around 23% of classrooms. In practice, both are present in 34% of classrooms, close to the theoretical maximum of 35% if parties always matched their opponent’s poll-watcher presence, indicating that parties systematically place poll-watchers where the other party has already done so. An important advantage of the Peruvian setting is that there are only two parties in the runoff, which means I can fully account for all four possible combinations of poll-watcher presence: no poll-watcher (omitted), winner party alone, loser party alone, and both. This is less feasible in settings with more parties, such as [Casas, Díaz and Trindade \(2017\)](#) and [Ascencio and Rueda \(2019\)](#), where accounting for all possible interactions is impractical. By including all four cases explicitly in the specification, I control for this form of strategic co-location.

Third, a potential source of measurement error in poll-watcher presence arises if party poll-watchers stepped in to replace absent poll-workers on election day. In this case, they would appear in the voting registries as poll-workers rather than poll-watchers, leading their presence to be undercounted. Because a poll-watcher acting as a poll-worker has more influence than one sitting alongside the poll-workers in their designated role, this would likely bias my estimates toward zero. To assess whether this is driving results, I restrict the sample to classrooms whose poll-workers were the same in both the first and second round. Since poll-watchers are not present in the first round, any replacement would not affect first-round poll-worker composition. Results from this restricted sample are shown in [Figure 2](#) and are similar to the main estimates, suggesting this issue is not widespread enough to meaningfully affect the results. A related concern is that poll-workers themselves may have had undisclosed party affiliations, and that parties assigned poll-watchers accordingly. This is unlikely to be

a major issue given that formal party affiliation is very low in Peru, at under 0.5% of the population according to the 2021 household survey, and poll-workers are drawn at random from the registered voters of each classroom.

4 Results

4.1 The Effect of Poll-Watchers on the Vote Margin

Results from various specifications of equation (1) are shown in Table 2. Columns (1) through (4) begin with a simple regression and progressively add controls for a common sample. The estimated effects indicate that even in the most fully specified models, party poll-watcher presence, when alone, is associated with an increase in the vote margin in favor of that party. For example, column (5) indicates that when each party has its poll-watcher present alone, the effect on the vote margin is between 0.3 and 0.4 percentage points, which exceeds the winning margin in two of the three elections studied.

The first specification in column (1) regresses the vote margin on each poll-watcher presence category. Column (2) adds school fixed effects, which causes the coefficients to drop substantially: from 10.75 to 0.48 percentage points for the winner party poll-watcher, and from -18.67 to -0.31 percentage points for the loser party. This illustrates the selection problem when relying on across-school variation in poll-watcher presence: parties tend to have greater poll-watcher presence in schools where their support is higher. Importantly, once school fixed effects are included and identification relies on within-school variation in poll-watcher presence, the coefficients remain remarkably stable as first round controls and poll-worker demographics¹² are progressively added in columns (3) and (4). Since voters are assigned alphabetically to classrooms within a school, and the first letter of their last name is unrelated to their political preferences within a site, parties have little scope to strategize their poll-watcher assignments. Finally, since demographic controls are not always available and their inclusion does not affect the estimates, column (5) reports results for the full sample excluding the demographic controls from column (4). This will serve as the preferred specification throughout the rest of the paper.

¹²indicators for gender and age, proxied from first names and national ID numbers

The stability of the estimates to the addition of other potential sources of strategic assignment, such as first round results or salient characteristics of classroom poll-workers, provides strong evidence that within-school variation in poll-watcher presence is exogenous to the vote margin, and suggests that the resulting estimates can be interpreted as causal. Furthermore, as discussed in Section 3, panel (c) and panel (d) of Figure 1 show that one factor informing poll-watcher assignment is the presence of poll-watchers from the opposing party. Since the runoff election involves only two parties, and all poll-watcher configurations are observed, this does not bias the results.

4.2 Mechanisms

As discussed in Section 1, poll-watchers can affect results through three channels: (i) legitimate contestation of vote validity, (ii) fraud, and (iii) turnout buying or intimidation. Columns 2 through 8 of Table 3 allow me to examine which of these is at play.

Starting with the vote share decomposition in columns (2) and (3), the results are consistent with poll-watchers increasing their own party's vote share and reducing their rival's. When the winning party's poll-watcher is present alone, the winner's vote share increases by 0.16 percentage points and the loser's falls by a similar amount. The pattern is symmetric for the losing party's poll-watcher. However, in this case the effect on their vote share is somewhat larger than the effect on their rival's, which is consistent with poll-watchers being more effective at defending their own votes than at contesting their opponent's, as discussed in Section 1.

