



Observing the Observers: The OAS in the 2019 Bolivian Elections

By Jake Johnston and David Rosnick*

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Center for Economic and Policy Research
1611 Connecticut Ave. NW
Suite 400
Washington, DC 20009

Tel: 202-293-5380
Fax: 202-588-1356
<https://cepr.net>

*Jake Johnston is a Research Associate at the Center for Economic and Policy Research. David Rosnick is an Economist at CEPR.

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Executive Summary

The Organization of American States (OAS) regularly organizes observation missions tasked with monitoring elections throughout Latin America and the Caribbean. These missions, which provide assessments on the fairness, reliability and transparency of an electoral process, are generally conducted in a relatively impartial and professional way. At times, however, these missions have acted in a biased and unprofessional way and, as a result, have undermined the democratic institutions of the host country. This was the case in 2010 in Haiti, when an OAS Special Audit Mission controversially recommended changing the results of the country's presidential elections, despite having no reasonable justification for doing so.

As this report shows, the OAS's observation activities in Bolivia's 2019 general elections are the latest example of a deeply problematic observation mission whose dishonest, biased, and unprofessional conduct has caused serious damage to the country's democracy.

In a series of statements and reports released between late October and early December, the OAS has alleged that serious irregularities occurred during the vote count following Bolivia's October 20 elections with the implication that there was deliberate manipulation of the results that changed the final outcome. In previous papers, we have shown how the very data on which the OAS based its initial allegations clearly contradicted these allegations. Jack Williams and John Curiel, two researchers at the Massachusetts Institute of Technology (MIT) Election Data and Science Lab, have replicated our findings, and concluded that "we cannot find results that would lead [...] to the same conclusion as the OAS."

This study focuses primarily on the "Final Report" of the OAS audit of the election results and shows how the authors of that report misrepresent the data and evidence found in the audit in an attempt to further bolster their claims of intentional manipulation on the part of Bolivia's former electoral authorities. The OAS Final Report identifies many real problems with the management of the elections that should be addressed. However, despite claims to the contrary, it does not provide any evidence that those irregularities altered the outcome of the election, or were part of an actual attempt to do so.

This study is not intended to validate the election results stemming from the October 20 vote, nor does it seek to support a particular candidate or political party. Rather, our analysis is focused on the OAS's actions and public reports on the Bolivian elections. The credibility of the OAS has tremendous implications for the next Bolivian election and for electoral processes

throughout the hemisphere. A multilateral organization that is called upon to resolve an electoral dispute must be honest, impartial, and credible. This study shows that the OAS was none of these in the case of the Bolivian electoral crisis of 2019.

The unethical conduct of the OAS in Bolivia has had deeply disturbing consequences. The fraud narrative that the OAS helped promote contributed to Evo Morales, the country's democratically elected president, fleeing the country — aboard a plane sent by Mexico — months before his term ended; other officials — including former members of Bolivia's electoral authority — sit in jail; and an unelected de facto government has assumed power with the support of the military and has engaged in violent repression of protests, the persecution of political opponents, and a drastic change in foreign policy.¹

Background

On October 20, 2019, Bolivians went to the polls to participate in general elections. At the presidential level, the incumbent, Evo Morales, running for a controversial fourth term,² faced a fractured opposition represented by eight candidates. At the invitation of the Bolivian government, the Organization of American States (OAS) deployed an Electoral Observation Mission (EOM) to monitor the vote.

At about 7:45 p.m., the country's electoral authority — the Tribunal Supremo Electoral (TSE) — announced preliminary, nonbinding results with 83.85 percent of votes processed by the preliminary results transmission system (TREP). Movimiento al Socialismo (MAS-ISPS) candidate Morales's margin over his closest competitor, Comunidad Ciudadana (CC) candidate Carlos Mesa, was 7.9 percentage points — below the 10 percentage point threshold necessary for a first-round win.³ The transmission of preliminary results then stopped, though the much slower official vote count process continued uninterrupted. The TSE provided no clear public explanation as to the reason for the stoppage, or whether they intended to continue with the TREP at all (2019 was the first time the TREP was used for a presidential election, but in previous votes the TREP never processed 100 percent of votes).

¹ Long (2020).

² Bolivia's constitutional court issued a ruling allowing Evo Morales to run for a fourth term despite a constitutional referendum held in 2016 in which 51.3 percent of voters chose not to allow indefinite reelection. The TSE ratified Morales's candidacy.

³ In Bolivian elections, a candidate must receive 50 percent of the vote or 40 percent of the vote and a 10 percentage point lead over the second-place candidate in order to win the election in the first round.

Box 1. Understanding Bolivia's Election and Results Transmission Systems

More than 7 million registered voters were able to participate in Bolivia's October 2019 election. Across the country's nine departments, there are 340 municipalities and 3,532 "locations," a narrower geographic level. Across these locations, electoral authorities set up 5,131 precincts, or voting centers. Electoral authorities set up an additional 165 voting centers abroad for Bolivians living outside the country.

Each voting center contains voting tables and each table has six electoral jurors who perform a mandatory citizens' role akin to jury duty in the US judicial system. In Bolivia, 207,322 citizens were randomly selected to be jurors and trained a month before the elections.⁴

Once voting has concluded, poll workers count individual ballots and aggregate the results into actas, or tally sheets. There are more than 34,000 tally sheets corresponding to individual voting tables within the 5,296 voting centers.

All six jurors in each voting center must sign off on the tally sheet. Representatives of political parties may also be present at the voting centers. Any person or political organization is able to monitor the vote-counting process as an observer.

There are two systems for the transmission of the results. The first is a preliminary, nonbinding count known as the *Transmisión de Resultados Electorales Preliminares (TREP)*. For the TREP, operators in the field are provided with a smartphone and mobile application, which they use to transmit a photo of the tally sheet to a team of verifiers within SERECI (the civil registry). The field operators also input the results from the tally sheet into the mobile application. When the data inputted by the field operator and the SERECI verifier match, the tally sheet is considered verified and made available online. Due to geographic limitations and time constraints, the TREP is not intended to process 100 percent of the tally sheets.

The second vote-counting system is the official count (or *Cómputo*), which is legally binding under Bolivian law. The official count is more thorough and precise and takes longer. For the *Cómputo*, the tally sheets are physically delivered to electoral tribunals in each department and then manually scanned into the *Cómputo* system. At this stage, electoral officials also check associated electoral material, like voter lists, to confirm the validity of the tally sheet results. It is the only legally valid vote tallying system, and the TSE uses it to determine and announce the final election results.

Images of the tally sheets from both systems are made available online to anyone who wishes to confirm that the information on the physical tally sheets matches the information entered into the system. Periodic timestamped Excel sheets with detailed results are also made available online. Political parties can also ensure that their copy of the tally sheet matches what is published online. This makes it easy to check for inconsistencies, and for any errors to be quickly corrected.

While the TREP provides a preliminary vote total, it also serves as a means of protection against fraud. With two sets of results, each inputted through separate processes, it is possible to cross-check the two systems to verify the accuracy of the results.

At 6:30 p.m. the day after the election, the TSE announced updated TREP results with 94.94 percent of the votes processed. Morales's margin had grown to 10.15 percentage points — above the threshold for winning in the first round. Soon afterward, the EOM issued a press release denouncing an “inexplicable” change in the trend of the vote that “drastically modifies the fate of the election and generates a loss of confidence in the electoral process.” Leaders of Bolivia's opposition, and many media outlets, interpreted this change in trend as *prima facie* evidence that fraud had taken place.

Protests against alleged electoral fraud spread throughout the country. Over the following days, protesters attacked departmental electoral offices, resulting in the destruction of original electoral material and the disruption of the official vote tabulation process. On October 25, the TSE announced official results showing Morales winning in the first round with a 10.56 percentage point margin — a figure consistent with the preliminary results. The opposition and those protesting alleged fraud refused to recognize these results.

The Bolivian government requested the OAS to send a team of experts to audit the results and provide clarity amid a burgeoning political crisis. Morales, whose existing mandate was supposed to last until January 22, 2020, agreed to abide by the recommendations of the OAS audit team. An agreement was signed by the Bolivian government and by OAS Secretary General Luis Almagro. The Group of Auditors (GOA), under the auspices of the OAS's Department of Electoral Cooperation and Observation (DECO), initiated its work in Bolivia on October 31.

The mandate of the GOA was to verify the official results of the election, including by analyzing the chain of custody of electoral material and by assessing the information technology (IT) systems used in the preliminary (TREP) and official (Cómputo) vote counts.⁵

The OAS released a preliminary report on its audit on November 10,⁶ alleging significant IT security vulnerabilities that could have been used to manipulate the results and realleging prior claims of an improbable change in the trend of the vote. The preliminary report recommended a new electoral process with a new TSE. While rejecting the underlying allegations of fraud, Morales expressed his support for new elections. However, later that day Morales resigned

⁴ Guarachi and Melgarejo (2019).

⁵ The mandate of the GOA focused specifically on the vote counting process and not on the campaign or other pre-election day matters. The focus of the audit would be on “the verification of the vote count, including tally sheets, ballots and votes; the verification of the process, including matters relating to computing; the statistical and projection component, as well as the chain of custody of the ballot boxes,” the OAS noted in a press release announcing the formation of the audit team. OAS (2019a).

⁶ OAS (2019b).

under pressure from the high command of the country's military, which "recommended," during a press conference, that Morales step down. Morales received political asylum in Mexico and is currently in Argentina, which has granted him refugee status.

Under the resulting de facto government, there has been an increase in human rights violations perpetrated by state security forces, and repression of protests and activists. At the time of this writing, the de facto government has detained more than 40 electoral officials allegedly involved in electoral fraud and levied charges of sedition and terrorism against leading MAS politicians, including Morales. New elections, with a new TSE, are scheduled for May 2020; Morales has been ruled ineligible to participate as a Senate candidate. The OAS has again pledged to send an observer mission for the upcoming vote.

The OAS published the final version of the GOA's Electoral Integrity Analysis (referred to from here on as the "Final Report"), on December 4, 2019. In an accompanying press release, the OAS stated that there was "intentional manipulation" and "serious irregularities" that made it impossible to validate the election results.⁷ The audit concludes, "There has been a series of intentional operations aimed at altering the will expressed at the polls."

The Final Report contains five main findings:

1. The IT systems for both preliminary election results and the final count were flawed and allowed for manipulation.
2. The process to fill out the tally sheets was marred by irregularities and forgeries that benefitted one candidate.
3. The deficient chain of custody did not guarantee that election material was not manipulated and/or replaced.
4. The final 4.4 percent of tally sheets contained an elevated number of "comments" or corrections.
5. The trend of the final 5 percent of the vote was highly improbable.

The final two findings are considered pieces of "evidence." The two pieces of evidence are not, in and of themselves, evidence of fraud, but rather are used by the GOA as indicators of how potential fraud may show up in the data. Additionally, the Final Report presents a list with each individual finding, which contains 12 "deliberate actions that sought to manipulate the results of the election," 13 "grave irregularities," and seven "errors." At least 14 of the 25 most significant findings relate to the nonbinding TREP.

⁷ The phrase "intentional manipulation" does not actually appear in the Final Report itself.

Main Findings Relating to the OAS Final Report

This study details the actions of the Bolivia EOM, DECO, and OAS Secretary General Luis Almagro, and provides an in-depth analysis of the OAS's Final Report of the Bolivian election results.

The first section of our report focuses on the false claims made by the EOM that strongly contributed to a narrative of electoral fraud in the lead-up to Morales's forced resignation. The EOM, on at least three different occasions, publicly claimed there was an inexplicable change in trend despite the presence of clear contradictory evidence. The preliminary report on the audit and the Final Report reiterate this false claim. OAS actions and statements played a central role in the events that led to the forced departure of President Evo Morales, and the de facto government has used OAS statements and reports to justify violations of human rights. It is important to consider the Final Report within this broader context.

The next section provides an overview of international standards and principles of international postelection audits and details postelection verification strategies. The International Foundation for Electoral Systems (IFES), warns that, while these types of audits may help reestablish confidence in the results amid allegations of fraud, they “should be used only in limited circumstances and according to clearly defined rules.” The section also discusses the only prior example of an OAS audit mission, in 2010 in Haiti, which failed to comply with basic audit principles and had a long-term damaging impact on that country's democracy.

The remaining sections of this study focus specifically on the Final Report. We find the Final Report to be statistically flawed and lacking clear methodology or standards. Further, the Final Report fails to report the results of the GOA's own verification exercises and buries, omits, or misrepresents facts and data that run counter to its conclusions. Far from providing a neutral and independent assessment that could provide greater clarity in the midst of a highly polarized environment, the Final Report represents an apparent attempt by the organization to justify its previous actions — including its repeated false claims about an “inexplicable” trend change after the stoppage of the TREP.

Ultimately, the responsibility for the management of the results system — both the TREP and Cómputo — lies with TSE officials and other electoral officials tasked with carrying out the elections. Certainly, the failure of the TSE to provide a clear public explanation for the decision to halt the TREP contributed to the electoral crisis and damaged the election's credibility. Yet,

the Final Report fails to provide essential contextual information that could explain the stoppage of the TREP and restore some semblance of trust in the electoral process. Whereas the Final Report could have provided clarity around these key events in the election, the report's authors instead opted to obscure and manipulate the public record.

Despite claims to the contrary, the Final Report presents no evidence that the stoppage of the TREP or other IT vulnerabilities resulted in any “intentional manipulation” of the electoral results. The Final Report notes many real problems with the management of the elections, but fails to provide any evidence that those irregularities altered the outcome of the election, or were part of an actual attempt to do so.

Finding I: The Final Report is based on flawed statistical analyses and incorrect assumptions. The Final Report presents two pieces of “evidence” which the GOA used to determine the focus of its investigation. Both of those findings are flawed.

- The GOA modifies the earlier claim made by the EOM regarding an “inexplicable” trend change following the suspension of the TREP with nearly 84 percent of the vote processed. In an earlier report from CEPR, we showed that there was no statistical basis for this claim. In the Final Report, the GOA modifies its allegation to focus on a “highly improbable” trend change over the last 5 percent of the votes. But the data presented in the Final Report directly contradicts this finding. Rather than showing a trend change in favor of Morales, the data reveal that Morales’s vote share actually decreased in the final 5 percent of the count as compared to the 5 percent counted directly before.
- The authors of the Final Report cite an elevated number of “comments” or corrections affecting presidential vote totals on the tally sheets not included in the TREP. The authors do not mention that tally sheets with complex corrections are placed under “observation” during the TREP and are expected to be given greater scrutiny in the Cómputo. More than 1,000 tally sheets were not included in the TREP because of problems with the images or due to corrections. The elevated number of “comments” on tally sheets not included in the TREP is therefore normal and explainable.

Finding II: The Final Report buries or omits altogether the results of its verification exercises despite the fact that they are highly relevant. The OAS audit team’s mandate included verifying the accuracy and legitimacy of the tally sheets processed in both the TREP and Cómputo systems. Yet, the Final Report buries or omits altogether any relevant findings that run counter to its narrative and fails to properly show or explain the methodology used.

- The GOA compared tally sheet images from the TREP and *Cómputo* systems, finding that the vote totals for each candidate matched across images in 99.8 percent of cases. This indicates that the data input into the systems match the results recorded on the tally sheets. The Final Report only mentions this finding on page 80 (of 95) and fails to explain its significance.
- To check the authenticity of the tally sheets, the GOA analyzed original hard copy records for 894 tally sheets out of a sample of 2,863. There is no explanation of the methodology that was used to select the sample, nor for the choice of subsample analyzed. The Final Report states that, in 230 cases, original electoral material had been burned or was missing. But what about the cases where the OAS did find the original electoral material — did the auditors verify those tally sheets? The Final Report never mentions the results of its verification exercise even though those results could help confirm whether or not fraud or manipulation took place.
- The most significant factor in the GOA’s inability to verify all the election results was the fact that 23 percent of tally sheets were burned during attacks on departmental electoral offices after the announcement of preliminary results. The Final Report includes the burning of electoral material in its findings of “intentional manipulation,” but fails to mention the context of these attacks. In particular, there is no evidence that electoral authorities or the Morales government were involved in the destruction of this material. On the contrary, all the available evidence suggests that anti-Morales protesters were responsible for the destruction. The Final Report fails to mention this and instead considers that all blame lies with a lack of security coordination between local police units and electoral offices and the inability of electoral officials to properly secure the material (which, even if true, still fails to show that there was “intentional manipulation” carried out by any of these authorities).

Finding III: The Final Report presents no evidence pointing to the manipulation of election results. Only one of the report’s findings of “intentional manipulation” or “grave irregularities” relates to actual election results. This finding is the result of a biased and methodologically unrepresentative sample of tally sheets, and does not appear to relate in any way to the problems identified with the IT systems.

- From an unrepresentative sample of 4,692 tally sheets in which MAS had overwhelming majorities, the GOA conducted a handwriting analysis and identified 226 tally sheets as problematic. These sheets correspond to 86 voting centers where one person filled out parts of two or more tally sheets. The report’s authors find this to be “an intentional and



systematic attempt to manipulate the results of the election.” To be clear, the Final Report does not find that the same person filled out all 226 tally sheets. No single individual is alleged to have partially filled out more than seven tally sheets. Nor does the fact that an individual filled out more than one tally sheet indicate that any election rules were violated. According to Article 49 of the Rules of the Election and the official guides issued by the TSE, it is only the signatures that are required from the electoral workers and party delegates.

- The Final Report claims that all of these 226 irregularities benefitted the same candidate and that if the GOA extended its analysis beyond the original sample, more irregularities would be found. The GOA, however, only analyzed a highly biased and statistically unrepresentative sample of tally sheets with overwhelming numbers of pro-MAS votes. There is nothing to indicate that the same irregularities would be found elsewhere. The GOA only looked for irregularities in one direction. If the GOA extended their sample to areas where CC did well, they would almost certainly have encountered irregularities among those tally sheets as well.
- Seventy-eight percent of the impacted voting centers are very small, with four or fewer voting tables (tally sheets correspond to these voting tables). The Final Report failed to consider sociodemographic factors in its analysis. Even if these are examples of “irregularities,” they do not inherently indicate fraud or the “deliberate” manipulation of results, as the Final Report claims. This is likely related to a well-known phenomenon: in rural areas and smaller voting centers, it is not uncommon for one person to assist with the tally sheets. This may be especially common where illiteracy rates are high or where a large percentage of the population does not speak Spanish.
- Based on comparisons with previous election results and with non-“irregular” tally sheets within the same voting centers or nearby areas, it is clear that there is nothing systematically abnormal about the results that appear on these “irregular” tally sheets. Results from “irregular” tally sheets match almost exactly the results found on other tally sheets within the same voting centers. This indicates that, even if these are “irregular,” they had little or no impact on the overall results of the election. It is therefore incorrect to say one party benefitted from all of the “irregularities.”
- Two-thirds of the 226 tally sheets identified were processed and published in the TREP system before the TREP interruption — indicating that these “irregular” tally sheets were not altered after or during the TREP’s interruption, the period during which the EOM and GOA have focused their suspicions of manipulation of the vote count.

Finding IV: The Final Report presents no evidence indicating that problems with the TREP, real or alleged, compromised the Cómputo or that the Cómputo was fraudulently altered. In an attempt to show that the security vulnerabilities affecting the TREP also affected the Cómputo, the preliminary report on the audit and the Final Report attempt to link the TREP and Cómputo systems by pointing to the presence of TREP images in the Cómputo. This is highly misleading as there is no evidence that these two systems were improperly linked.

- More than 90 percent of the TREP images present in the Cómputo correspond to voting centers abroad and are in compliance with the established procedures of the election, as the Final Report itself notes. The remaining TREP images in the Cómputo correspond to tally sheets that were lost, damaged, or destroyed in postelection protests, which, as previously stated, the Final Report does not put into context. These tally sheets were printed, scanned, and inputted into the Cómputo system, thereby severing any unplanned technological link between the two systems as the Final Report alleges. To the extent nonforeign TREP images were used in the Cómputo, it was due to extraordinary and unforeseen circumstances. The Final Report misrepresents these facts.
- The Final Report finds that the contractor responsible for the Cómputo system made direct edits in the Cómputo database, and suggests that this could be further evidence of manipulation. However, the GOA fails to note that these changes were monitored by an auditing company and were communicated to all relevant actors. The Final Report includes no analysis of what these actual changes were and if they were legitimate or not, despite having a clear record of what the changes were.

Finding V: The Final Report fails to provide clarity around the TREP stoppage and, as a result, perpetuates a false narrative of fraud. More than half of the Final Report’s findings of “intentional manipulation” and “grave irregularities” relate to the preliminary, nonbinding TREP. Yet, the report fails to take into account essential contextual information that provides a highly plausible explanation for the stoppage of the TREP that suggest that human error rather than foul play was involved. Rather than providing clarity around this key event, the Final Report uses vague language and innuendo and, in so doing, perpetuates a false narrative of fraud.