The evidence points toward the legitimate channel as the primary mechanism. When both poll-watchers are present, the vote margin is not significant, but null votes fall by 0.08 percentage points. Importantly, this is reinforced by the fact that count duration increases by 1.27 minutes, representing a 3.4% increase over the mean of 37.59 minutes, consistent with longer deliberations over disputed ballots during the count. By contrast, the effects on blank votes and turnout are small and generally insignificant across all configurations, which argues against fraud or turnout buying as relevant mechanisms. The effects on voting duration are also small relative to the mean of 539.79 minutes, suggesting that poll-watcher presence does not meaningfully alter the voting process itself.

5 Robustness Checks

Results from the main specification are robust to a number of alternative samples and specifications, all of which are summarized in [Figure 2](#).

5.1 Classrooms with the Same Poll-Workers as the First Round

One concern is that poll-watchers may have replaced absent poll-workers on election day, appearing in the voting registries as poll-workers rather than poll-watchers. To address this, I restrict the sample to classrooms whose poll-workers were the same in both the first and second round, using the poll-worker IDs recorded in the voting registries. Matching IDs across rounds is imprecise and tends to produce false negatives rather than false positives, so this restricted sample is best understood as a conservative subset of classrooms where replacement is unlikely to have occurred. Results are similar to the main estimates, suggesting that unobserved poll-watcher replacement is not widespread enough to meaningfully affect the findings.

5.2 On-Time Classrooms

A related proxy for poll-worker replacement is whether a classroom opened on time. When all poll-workers show up as assigned, the classroom generally opens on schedule; delays are more likely when a poll-worker is absent and needs to be replaced. I therefore restrict the sample to classrooms that opened on time, using the opening timestamps recorded in the voting registries. Results are again similar to the main estimates, further supporting the conclusion that unobserved poll-watcher replacement is not driving the findings.

5.3 Placebo Test: Predicted Second Round Votes

[Figure 2](#) also displays, as a placebo test, the effect of each poll-watcher configuration on the predicted second-round vote margin based on first-round results. These effects are close to zero across all configurations, supporting the identifying assumption that parties are not systematically assigning poll-watchers to classrooms where they expect to perform better. In some cases the placebo estimates are slightly positive, suggesting a mild tendency for parties

to favor classrooms where the winning party had a projected advantage. However, the loser party coefficient goes in the opposite direction, and any remaining tendency is in any case addressed by controlling for predicted second-round vote shares in all specifications.

6 Conclusion

I find that poll-watchers affect the vote margin in their favor by up to 0.4 percentage points when present alone, an effect that exceeds the winning margin in two of the three elections studied. The effects are similar for both parties and are consistent with poll-watchers increasing their own party's vote share while reducing their rival's. When both parties' poll-watchers are present simultaneously, their effects offset each other and the vote margin is not significantly different from classrooms with no poll-watchers.

The evidence points toward legitimate contestation of ballots during the count as the primary mechanism. Poll-watchers appear to be more effective at defending their own party's votes than at contesting their opponent's votes, consistent with poll-workers being more receptive to arguments in favor of counting a vote than to arguments for invalidating one. This is corroborated by the effect on count duration: when both poll-watchers are present, the duration of the ballot count increases by 3.4%, consistent with longer deliberations over disputed ballots, while the effects on blank votes, turnout, and voting duration are small and insignificant across all configurations.

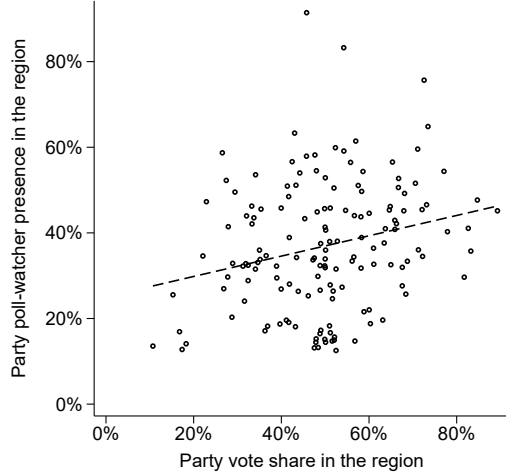
These findings are relevant beyond the Peruvian context. As razor-thin electoral margins become increasingly frequent [Geruso and Spears \(2026\)](#); [Levine and Martinelli \(2024\)](#), the role of poll-watchers in determining outcomes grows in importance. The results suggest that poll-watchers can influence electoral outcomes even through entirely legitimate means, and that asymmetries in party coverage across classrooms can have consequences for the integrity of the count.

References

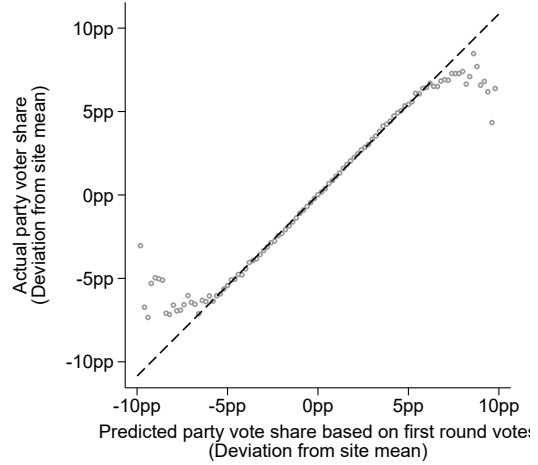
- Ascencio, Sergio J., and Miguel R. Rueda.** 2019. "Partisan Poll Watchers and Electoral Manipulation." *American Political Science Review*, 113(3): 727–742.
- Asunka, Joseph, Sarah Brierley, Miriam Golden, Eric Kramon, and George Ofofu.** 2019. "Electoral Fraud or Violence: The Effect of Observers on Party Manipulation Strategies." *British Journal of Political Science*, 49(1): 129–151.
- Berman, Eli, Michael Callen, Clark C. Gibson, James D. Long, and Arman Rezaee.** 2019. "Election fairness and government legitimacy in Afghanistan." *Journal of Economic Behavior & Organization*, 168: 292–317.
- Besley, Timothy, and Anne Case.** 1995. "Does Electoral Accountability Affect Economic Policy Choices? Evidence from Gubernatorial Term Limits*." *The Quarterly Journal of Economics*, 110(3): 769–798.
- Buzin, Andrei, Kevin Brondum, and Graeme Robertson.** 2016. "Election observer effects: A field experiment in the Russian Duma election of 2011." *Electoral Studies*, 44: 184–191.
- Cantú, Francisco.** 2014. "Identifying Irregularities in Mexican Local Elections." *American Journal of Political Science*, 58(4): 936–951.
- Casas, Agustín, Guillermo Díaz, and André Trindade.** 2017. "Who monitors the monitor? Effect of party observers on electoral outcomes." *Journal of Public Economics*, 145: 136–149.
- Cohen, Mollie J, and Geoffrey Sheagley.** 2024. "Partisan Poll Watchers and Americans' Perceptions of Electoral Fairness." *Public Opinion Quarterly*, 88(SI): 536–560.
- Ferraz, Claudio, and Frederico Finan.** 2008. "Exposing Corrupt Politicians: The Effects of Brazil's Publicly Released Audits on Electoral Outcomes*." *The Quarterly Journal of Economics*, 123(2): 703–745.

- Geruso, Michael, and Dean Spears.** 2026. “The Risk of Narrow, Disputable Results in the U.S. Electoral College.” *The Review of Economics and Statistics*, 1–10.
- Hyde, Susan D.** 2007. “The Observer Effect in International Politics: Evidence from a Natural Experiment.” *World Politics*, 60(1): 37–63.
- Hyde, Susan D.** 2010. “Experimenting in Democracy Promotion: International Observers and the 2004 Presidential Elections in Indonesia.” *Perspectives on Politics*, 8(2): 511–527.
- Ichino, Nahomi, and Matthias Schündeln.** 2012. “Deterring or Displacing Electoral Irregularities? Spillover Effects of Observers in a Randomized Field Experiment in Ghana.” *The Journal of Politics*, 74(1): 292–307.
- Leeffers, Stefan, and Pedro C. Vicente.** 2019. “Does electoral observation influence electoral results? Experimental evidence for domestic and international observers in Mozambique.” *World Development*, 114: 42–58.
- Levine, David K., and Cesar Martinelli.** 2024. “Razor-Thin Mass Elections with High Turnout.” *International Economic Review*, 65(4): 1607–1624.
- Mbozi, Fanisi.** 2025. “When Do Voters See Fraud? Evaluating the Effects of Poll Supervision on Perceptions of Integrity.” *Journal of Experimental Political Science*, 12(1): 27–41.
- Neggers, Yusuf.** 2018. “Enfranchising Your Own? Experimental Evidence on Bureaucrat Diversity and Election Bias in India.” *American Economic Review*, 108(6): 1288–1321.
- Shen, Zejiang, Ruochen Zhang, Melissa Dell, Benjamin Charles Germain Lee, Jacob Carlson, and Weining Li.** 2021. “LayoutParser: A Unified Toolkit for Deep Learning Based Document Image Analysis.” arXiv:2103.15348 [cs].
- Sjoberg, Fredrik M.** 2012. “Making Voters Count: Evidence from Field Experiments about the Efficacy of Domestic Election Observation.”
- Sjoberg, Fredrik M.** 2016. “Bring the party back in: Institutional design for ‘smart election fraud’.” *Electoral Studies*, 44: 307–318.