- The Final Report presents contradictory information relating to the TREP. It claims there was no technically valid reason to stop the TREP, but then includes more than a dozen findings related to technical problems with the TREP that emerged before the stoppage.

When the EOM pressured the TSE to restart the TREP on October 21, OAS officials were aware of many of the technical problems that the Final Report now alleges to be evidence of “intentional manipulation.” It is perplexing that the OAS would pressure the TSE to take actions that would lead to further problems that the OAS would later criticize and point to as evidence of manipulation.

- The Final Report identifies the stoppage of the TREP as an act of “intentional manipulation,” but fails to reference the fact that Ethical Hacking, the audit company whose analysis the Final Report features prominently, sent a maximum alert to the TSE right before the decision was made to stop the TREP. Though it is highly probable that this maximum alert led the TSE to stop the TREP, the Final Report does not mention it.
- The Final Report includes the presence of an unmonitored server (BO1) as an act of “intentional manipulation,” but fails to note that the identification of said server was the subject of the audit company’s maximum alert. The Final Report does not reference the fact that Ethical Hacking investigated the use of the BO1 server during the time in which the TREP was stopped and concluded that “there was no alteration of data.” The Final Report, which cites the Ethical Hacking audit multiple times, never mentions this.

Introduction

The OAS EOM played an instrumental role in establishing a narrative of fraud in the 2019 Bolivian elections. Beginning the day after the election, the EOM made repeated false public statements that emboldened opponents of the Bolivian government and destabilized the country. Far from behaving like a neutral observer, the EOM’s actions constituted a clear political intervention in the electoral process, contributing to greater polarization, violence, and eventually, the ouster of a democratically elected president and government.⁸

Many Bolivians opposed Evo Morales’s decision to participate in the election altogether. In a 2016 referendum, voters narrowly rejected a proposed constitutional amendment that would have permitted continuous presidential reelection, and Morales’s candidacy was only allowed following a ruling from the country’s constitutional court. Before the first vote was cast, many

⁸ The OAS did not make public the names of individuals involved in the Election Observation Mission. For every other electoral process in 2019, the OAS did publish the names of the members of electoral observation missions. The observer webpage, which contains the OAS observer mission recommendations and other relevant information for the 2019 Bolivian election, does not exist on the OAS website. Accessed March 3, 2020.

opposition leaders pledged not to respect the results if Morales secured enough votes to win in the first round. A lack of trust in the Tribunal Supremo Electoral (TSE) and the perception of a skewed playing field in favor of Morales contributed to a highly polarized electoral atmosphere. It was in this context that the OAS deployed an electoral observation mission to Bolivia.

At 7:45 p.m.⁹ on election day, the TSE provided preliminary, nonbinding results from the TREP showing Morales with a 7.9 percentage point lead over Carlos Mesa, below the 10 percentage point margin needed to win in the first round. The transmission of preliminary results stopped and the TSE failed to provide a clear explanation to the public.¹⁰ At 9:30 p.m., the EOM issued a brief statement urging the authorities to continue with the preliminary transmission process.

Carlos Mesa issued a public declaration claiming the results confirmed the need for a second-round election. Morales claimed that once all the votes were counted, he would emerge victorious in the first round.¹¹

On October 21, the EOM met with members of the TSE, who explained that there had been technical problems with the TREP relating to an external server. The company hired by the TSE to audit the electoral computer systems had sent an alert, right before the decision was made to suspend the TREP, notifying the TSE of this external server and of an elevated amount of data being transmitted through it.¹² Under pressure from the EOM, with opposition candidates and US politicians alleging fraud and protests already occurring, the TSE agreed to restart the TREP. The technical problems with the TREP are now at the center of the Final Report's claims that it is unable to verify the results of the election.

On October 21, when the TSE provided updated results from the TREP showing Morales's margin above the 10 percentage point threshold, the EOM issued a press release denouncing an "inexplicable" change in the trend of the vote that "drastically modifies the fate of the election and generates a loss of confidence in the electoral process." The EOM stated that it would issue a report with recommendations "ahead of a second round."

⁹ Times referenced in this study refer to local time unless otherwise specified.

¹⁰ The stoppage of the TREP is included in the Final Report as a finding of "Deliberate Actions That Sought to Manipulate the Results of the Election."

¹¹ The morning of October 21, US Senator Marco Rubio claimed "all credible indications are Evo Morales failed to secure [the] necessary margin to avoid [a] second round in [the] Presidential election." But, he added, there was "some concern he will tamper with the results or process to avoid this." Rubio (2019). The State Department's director of policy in the Western Hemisphere echoed the senator's allegations. "The U.S. rejects the Electoral Tribunal's attempts to subvert #Bolivia's democracy by delaying the vote count & taking actions that undermine the credibility of Bolivia's elections," he Tweeted. Kozak (2019).

¹² This is discussed in detail in Finding V.

The trend change, however, was not “inexplicable” as the EOM claimed. Based on the results at the time of the TREP’s interruption, the final results were predictable.¹³ The votes that remained to be counted were more likely to come from geographic areas that had already shown a clear pattern in favor of Morales. The OAS has never directly addressed this finding. The repetition of this falsehood helped to consolidate a narrative of alleged fraud: that the TREP was stopped in order to manipulate the results of the election.

The statement from the EOM was unusual for another reason: the fact that it failed to mention that the Cómputo was already processing votes in the official count, and that the official results that had already been processed matched those of the TREP. Rather than provide clarity in a tense and heated electoral moment, the EOM’s press release further fanned the flames.

Protests responding to alleged electoral fraud proliferated throughout the country after the announcement that Morales had likely secured a first-round victory. The EOM, in an October 22 press release, condemned all acts of violence and “confirmed that the violence forced the interruption of the computation process in six departments: La Paz, Cochabamba, Chuquisaca, Potosí, Oruro, and Beni. In Potosí, Pando, and Tarija, the infrastructure of the Departmental Electoral Tribunal was completely burned, as were the facilities of the Civic Registry Service in Potosí and Chuquisaca.”¹⁴

But by the afternoon of October 22, only 4,300 tally sheets (12.4 percent of the total) remained to be processed in the Cómputo, providing an opportunity to check the results between the two systems and ensure the accuracy of the TREP and the Cómputo. With a simple arithmetic projection based on already counted returns, CEPR projected that the final margin in the Cómputo would surpass the 10 percentage point margin before the processing was complete.¹⁵

Bolivian foreign minister Diego Pary sent a letter to OAS Secretary General Luis Almagro, requesting the OAS send a group of auditors to verify the transparency and legitimacy of the vote count.¹⁶

¹³ CEPR (2019). In a personal correspondence with a high-level OAS official on October 22, it was pointed out that there had not been a trend change within municipalities, indicating that there was nothing inexplicable about the change. The OAS official responded, “We know.”

¹⁴ OAS (2019c).

¹⁵ CEPR (2019).

¹⁶ The letter is included in an annex to the OAS Final Report. OAS (2019d).

The same day, Antonio Costas, the vice president of the TSE, resigned, citing the suspension of the TREP and the resulting lack of confidence in the electoral process.¹⁷ On October 23, in an interview with local press,¹⁸ Costas explained that the audit company's maximum alert was the product of "excessive zeal" and that he did not view that as a valid reason to stop the TREP. "There is no fraud, there were imperfections," he said. Costas claimed to have argued for the TREP's resumption, telling the other TSE officials that he had a "reliable engineer" compare the TREP and Cómputo results and that they matched.

The same day, though the Cómputo was still progressing, the EOM released a preliminary report on the elections. The report repeated the false claim of an improbable trend change. The mission concluded that, given the tight margin expected in the Cómputo, "the best option would still be to convene a second round."¹⁹

It is highly irregular for an electoral observation mission to suggest a political, rather than a technical, solution in response to contested results, particularly while a vote count is still underway. This is a clear violation of the Declaration of the Principles for International Electoral Observation and of the Code of Conduct for Electoral Observation, both of which the OAS is a signatory to.²⁰

The Code of Conduct states, "Observers must base all conclusions on factual and verifiable evidence and not draw conclusions prematurely." Both the EOM press release and the EOM preliminary report, however, draw conclusions from a demonstrably false claim of an improbable change in the trend of the vote.

Additionally, as laid out in the Declaration of the Principles for International Electoral Observation, missions "should, when possible, offer recommendations for improving the integrity and effectiveness of electoral and related processes, while not interfering in and thus hindering such processes." Any conclusions must be "based on the highest standards for accuracy of information and impartiality of analysis." Further, the declaration notes: "International election observation must be conducted with respect for the sovereignty of the country holding elections and ... must respect the laws of the host country, as well as national authorities, including electoral bodies." In the EOM's preliminary report, the mission suggests

¹⁷ Corz (2019). Costas is often referred to in the local press as the only TSE official independent from MAS and Morales. See, for example, Vásquez (2019).

¹⁸ Cambara Ferrufino (2019).

¹⁹ OAS (2019e).

²⁰ OAS (2005).

ignoring Bolivia’s electoral law, which states that a candidate will win the election if they have more than 40 percent of the vote and a 10 percentage point margin over their nearest competitor.

It should have come as little surprise to experienced election observers that later-counted votes could swing the election without fraud having taken place.²¹ In 2016, the TREP was stopped after having processed 83.1 percent of results. From the moment the TREP was stopped to the announcement of official results, the margins shifted more in 2016 than they did in 2019. This can be seen in **Table 1**.

TABLE 1

TREP Results in 2016 Versus TREP Results in 2019

2016 Constitutional Referendum			
	No	Yes	Margin
TREP at 83.1	53.8%	46.2%	7.6%
Final Results	51.3%	48.7%	2.6%
2019 General Elections			
	All Other	Morales	Margin
TREP at 83.9	54.3%	45.7%	8.6%
Final Results	52.9%	47.1%	5.8%

Source: OEP (2019d) and Opinión (2016).

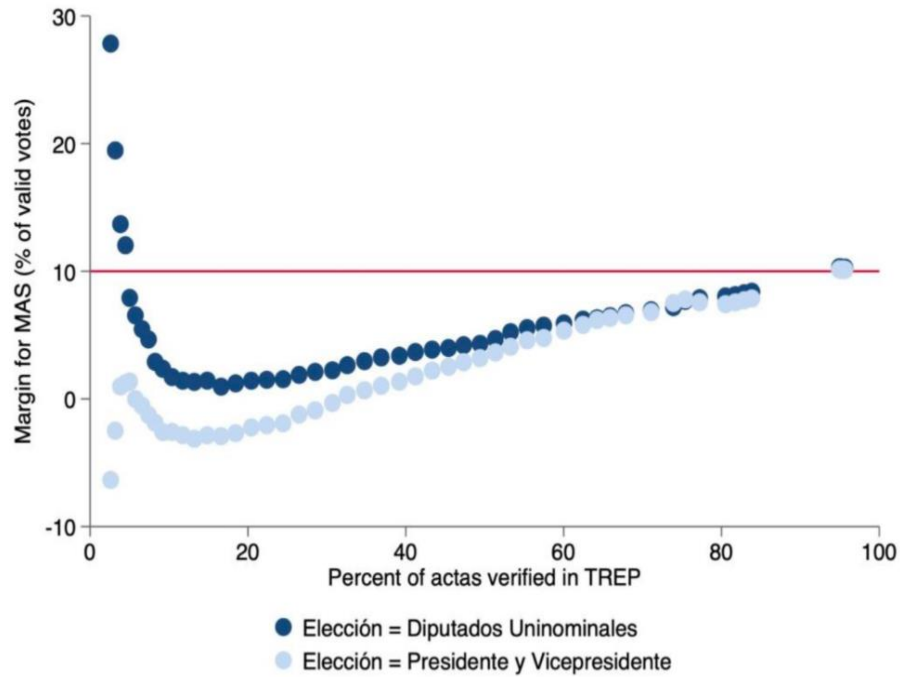
Figure 1, below, shows that MAS’s margin of victory increased steadily as more votes were counted, consistent with the fact that differences in geography and infrastructure resulted in, on average, the later counting of areas that favored MAS. This trend also holds for legislative seats.

²¹ Chang et. al. (2019). “It is not uncommon for election results to be skewed by location, which means that results can change depending on when different areas’ votes get counted. No one argued that there was fraud in Louisiana’s 16 November gubernatorial election, when the Democratic candidate John Bel Edwards, pulled out a 2.6% point victory, after being behind all night, because he won 90% of the vote in Orleans county, which came in at the end of the count.”



FIGURE 1

The MAS-IPSP Margin Increased Steadily Through Most of the Quick Count (TREP) as More Tally Sheets (Actas) Were Verified

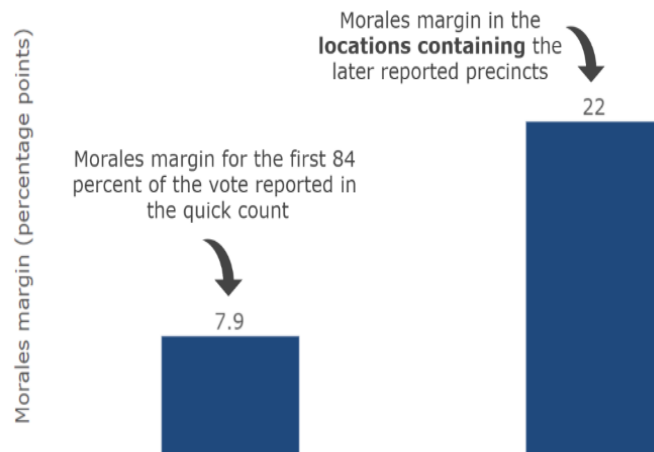


Source: OEP (2019d) and authors' calculations.

Observers did not need anything other than basic arithmetic to explain this “change in trend.” **Figure 2** shows the average MAS margin of victory in those locations containing the later-reported precincts.

FIGURE 2

Morales Margin at time of TREP Interruption



Source: OEP (2019d) and authors' calculations.

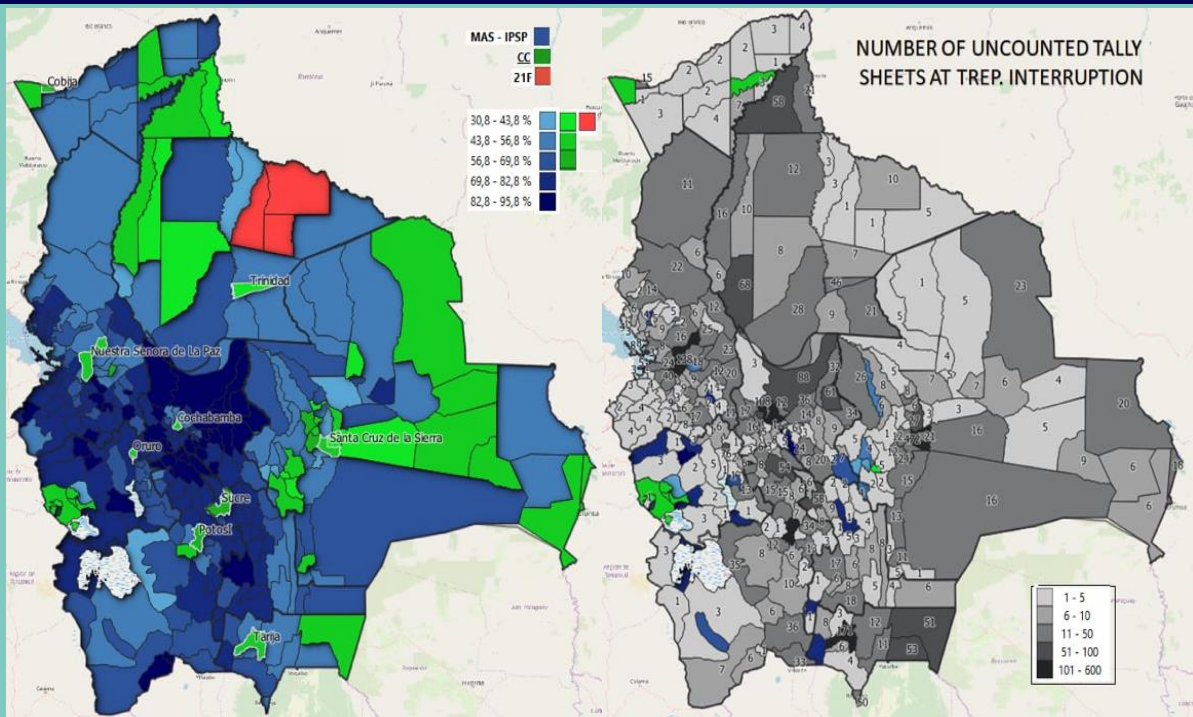
As can be seen in the above figure, at the time of the TREP stoppage, the average margin for Morales, before the interruption, was 22 percent in the locations that the later-reported precincts came from. This compares to the overall average before the interruption of a 7.9 percent margin. Clearly, the precincts counted after the interruption were in much more pro-Morales areas, enough to account for the increase in Morales’s margin if the later-reported precincts simply reflected the average of the locations where these later-reported precincts sat.

Box 2. Map Analysis of Election Results and Trend Change

Figure 3 presents the vote share of varying parties at the municipality level (left map) and the number of uncounted tally sheets in each municipality at the time of the TREP interruption (right map). As can be seen, CC does relatively better in the Eastern Lowlands of Bolivia and in the capital cities (labeled). In the Western Highlands, MAS does exceedingly well. The darkest blue in the map corresponds to areas where MAS received more than 82.8 percent of the vote.

FIGURE 3

Winning Party Vote Share by Municipality and Uncounted Tally Sheets at Interruption



Source: OEP (2019c) and OEP (2019e).

At the moment of the TREP interruption, with approximately 84 percent of all tally sheets processed, only a few municipalities had the total of their respective tally sheets counted, as can be seen above. In the case where a municipality had all of its tally sheets processed, it adopts the color of the victorious party (green for CC and blue for MAS). For the remaining municipalities, they are labeled with the number of outstanding tally sheets at the time of the interruption. The darker the shade, the higher the number of missing tally sheets.

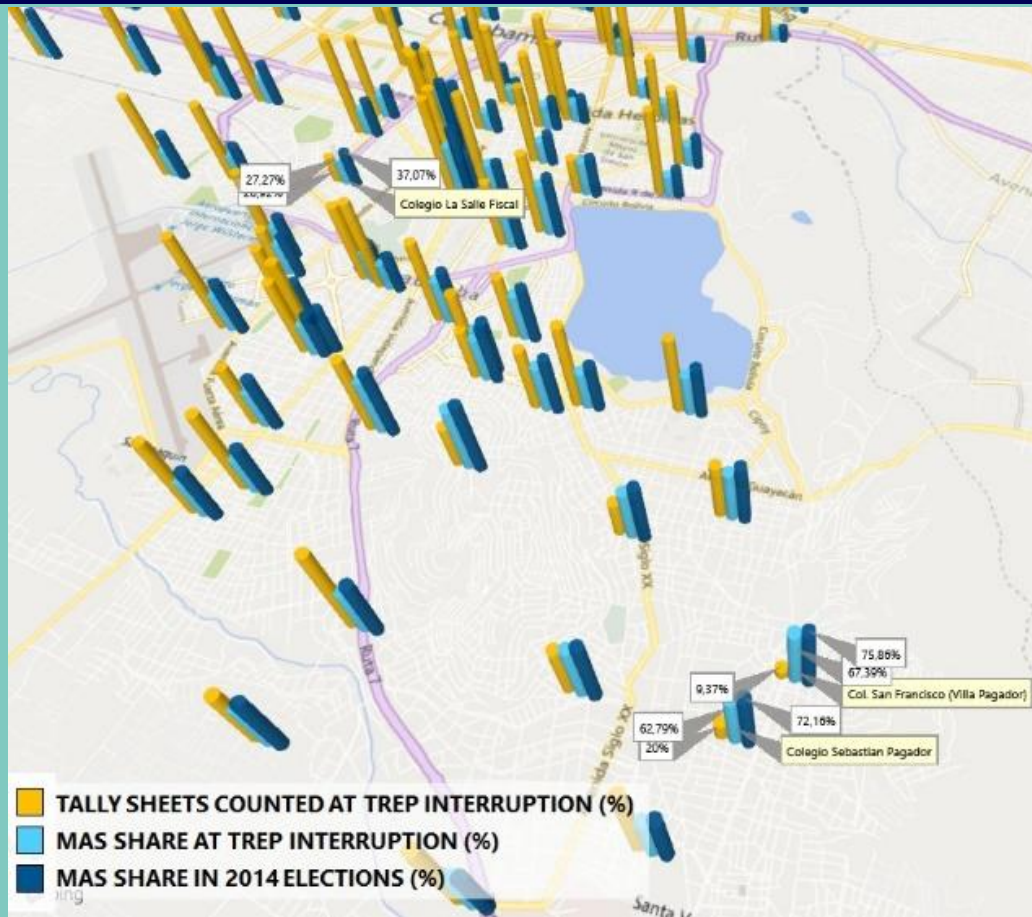
Box 2. Map Analysis of Election Results and Trend Change (cont.)