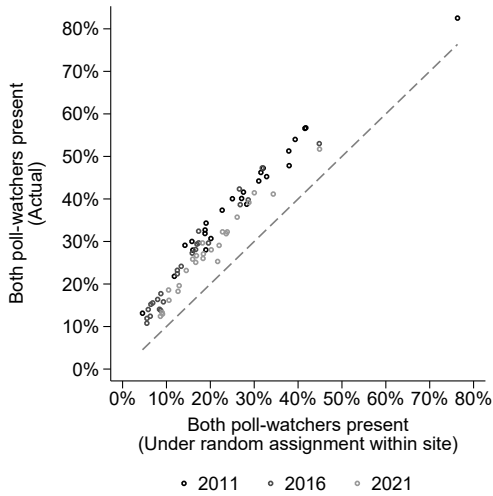
Figure 1: Identification strategy assumptions



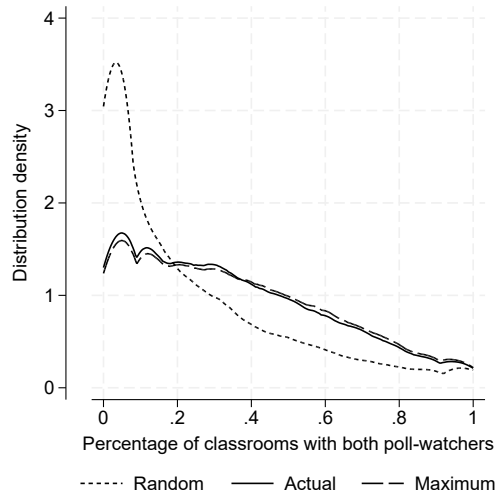
(a) Vote share and observer presence



(b) Actual vs predicted second round votes



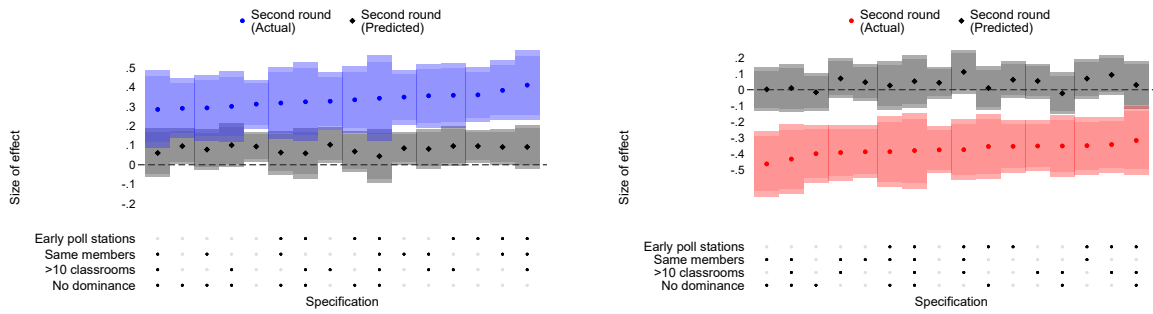
(c) Observers matching each others' presence



(d) Both poll-watcher's presence different assumptions

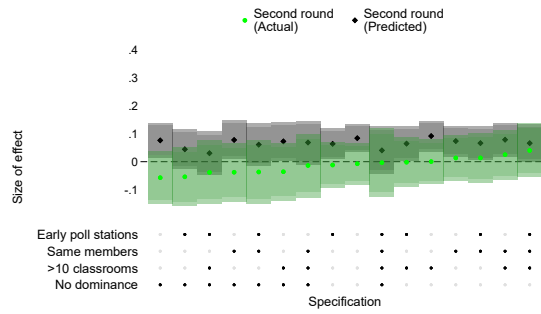
Notes: Panel (a) shows the relationship between party support and poll-watcher presence. Panel (b) shows that even within a polling site, first round votes are a strong predictor of second round votes. Panel (c) plots, for each region-year, the share of polling stations with poll-watchers from both parties on the y-axis against the share that would be expected under random within-site assignment on the x-axis. Panel (d) shows the distribution of classrooms with poll-watchers from both parties under three assignment strategies: (i) random assignment by each party independently (short dash), (ii) the actual observed assignment (solid line), and (iii) the maximum possible overlap, if each party perfectly matched the other's poll-watcher placement (long dash). Panels (c) and (d) together show that poll-watchers from both parties are considerably more likely to be present in the same classroom than would be expected under independent random assignment.

Figure 2: Effect of poll-Watchers



(a) Winner party observer alone

(b) Loser party observer alone



(c) Both observers

Notes: We show effects on the vote share margin (winner minus loser) of different observer assignments: winner party alone in panel (a), shown in blue; loser party alone in panel (b), shown in red; and both observers in panel (c), shown in green. In each case we show results on the predicted vote share margin based on first round results in grey. We do this for different samples: tables that open on time, with similar number of registered voters, with the same set of table members than in the first round and without areas with strong domination of one party. 90% and 95% intervals are displayed.