As can be seen, there appears to be no pattern to the outstanding tally sheets, though it is clear that many of the municipalities with the most outstanding tally sheets are in the western, more pro-MAS part of the country.

Figure 4 below focuses on the municipality of Cochabamba, which experienced the sharpest swing in the MAS share of the vote from the time of the TREP suspension until the TSE provided updated results.

FIGURE 4

Comparative Election Results for Cochabamba City, By Precinct



Source: Google Maps (2020), OEP (2019e), OEP (2020b), and GeoBolivia (2016).

On October 22, CEPR explained that this had to do with the fact that certain pro-MAS precincts (voting centers) had not yet been fully counted at the time of the interruption.²² In this map, that phenomenon is easy to see. Each voting center, or precinct, has three columns. The yellow column is the proportion of that precinct's tally sheets that had been included in the TREP before the interruption, the light blue column shows the MAS share of the vote at the time of the TREP interruption, and the dark blue column shows the MAS share of the vote in the 2014 elections.²³

Box 2. Map Analysis of Election Results and Trend Change (cont.)

As can be seen in the yellow columns, most voting centers in Cochabamba already had a high percent of tally sheets processed at the time of the TREP interruption. This appears to be especially true in the northern section of the map, where the MAS vote share is, on average, lower. But in three voting centers labeled in the above map (Colegio San Francisco Villa Pagador, Colegio Sebastian Pagador, and Colegio La Salle Fiscal), the proportion of the tally sheets counted is quite low — they are all under 27 percent.

While the share of the MAS votes in the two southernmost precincts is high relative to the rest of the city, they are very consistent with and lower than in the previous election. In general, all over the municipality of Cochabamba, the MAS votes were slightly lower than the share obtained in the previous election. The trend change in the municipality of Cochabamba appears entirely explainable.

To further the analysis, we performed statistical imputations to project the outstanding vote totals based on results already entered into the system at the time of the TREP stoppage. The precinct-level results are the most geographically disaggregated data available, followed by “locality.” In the imputation, projections for the final 16 percent of the votes are based on estimates from already tallied results from within the same precinct, or, in the case where precinct-level data has not yet been entered, by estimates based on data from the “locality” level.²⁴ The results can be seen in **Figure 5**.

²² CEPR (2019).

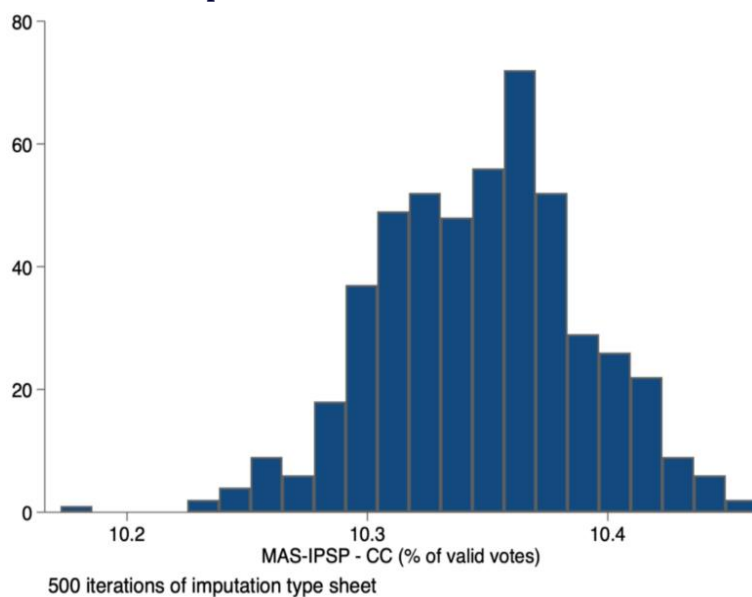
²³ Geographical data was retrieved from GeoBolivia (2014). The data from the 2014 election is available through the CEPR website. OEP (2019f).

²⁴ See Statistical Annex in Long et. al. (2019).

FIGURE 5

500 Imputations to Simulate the Final Margin of MAS-IPSP Victory in the Quick Count

(number of imputations)



Source: OEP (2019d) and authors' calculations.

The average margin resulting from the simulation exercise is 10.35 percentage points, with 80 percent of the results falling between 10.30 and 10.40 percentage points.²⁵ Curiel and Williams, researchers at the MIT Election Data and Science Lab, replicated these findings.²⁶ The researchers performed 1,000 simulations and estimated the official margin to be 10.49 percentage points.

Consistent with the imputation and the preliminary results, when the Cómputo process officially concluded on October 25, the results showed Morales winning in the first round with a 10.56 percentage point margin.²⁷ The opposition and those protesting alleged fraud refused to recognize the official results. The EOM did not issue any statement taking note of the official results.

²⁵ Long et. al. (2019).

²⁶ In December, CEPR contracted John Curiel and Jack Williams to independently replicate the graphs and projections included in CEPR's November 9 report. It is available in full on CEPR's website. Curiel and Williams (2020).

²⁷ The official results were also consistent with our October 22 projection. CEPR (2019).

Box 3. Legislative Results Mirror Presidential Results

The elections for the legislative branch took place at the same time as the presidential elections. Bolivians choose representatives based on political party, not individual candidates. There are regular representatives (6.2 million votes) and special representatives for certain jurisdictions (around 70,000 votes). Legislative votes are recorded on the same tally sheets as presidential votes. The analysis that follows is based on data only within Bolivia (excluding tally sheets from voting centers abroad).

The margin between the MAS and the CC shares of the vote for the legislative election was similar to the margin in the presidential election: overall, the difference is 1.1 percentage points. The MAS share of the legislative vote was 4.2 percentage points lower than at the presidential level. Most importantly, tally sheets tend to have substantially higher blank votes for the legislature than for the presidency. While blank votes amount to 1.45 percent of the total votes cast at the national level for the presidential elections, they amount to 19 percent of the total votes cast for the legislative elections. The absolute number of valid votes for the presidential election (within Bolivia) was 5.9 million, but only 4.9 million for the legislative election.

Considering that the legislative elections have different rules for assigning representatives, the margin between the candidates is less relevant. It is common, in a presidential system like that of Bolivia's, for voters to treat legislative elections as less important, as demonstrated by the level of blank votes.

Nevertheless, voters, on average, tend to support the same party at both the legislative and presidential level. While voters may, proportionally speaking, have a similar support for the MAS, the absolute numbers differ significantly between the legislative and presidential races. It would be reasonable to consider that the legislative vote data, at the aggregate level, constitute a good proxy of voter intention for presidential elections.

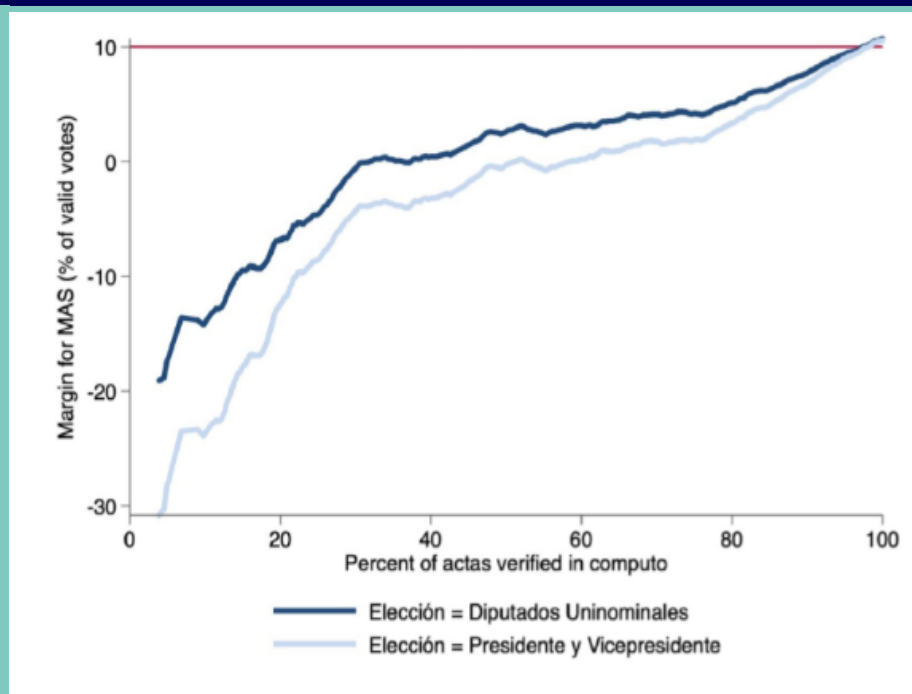
*As can be seen in **Figure 6**, below, the legislative results mirrored those at the presidential level, despite the raw numbers differing. The Final Report does not mention the legislative results, though the votes are recorded on the same tally sheets as the presidential votes.*

The results of the legislative elections were the following: in the Senate, MAS earned 21 senators (out of 36) and CC earned 15; in the lower chamber, MAS earned 65 deputies (out of 130), CC earned 51, and the remaining 14 seats went to smaller parties.

Box 3. Legislative Results Mirror Presidential Results (cont.)

FIGURE 6

The MAS-IPSP Margin Increased Steadily Through Most of the Official Count (*Cómputo*) as More Tally Sheets (*Actas*) Were Verified



Source: OEP (2019d) and author's calculations.

On October 30, in the OAS Permanent Council,²⁸ Almagro noted that his office and the Bolivian government had reached an agreement on the terms of an international audit of the election results. The work of the GOA commenced on October 31. The OAS noted: “The team comprises some 30 international specialists and auditors, including: electoral lawyers, statisticians, computer experts, document authentication specialists, and experts in chain of custody and electoral organization.” The OAS estimated that the specialists’ work would be completed in 12 days.

The GOA faced a difficult work environment on the ground in Bolivia.²⁹ Their headquarters was located in a hotel in the capital of La Paz. Protesters alleging electoral fraud and criticizing the

²⁸ The Permanent Council is the multilateral organization’s main body, consisting of representatives of each of the 34 member states.

²⁹ Almagro traveled to Bolivia in May 2019 and expressed his support for Morales’s controversial fourth term. The opposition in Bolivia was deeply skeptical of the OAS at the outset of the election. Ramos (2019).

OAS were present outside the hotel for much of the GOA's deployment.³⁰ Further, anti-government protests and pro-Morales counterprotests nationwide impacted the ability of the GOA to travel outside the capital to analyze original electoral materials stored in Departmental Electoral Tribunals (TEDs) in the capital city of each department.

GOA field analysts were only able to access the departments of La Paz, Beni, Tarija, and Pando. On November 8, field analysts were deployed to Cochabamba and there were plans to send analysts to the remaining four departments the following day. However, due to a worsening security situation, field analysts in Cochabamba were immediately evacuated back to the capital. The remaining deployments never occurred. This is significant, as it is clear the GOA was unable to adequately carry out its mandate before concluding its work. On November 9, police units in various cities across the country declared themselves in mutiny.

The OAS released a preliminary version of its report on the audit early in the morning of November 10.³¹ The preliminary report alleged that the TREP and Cómputo transmission systems were flawed, that there had been forgeries and alterations of tally sheets, that there had been a deficient chain of custody of original electoral material, and that there had been a “highly unlikely trend shown in the last 5% of the vote count.”

The preliminary report on the audit concluded:

The audit team cannot validate the results of this election and therefore recommends another electoral process. Any future process should be overseen by new electoral authorities to ensure the conduct of credible elections.

The preliminary report, however, used vague language and lacked clarity concerning its findings. For example, in the preliminary report's finding of forged signatures and altered tally sheets, the report's authors described the problems as occurring “in some cases,” or “sometimes,” or across “several tally sheets.” The preliminary report on the audit, however, failed to provide any specifics on the tally sheets in question. Further, while pointing to alleged violations of the security protocol for the TREP and the Cómputo, the preliminary report provided no evidence that those irregularities affected the results of the election.

³⁰ Jornada (2019).

³¹ Contesting narratives concerning the timing of the release have been presented. OAS officials initially claimed, in conversations with CEPR that the preliminary report was released at the request of the Morales administration. For his part, Morales said he personally tried to get in touch with Almagro in order to prevent the release of the preliminary report. Atahuichi (2019). Almagro later publicly stated that Morales had attempted to stop the publication of the report. Del Rincón (2019a).

More damning, however, was the preliminary report's inclusion of the claim that there had been an improbable trend change in the final 5 percent of the vote.³² Again, this was a demonstrably false claim.³³

Nevertheless, the Morales government had agreed to the binding nature of the OAS audit, and Morales quickly held a press conference announcing his acceptance of the recommendations and willingness to call for new elections with a new TSE. However, after three weeks of sustained protests, a call for new elections did not satisfy opposition leaders who demanded that Morales resign. The same day that the OAS released its preliminary report on the audit, Evo Morales resigned under pressure from the military high command. More than 65 local officials and other political leaders also resigned, many citing threats against their family members and allies, the burning of homes, and other acts of intimidation.³⁴

Morales traveled to, and received political asylum in, Mexico.³⁵ He is currently in Argentina, which has granted him refugee status.

On November 12, Luis Almagro, the secretary general of the OAS, addressed the body's Permanent Council. The only coup, he said in Spanish, was on "October 20, when Morales committed electoral fraud," he said, calling for judicial prosecution of those responsible.³⁶

That night, an opposition senator, Jeanine Áñez, swore herself in as president in front of a largely empty congress. The United States quickly recognized Áñez's presidency.³⁷ Protests denouncing the nondemocratic transfer of power proliferated throughout the country. Within a week, according to the Inter-American Commission on Human Rights, state security forces had perpetrated two civilian massacres, killing at least 19. The de facto government issued a decree exempting state security forces from criminal responsibility for actions relating to their efforts to restore order.³⁸

³² A more detailed analysis of the OAS claims of an improbable trend change is included in the Introduction.

³³ For a more technical discussion, see Box 5.

³⁴ OAS (2019f), Página Siete (2019a), ANF (2019), Los Tiempos (2019), Clarín (2019a).

³⁵ Long and Allen (2019).

³⁶ OAS Videos - Events (2019a), Almagro (2019).

³⁷ Pompeo (2019).

³⁸ OAS (2019f).

The de facto government also took action against TSE and other electoral officials across the country. At the time of writing, the de facto government has detained or put under house arrest all six members of the TSE, including Costas, and at least 40 other electoral officials.

On December 4, 2019, more than three weeks after Morales's ouster and the consolidation of power by the de facto Áñez government, the OAS published the Final Report from the GOA.

The OAS presented the report to the Áñez de facto government, which claimed that the report confirmed the massive fraud perpetrated by Morales in the October 20 election.³⁹ The Final Report uses language that insinuates a confirmation of the established narrative of fraud: that the stoppage of the TREP was an intentional act in order to manipulate the results of the election. This is false; the Final Report contains no evidence of this. Still, OAS officials, including both Almagro and the head of DECO, Gerardo de Icaza, have publicly misrepresented the findings of the Final Report.

On December 12, Jorge “Tuto” Quiroga, a former Bolivian president and the de facto government's “Delegate to the International Community,” presented a report to the OAS Permanent Council on “the transition process in Bolivia being carried out by the Constitutional President of the State, Jeanine Áñez Chávez.” At the same OAS meeting, DECO's Gerardo de Icaza presented the findings of the Final Report to member states. In his remarks, he claimed that 226 tally sheets the GOA identified as irregular had been “manipulated” in a “premeditated” and “systematic” manner “to benefit the same candidate.” Icaza then referred to forged signatures as part of the “intentional manipulation.” Icaza's characterization of the evidence presented in the Final Report was grossly misleading.⁴⁰

Far from providing a neutral and independent assessment that could help stabilize the situation and provide clarity in the midst of a polarized environment, the Final Report represents an attempt by the organization to justify its previous actions — including its repeated false claims about an “inexplicable” trend change. Given the turn of events in Bolivia — the ouster of a democratically elected president — it appears that the authors of the report felt that they had little choice but to double down on their claims. If the Final Report were to provide clarity on the reasons for the TREP's stoppage and state clearly that the irregularities with the TREP did

³⁹ EFE (2019).

⁴⁰ OAS Videos – Events (2019b). A detailed analysis of these 226 tally sheets is included in the section detailing Finding III. The Permanent Representative to the OAS from the Government of Mexico invited CEPR to present at the December 12 Permanent Council meeting. The president of the Permanent Council did not allow the Mexican government to cede its allotted speaking time to CEPR.

not result in any manipulation of the actual results, it would mean that the EOM had published false claims and that those false claims had helped precipitate the ouster of a democratically elected government.

Nevertheless, the de facto government, as well as its international supporters, have used the Final Report to justify its nondemocratic usurpation of power and its violation of human rights and due process rights since.⁴¹ Despite the importance of the OAS's role in the election, Morales's ouster, and its aftermath, the organization has refused to answer questions regarding its statements and reports on the Bolivian elections from journalists, researchers, members of the US Congress, or OAS member states.⁴²

Audit Standards and Verification Methods

Postelection audits are an increasingly common way to confirm the accuracy of results and ensure the credibility of an election. In the United States, 38 states and Washington, DC have all incorporated some form of postelection audit mechanism into their electoral processes.⁴³ Generally, a sample of results are compared to a hand count of the vote or to other original electoral records. With a representative sample, election officials are able to provide strong evidence that the results are accurate without the need for a full recount.

Audit mechanisms are included in the electoral systems of countries across the world;⁴⁴ however, that is less often the case in developing countries. Without clearly established procedures built into the electoral process, allegations of electoral fraud have, in some cases, resulted in ad hoc postelection audits. These audits are often more complex and may include investigating allegations of fraud, partial or full recounts, and other analyses.⁴⁵

The involvement of international organizations in *leading* such a postelection audit is rare. Only recently have researchers begun to formulate some basic principles to guide these interventions.⁴⁶ The International Foundation for Electoral Systems (IFES), warns that, while

⁴¹ “Por el momento, la base de la investigación es el informe de la OEA” dijo el Fiscal. Chuquimia Huallpa (2019).

⁴² Kryt (2019), Schakowsky (2019), CELAG (2019).

⁴³ NCSL (2019).

⁴⁴ For example, India: Ravi (2019).

⁴⁵ Darnolf (2015), Shein and Vickery (2017).

⁴⁶ Kosovo in 2009 and 2010, Afghanistan in 2009 and 2014, Iraq in 2005, and Haiti in 2010 all utilized postelection audits. The audits in Afghanistan in 2014 and Haiti in 2010 were led by international organizations. Darnolf (2015), Shein and Vickery (2017).

these types of audits may help reestablish confidence in the results amid allegations of fraud, they “should be used only in limited circumstances and according to clearly defined rules.”

One difficulty, IFES researchers note, is that an audit that results from a losing candidate’s allegations of fraud means “that the election commission is starting from a position of weakness ... Essentially, the electoral process is considered guilty until proven innocent, often undermining public confidence in the electoral system.” When international organizations do get involved, they must work carefully to “balance the interests and concerns of the candidates with respect for the domestic electoral process.”

In the Western Hemisphere, there has only been one recent postelection audit that involved the OAS. Poor planning and myriad irregularities resulted in fatally flawed elections in Haiti in 2010. The election was held in the aftermath of a devastating earthquake and with hundreds of thousands of people still displaced. Election officials were unable to count some 10 percent of the votes due to election day violence and postelection protests alleging fraud. Irregularities tainted an additional 10 percent.

In a highly contentious political environment, the Haitian government reached an agreement with the OAS to establish an Expert Verification Mission in order to analyze the election results. Without performing a full recount, or even performing any statistical inference over the large percent of the vote that officials never counted, the OAS mission recommended removing “irregular” tally sheets, thereby changing the official results of the election and placing the third-place candidate into a second-round vote.⁴⁷

Box 4. IFES Principles for Postelection Audit Processes

Ownership of the audit process. The domestic entity which conducted the election should have control of, or a clearly defined role in, the process.

Predetermination of standards and procedures. These should be agreed to and published in advance of the audit.

Training and consistent application of standards and procedures. Ensure auditors receive proper and consistent training and have an understanding of the code of conduct.

Principles for managing evidence. The audit must be based on facts and investigators must make use of concrete evidence.

Right of appeal. The ability for parties to appeal the findings of the audit.

Mandate for Audit Oversight/Observation. Best practices include allowing for outside observation of the auditors’ work.