Table 1: Descriptive statistics

	2011	2016	2021
Panel A: Electoral Setting			
Districts	2,176	1,960	2,072
Polling Sites (schools)	4,924	5,234	11,841
Polling-stations (classrooms)	107,436	77,290	86,482
Classrooms per school	21.8	14.8	7.3
Registered voters per classroom	185.7	296.5	292.3
Panel B: First Round Results			
<i>Participation</i>			
Votes per polling-station	155.5	243.9	207.6
Turnout (%)	84.0	82.1	71.1
<i>Vote (%)</i>			
Winner party	27.8	17.3	15.4
Loser party	20.7	32.7	10.9
Other parties	39.3	32.6	55.0
Blank	8.8	11.9	12.4
Null	3.4	5.5	6.3
Panel C: Second Round (Runoff) Results			
<i>Participation</i>			
Votes per polling-station	153.3	237.3	218.0
Turnout (%)	82.9	80.4	75.1
<i>Vote (%)</i>			
Vote margin	2.7	0.2	0.2
Winner party	48.2	46.9	46.9
Loser party	45.5	46.6	46.6
Blank	0.7	0.8	0.6
Null	5.6	5.7	5.9
<i>Poll-watcher presence</i>			
None	46.4	63.3	52.7
Winner party alone	3.8	5.6	5.1
Loser party alone	8.4	2.8	12.9
Both	41.4	28.2	29.3
<i>Duration (minutes)</i>			
Vote duration	470.6	467.0	700.3
Vote count duration	.	40.9	40.7

Note: This table shows descriptive statistics for the first and second (runoff) rounds of the three presidential elections studied in this paper (2011, 2016, and 2021). Panel A shows the aggregate and average characteristics of the electoral setting. The unit of observation in the analysis is the polling station (classroom) level, using polling-site (school) fixed effects. Each observation corresponds to the average vote share out of the total number of registered voters in the classroom. Panel B shows results for the first round. In none of the three elections did any party obtain more than 50% of the votes, which triggered a runoff election. Winner and Loser parties refer to the eventual winner and runner-up of the second round. Turnout is computed as the share of registered voters who cast a ballot. Vote shares are expressed as a percentage of total votes cast, including blank and null votes. Panel C shows results for the second round. The vote margin is defined as the difference in vote share between the winning and losing party, with margins of approximately 0.2% in the 2016 and 2021 elections. Pollwatcher presence categories are mutually exclusive and reported as a percentage of classrooms. Vote duration refers to the total number of minutes the polling station was open for voting. Vote count duration refers to the number of minutes taken to count the ballots after closing

Table 2: Effect of poll-watchers on the vote margin

	Vote margin in percentage points (winner - loser)					
	(1)	(2)	(3)	(4)	(5)	(6)
Winner only	10.75*** (0.57)	0.95*** (0.12)	0.48*** (0.09)	0.41*** (0.08)	0.41*** (0.08)	0.31*** (0.06)
Loser only	-18.67*** (0.79)	-1.11*** (0.17)	-0.31*** (0.11)	-0.38*** (0.09)	-0.38*** (0.09)	-0.38*** (0.07)
Both	-3.21*** (0.35)	0.22*** (0.08)	0.10* (0.06)	-0.00 (0.05)	-0.01 (0.05)	-0.01 (0.04)
School FE	No	No	Yes	Yes	Yes	Yes
District FE	No	Yes	No	No	No	No
First round controls	No	No	No	Yes	Yes	Yes
Poll-workers demographics	No	No	No	No	Yes	No
Mean	2.44	1.28	1.33	1.33	0.50	2.09
N	170,412	170,412	170,412	170,412	170,412	258,288

Note: This table reports estimates of the effect of poll-watcher presence on the second round vote margin, expressed in percentage points as the difference in vote shares between the winner and runner-up. The three poll-watcher presence categories are mutually exclusive: *Winner only* indicates that only the winning party had a poll-watcher present, *Loser only* indicates that only the losing party had a poll-watcher present, and *Both* indicates that both parties had a poll-watcher present. The omitted category is polling stations with no poll-watcher present. Columns (1) through (5) report results for a common subsample with complete observations for all variables, for comparability. Column (1) reports the baseline estimate with no controls or fixed effects. Column (2) adds district fixed effects. Column (3) adds polling-site (school) fixed effects, which captures most of the variation in poll-watcher assignment and its relationship with vote margins. Column (4) further adds a predicted vote margin based on first round results. Column (5) adds poll worker demographics, including a gender indicator proxied by first name and an above-30 age indicator proxied by national ID number. Column (6) shows the preferred specification, which uses the full sample and excludes the demographic controls from column (5). Standard errors are clustered at the polling-site level and reported in parentheses. ***p<0.01, **p<0.05, *p<0.1.SSS

Table 3: Mechanisms – Effect on vote shares, turnout, vote duration, and count duration

	Vote shares (percentage points)					Participation, and voting and count duration		
	(1) Margin (W-L)	(2) Winner	(3) Loser	(4) Null	(5) Blank	(6) Turnout	(7) Voting duration (min)	(8) Count duration (min)
Winner only	0.31*** (0.06)	0.16*** (0.04)	-0.16*** (0.04)	0.01 (0.06)	-0.01** (0.01)	-0.00 (0.03)	-0.21 (0.38)	0.13 (0.22)
Loser only	-0.38*** (0.07)	-0.12** (0.05)	0.23*** (0.05)	-0.11 (0.07)	0.00 (0.01)	-0.02 (0.04)	-0.90* (0.49)	-0.56* (0.30)
Both	-0.01 (0.04)	0.05* (0.03)	0.03 (0.03)	-0.08** (0.04)	0.00 (0.00)	0.00 (0.02)	-0.41* (0.24)	1.27*** (0.15)
School FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
First Round Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mean	2.09	47.78	45.69	5.79	0.74	80.79	539.79	37.59
N	258,288	258,288	258,288	258,288	258,288	258,289	199,342	206,570

Note: This table reports estimates of the effect of poll-watcher presence on second round outcomes at the polling station level. The three poll-watcher categories are mutually exclusive: *Winner only* indicates that only the winning party had a poll-watcher present, *Loser only* indicates that only the losing party had a poll-watcher present, and *Both* indicates that both parties had a poll-watcher present. The omitted category is polling stations with no poll-watcher present. Columns (1) through (5) report effects on vote shares, expressed as a percentage of total votes cast. Column (1) reports the effect on the margin between the winner and loser. Columns (2) and (3) report effects on the winner and loser vote shares respectively. Columns (4) and (5) report effects on null and blank vote shares. Column (6) reports the effect on turnout, measured as the share of registered voters who cast a ballot. All share variables are expressed in percentage points (0 to 100). Columns (7) and (8) report effects on voting duration and count duration in minutes respectively. The smaller sample in these columns reflects missing duration data for some polling stations due to difficulties extracting this information from the voting registries. All specifications include polling-site fixed effects and first round controls, defined as the predicted second round vote share based on first round results. Standard errors are clustered at the polling-site level and reported in parentheses. ***p<0.01, **p<0.05, *p<0.1.

Appendix

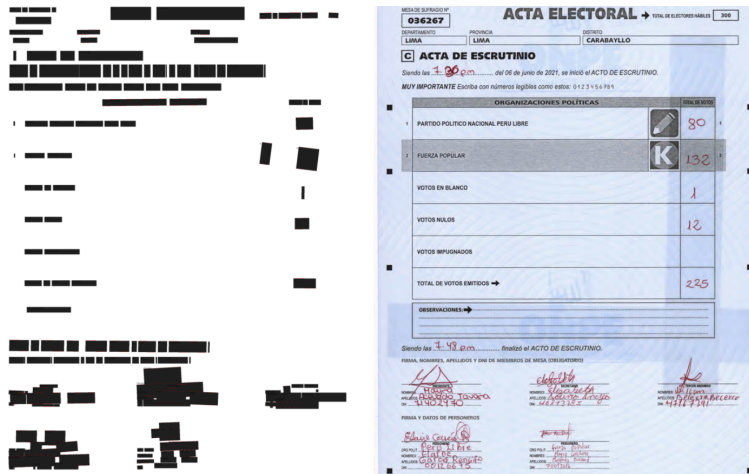
A1 Data Collection

To construct the poll-watcher presence data, I used a combination of direct data access, image-to-text software, manual review, and AI image recognition. The steps followed were: (i) accessing vote counts from the first and second rounds directly through the ONPE database, along with the 81,671 scanned voting registry records containing poll-watcher information; (ii) using Layout-Parser (Shen et al. (2021)), an image-to-text software, to analyze the handwritten sections of each registry and assign poll-watcher status to each classroom – this software identifies text blocks as shown in Figure 3, but because it is designed for printed rather than handwritten text, recognition is imperfect; (iii) since only one poll-watcher per party is permitted, cases where two poll-watcher text blocks are detected are coded as having both parties present, even when party affiliation cannot be independently confirmed for each; (iv) once a preliminary assignment to each poll-watcher presence category is determined, I proceed to manually review the registries to correct any misclassifications;¹³ and (v) all registries are then processed through AI image recognition¹⁴ to more precisely identify timestamps, national ID numbers, and full names of poll-workers and poll-watchers, as well as the party affiliation of poll-workers, which is used to validate and further improve poll-watcher identification.