⁴⁷ In 2011, CEPR published two papers analyzing the actions of the OAS Expert Verification Mission in Haiti: Johnston and Weisbrot (2011), Rosnick and Weisbrot (2011). For further information on the role of the international community in the 2010 election, see Beeton and Nienaber (2014). In 2011, CEPR recommended

IFES researchers concluded that the OAS-led 2010 audit in Haiti failed to comply with the principles outlined in **Box 4**.⁴⁸ The audit was “led by an international actor lacking both a prior legal mandate and predetermined audit processes and procedures; it used a statistically flawed methodology and suffered from a lack of uniformity because the triggers for an audit of a polling station were adjusted midstream; and it did not include a clear right of appeal of the results, given the politically charged nature of the final outcome.”⁴⁹

The United States government exerted significant pressure on the Haitian government to accept the flawed recommendations of the OAS audit, including by threatening to withhold aid destined for earthquake relief. The Haitian government eventually accepted the OAS’s recommendations. The result was a runoff election pitting two right-wing candidates against each other. Voter turnout was a historically low 23 percent.⁵⁰

As discussed previously, the mandate of the GOA in Bolivia was to analyze the vote counting process and verify the results. Again, one of the key functions of a postelection audit is to provide clarity and restore credibility to a voting process plagued by political polarization and allegations of fraud — in addition to investigating any wrongdoing.

In order to investigate the allegation of fraud and verify the results, some basic audit procedures could have been employed. In Bolivia, there is no opportunity for a vote-by-vote recount.⁵¹ Tally sheets filled in by poll workers at the end of election day stand as the only official record of the results.⁵²

Here, it is important to distinguish between irregularities and fraud. In analyzing the results in such detail, auditors are bound to discover technical problems in the completion of the tally sheets. As IFES researchers noted:

that Haiti hold entirely new elections given that the number of missing votes and irregularities was so extensive. Instead, the OAS recommended changing the results.

48 The conclusion of this study returns to the international principles outlined above, and provides an assessment of the OAS’s adherence in the case of the 2019 elections in Bolivia.

49 Shein and Vickery (2017).

50 ElectionGuide (2020), Taft-Morales (2011).

51 Bolivia’s electoral law regulates the electoral process at the voting tables. Article 173 defines the principle of preclusion: only the electoral jurors at the voting table can definitively and irreversibly count votes and register them on the tally sheet. No electoral authority can revise this unless there is a cause for annulment. Preclusion has been in Bolivian electoral law since 1991. It is an important characteristic of the Bolivian electoral process, which is designed to advance in a sequential and timely manner. OEP (2010a).

52 Additional electoral materials are considered “sensitive” and must be retained by electoral authorities. The Final Report identified a “deficient chain of custody” regarding sensitive electoral material. This was included in the Final Report’s findings of “grave irregularities.”

There are no perfect elections or electoral systems, and while inevitably there are irregularities, these should not necessarily threaten an election’s credibility or integrity. Rather, irregularities threaten the integrity of an election only if they are extensive, systematic, and decisive in a close race.

One significant shortcoming of the OAS audit of the Haitian 2010 elections was that the mission did not perform any statistical inference. This is especially relevant in analyzing if irregularities actually had a determinative impact on the results. In Haiti, the OAS mission simply discarded “irregular” tally sheets, but that presumes that each of the votes represented on the tally sheet was problematic or fraudulent in some way.⁵³

In Bolivia, there were specific concerns over the IT systems used to transmit results and concerning the general integrity of the results of the election. As explained in more detail in **Box 1**, there are two sets of digitized results: the preliminary, nonbinding results, and the official results. Because the two sets of results are processed using distinct procedures, it allows the two systems to be compared to one another as a check for any irregularities or discrepancies. The recorded results from the two systems could be compared, but also the tally sheet images in both systems.

Further, auditors could utilize representative sampling in order to check the digitized official records against original electoral materials. This would allow for some general conclusions about the integrity of the data and overall results.⁵⁴

Additional electoral records could be useful to those auditing the results. Political party representatives present for the counting of votes are provided with a copy of the tally sheet. Those tallies can be compared to official results in order to detect any discrepancies or to verify results in those cases where official materials may not be available. Notaries and voting table presidents — whose data is registered by Bolivia’s TSE — also receive copies of these tally sheets.

⁵³ Consider an example: if a tally sheet is missing a signature, it may be deemed invalid, or as containing an irregularity. But, if the results recorded on the “irregular” tally sheet are similar to results on other legitimate tally sheets in the same voting center or same geographic area, it may be determined that the missing signature did not affect the actual results of the election. In Haiti, OAS auditors discarded all tally sheets in which a candidate received 150 votes or more. But the auditors did not compare those tally sheets to the ones from the same voting centers or nearby geographical areas, or make any statistical inferences concerning the expected vote totals.

⁵⁴ NCSL (2019).

The main allegation of fraud was that there had been a change in the trend of the vote after the preliminary results system stopped. To investigate the specific allegation of fraud here, a random sample of these later-counted tally sheets could be drawn and then checked by hand against original electoral materials.

Further, the results from before and after the stoppage could be compared to one another to explore possible explanations for the change in the trend, such as certain geographic areas having votes counted later. Finally, auditors could analyze the actual IT systems used to determine why the preliminary results system was stopped, and if its stoppage had any effect on the results of the election.

While the GOA did perform some limited verification exercises similar to those discussed above, the Final Report failed to adequately report the GOA's methodology or properly explain the significance of the GOA's findings. Further, the Final Report failed to provide greater clarity around the TREP stoppage, despite being aware of key contextual information, and failed to analyze the most obvious plausible explanations for the alleged change in the trend of the vote.

Final Report Analysis

Finding I: The Final Report is Based on Flawed Statistical Analyses and Incorrect Assumptions

The Final Report includes two findings under the header “Evidence.” The Final Report does not discuss this “evidence” until page 80. The two pieces of evidence are not, in and of themselves, evidence of fraud, but rather, are used by the GOA as indicators of how potential fraud may show up in the data.⁵⁵ The GOA used these analyses to inform where they would look and what they would look for during the audit.

One of the findings in this section of the Final Report relates to the “inexplicable” change in the trend of the vote after the suspension of the TREP. It is interesting to note that, similar to the preliminary report on the audit, the Final Report has modified the allegation from the initial

⁵⁵ The Final Report itself does not use the word “fraud” one time; however, it is the clear implication of the report. Both OAS officials and de facto authorities in Bolivia have used the Final Report to claim that fraud in the 2019 Bolivian elections has been confirmed.

EOM press release on October 21. While the report maintains there was a trend change after the interruption of the TREP, it finds the most significant trend change to have occurred over the last 5 percent of the votes processed. The Final Report states:

The statistical analysis concluded that the first-round victory of Evo Morales was statistically improbable and the result of a massive and inexplicable increase in the number of votes for MAS in the final 5% of the votes counted. Without this increase, although the MAS would have obtained the majority of votes, it would not have had the 10% difference needed to avoid the second round. This increase came with noticeable breaks in the trendlines of votes for the ruling party and for Comunidad Ciudadana (CC), at both the national and departmental levels. The size of the breaks is extremely unusual and calls into question the credibility of the process.

The report's authors continue with what appears to be a veiled reference to CEPR's previous study:

Other studies, with clearly less information and experience in electoral analysis, have argued that the result of the Bolivian election can be explained by a direct extrapolation of the TREP vote count from 84%. But these reports do not address the marked change in the trend after the 84% threshold has been reached. They seem more determined to justify a result, than to make a serious and impartial analysis of the data. The extrapolation is valid depending on whether the rapid increase of the MAS Party advantage after that point is possible or not. The following analysis addresses this question.

In fact, CEPR's analysis did address the "marked change in the trend after the 84% threshold has been reached" by showing that it was entirely predictable based upon already processed results. Even a simple precinct-level extrapolation from the first 84 percent of the results, as was shown earlier, could have predicted the final margin with relative precision.

In the Final Report, however, the OAS sticks to its initial claim of an "inexplicable" change in the TREP vote count trend, but focuses instead on the final 5 percent of the count.⁵⁶ The Final

⁵⁶ The OAS's preliminary report on the audit also discusses the trend change in the final 5 percent of tally sheets processed.

Report utilizes a “discontinuity” analysis to compare the results before this trend change and after, using 95 percent of votes counted as the break.⁵⁷

The report’s authors conclude:

The last part of the calculation, which substantially favored Morales, not only shows a different trend from the rest of the count, but also presents a very marked difference with the votes that had been computed immediately before. The difference between the polling stations on one side of 95% of the vote count and on the other should not reflect acute urban and rural divisions.

To further their point, the GOA performs a departmental-level analysis of the trend change, showing that the trend changed within departments over the last 5 percent of the tally sheets processed by the TREP as well as by the Cómputo.⁵⁸ However, this level of analysis is clearly insufficient. There are wide discrepancies in voter preferences within each department. A more thorough analysis would look at more refined geographic data, including the city and precinct levels, as discussed in **Box 5**.

Box 5. Discontinuities and Precinct-Level Effects, Research Review

In the Introduction, we make the case that the results of the TREP were predictable based on those precincts that had already reported before the TREP interruption. The Final Report includes a departmental-level analysis to claim an improbable change in the trend. We find this unconvincing, given the large variations within departments.

Diego Escobari, associate professor of economics at the University of Texas Rio Grande Valley, and Gary Hoover, chair of the Department of Economics at the University of Oklahoma, treated the break in the TREP as a “natural experiment” by which “fraud” in the election might be measured. At its most basic level, Escobari and Hoover assume that the tally sheets counted prior to the interruption were effectively “clean.” To the extent that the later tally sheets look inexplicably different, the authors attribute the difference to fraud. “Fraud,” in this case, is anything the model does not explain.⁵⁹

The two economists concluded that “the extent of the fraud is at least 2.67 percent of the valid votes.” We strongly question this characterization of their findings. Given that “fraud” is defined here as the unexplained increase in the MAS margin, the model without any other controls must produce an initial upper bound on what is left unexplained. When

⁵⁷ This is similar to what was presented in the preliminary report on the audit on November 10. For a more detailed discussion, see Box 5. The authors of the Final Report write that the “general conclusions” of their analysis do not change if you use time stamp data from the TREP or Cómputo systems. The 4.4 percent of the tally sheets that never entered into the TREP are treated by the GOA as “late results.”

⁵⁸ The OAS performs two different analyses. The first looks at the final 5 percent of tally sheets processed in the TREP and those tally sheets not included in the TREP (for a total of around 9 percent). The second looks at just the final 5 percent of tally sheets processed in the Cómputo system.

Box 5. Discontinuities and Precinct-Level Effects, Research Review (cont.)

precinct-level controls are employed, that “upper” bound falls below 0.05 percent of the valid votes. Everything else is explained by the extent to which precincts were counted in the initial 84 percent of the TREP.

Far from indicating fraud, Escobari and Hoover’s approach confirms our finding that the expanded MAS margin on the later tally sheets is explained by the mix of precincts considered before and after the interruption of the unofficial TREP count.

Jack R. Williams and John Curiel further explain this dynamic in their report, available in full on CEPR’s website. The two researchers compare tally sheets from the exact same voting center (precinct), which were counted before and after the TREP interruption, finding an extremely tight correlation between the two. “This provides a strong indication that within precincts there was no clear change in favor of a single party after the [TREP] interruption,” the authors of that report note.

In furtherance of the OAS’s claim of an improbable change in the trend of the vote, the OAS’s preliminary report of the audit presented a discontinuity analysis, purporting to show a rapid break in the trend at the point in time when the TREP stopped and over the last 5 percent of the votes counted. The discontinuity analysis is also included in the OAS’s Final Report.

Andrew Gelman is a professor of statistics and political science and director of the Applied Statistics Center at Columbia University. Gelman analyzed the discontinuity analysis included in the OAS’s preliminary report, concluding:

The discontinuity analysis is a joke ... But in any case it’s clear that the votes were different, on average, at different points in the vote-collecting process.⁶⁰

In other words, at best all the discontinuity analysis shows is that the order in which votes were tabulated was not random. We know this to be true, as explained in previous sections.

Further, Curiel and Williams perform their own discontinuity analysis in their report. The researchers note that the discontinuity analysis would only hold relevance if sociodemographic and other covariates could not predict whether a precinct reported results before or after the deadline. However, they find that sociodemographic variables are “significantly associated with whether an area reported results before the cutoff.” Not only was the order nonrandom, but there are clear explanations for why it was not random. Further, as discussed previously, the researchers replicated CEPR’s earlier findings that the later-counted TREP results were entirely explainable based on already reported results.

The Final Report analysis rests on the methodological postulation that the order in which tally sheets are processed is entirely random. But the Final Report itself confirms that this is not the case. The Final Report notes that the TSE planned on presenting preliminary results with close to 80 percent of the votes processed in the TREP by 8 p.m. on election day. Not all the results

⁵⁹ Rosnick (2019).

⁶⁰ Gelman (2019).

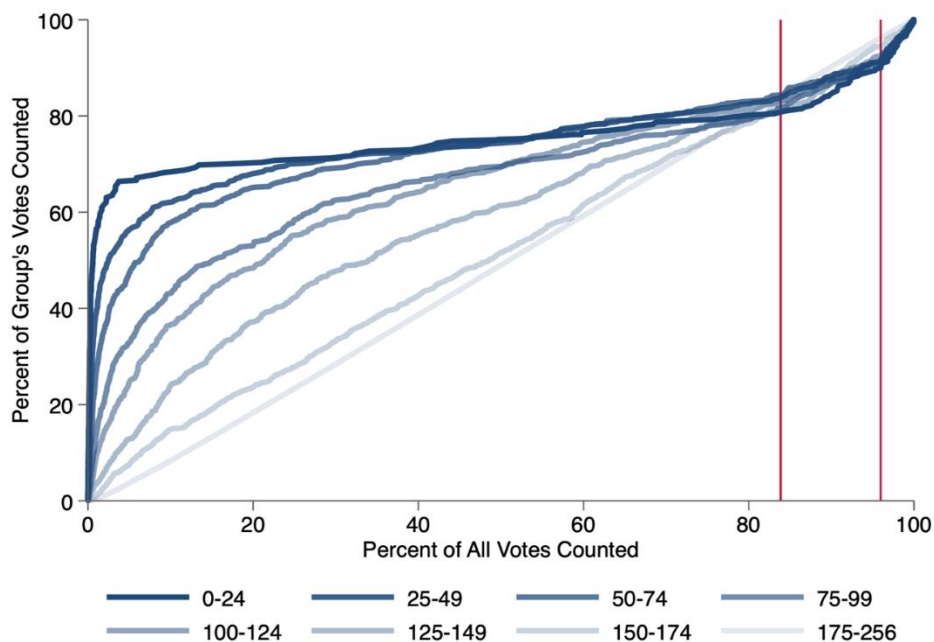
would be available because of, as the Final Report notes, “the time needed to count the votes at the tables and the communications infrastructure in different areas of the country.” In other words, tally sheets from certain parts of the country take longer to receive and process.

There are multiple ways to show that the vote count was nonrandom. First, tally sheets with relatively few votes cast were reported earlier than those with more votes cast. Tally sheets with only five votes to count would be completed and ready for transmission before tally sheets with 250 votes to count, which would require more time. In **Figure 7**, each blue line shows the progress in counting tally sheets within a given range of votes cast (tally sheets with 0–24 votes recorded to tally sheets with 175–256 votes recorded). We see that domestic tally sheets with the largest numbers of votes were counted more uniformly throughout the TREP, but those with the smallest number of votes tended to be reported early.

FIGURE 7

Progress in Counting Tally Sheets Varied by the Number of Voters

(votes recorded per tally sheet)



Source: OEP (2019d) and authors' calculations.

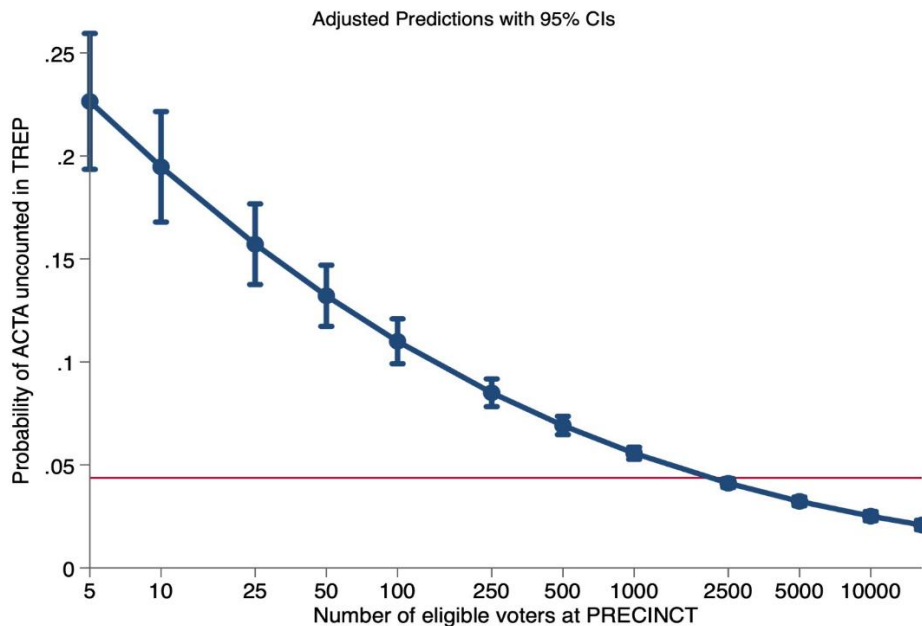
Note however, that this only applied to the first 80 percent or so of votes recorded. Tally sheets with smaller number of votes were both more likely to be set aside for further consideration and less likely to be included in the TREP at all. Presumably, these were either transmitted late because of problems at the polling station, poor infrastructure, or were transmitted quickly but not reported until after receiving greater scrutiny.



The size of voting centers also seems to have impacted the order in which tally sheets were processed. In **Figure 8** one can see how, as the size of a voting center decreases (as the trend line approaches the y-axis), there is a greater chance that the tally sheets from that voting center are not included in the TREP. It is reasonable to assume that the smaller the voting center, the more likely it is to be in an area of the department, city, or locality with less population density.

FIGURE 8

Tally Sheets at Smaller Precincts Were More Likely to Be Counted Late



Source: OEP (2019d) and authors' calculations.

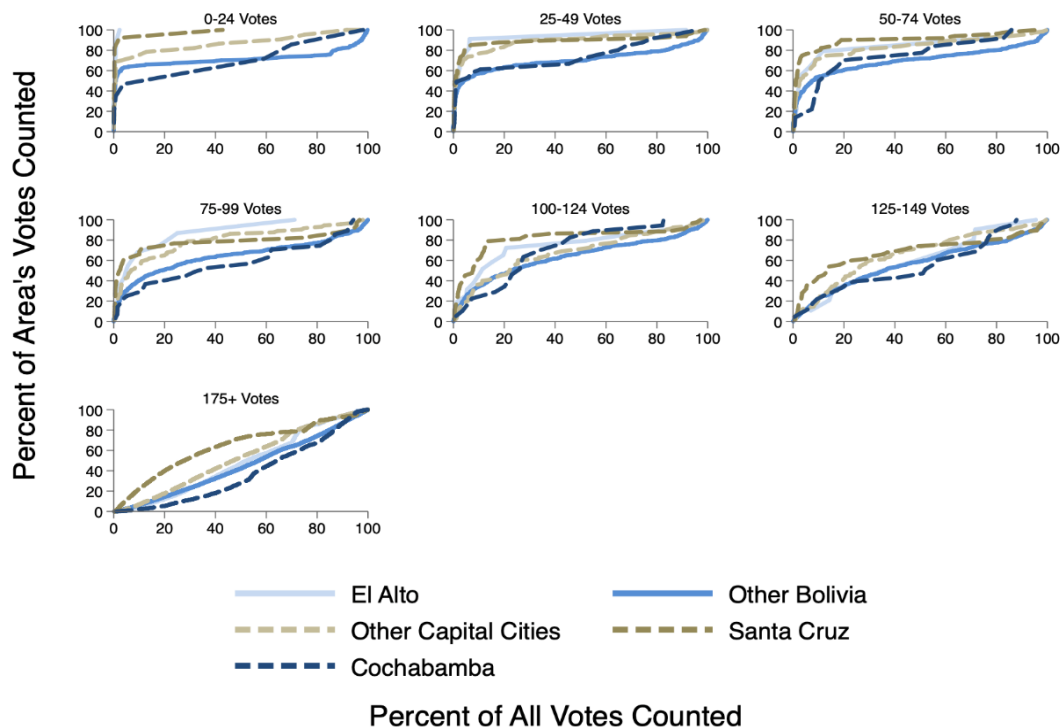
Curiel and Williams used sociodemographic indicators to investigate this further. They found a correlation between indicators such as “percent of population with indoor water access,” “percent of population that does not attend school,” “percent of population without internet,” and “percent of population that is Spanish speaking,” and the likelihood of tally sheets being counted before the TREP interruption. In other words, tally sheets from geographic locations with a higher percent of non-native Spanish speakers and below average infrastructure were more likely to be processed later.⁶¹

⁶¹ Curiel and Williams (2020).

Indeed, geography and infrastructure clearly played a role. As **Figure 9** below shows, regardless of tally sheet size, those from Santa Cruz and other capital cities were processed earlier. Tally sheets from Cochabamba and outlying areas of Bolivia tended to report later.