¹³The manual review was conducted separately for each pre-assigned group, which expedited the process since most entries were already correct.

¹⁴Cropped images for each timestamp and each poll-worker and poll-watcher entry were analyzed using Gemini 2.5 Flash Lite.

Figure 3: Voting registry and algorithm to detect handwritten text



Notes: The figure on the left shows how the Layout-Parser software identifies textblocks from the print and handwritten information in the right.

A2 Other Figures and Tables

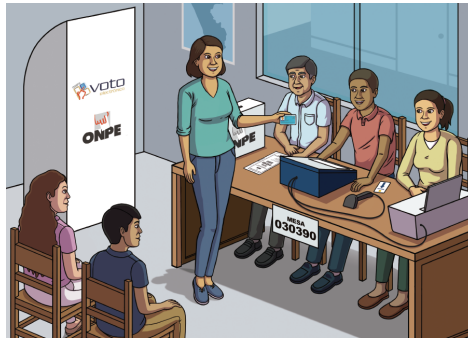
Figure 4: Election day in Peru



(a) Electoral site (school)



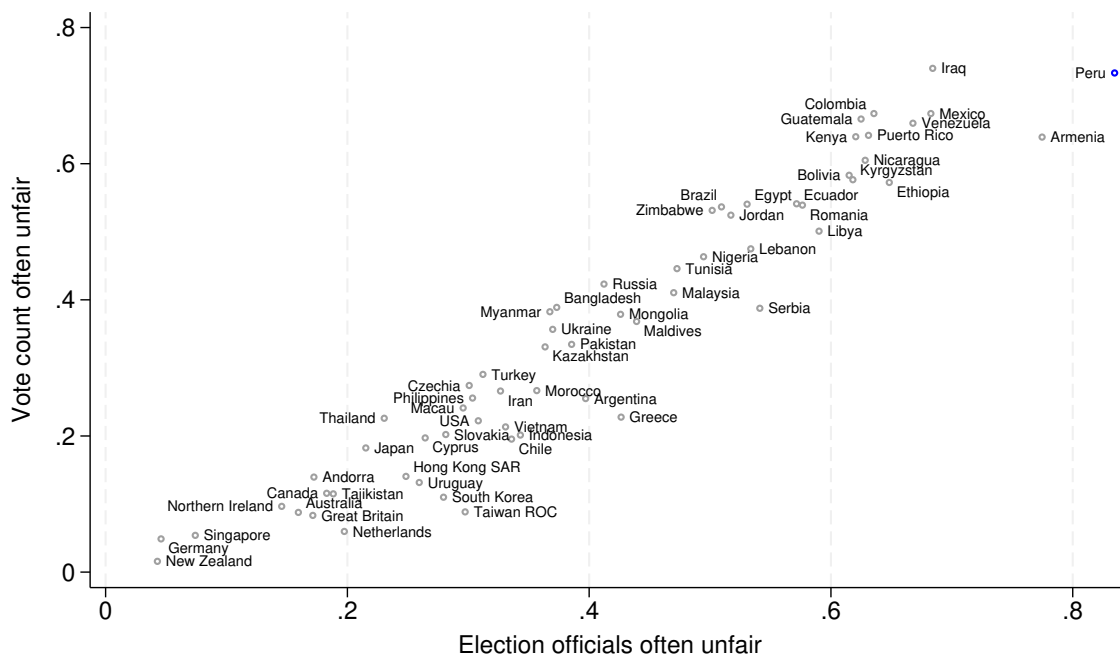
(b) Line outside electoral table (classroom)



(c) Table members (right), voter (center) and observers (left) in a voting table (classroom)

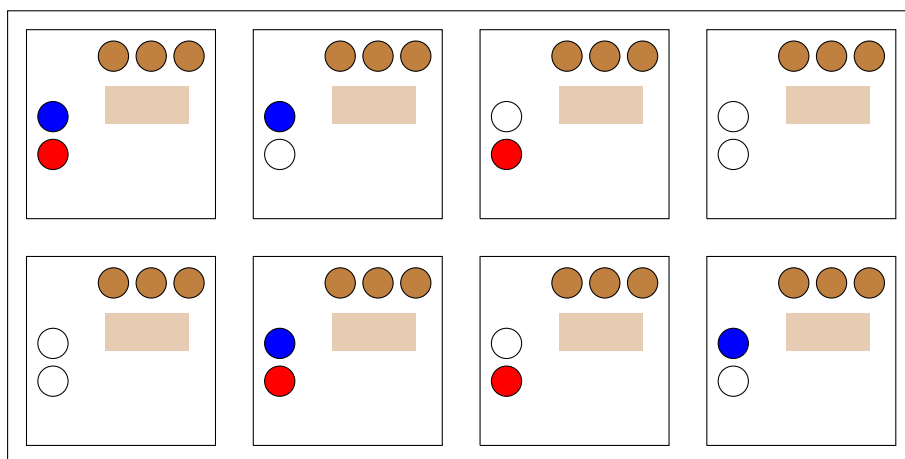
Notes: These images show how voting takes place on election day. Image (a) shows the outside of a polling site (school), where voters can see which classroom they are assigned to based on their ID and last name. Image (b) shows voters in a polling station (classroom) lined up and waiting for their turn to vote. Image (c) shows the different actors inside the classroom: three poll-workers (top right), drawn from the voter pool assigned to that classroom, are responsible for overseeing the voting process, verifying IDs, and counting votes. The voter (middle) steps behind a voting booth to cast their ballot. The party poll-watchers (bottom left) monitor the process and may flag any irregularities. During the vote count, they may challenge any ballot they believe was counted improperly.