FIGURE 9

Regardless of Size, Capital Cities, Especially Santa Cruz, Were Counted Early

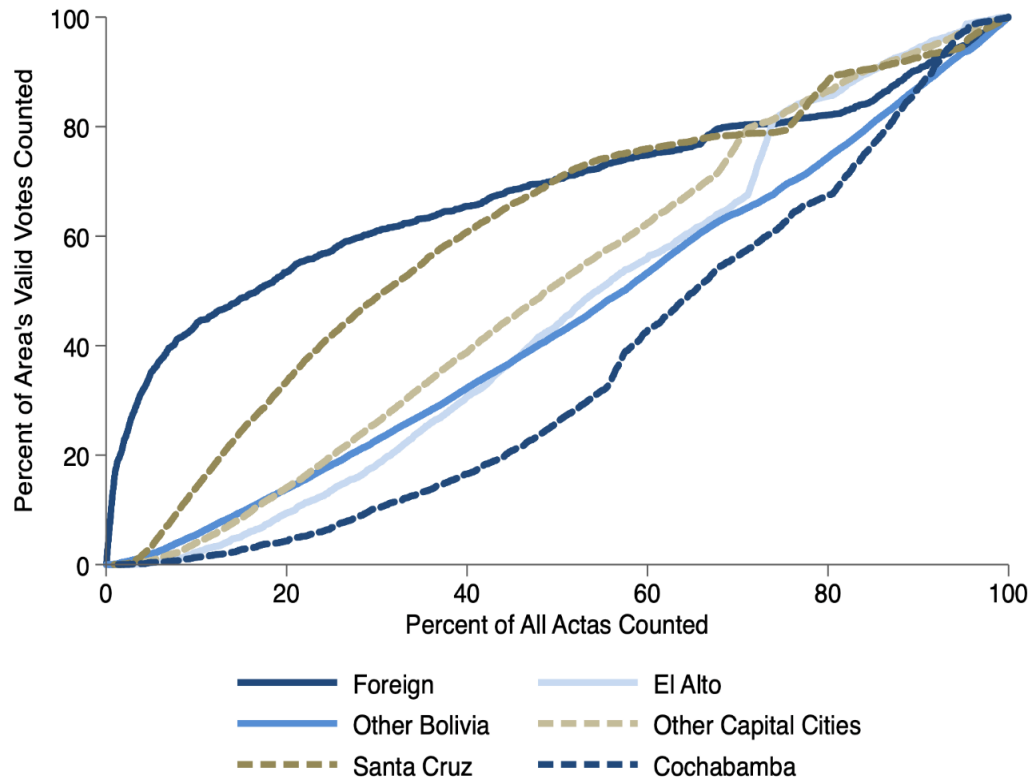


Source: OEP (2019d) and authors' calculations.

The timing difference between Santa Cruz and Cochabamba is especially acute for larger tally sheets. As 86 percent of tally sheets fall into this “large” category and — by construction — represent the largest number of votes — certain areas had their votes reported relatively early in the TREP compared to others, as can be seen in **Figure 10** below.

FIGURE 10

TREP Progress Varied Strongly by Region



Source: OEP (2019d) and authors' calculations.

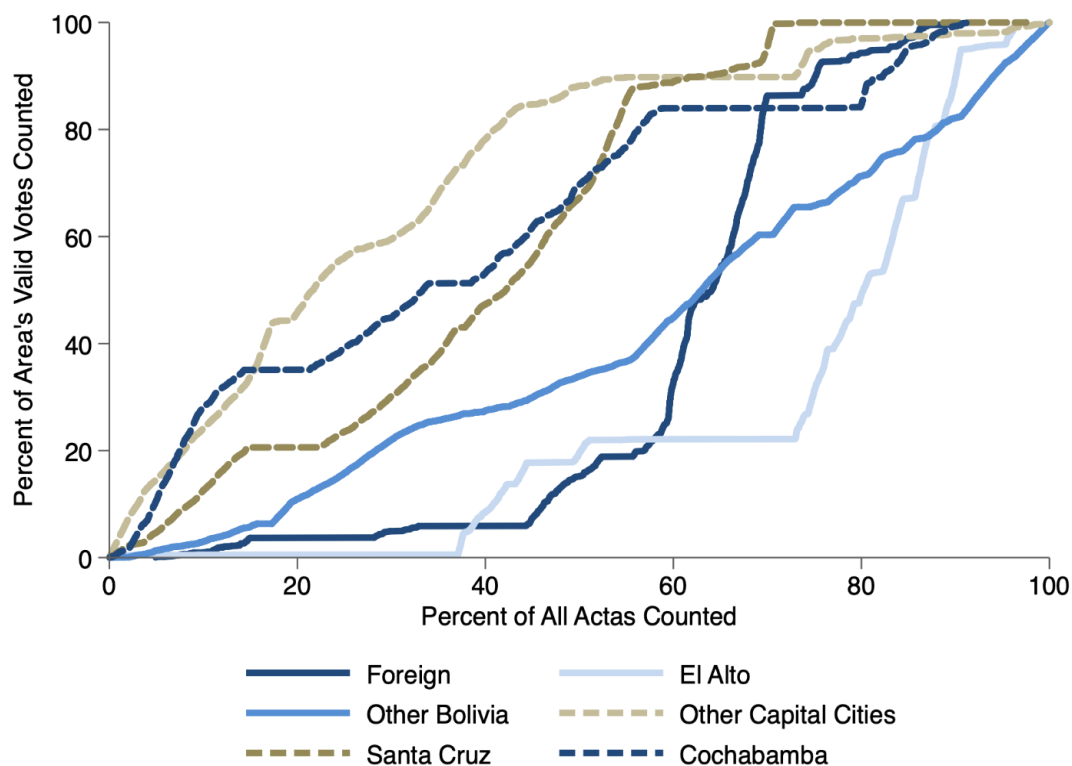
Because MAS tended to perform well in El Alto, Cochabamba, and outlying areas of Bolivia, the timing in the reporting from these regions explains the observed increase in the MAS margin as the TREP progressed.

On the other hand, the tally sheets were processed differently in the Cómputo than they were in the TREP. Because Cómputo tally sheets were reported only after hand delivery to departmental offices, precincts close to the offices were reported earlier. This means that precincts in the capital cities tended to report early in the Cómputo, as can be seen in **Figure 11** below.



FIGURE 11

In the Cómputo, The Differences in Progress by Region Were Even Stronger



Source: OEP (2019d) and authors' calculations.

Because capital cities broke heavily against MAS, this meant that relative to the TREP, the change in margin moving from early reporting to late was even stronger in the Cómputo. By the time half of the tally sheets were processed in the Cómputo, upward of 80 percent or more of all votes from the capital cities had already been counted, leaving a large number of pro-MAS tally sheets uncounted. By the last fifth of the Cómputo, nearly all the outstanding tally sheets were from El Alto and outlying areas of Bolivia where MAS performed especially well — consistent with prior elections. These different processes—in both TREP and Cómputo — resulted in strong MAS performance late in the count and explain the observed change in trend.

Finally, the Final Report presents a data table covering the final 13.1 percent of the votes counted in the Cómputo system. The report authors write:

The difference between the two candidates grows rapidly during the final 15% of the vote count. But, as previously identified, the last 5% is the critical point. It is from there that the advantage of the MAS goes from just under 9% to 10.57%, which requires that its advantage over the CC be extended by 120,000 votes. How did this happen? In the

final 5% of the calculation, the MAS obtains 167,000 votes, against only 50,000 for CC. It is this rupture, *unforeseen and impossible to anticipate* given the trend of the rest of the vote, which pushes the MAS above the 10% margin. *[Emphasis added.]*

Again, the OAS repeats its claim that there was an abrupt trend change at the 95 percent mark. However, the data table provided in the report directly contradicts this claim, as can be seen in **Table 2**. From 90.38 percent to 95.12 percent, the period directly before this “rupture,” MAS obtained 80.5 percent of votes (as a percent of votes cast for either MAS or CC only).⁶² In the final 4.88 percent of the votes counted, MAS obtained 76.7 percent of the votes — in other words, MAS’s margin decreased after this “rupture” compared to the 5 percent counted immediately before.

TABLE 2

Final Report Data Contradicts Final Report Finding

Interval	Tally Sheets	CC Votes	CC Vote Share	MAS Votes	MAS Vote Share
From 90.38% — 95.12% of Total Votes	1,637	45,270	19.5%	186,687	80.5%
From 95.12% — 100% of Total Votes	1,688	50,489	23.3%	166,597	76.7%

Source: OAS (2019g).

Despite this glaring mathematical malpractice, which disproves the Final Report’s thesis of a dramatic rupture at the 95 percent threshold, the authors conclude:

Our analysis of the data of the 2019 Bolivia Elections makes it clear that Evo Morales’s first-round victory was statistically unlikely, and that his proclamation was given by a massive and unexplained increase in MAS votes in the final 5% of the calculation. Without this increase, although the MAS would have obtained the majority of the votes, it would not have obtained the difference of 10% necessary to avoid the second round.

The Final Report’s conclusion is contradicted by the data it presents and by basic arithmetic. Far from showing the inadequacy of the CEPR analysis, or an unexplained trend shift, the Final Report’s analysis raises serious questions about its ability to perform a professional and neutral audit. It appears the organization was more concerned with justifying the claims in its October 21 press release by any means necessary than in objectively analyzing the results. However, the data are clear: the trend change was not only explainable but entirely predictable.

⁶² The data presented in the Final Report only includes vote totals for the top two candidates.



Observations

The second piece of “evidence” that the GOA uses to target its analysis is the finding that the 4.4 percent of tally sheets not counted in the TREP contained an irregularly high number of “comments.” As the report itself notes, these comments often involve corrections made by poll workers after the votes are counted. Tally sheets contain space for poll workers to write any comments. Many of those comments pertain to mistakes made in the filling out of the tally sheets. For example, five votes were recorded for candidate X when in reality those five votes should have been recorded for candidate Y.

The Final Report finds:

An analysis of the use of the space for comments in the tally sheets of the official count found that 12,925 tally sheets (37%) included comments providing some clarification or noting a situation that took place during the vote or vote counting. Fifty-six percent of the tally sheets that were entered directly into the official count and were never published through the TREP had comments. Analysis of the type of comments found in the 12,925 tally sheets indicates that 18% corresponded to changes/corrections to the number of votes recorded for the presidential election. The audit also found that of these 12,925 tally sheets, 846 were entered only in the final count (final 4.4%), of which, 328 (39%) referred to changes in the number of votes for president.

The elevated number of comments related to presidential vote totals is of extreme concern to the report authors. But this does not inherently indicate the presence of fraud.

TABLE 3

	Tally Sheets w/ Comments	Percent w/ Presidential Impact
Total	12,925	10.3%
In TREP	12,079	8.3%
Only in Cómputo	846	38.8%

Source: OAS (2019g).

The GOA analysis identified 846 tally sheets that contained comments and were not entered into the TREP. Of those, 38.8 percent contained comments related to the presidential vote count, as can be seen in **Table 3**. The Final Report does not reveal the magnitude of those

changes or which candidate benefitted from them. Far from evidence of irregular behavior on the part of election authorities, this appears to be the natural result of the verification process whereby tally sheets with illegible handwriting, complex comments, or other issues are given greater scrutiny.⁶³

In a report presented to the TSE, the contractor responsible for managing the TREP and *Cómputo* noted that 1,134 tally sheets could not be included in the TREP due to these concerns.⁶⁴ Therefore, it in no way seems irregular that a greater percent of tally sheets not counted in the TREP contained comments. Though the Final Report highlights this as a problem, it seems to actually indicate that the verification process was functioning as it should have during the TREP.

In conclusion, both pieces of “evidence” — the improbable trend change and the elevated number of comments on late-counted tally sheets — that the report authors point to as driving their analysis and audit investigation, are flawed.

Finding II: The Final Report Buries or Conceals Altogether the Results of its Verification Exercises and Fails to Clearly Explain its Methodology

The GOA investigated four distinct issues in the Bolivian election: the information technology infrastructure used for the preliminary and official results systems; the chain of custody over sensitive electoral material in the field; the flow of data; and finally, the authenticity and reliability of the tally sheets and data input into the preliminary and official results systems.

The Final Report found that violations of the security protocol with regard to the nonbinding component of the IT system (the TREP) and the deficient chain of custody with regard to the physical electoral material, allowed the possibility for the results to be manipulated. In Bolivia, there is no legal possibility for a vote-by-vote recount. The official electoral record is contained

⁶³ OEP (2019a).

⁶⁴ The contractor was NEOTEC. For more information on NEOTEC see Box 11. “When the image [in the TREP] does not correspond to a tally sheet, does not have the complete record, is illegible or has [comments] beyond the simple and obvious, the record remains observed. For this reason, 1,134 [tally sheets] could not be approved, 3% of the total [tally sheets].” NEOTEC (2019). These 1,134 tally sheets account for 75 percent of the tally sheets not included in the TREP.

in the physical tally sheets produced from each voting table across the country at the end of election day.

As discussed in “Audit Standards and Verification Methods,” there were numerous tools at the GOA’s disposal in order to verify the electoral results’ legitimacy. At question in the election was not just the authenticity of some small section of the vote, but the results in their entirety. The stoppage of the TREP, the EOM claim of an “inexplicable” change in the trend, and the preliminary report on the audit together contributed to the overall belief that the results of the election could not be trusted.

The authors of the Final Report do offer a partial discussion of the verification efforts that the GOA did undertake beginning on Page 80 (of 95).⁶⁵

It is expected that there are differences in the results produced by the TREP and the *Cómputo*, as tally sheets are given greater scrutiny in the official process. To determine if any result data had been directly manipulated, i.e., the data in the system did not correspond to the tally sheets in the system, the GOA compared the photo images in the TREP with the scanned images in the *Cómputo*.⁶⁶ If the votes for each candidate match across systems, based not on the data in the IT system but on the actual images of the tally sheets, it would serve as a good indication that the data are authentic.

The Final Report, in a parenthetical aside, notes that the tally sheet candidate vote totals matched across systems in 99.8 percent of cases. The Final Report contains no information or analysis of the 0.2 percent of cases where they do not match.⁶⁷ Here, the GOA analysis stands as good evidence that the data itself was not manipulated despite the alleged IT irregularities identified in the Final Report. Yet the Final Report never even mentions the significance of this verification exercise performed by the GOA. Rather, the Final Report simply notes that this analysis does not confirm the authenticity of the tally sheets.

The GOA did attempt to verify certain tally sheets, though the Final Report makes clear that the audit team itself was unable to adequately perform its work with regard to the verification

⁶⁵ Pages 80–84, where this information is located, correspond to the section of the Final Report on the finding of the increased level of “comments” in the tally sheets not inputted into the TREP system. That finding is flawed, as discussed earlier. OAS (2019g).

⁶⁶ See Box 1 for more detailed discussion of the two vote transmission systems.

⁶⁷ This same analysis, comparing the data across the two systems, was what Antonio Costas, the opposition member of the TSE, claimed to have done on the night of the election when the TREP was suspended. At the time, he said, the numbers matched — and so he believed there was no technically valid reason to stop the TREP. This is discussed in the Introduction.

of the results in the field.⁶⁸ The GOA, however was able to check at least some tally sheets in the departments they were able to travel to. If the image analysis did not prove the authenticity of the tally sheets, the GOA's verification of the physical election materials could.

The Final Report notes that the GOA analyzed 894 tally sheets out of a sample of 2,863.⁶⁹ It is not described how the original sample was chosen, or how or why the audit team limited the analysis to just the 894 tally sheets. These methodological concerns are extremely important. For an audit to be credible, it must work from clear standards and with clearly explained methodology.

Further, the Final Report never mentions the results of its verification exercise in those cases where it did locate original electoral material. The only result of the verification analysis reported is that, in 230 cases, the tally sheets “could not be matched with the eligible voter rolls ... because they had been partially or totally burned or were not found in the respective envelopes.” **Table 4** shows the magnitude and location of the burning of electoral material.

TABLE 4

Destroyed Electoral Material, By Department

Department	Total Tally Sheets	Tally Sheets in Good Condition	Tally Sheets Burned or Destroyed	Electoral Lists in Good Condition	Electoral Lists Destroyed
Potosí	2,338	75.0%	25.0%	0.0%	100.0%
Cochabamba*	6,134	99.5%	0.5%	100.0%	0.0%
Beni*	1,302	100.0%	0.0%	83.8%	16.2%
Santa Cruz	8,621	19.0%	81.0%	0.0%	100.0%
La Paz*	8,988	100.0%	0.0%	100.0%	0.0%
Pando*	389	100.0%	0.0%	0.0%	100.0%
Chuquisaca	1,828	99.9%	0.01%	0.0%	100.0%
Tarija*	1,802	100.0%	0.0%	100.0%	0.0%
Oruro	1,646	100.0%	0.0%	100.0%	0.0%

Source: OAS (2019g). *Departments the GOA traveled to.

The Final Report casts doubt on the validity of the results due to procedural problems with the IT network and chain of custody, but then fails to properly answer the question of whether those procedural problems affected the results.

⁶⁸ This is discussed in greater detail in the Introduction.

⁶⁹ OAS (2019g), English version, page 84.



If the conditions on the ground did not allow for the GOA to adequately perform its verification work, the Final Report should have stated clearly that that was why it was unable to verify the results of the election. Instead, and contrary to basic auditing principles, the Final Report reaches its conclusions based on inadequate and incomplete findings. That error is compounded by the lack of reporting on even those basic verification exercises that the GOA did complete.

Further, a reference in the preliminary report on the audit raises even greater questions about the methodology used in determining the verification sample mentioned above. The preliminary report includes a reference to a sample of 894 tally sheets (same as above) and mentions that 176 correspond to tally sheets from Argentina. The chance that a random sample of 894 out of more than 34,000 tally sheets could produce 176 from Argentina is virtually impossible.⁷⁰ This indicates again that the GOA did not use a representative statistical sample in performing its verification exercise.

The nonbinding, preliminary election results generated a lack of confidence in the electoral process. The GOA mandate included verifying the results. To do so, three main exercises could be performed. The first is a visual comparison of the images between the preliminary and official systems. The GOA performed that analysis and did not identify any problems. Next, those seeking to verify the results could compare opposition party tally sheets with the official results. There is no indication in the Final Report that this was ever done. Finally, auditors could verify the digitized results by comparing them with the original electoral material. Though the loss of electoral material prevented the latter test from being performed in some cases, the results of this verification exercise are not included anywhere in the Final Report.⁷¹

70 Still, the case of the tally sheets from Argentina is interesting. The preliminary report noted that, in 38.07 percent of the 176 tally sheets analyzed from Argentina, “the tally sheets showed a higher number of votes than voters on the voter registration lists.” This finding was repeated after the release of the preliminary report as evidence of fraud. But in the Final Report, these tally sheets are only included in the category of “errors.” The category is described as “Mistakes or negligence without indication of intentionality but that could have facilitated actions that did violate the electoral process.” In other words, while the media focused on these allegedly fraudulent tally sheets for weeks between the release of the preliminary report and the Final report, the Final Report does not even consider these examples as “irregularities,” let alone anything that affected the results of the election.

71 Argentine journalist Alejandra Dandan, writing for the media outlet “El Cohete a la Luna,” has made several claims based on her conversations with what she terms “diplomatic sources,” who appear to have participated in the OAS’s EOM and audit in Bolivia in October and November 2019. Dandan’s first claim is that the release of the preliminary audit report was rushed and had “incomplete data.” Dandan reports that Luis Almagro pushed for the publication of the report despite the fact that “many experts were still working on the report in the Hotel Casa Grande and were unaware that the report would be published” that day. As a result, “the auditors were swiftly dispatched to the airport in El Alto to get them out of Bolivia.” Dandan’s second claim is that “Almagro’s report only included a small part of the audit’s findings and left out a good deal of the work carried out” and that the report “ignored much of the work carried out by the commissions.” Dandan claims, for example, that the exercise of “contrasting the tally sheets with the *Cómputo* resulted in no significant differences being identified,” but that this was largely ignored. In a more recent piece, Dandan also claims that the EOM’s own



Box 6. Alternative Verification Methods

While the GOA was limited in its ability to travel, auditors could have utilized alternative measures in an attempt to verify samples of the results.

An official copy of the tally sheets should be stored in the TED, as explained earlier. But there are additional copies of the tally sheets distributed on the day of the election. Notaries, some 8,000 present on election day, received a copy. Political party delegates present for the vote count also received a copy.

The president of each voting table also received a copy. Contact information for the notaries and voting table presidents was readily available at the TSE. There is no indication in the Final Report that the GOA attempted to contact or collect these tally sheet copies in order to supplement their verification efforts. But the Final Report does provide information on the number of political party delegates present at voting tables across the country.