Figure 5: Percentage of individuals who consider election officials and vote count to be often unfair



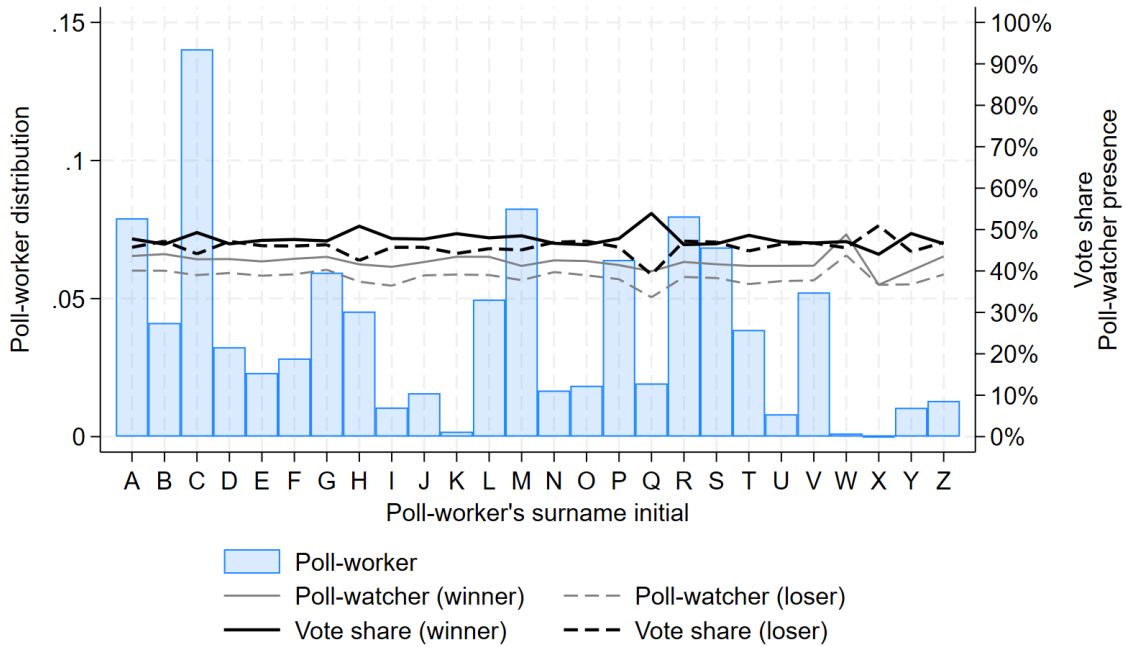
Notes: Data from the World Values Survey (2017–2022). The x-axis shows the share of surveyed individuals who responded “Not at all often” or “Not often” to the question “How often in your country’s elections: Election officials are fair?” The y-axis shows the share of surveyed individuals who responded “Not at all often” or “Not often” to the question “How often in your country’s elections: Votes are counted fairly?”.

Figure 6: Research Design



Notes: The following figures shows an example of an election site with 8 tables. Each of these has one of 4 possible observer assignments (red and blue). The analysis focuses on how each of the 4 possible cases deviates from the site mean considering that once controlling for first round votes, within a site, there is not much more than parties can do to inform their allocation that would be related to potential outcomes.

Figure 7: Validating random assignment



Notes: The left axis shows the distribution of poll workers and poll-watchers by first initial of the lead poll worker's last name. The right axis shows the average vote share for the winner and runner-up parties. The x-axis shows the first initial of the lead poll worker's last name, which serves as a proxy for the last names of voters assigned to that classroom, since voters are assigned to classrooms alphabetically. The figure shows no strong association between alphabetical assignment and voting patterns, which supports the assumption that classrooms can be considered similar within a school. Moreover, since these are national averages, within-site variation would be even smaller. Main estimates are robust to excluding initials that exhibit the largest differences in vote shares.