The GOA selected a sample of 5,000 tally sheets (digitized copies) to analyze the number of electoral employees and political party delegates that signed the tally sheets. Overall, in 88 percent of voting tables, the vote counting was conducted in the presence of at least one political party delegate. It is little surprise that the two parties with the greatest delegate coverage were Movimiento al Socialismo (MAS-IPSP) and Comunidad Ciudadana (CC). The MAS had a delegate present at 66 percent of voting tables across the country; the CC had a delegate present at 55 percent of voting tables. At 18 percent of the tables, only a delegate from the MAS was present; in 8 percent of the tables, only a delegate of CC was present.

The Final Report provides no further analysis of these figures, but the information does raise a serious question with regard to the audit. The physical copies of the tally sheets, given to each political party delegate present during the counting of votes, serve as a means of preventing fraud as parties are able to ensure the official totals match the copies in their possession.⁷² CC, with delegates at 55 percent of voting tables, would be able to compare their tally sheets with those published by the electoral authority. The CC provided the OAS with their tally sheets, though this is not referenced in the Final Report.⁷³

internal quick count was adjusted on election night. According to Dandan, “the first result of the quick count resulted in a lead of more than 10 points in favor of Evo Morales. This was never recognized by the OAS. Neither did the organization recognize that it was unhappy with its results and that it carried out a series of exercises to change the sample, until it obtained a result similar to the one that at this time had been released by a polling company [Viaciencia] of a 4-point difference in favor of Morales.” Dandan (2019a), Dandan (2019b). Almagro accused two Argentines of being “spies” inside the GOA. Clarín (2019b).

72 It is normal, in contested elections, for OAS observer missions to ask parties alleging fraud to turn over their copies of the tally sheets in order to check for fraud. In the case of the 2017 election in Honduras, the OAS mission specifically noted that it had compared party tally sheets to the official results. OAS (2017b).

73 Conversation with high-level source within the OAS. The source claimed that an analysis of the CC tally sheets revealed no significant discrepancies with the official results.

Though the vast majority of the Final Report is focused on casting doubt on the validity of the election results, the fact that it barely mentions its verification efforts, does not disclose its verification methodology, and fails to even report basic findings from the verification effort, indicate a clear contravention of the principles of election auditing, and raise significant questions about the intentions of the report’s authors.⁷⁴

What is clear from the Final Report is that the main action that prevented the GOA from verifying the election results was the destruction of electoral material by those protesting alleged electoral fraud.⁷⁵ That is a significant finding. With no possibility for a recount and with significant loss of the original electoral material in the custody of the TEDs, it is technically impossible to verify the entirety of the results of the election, as the Final Report concludes.⁷⁶ However, that finding has nothing to do with the myriad allegations of irregularities or “intentional manipulation” in the Final Report. In fact, the Final Report itself shows that the actual verification efforts, such as they were able to be performed, did not identify any serious irregularities or manipulation of results.

Finding III: The Final Report Presents No Evidence Indicating Manipulation of Election Results

Only one of the Final Report’s findings of “intentional manipulation” or “grave irregularities” relate to actual vote totals. The GOA conducted a handwriting analysis and identified 226 tally sheets as problematic. These sheets correspond to 86 voting centers where one person filled out parts of two or more tally sheets. The report’s authors find this to be “an intentional and systematic attempt to manipulate the results of the election.”

That finding, however, is the result of a biased and unrepresentative methodological sample of tally sheets, and does not relate in any way to the problems identified with the IT systems.

⁷⁴ Here we distinguish the actual Group of Auditors (GOA) who performed the work from the unnamed authors of the Final Report itself. It is possible the GOA did reach conclusions based on their limited verification efforts, or did perform additional verification exercises, but if so, the authors of the report did not include those findings.

⁷⁵ The Final Report does include the destruction of electoral material in its finding of “intentional manipulation,” but fails to provide context on the circumstances in which that material was destroyed. The Final Report notes a lack of communication or security planning on the part of the TED with local police units. It is worth noting that, in the weeks following the election, many police units declared themselves in mutiny.

⁷⁶ The vast majority of destroyed tally sheets had already been processed in both the TREP and the Cómputo. There was also a limited number of cases, the Final Report claims 130, where electoral officials used TREP images in place of original tally sheets that had been destroyed.

Further, there is nothing to indicate that, even if these 226 tally sheets actually were “irregular,” that they affected the overall results of the election.

The Final Report states:

In an exercise aimed at analysing potential falsification or manipulation, a sample of 4,692 tally sheets was reviewed. The analysis found 226 cases in which two or more tally sheets from a single polling station were filled out by the same person, *indicating an intentional and systematic attempt to manipulate the results of the election* and violate the law establishing the duties of the sworn polling table workers. The tally sheets came from 86 polling stations in 47 different municipalities. Their total valid votes added up to 38,001, of which 91% (34,718) were awarded to the Movimiento al Socialismo (MAS). *[Emphasis added.]*

This finding has been consistently misrepresented in the media and by DECO officials.⁷⁷ Given that this is the only allegation of any direct impact on the results of the election, it is worth examining this claim in detail.

First, the sample itself is biased, as explained in detail in **Box 7**. The entire 4,692 tally sheet sample comes from areas that overwhelmingly voted for MAS. The sample bias is important. The Final Report alleges that if the GOA looked at a larger sample, they would find more examples of irregularities favoring MAS, but this is not a random sample to begin with. Certainly, additional irregularities could be found, but they might just as easily come from pro-CC precincts. This is not considered in the Final Report.

Media reports and OAS officials have presented these 226 tally sheets as containing altered results and forged signatures — and as proof that all the computer problems were part of a plot to steal the election.⁷⁸ What the Final Report states, however, is that the 226 correspond to tally sheets from 86 voting centers in which the same person partially filled out two or more tally sheets. To be clear, the allegation is not that one person filled out all 226 tally sheets.⁷⁹ It is not that the signatures of poll workers were forged on these 226 tally sheets. The allegation

⁷⁷ In remarks made at the OAS Permanent Council, Gerardo de Icaza, the head of DECO, claimed that the 226 tally sheets had been “manipulated” in a “premeditated” and “systematic” manner “to benefit the same candidate.” Icaza then referred to forged signatures as part of the “intentional manipulation.” OAS Videos – Events (2019b), Infobae (2019), Lopez and Ramos (2019).

⁷⁸ 1:29:00 of OAS Videos – Events (2019b).

⁷⁹ Nevertheless, some media reports have presented the findings as being that one person filled out all 226 tally sheets. For example: El Diario (2019).

is that, in 86 voting centers, one person partially filled out two or more tally sheets and that this is a violation of the electoral law. The handwriting analysis pertains simply to the written names and ID numbers, and not to the signatures of the jurors.⁸⁰

The vast majority of these 226 tally sheets — 78 percent — come from voting centers with 4 or fewer voting tables (each tally sheet corresponds to a table). Extending that analysis, in 55 of the 86 voting centers (precincts), the “irregular” tally sheets constituted *all* of the tally sheets at that voting center. Those 55 precincts contained, on average, just 425 registered voters. These findings indicate that the alleged irregularities predominantly came from more rural areas and smaller voting centers.

Rather than an indication of fraud or the “deliberate” manipulation of results, as the Final Report claims, this is likely indicative of a well-known phenomenon: in rural areas and smaller voting centers, it is not uncommon for one person to assist with the tally sheets. This may especially be true in communities with relatively higher rates of illiteracy or among largely indigenous communities. The tally sheets are available only in Spanish.⁸¹

Box 7. A Biased Sample Produces a Biased Result

First, the GOA selected tally sheets in which MAS received 99 percent of the votes or more. That resulted in a sample of 125 tally sheets. The GOA then extended the sample to include all the other tally sheets from those same voting centers. This resulted in a total sample of 333 tally sheets.

Next, the GOA selected tally sheets from the departments of Cochabamba, Potosí, Chuquisaca, Santa Cruz, and from Buenos Aires, Argentina in which MAS obtained between 90 percent and 98.9 percent of the vote. The GOA then extended the sample to include other tally sheets from the same voting centers identified. This resulted in sample of 3,285 tally sheets.

Finally, the GOA selected tally sheets that were never processed in the TREP in which MAS obtained 77 percent of the votes or more. This resulted in 319 tally sheets. The GOA extended the sample like it did elsewhere, and came up with a total sample of 1,074 tally sheets.

The Final Report insinuates that the high level of support for MAS on these tally sheets is inherently suspicious; however, the results were consistent with previous elections where MAS received more than 90 percent support in myriad locations across the country.

⁸⁰ The Final Report includes its full handwriting analysis as Appendix 8. Tally sheets contain specific information about each electoral juror assigned to a voting table. The names and ID numbers of each juror are included on the tally sheet. The handwriting analysis pertains simply to the written names and ID numbers, and not to the signatures of the jurors.

⁸¹ It should be noted that Curiel and Williams, did utilize sociodemographic data in their analysis. It was clearly possible for the GOA to have included these factors in its own analysis.

Further, it is not clear that the observed irregularity is even a violation of the electoral law. The Final Report states:

According to Article 64 of Law No. 018 of the Plurinational Electoral Organ, the sworn staff of the voting table is in charge of “conducting the opening and closing actions of the Voting Table, examining and counting the ballots, and completing the respective tally sheet.”⁸²

This is ambiguous, however. According to Article 49 of the Rules of the Election and the official guides issued by the TSE, it is the signatures that are required from the voting table staff and party delegates.⁸³ Out of the 226 tally sheets, the Final Report only identifies one tally sheet as containing anything irregular concerning the signatures.⁸⁴

This does not mean that there are no irregularities in the 226 tally sheets. However, the Final Report puts all of these tally sheets together and refers to them as evidence of “an intentional and systematic attempt to manipulate the results of the election.”⁸⁵ Given that there is nothing actually connecting all of these tally sheets, other than the fact that a large portion of them come from predominantly indigenous communities, and that the irregularities identified are not even clear violations of the electoral law, it is unclear how or why the Final Report determines these 226 tally sheets are evidence of anything “systematic” or “intentional.”

Further, the Final Report does not provide any evidence indicating these perceived irregularities affected the results of the election. The Final Report does not provide any analysis of the results of the 226 tally sheets in comparison to other tally sheets from the same voting centers or from nearby geographic areas. If the 226 tally sheets were forged, or were part of a “systematic attempt to manipulate the results of the election,” one would expect the actual results reflected on those tally sheets to look substantially different from other tally sheets at the same or nearby voting centers. This is not the case.

⁸² The relevant law cited by the Final Report uses the Spanish term “asentar,” which does not translate to “complete.” “Asentar” means writing down an oral statement, it means “to tally.”

⁸³ Article 49, OEP (2019a).

⁸⁴ See Box 9.

⁸⁵ Proper training of poll workers is obviously something to improve in the next Bolivian elections. The European Union Observation Mission’s final report on the 2019 elections notes the presence of a “significant number” of errors or irregularities in the completion of the tally sheets. One factor, the report’s authors note, is that training for electoral jurors is not mandatory. Page 12, EU Election Expert Mission (2019).

One can impute the expected votes on the 226 tally sheets with a similar process as used earlier.⁸⁶ The result of that imputation exercise can be seen in **Table 5**.

TABLE 5

Imputing Votes for 226 “Irregular” Tally Sheets	
MAS-CC Margin (Total Votes)	
“Irregular” 226 Tally Sheets	33,710
Imputed 226 Tally Sheets	30,826
Mas-CC Margin (Percentage Points)	
Official Results	10.56
Official Results (With imputed 226)	10.52

Source: OEP (2019d) and authors’ calculations. The imputation generates a range of possible outcomes. The mean outcome is used in the above table.

As can be seen in the above figure, replacing the “irregular” results from the 226 tally sheets with imputed results based on tally sheets nearby had only a negligible impact on the overall results, reducing the MAS margin from 10.56 to 10.52. This is to be expected, as the results from the 226 tally sheets appear very similar to those around them. This provides strong evidence that, rather than systemic fraud, the Final Report has identified localized irregularities with no discernible impact on the overall results.

This dynamic can be demonstrated without the use of statistical modeling. As mentioned previously, in 55 voting centers, the “irregular” tally sheets constituted all the tally sheets within the voting center. That, however, leaves 31 voting centers where one can directly compare the “irregular” results to other tally sheets within the exact same voting center. **Table 6** presents the overall averages from this analysis.

TABLE 6

Results on “Irregular” Tally Sheets Are Not Irregular		
	Average Vote Share in 31 Voting Centers	Average Vote Share on “Irregular” Tally Sheets from the Same 31 Voting Centers
MAS	89.85%	89.82%
CC	3.24%	3.22%

Source: OEP (2019d) and authors’ calculations. Average vote share in 31 voting centers excludes “irregular” tally sheets in those voting centers.

⁸⁶ See statistical annex of Long et. al. (2019).



When comparing the “legitimate” tally sheets in those 31 voting centers to the “irregular” tally sheets, one can see that there is virtually no difference in the actual results of the “irregular” set of tally sheets when compared to those within the same voting center. Again, this indicates that the Final Report’s finding that these 226 tally sheets affected the overall results is misleading. Again, given the similarity of the results between the “irregular” set and other tally sheets within the same voting centers, these two assumptions are clearly incorrect. A few specific examples are discussed in greater detail in **Box 8**.

This is especially relevant to the conclusions the Final Report reaches. The Final Report alleges irregularities and then insinuates these votes should be removed from the final results.⁸⁷ However, given that these tally sheets, in general, contain results extremely similar to those around them, by entirely discounting the votes from a certain table the Final Report is effectively disenfranchising tens of thousands of Bolivians.⁸⁸ Given the results from similar or the same locations, it is clear that not only did Bolivians vote at these tables, but that they overwhelmingly voted in favor of MAS and the candidacy of Morales.⁸⁹

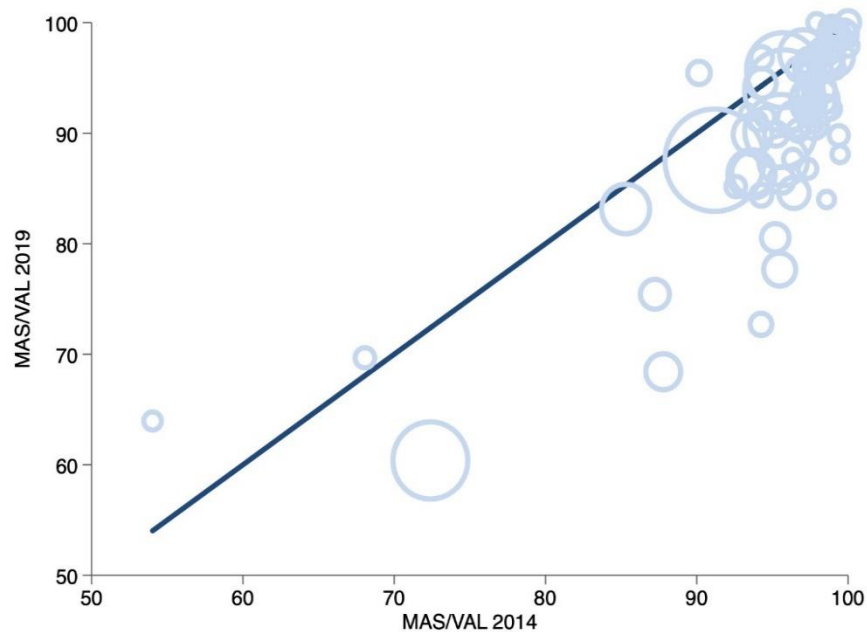
To extend this analysis even further, it is possible to compare the results in those voting centers containing “irregular” tally sheets to results from those same voting centers in previous elections, such as the presidential vote in 2014.

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- 87** According to electoral observation standards, missions should comply with domestic law. There is a process in Bolivia’s electoral law for the annulment of tally sheets. Article 177 of the electoral law defines the causes for annulment. In the event that a tally sheet is annulled, the election will be reheld on the second Sunday following the election. OEP (2010a).
- 88** The other reason why this sample bias is important is because the Final Report describes the number of votes for MAS on these 226 tally sheets (34,718) as “almost” the entire margin beyond 10 percentage points that gave Morales a first-round victory. The Final Report does not actually present this calculation, however, if one counted all of those 34,718 votes as “fraudulent” and assigned them to other minor-party candidates (defined here as any party other than MAS and CC), then Morales’s margin of victory decreases to 9.99925 percentage points. Of course, projecting anything onto the final results after only looking for irregularities in one direction is inherently flawed, but this perhaps explains why the Final Report performed this specific exercise.
- 89** This was also a significant flaw with the OAS Expert Verification Mission in Haiti in 2010. Then, the mission simply excluded tally sheets where one candidate received more than 150 votes. But, as CEPR pointed out at the time, the mission performed no statistical inference to see if those votes could be explained by geographical voting patterns.

FIGURE 12

Across Precincts, the MAS Share of the Vote in 2019 Was Similar to 2014.

(circle size indicates voting population)



Source: OEP (2019d) and authors' calculations.

There are official results from 2014 for 72 of the 86 voting centers.⁹⁰ As can be seen in **Figure 12**, there are only a few, small examples where MAS outperformed the 2014 results. In 2014, MAS received 93 percent of the vote in those 72 voting centers. In 2019, the MAS share fell to 89 percent. Again, it is clear there is nothing surprising about the high level of MAS support in these geographical locations.

Box 8. OAS “Irregular” Tally Sheets Target Indigenous Communities with History of Pro-MAS Voting

The Final Report flags 13 tally sheets from the municipality of Sacaca in Potosí. Those 13 sheets correspond to five different voting centers and constitute the entirety of the tally sheets from those five voting centers. The number of registered voters at those 13 voting tables totals 2,298.

Overall, there are 47 tally sheets from the municipality of Sacaca. Ten correspond to the largest voting center in the area, in the town of Sacaca itself. In that voting center, Mesa received 19.9 percent of the vote and Morales 57.5 percent. However, in the rest of the municipality, Morales received 93.84 percent of the vote. If you remove the 13 suspect tally sheets, all of which come from outside the one larger voting center, Morales received 93.2 percent of the vote. In other words, the suspect tally sheets look almost identical to those nearby.

⁹⁰ It would not be expected to have a complete match of voting centers between 2014 and 2019. Over time, locations of voting centers change as do their respective sizes.



Box 8. OAS “Irregular” Tally Sheets Target Indigenous Communities with History of Pro-MAS Voting (cont.)

Sixteen of the 226 tally sheets are from the municipality of Tapacarí in the Cochabamba department. Over the 61 tally sheets from Tapacarí, Morales received 93.4 percent of the vote. Removing the 16 flagged tally sheets, Morales’s share of the vote fell only to 92 percent. The Final Report notes that, in some of the flagged tally sheets, Morales/MAS received 100 percent of the valid votes cast. As referenced in the EU Observer Mission Report, however, community voting is a recognized phenomenon in many parts of rural Bolivia, especially in indigenous communities.⁹¹

The EU characterizes this as a form of coerced voting, as communities collectively determine whom they will support and require residents to vote for said candidate. Nevertheless, that is a significantly different finding than pointing to these tally sheets as evidence of “systematic” manipulation of the electoral results.

The municipality with the single highest number of tally sheets flagged is Villa Tunari, in the Chapare region of the Cochabamba department. Seventeen of the 226 tally sheets are from this area. Villa Tunari, the site of a drug war massacre in 1988, was a historic location in the rise of Evo Morales.⁹² It hardly comes as a surprise that Morales received more than 95 percent of the vote in Villa Tunari, which is home to more than 40,000 registered voters.

Eight of the tally sheets flagged in Villa Tunari come from one voting center (Unidad Educativa Mixta Eterazama). That voting center consists of 26 voting tables, meaning 26 tally sheets. Excluding the eight “irregular” tally sheets, Morales received 93.6 percent of the vote. In the eight “irregular” tally sheets, Morales received 94.6 percent of the vote. Again, the “irregular” tally sheets look very similar to those in the rest of the voting center. Interestingly, Carlos Mesa actually receives a higher share of the vote on the irregular tally sheets than overall. This is due to what appears to be an irregularity within the sample that reduced the number of votes for Morales.

In only one of the voting center’s 26 tally sheets does Morales receive fewer than 183 votes; on tally sheet number 35012, Morales is recorded as receiving only 143 votes. The Final Report flags this tally sheet as irregular, and includes it in the sample of tally sheets presented as evidence of systematic manipulation designed to benefit the MAS candidate. However, on 35012, there are 62 blank votes recorded. Given that this is the only tally sheet in the voting center with such a low number of Morales votes, it is likely that many of those blank votes were in fact pro-Morales votes. This appears to be an example of an irregularity that plausibly benefitted second place candidate Carlos Mesa.

In Sacaca, Tapacarí, and Villa Tunari, a majority of the population does not speak Spanish, according to Bolivian census data.⁹³ Over the entire set of 47 municipalities with “irregular” tally sheets, the average percent of residents who speak Spanish was 31.8 percent. For the country as a whole, 62.8 percent of the population speaks Spanish.⁹⁴ Tally sheets are in Spanish. It would be wise for auditors to consider these sociodemographic realities when performing election analysis and identifying irregularities.

OAS officials have presented these 226 tally sheets as evidence of “systemic” manipulation, made possible by violations of the IT security protocol of the results transmission systems. However, there is nothing to indicate the observed irregularities — if they even are irregularities — have any relation to concerns over IT security.

Two-thirds of the 226 tally sheets were processed before the TREP interruption, indicating that there is no relationship between these “irregularities” and the stoppage of the TREP. Further, the results on these 226 tally sheets look very similar to those from the same or surrounding voting centers. While it is possible the 226 tally sheets include examples of localized irregularities, there is nothing to indicate that they stand as evidence of systematic manipulation or had any impact on the results of the election.⁹⁵

Box 9. Verification Efforts Related to the 226 “Irregular” Tally Sheets

The GOA analyzed digitized records of the tally sheets in order to perform the handwriting analysis which flagged the 226 “irregular” tally sheets. The GOA did, however, attempt to check the digitized records with original electoral material.

Table 7 shows the departmental breakdown of the 226 tally sheets.

TABLE 7

Departmental Breakdown of the 226 “Irregular” Tally Sheets

Department	“Irregular” Tally Sheets	Percent of Total
Chuquisaca	17	7.5%
La Paz	26	11.5%
Cochabamba	139	61.5%
Oruro	4	1.8%
Potosí	31	13.7%
Santa Cruz	9	4.0%
Total	226	100%

Source: OAS (2019g).

⁹¹ Page 24, EU Election Expert Mission (2019).

⁹² In 1989, Morales gave a speech commemorating the 1988 drug war massacre in Villa Tunari. Morales was the leader of the coca growers union in the region. On November 27, 2019, *The New York Times* published an article with the headline, “Evo Morales is Like a Father to Us.” The article’s dateline indicates it was written from Villa Tunari. Kurmanaev and Rios (2019).

⁹³ In Tapacarí, only 7 percent of the population reported speaking Spanish, according to the 2012 census. In Sacaca, the figure is 13 percent. In Villa Tunari, a larger municipality, the figure is 38 percent. INE (2015).

⁹⁴ INE (2015). Data available for 44 of 47 municipalities.

⁹⁵ The Final Report handwriting analysis was done by comparing digitized records of the tally sheets. See Box 9 for further information on the GOA’s verification attempts concerning the 226 “irregular” tally sheets.

Box 9. Verification Efforts Related to the 226 “Irregular” Tally Sheets (cont.)

As mentioned previously, a significant amount of electoral material was destroyed in postelection protests.⁹⁶ “The audit team was unable to conduct a thorough review and undertake additional cross-checking because part of the electoral materials from the departments of Potosí, Chuquisaca, and Santa Cruz had been burned. But it was possible to secure and review original materials from the department of Cochabamba,” the Final Report notes.

In Annex 8 of the Final Report, the methodology of the verification exercise is partially explained. First, the GOA requested original materials related to five tally sheets, and for all other materials from those same voting centers. This resulted in a sample of 32 tally sheets. All of them were from Villa Tunari, a Morales stronghold.

Further, the GOA requested original materials related to another set of 31 tally sheets. The Final Report annex does not specify if that request extended to the associated voting centers or solely to those 31 tally sheets. (In 11 cases, the TSE did not provide copies of the tally sheets, but other original materials were provided.)

Finally, the GOA analyzed 17 tally sheets from Argentina. The tally sheet copies and worksheets were not available, but again, other original materials were available.

The Final Report identifies three tally sheets (35036, 35034, and 34124) for which it alleges that “the signatures of the sworn polling staff in the original tally sheet do not match the signatures appearing on the photocopy.” The Final Report notes, however, that “although they were signed by the same person, they were written down at different times.”

In the case of tally sheet 34124, the Final Report alleges that the signatures on the worksheet — not the tally sheet — “were forged.” This is the only example of a forged signature provided in the Final Report.

Additionally, the Final Report flags tally sheet 35180: “It was observed that the signature of one of the polling staff members does not match the personal signature written in his or her own hand located on the roll, consisting in this case of two lines in the shape of an ‘x.’” This is not the case of a forged signature; rather someone simply put an “x” where a signature was supposed to be. Tally sheet 35180 is the only one of these included in the list of 226.

Finally, the Final Report flags tally sheet 1305 from Argentina. In that case, the GOA claims that one of the signatures pertaining to a member of the polling staff did not match their signature on the voter roll. The signature, they allege, came from a different member of the polling staff.

In total, the Final Report flags these five tally sheets, but only one of them is included in the list of 226 “irregular” tally sheets. While the Final Report alleges these irregularities in the filling out of the tally sheets, it is interesting that there isn’t a single case where the GOA checked original material and disputed the legitimacy of the votes themselves.

Once again, while these limited verification efforts are used to isolate and highlight a few examples of alleged problems, the Final Report provides no information about what was discovered in all the other cases where they checked the original

Box 9. Verification Efforts Related to the 226 “Irregular” Tally Sheets (cont.)

materials. Further, given the information provided in the Final Report, it appears as if there are no irregularities regarding the number of votes on these tally sheets. This, of course, makes sense, since the results on the 226 “irregular” tally sheets, and the results on these tally sheets highlighted here, do not stand out in comparison to other tally sheets from the same voting centers. The Final Report has identified procedural errors, but certainly no clear case of fraud let alone any sort of systemic attempt at manipulating the results of the election.

Further, it is worth pointing out that in this verification exercise, the GOA did analyze original materials for at least 27 tally sheets from the group of 226 “irregular” tally sheets. The Final Report does not include any findings related to those tally sheets outside of tally sheet number 35180 mentioned above. In other words, the GOA analyzed original electoral material for 12 percent of the “irregular” tally sheets and uncovered only one example of any type of irregularity. This stands as further proof that there was nothing systematically “irregular” about the 226 tally sheets identified in the Final Report.

Finding IV: The Final Report Presents No Information Indicating That Problems with the TREP Compromised the Cómputo or that the Cómputo Was Fraudulently Altered in Any Way

The majority of the Final Report’s major findings relate to the TREP results.⁹⁷ As mentioned previously, the TREP provides nonbinding preliminary results, but also provides a check against fraud. Since the TREP and Cómputo systems operate independently, results can be compared between the two systems in order to verify their accuracy. The preliminary report and Final Report attempt to link the TREP and Cómputo systems in an attempt to show that security vulnerabilities affecting the TREP also affected the Cómputo.⁹⁸ This is false and misleading.

In the preliminary report, the authors write, “a clear manipulation of the TREP system was discovered, which affected the results of both that system and the final count.” The authors continue:

The existence of 1,575 TREP tally sheets in the final count corresponds to approximately 350,000 votes. The first round margin of victory is fewer than 40,000 votes. Therefore,

⁹⁶ See Table 4 for full accounting of lost electoral material by department.

⁹⁷ A full discussion of the TREP system is available in Finding V.

⁹⁸ See Box 1 for a description of both vote transmission systems.

an irregularity on that scale is a determining factor in the outcome. For those reasons, the audit team is unable to confirm a first round victory.

In the Final Report, these 1,575 TREP tally sheets in the Cómputo are categorized as a “grave irregularity.” However, information provided elsewhere in the report contradicts this finding. The image analysis performed by the GOA identified 1,637 tally sheets “entered into the official count as photographs.”⁹⁹ The Final Report notes that 90 percent (1,507 tally sheets) “pertain to tally sheets from abroad,” and that the procedure of using TREP images in the Cómputo for these tally sheets was “planned.”¹⁰⁰ Nevertheless, the Final Report’s authors conclude that the TREP images’ presence in the Cómputo “categorically rules out the claim that the TREP and the official count are two completely independent processes.”

The Final Report states: “130 tally sheets from the national territory that were entered as photographs should have been scanned, in accordance with the regulations.” Those 130 tally sheets correspond to tally sheets that were burned or damaged in the attacks against TEDs in the days after the election, as the Final Report notes.¹⁰¹

In order to assess this finding, we performed an analysis of the dimensions of the images in both the TREP and Cómputo. Outside of the 1,507 tally sheets from voting centers abroad, the dimensions of the images are unique across every single domestic tally sheet. This indicates that the 130 tally sheets allegedly corresponding to TREP images in the Cómputo are not in fact identical. A visual review appears to show that, in the limited cases where original tally sheets were unavailable, electoral officials printed the TREP tally sheet images and scanned those into the Cómputo. This explains why the image dimensions do not match across all domestic tally sheets.¹⁰²

99 In the image analysis, the GOA compared the TREP and Cómputo images. Candidate vote totals matched in 99.8 percent of cases. For further discussion see Finding II and Finding IV.

100 OAS (2019g), page 83, and OEP (2019b). The TSE publicly broadcast the processing of the tally sheets from voting centers abroad. TSE (2019a), TSE (2019b).

101 Pages 46; 83 of OAS (2019g).

102 By comparing the hue and dimensions of TREP and Cómputo tally sheets, we were able to replicate the Final Report finding of 130 nonforeign TREP tally sheets in the Cómputo. To perform the image analysis we extracted the size and HSV color histogram of each tally sheet using Image Color Summarizer (<http://mkweb.bcgsc.ca/color-summarizer/>), rotated hue with a cut to minimized variance, and computed the mean value, saturation, and (rotated) hue. For the extracted means (HSV) and pixel height and width we re-rotated hue to (-180,180) and computed the log z² score across images. For Cómputo image data, we produced a probit model. The dependent variable was an indicator for tally sheets corresponding to voting within Bolivia. The independent variable was the log z² score. We flagged any domestic tally sheet with a predicted value below 99.9 percent, resulting in the identification of 130 tally sheets.

The Final Report makes the case that the IT vulnerabilities of the TREP system affected the Cómputo system because TREP images ended up in the Cómputo. But if electoral officials printed the TREP images and scanned those into the Cómputo system, it indicates there was not an unanticipated technological link between the two systems. Outside of that erroneous link, the Final Report provides nothing to indicate that the claimed problems with the TREP compromised the Cómputo. The Final Report's findings relating to the Cómputo must then be judged on their own merits.

The Final Report includes only two findings in its category of “deliberate actions” to manipulate the election results relating to the Cómputo system. The first is that the company hired by the TSE to administer the transmission systems worked remotely, outside of the TSE main office in San Jorge.¹⁰³ The second finding is that the contractor was the only person able to directly access the servers containing the official results. These are both references to Marcel Guzmán de Rojas, the CEO of NEOTEC, the private company the TSE contracted to manage the results transmission systems.¹⁰⁴

Box 10. Local Researchers and Changes to the Official Results

Researchers in Bolivia have raised concerns¹⁰⁷ over numbers changing in the database throughout the Cómputo process and have identified instances where data was temporarily dropped from the downloadable Excel archive of tally sheets. In its October 28 report to the TSE, NEOTEC partially addresses these concerns. The company notes that, when a tally sheet is flagged for additional observation because the data entered is inconsistent, the tally sheet is removed from the Excel archive and placed into a pool of tally sheets in need of greater scrutiny. When the discrepancy is addressed, the data is updated and the tally sheet reappears in the Excel archive.

The Cómputo Excel archive is updated every three minutes. By comparing each version it is possible to identify the magnitude of these alterations. Overall, we identified 35 tally sheets that dropped out of the Cómputo and were later reentered. Thirteen of those were reentered with modifications. Further, there are nine tally sheets where the results themselves were modified.

Across the 13 tally sheets that dropped out and were reentered with modifications, Carlos Mesa received 178 additional votes and Evo Morales received 209 additional votes. Clearly there is nothing here that would affect the results of the election. Again, there is no indication these changes were improper.

Looking at the nine tally sheets with data modifications, those changes resulted in an increase of 181 votes for Carlos Mesa and only 42 votes for Evo Morales. Taken together, these alterations actually benefitted the second-place opposition candidate more so than Morales.

103 The contractor worked from the SERECI offices rather than the TSE office in San Jorge. The SERECI office is where operators verified TREP images and is part of the electoral framework.

104 Background on the two private companies involved in the election is available in Box 11.

In the category of “grave irregularities,” the Final Report cites Guzmán de Rojas making edits to “the official count software more than once in the middle of the process,” and making changes in the official database through SQL commands.¹⁰⁵ The error fixes and direct alterations made by Guzmán de Rojas are presented as significant problems in the election, but there is no indication this had any impact on the results nor that the changes made by Guzmán de Rojas were inappropriate.

As explained in **Box 11**, the TSE hired Ethical Hacking to audit the work of NEOTEC and Guzmán de Rojas. Ethical Hacking, in its own report remitted to the TSE, concluded that the results should be nullified because of the actions of Guzmán de Rojas, which, they allege, took place without proper oversight. However, at all times Ethical Hacking was able to monitor the *Cómputo* servers. Unlike the TREP, there were no outside (“hidden”) servers involved in the *Cómputo*. Ethical Hacking’s own report includes emails from Guzmán de Rojas describing the changes he was going to make and even providing the code used to implement the changes.¹⁰⁶ The GOA could easily have reviewed those specific changes.

The findings in the Final Report relate to alleged procedural violations, but the Final Report does not include any information about the actual changes made and whether those changes affected the results.

The Final Report notes that Guzmán de Rojas had direct access to the server and that “this is unacceptable in an electoral process.” It is unclear if this differed from past elections. Further, the record indicates that Guzmán de Rojas was simply implementing fixes to problems¹⁰⁸ encountered in the processing of results and responding to requests from regional electoral offices. Many of those requests relate to the “reverse annulment” of tally sheets.

In Bolivian elections, if the tally sheet does not meet certain requirements, it is annulled.¹⁰⁹ According to the electoral law, a new vote must be held at that voting table within two weeks.

¹⁰⁵ SQL stands for “Structured Query Language.” It is a standard language for database management systems.

¹⁰⁶ Ethical Hacking (2019a).

¹⁰⁷ Villegas Alvarado (2019).

¹⁰⁸ An error known as “FLAT CÓMPUTO” prevented the proper loading of tally sheets. The Final Report claims that Guzmán de Rojas directly altered 41 tally sheets, but in reality, he implemented a bug fix that allowed those 41 tally sheets to properly load. Regarding this, the EH report says that the OAS observers agreed there was no other way to fix this issue. Ethical Hacking (2019b).

¹⁰⁹ EU observer report: “The Electoral Law sets out grounds of annulment of results forms in Art. 177. This [*sic*] include the absence of signatures and fingerprints of at least three polling station staff, alteration of figures which is not noted in the observations, a number of votes greater than the number of registered voters, loss of the original form unless it is replaced by two original copies and the existence of elements which contradict the information in the form.” EU Election Expert Mission (2019).

When the TSE announced final official results of the election, not a single tally sheet had been annulled.¹¹⁰

This is certainly uncommon, but it is difficult to argue that the situation itself was not highly uncommon. In certain departments, the official processing of results had to be suspended after attacks against electoral offices. The European Union Observer Mission noted that the TSE appeared to be attempting to move as fast as possible to provide official results given the allegations of fraud and deep suspicion of the preliminary results and that “polling station results that should have been annulled were not.”¹¹¹

The EU recommended the TSE improve its policies and instructions for the annulment of tally sheets, but there is nothing to indicate that these issues affected the outcome of the election. Again, both Ethical Hacking and the GOA knew the specific tally sheets that had been “reverse-annulled,” yet there is no analysis of the tally sheets themselves in the Final Report.

The Final Report presents no evidence that these procedural problems with the administration of the *Cómputo* affected the official results. Further, the Final Report’s most significant findings relating to the *Cómputo* concern the actions of a private contractor and not the TSE itself. Finally, the argument that one cannot trust the *Cómputo* results rests on a nonexistent link between the *Cómputo* and the TREP.

Box 11. Private Contractors Involved in Bolivia’s Election

In the year prior to the election, the Tribunal Supremo Electoral (TSE) suffered numerous resignations. Many of these changes stemmed from a ruling by Bolivia’s constitutional court allowing Evo Morales to run for a fourth term, despite a constitutional referendum held in 2016 in which 51.3 percent of voters chose not to allow indefinite candidacy for reelection. The TSE ratified Morales’s candidacy.

*The resignations, especially of technical staff, caused the TSE to rely heavily on private contractors in the 2019 election. The TSE contracted with two private companies for election-related work. The TSE hired NEOTEC, a Bolivian firm that developed the computerized results transmission system used in Bolivian elections, to manage both the TREP and *Cómputo*. NEOTEC has played a similar role in each election since 2016.*

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- 110** Local researchers alleging fraud in the election have highlighted four tally sheets with no results and where electoral officials made clear markings indicating the tally sheet should be annulled. In our review of the data, we found no other examples of tally sheets with such characteristics. Of those four tally sheets, two came from pro-Mesa areas and two came from pro-Morales areas.
- 111** EU Election Expert Mission (2019). Four tally sheets from the department of Beni were initially annulled by the Beni Departmental Electoral Tribunal, but that decision was later reversed by the TSE. TSE (2019c).

Box 11. Private Contractors Involved in Bolivia's Election (cont.)

NEOTEC developed software in the late 1980s for the transmission and digitization of electoral results. NEOTEC has been involved in elections in Guatemala, Honduras, and El Salvador, in addition to Bolivia.¹¹² Bolivian electoral authorities have used NEOTEC's software since 1993.¹¹³

NEOTEC's CEO is Marcel Guzmán de Rojas, whose father, Ivan, was a former official of the national electoral court. In 2001, when Ivan Guzmán de Rojas was the president of the electoral body, the Bolivian Congress raised questions about the awarding of contracts to NEOTEC.¹¹⁴

In 2019, the TSE intended to handle the management of the results transmission systems internally; however, in late September, the TSE indicated it was going to bring in a private contractor.

Prominent members of the opposition praised the decision to bring NEOTEC back as a sign the TSE was attempting to restore its credibility.¹¹⁵ Local news reports indicated that officials within the TSE, particularly those close to the Morales government, had opposed the awarding of the contract to NEOTEC.¹¹⁶ Antonio Costas, the former TSE vice president, was the official in charge of information technology dating back to at least 2016.¹¹⁷ Costas made multiple public remarks supporting the validity of the TREP results and NEOTEC's work in general. Costas previously worked with Ivan Guzmán de Rojas.¹¹⁸

The Final Report makes clear that it was NEOTEC, and specifically Marcel Guzmán de Rojas, who maintained sole access to the results databases throughout the election.

In early October, less than three weeks before the election, and for the first time ever, the TSE contracted another firm to audit the results transmission process and to monitor the work of NEOTEC. The TSE hired SIM SRL, the local representative of the Panama-based firm Ethical Hacking, which is led by a Bolivian CEO, Alvaro Andrade.

In the lead-up to election day, Ethical Hacking raised concerns over the security of the electronic results transmission systems. The company even, at one point, suggested delaying the elections altogether.

Ethical Hacking installed monitoring devices on the servers used for the transmission of electoral results. NEOTEC initially resisted installing Ethical Hacking's monitoring software, but agreed following pressure from the TSE. It is clear that a lack of trust between both contractors, and among TSE officials, contributed to a number of the problems with the TREP identified in the Final Report.

Andrade is a registered member of the political party Frente de Unidad Nacional.¹¹⁹ The party is led by Samuel Doria Medina, a businessman and outspoken member of the political opposition to Morales and the MAS.¹²⁰ Doria Medina is currently a candidate for vice president on a ticket with de facto president Jeanine Áñez in the upcoming May election.

Box 11. Private Contractors Involved in Bolivia's Election (cont.)

Andrade and Ethical Hacking released the findings of their audit on November 6, 2019.¹²¹ It concluded that, due to repeated violations of the security protocol, the results of the election should be voided. It is unusual that an internal contractor would even make such far-reaching conclusions.

Andrade appeared alongside the head of the OAS's election department (DECO) at the OAS Permanent Council on December 12, 2019, when DECO presented the Final Report to the full organization membership.¹²² He has since made numerous media appearances focusing on the actions of Guzmán de Rojas and impugning the credibility of the election.¹²³

NEOTEC also produced multiple reports. The firm's October 28, 2019 report to the TSE is available on CEPR's website. That report is cited in the Final Report, but not included as an annex. Additionally, the Final Report includes as an annex a supplementary report from NEOTEC dated November 4, 2019.

Marcel Guzmán de Rojas has not made any public remarks since early November. His last known location was Germany. He did not respond to multiple emails seeking comment.

Finding V: The Final Report Fails to Provide Clarity around the TREP Stoppage and, as a Result, Perpetuates a False Narrative of Fraud

The election night stoppage of the TREP remains at the heart of the allegations of electoral fraud. As discussed previously, the EOM, the preliminary report on the audit, and the Final Report all include the false assertion that there was an improbable change in the trend of the vote *after* the stoppage of the TREP.

¹¹² ABI (2019), El Deber (2019).

¹¹³ OAS (2003).

¹¹⁴ See ANF (2000a), ANF (2000b).

¹¹⁵ El Deber (2019).

¹¹⁶ Página Siete (2019b).

¹¹⁷ Mercado (2016).

¹¹⁸ Pinto (2016).

¹¹⁹ Bolivian electoral law forbids TSE officials from formally registering with a political party. OEP (2010b). The internal personnel regulations specify that all those employed by the Plurinational Electoral Organ (OEP) must not be registered with a political party. OEP (2014), OEP (2020a).

¹²⁰ Kurmanaev and Del Castillo (2019).

¹²¹ Ethical Hacking (2019a).

¹²² OAS Videos – Events (2019b).

¹²³ Del Rincón (2019b).

More than half of the Final Report’s findings of “intentional manipulation” and “grave irregularities” relate to the preliminary, nonbinding TREP.¹²⁴ The Final Report alleges significant violations of the agreed-upon security protocol, including the presence of two “hidden” servers. “The parallel and uncontrolled technological scheme that was deliberately created facilitated an environment that allowed data manipulation, falsification of proceedings or any maneuver, facilitated by the volatility of digital evidence,” the Final Report claimed.

Further, the Final Report finds that the decision of the TSE to suspend the publication of preliminary results was “intentional,” “arbitrary,” and “without technical justification.” This is included in its findings of “Deliberate Actions Which Sought to Manipulate the Results of the Election.”

While some of the procedural issues identified in the Final Report may be significant and should be addressed in future Bolivian elections, the Final Report makes no claim as to whether or not those vulnerabilities were actually taken advantage of to manipulate the results in favor of one candidate.¹²⁵

Ultimately, the responsibility for the management of the results system — both the TREP and the *Cómputo* — lies with TSE officials and other electoral officials tasked with carrying out the elections. Certainly, the failure of the TSE to provide a clear public explanation for its decision contributed greatly to the electoral crisis and damaged the election’s credibility. Yet, the Final Report fails to take into account essential contextual information that could explain the stoppage of the TREP and restore some semblance of trust in the electoral process. Whereas the Final Report could have provided clarity around these key events in the election, the report’s authors instead opted to obscure and manipulate the public record.

The Final Report includes each alleged irregularity as part of the same overall narrative of an intentional effort to hide actions and manipulate the results of the election. Despite providing no evidence that any of these actions affected the results, official or preliminary, the Final Report attempts to tie them all together to support a narrative of an unproven conspiracy theory. This is irresponsible, and clearly contrary to recommended best practices.¹²⁶

¹²⁴ See Box 12 for background information on the TREP.

¹²⁵ The following section refers frequently to the two contractors involved in the election, NEOTEC and Ethical Hacking. More information on these two contractors is available in Box 11.

¹²⁶ Using incomplete evidence and drawing far reaching conclusions are clearly not in line with postelection best practices, as discussed in “Audit Standards and Verification Methods.”

Box 12. The TREP and the OAS

In 2014, following presidential elections in Bolivia, the Organization of American States (OAS) Observer Mission recommended the country implement a system for the rapid transmission of preliminary electoral results.¹²⁷ Previously, the OAS had worked with both Paraguay and Uruguay in developing such a system.¹²⁸ The OAS again recommended the formalization of a preliminary results system following 2015 legislative elections.¹²⁹

In 2016, for the first time, Bolivian electoral authorities implemented the *Transmisión de Resultados Electorales Preliminares* (TREP) system.¹³⁰ NEOTEC, a private Bolivian firm, which designed the election software utilized by the TSE, also developed the rapid transmission system.¹³¹ The system has been used in each subsequent election.

The TSE hired NEOTEC again in 2017, this time to manage the TREP system for judicial elections. The OAS once again observed the election. In its Observation Mission Report, the OAS noted the strong technical and security system of the TREP.¹³² The mission also noted the functionality of the mobile application used by field operators. The TSE dispatched 4,636 operators to voting centers throughout the country. After the final vote count at each electoral table, poll workers produce an acta, or tally sheet. The TREP field operators take a photo of the tally sheet and enter the corresponding data into their mobile application. The application includes offline functionality, so that operators can input the data and take the photo without an internet connection. The data is then transmitted as soon as the phone reestablishes a network connection. “This functionality is particularly applicable in rural zones” with low telecommunications coverage, the OAS noted.

In the 2017 judicial elections, the TREP processed and verified 80.74 percent of the tally sheets by 9:30 p.m., at which point the TSE announced the preliminary results.¹³³

In September 2019, the TSE opened a direct bidding process for the contract to manage and maintain the TREP system in the upcoming general elections. The TSE awarded the contract to NEOTEC.

¹²⁷ OAS (2020a).

¹²⁸ OAS (2020b).

¹²⁹ OAS (2020c).

¹³⁰ In the 2016 election, the TREP was referred to as the *Transmisión Rápida y Segura de Actas*. The TREP was formally adopted after the 2016 vote.

¹³¹ ABI (2019). See Box 10 for background information on NEOTEC.

¹³² OAS (2017c). CEPR Research Associate Guillaume Long participated in this electoral observation mission.

¹³³ *Ibid.*

The TREP Stoppage

There is an inherent contradiction in the Final Report's findings. The report's authors allege there to be no technically valid reason for the TSE's intentional stoppage of the TREP, but then allege a series of significant violations of the security protocol with regard to the TREP system. Many of the most significant alleged violations occurred prior to the interruption of the TREP.¹³⁴

The Final Report includes the full two-page conclusory remarks of Ethical Hacking's audit report, which reached the determination that the electoral results should be voided due to irregularities. However, the Final Report does not include the full Ethical Hacking report as an annex.¹³⁵

In that report, Ethical Hacking claims to have sent a "maximum alert" to the officials of the TSE at 7:30 p.m. on October 20, 2019, the day of the election. The audit company noticed data flowing into the TREP database from a server outside its monitoring plan (server BO1). Ethical Hacking noticed that verification data from SERECI was transmitting at an extraordinarily high speed. Ethical Hacking claims to have attempted to reach Guzmán de Rojas multiple times to inquire about this, but received no response.¹³⁶ Unable to reach Guzmán de Rojas, Ethical Hacking transmitted the "maximum alert" to the TSE. The last update to the TREP's downloadable Excel database of results occurred at 7:40 p.m.

The Final Report does not include a single mention of this maximum alert.

NEOTEC and Marcel Guzmán de Rojas provided their own account of what transpired in an October 28 report delivered to the TSE.¹³⁷ That report is public and is referenced in the Final Report, but it is not included as an annex. In the report, Guzmán de Rojas states that the pause of the TREP system at 7:40 p.m. was planned to allow the TSE to hold its press conference to deliver results and that the intention was to restart the verification and transmission processes

¹³⁴ As discussed in the Introduction, the OAS EOM met with members of the TSE on October 21. At that meeting the TSE explained the technical reasons for stopping the TREP, which included numerous findings that are now in the Final Report. Nevertheless, the OAS EOM exerted pressure on the TSE to restart the TREP system immediately.

¹³⁵ The report is available on the CEPR website. Ethical Hacking (2019a).

¹³⁶ Guzmán de Rojas did not work from the main TSE office in San Jorge, but instead worked remotely. As discussed in Finding IV, this is considered a "grave irregularity" in the Final Report. Guzmán de Rojas worked from the SERECI office.

¹³⁷ NEOTEC (2019).

after.¹³⁸ The TSE press conference was held before 8 p.m.; the officials announced preliminary results with 84 percent of the votes processed.¹³⁹

NEOTEC reports that internet was cut in the SERECI building — where some 350 operators verified preliminary results as they came in — at around 8:10 p.m. Around the same time, Guzmán de Rojas reported receiving a call from TSE officials who ordered him to shut down the TREP and come to a meeting at the TSE office in San Jorge.

The accounts of both Ethical Hacking and NEOTEC note that, at the San Jorge meeting, TSE officials accused NEOTEC of fraud. Ethical Hacking reported that there was talk of calling in the Prosecutor General's Office or the police. In the NEOTEC report, Guzmán de Rojas claimed that TSE officials presented him with three reasons why the TREP was stopped, all of which he disagreed with:

1. The use of an unmonitored server (BO1).
2. A surge in verification traffic coming from said server.
3. A change in the vote trend in favor of Carlos Mesa and against Evo Morales.

Both Ethical Hacking and NEOTEC note that Antonio Costas, the vice president of the TSE, was not present when the decision to stop the TREP was communicated. On October 22, Costas resigned from the TSE, citing the suspension of the TREP and the resulting lack of public confidence in the electoral process.¹⁴⁰ As discussed in **Box 11**, Costas was the TSE official in charge of IT and made repeated public remarks supporting the validity of the TREP results.

The OAS, through both its EOM and its audit mission, maintained that there was no technical reason to stop the TREP. This finding clearly rests on the analysis of NEOTEC's Marcel Guzmán de Rojas and Antonio Costas that there was nothing wrong with the TREP.¹⁴¹ But, 75 percent of the Final Report's findings of alleged deliberate manipulation of the electoral results relate to security problems with the TREP system. Further, most of those findings relate to issues that

138 The exact timelines presented in the Ethical Hacking and NEOTEC reports differ slightly.

139 A greater percent of tally sheets had been transmitted but had yet to be verified by SERECI.

140 Costas is currently under house arrest. Guarachi (2020).

141 As further confirmation of its finding, the Final Report cites the director of SERECI (the civic registry), whose operators verified the TREP images, and the director of DNTIC (the government's information technology department), who both told the GOA that they were not aware of any reason to stop the TREP. The verification process was proceeding normally and the networks themselves were operational, according to the directors. However, it is unclear if either were aware of the existence of the BO1 server, the increase in traffic from that server, or the maximum alert issued by Ethical Hacking. The de facto government of Bolivia has since arrested both the director of SERECI and the director of DNTIC. OAS (2019h).

were readily identifiable by the time of the TREP suspension. According to the public statements and reports of Ethical Hacking, NEOTEC, and Antonio Costas, many of those problems were raised with the TSE just before the decision to suspend the TREP.

Logically, the Final Report cannot both find that there was no technical reason to stop the TREP and then include the reasons for why the TREP was stopped in its findings of efforts to intentionally manipulate the results of the election.

The BO1 Server

The presence of the BO1 server, which was the subject of Ethical Hacking's alert to the TSE before the TREP suspension, is included in the Final Report's findings of "intentional manipulation." The Final Report fails to report contextual information that directly contradicts its finding.

After the TREP suspension, Ethical Hacking performed a security review of the BO1 server.¹⁴² The Final Report does not mention this review.

Ethical Hacking met with Guzmán de Rojas and received the relevant information, including server logs, in order to analyze the BO1 server and determine if there had been any threat to the TREP. Ethical Hacking concluded that the problem stemmed from NEOTEC not following the security protocol, but that the server did not contain any malicious software, any scripts or code that could have altered results, or any record of unauthorized users or communication. Ethical Hacking concluded that there was "no hacking or alteration of the database."¹⁴³ The Final Report does not mention the findings of Ethical Hacking's investigation of the BO1 server despite being in possession of Ethical Hacking's reports.

The Final Report contains fragments of computer logs and other information pertaining to the BO1 server.¹⁴⁴ The logs included in the Final Report show that verification traffic was routed through the BO1 server, that the server was in use throughout election day, and that it was accessed late at night on October 20, after the suspension of the TREP. At 9:30 p.m., the log fragments provided in the Final Report indicate that the user of the BO1 server (Marcel Guzmán

¹⁴² On page 6 of Ethical Hacking's timeline, it mentions "infrastructure hardening" as a task performed by Ethical Hacking. If the contractor had actually completed the hardening of the servers, BO1 would not have been able to communicate with BO2. Ethical Hacking (2019c).

¹⁴³ Ethical Hacking (2019a).

¹⁴⁴ OAS (2019g), page 23.

de Rojas of NEOTEC) provided authorization to a new user and that that user session was closed at 10:30 PM. Again, the Final Report never mentions that Ethical Hacking was granted access to the BO1 server that same night in order to investigate both the server itself and the associated logs.¹⁴⁵

The Final Report also includes 3.5 pages of log entries for the BO1 server on October 25, claiming to show that the server “had stayed on following the halt of the TREP” and that it had been “assigned to other tasks.” Every single entry in the log fragment provided corresponds to a 404 error. In other words, the logs show that the “hidden” server was unable to successfully interact with the main results servers. Nevertheless, the Final Report concludes its analysis of the BO1 server: “These findings reveal the existence of an organized group whose objective was to create a hidden computing structure.”

The obvious intended implication of this finding is that the TSE created a hidden computer network in order to manipulate the results. This is a gross manipulation of the record and the facts available. As the Final Report acknowledges, it was NEOTEC that retained exclusive control over the BO1 server. Further, the Final Report fails to acknowledge Ethical Hacking’s findings: that the BO1 server was detected just before the TREP’s stoppage; that when Ethical Hacking alerted the TSE to the server’s existence, the TSE asked to stop the TREP and accused NEOTEC of fraud; and that a review of the BO1 server was undertaken by the audit company while the TREP system was stopped. The Final Report fails to note that, because Ethical Hacking was monitoring the results databases, they could observe, in real time, that the BO1 server was transmitting information throughout election day.

Still, despite its review of the BO1 server, Ethical Hacking concluded that it could not attest to the integrity of the data, because it viewed the massive influx of traffic as “almost impossible.”

Increase in Verification Traffic on the BO1 Server

There is a certain irony in the fact that one clear reason for the TREP’s interruption was the TSE’s belief that NEOTEC was committing fraud against MAS — and that now the decision to

¹⁴⁵ The Final Report alleges that the “user” could delete any evidence of their actions, so it is impossible to determine if any manipulation occurred. This ignores the fact that NEOTEC provided Ethical Hacking with access to the server. Further, the servers were hosted on Amazon Web Services (AWS) and there should be a complete record of the server logs available to AWS. With a thorough forensic investigation, it seems possible to review the entirety of the actions the server undertook. One of the standards of postelection audits discussed earlier was not basing conclusions on incomplete investigations.

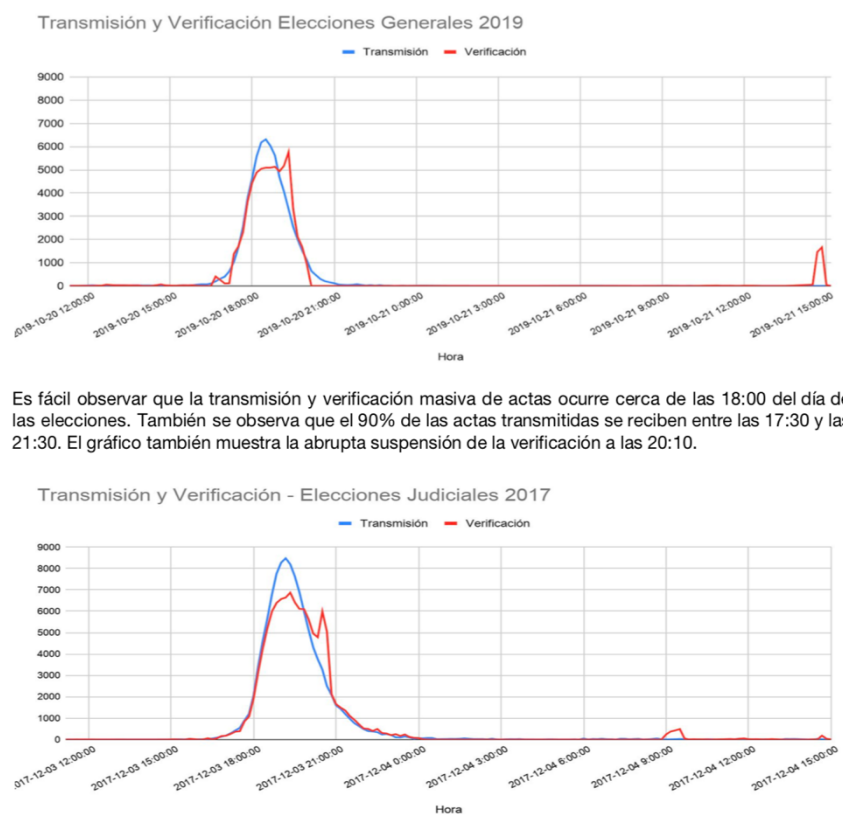
stop the TREP is taken as evidence of fraud committed by MAS. Still, the Final Report does not focus on the increase in verification traffic through the BO1 server.

NEOTEC disagreed with Ethical Hacking's claims about the magnitude of the traffic and provided information from a previous election that it claimed showed the elevated traffic as normal, as shown in **Figure 13**.

FIGURE 13

NEOTEC Historical Transmission Data

(number of tally sheets)



Es fácil observar que la transmisión y verificación masiva de actas ocurre cerca de las 18:00 del día de las elecciones. También se observa que el 90% de las actas transmitidas se reciben entre las 17:30 y las 21:30. El gráfico también muestra la abrupta suspensión de la verificación a las 20:10.

Source: NEOTEC (2019).

It is important to note that there exist two simultaneous narratives of the traffic burst. First, Ethical Hacking reports a burst in tally sheet verification traffic from 10,000 every 30 seconds to 30,000 every 30 seconds. Ethical Hacking considered this rate too high given that there were only 350 individuals verifying tally sheets. However, each tally sheet contains many data points across both the presidential and legislative races, including identifying information, each party's vote totals, valid vote totals, blank vote totals, and null vote totals, in addition to the image itself and its metadata. Given this, and the information provided by NEOTEC on previous elections, there does not appear to be anything irregular about the verification traffic surge.



Second, Ethical Hacking identified a traffic burst to the TSE web servers, the public portals where the public could view results. At the time of the alert sent to the TSE, this second burst was initially erroneously identified as a possible cyberattack on the TREP. However, the public IP address reported as the source of that elevated traffic corresponds to the polling company Víaciencia's Colombia headquarters. The company appears to have been scraping the TREP results.¹⁴⁶ Topologically speaking, this traffic is completely unrelated to the BO1 traffic burst.

Box 13. Did the Trend Change Before the TREP Stoppage?

NEOTEC and Ethical Hacking both reported that the TSE accused NEOTEC of fraud at the meeting where the TSE decided to halt the TREP reporting. In addition to the “hidden” server and elevated traffic, the TSE provided an additional reason for its decision: that there had been a change in the trend that favored second-place candidate Carlos Mesa.

What happened?

This analysis focuses on a third increase in traffic, separate from those discussed in the main text. On the day of the election, NEOTEC implemented a “contingency plan” because of server issues. The TREP utilized three results servers for publishing results (BO3, the main results server, a secondary results server, BO2s, and the main application server BO2). Ethical Hacking had installed monitors on all three of these servers. The original plan called for data to go from the BO2 server to the BO2s server and then from BO2s to the BO3 server connected to the public web portal. On the day of the election, NEOTEC noticed that data from BO2 was not replicating appropriately to BO2s.¹⁴⁷

In order to increase the percent of tally sheets processed by the time of the press conference from 60 percent to more than 83 percent, NEOTEC implemented its contingency plan of bypassing the BO3 and BO2s servers and publishing straight from the BO2 server.¹⁴⁸ This migration, in a short period, led to the appearance of 11,310 tally sheets in the main results portal. Many of those tally sheets were from Santa Cruz.

In an extensive interview with local press, Alvaro Andrade, the CEO of Ethical Hacking, commented on the confluence of all these various issues right before the TSE press conference.¹⁴⁹ He noted that TSE officials had been viewing results, and that, before NEOTEC's implementation of the “contingency plan,” Morales's margin was between 11 and 12 percentage points. But, in the minutes before the press conference and after NEOTEC implemented its contingency plan, tally sheets from Santa Cruz were rapidly included in the count. Morales's margin fell to around 7 percentage points.

¹⁴⁶ The TSE authorized only one company, Víaciencia, to provide exit polls on the day of the election. The exit poll from Víaciencia projected Morales winning by less than 10 percentage points. The OAS EOM also conducted an exit poll, which has not been made public. In decrying the “inexplicable” change in the trend of the vote, the EOM cited the TREP results differing from “other measures,” a reference to the OAS and Víaciencia exit polls. If the Víaciencia exit poll was based on the company's scraping of incomplete TREP data, that could explain the results of its poll. As for the OAS EOM quick count, a report in the Argentine press claimed that the initial OAS EOM quick count showed Morales winning by more than 10 percentage points but that the methodology was then changed. The press report cited GOA whistleblowers. Dandan (2019c).

Box 13. Did the Trend Change Before the TREP Stoppage? (cont.)

The TREP results were made public just before 8 p.m. the night of the election; however, the TREP system itself had been processing tally sheets for many hours. Those updates, provided every three minutes until 7:40 p.m. the night of the election, were available online.¹⁵¹ As was discussed previously, the overall TREP trend — of Morales increasing his margin as more votes were processed — was consistent throughout the TREP process.

There is no evidence that indicates Morales’s margin was ever between 11 to 12 percentage points in the public TREP results, as Andrade claimed. However, if one excluded all of the votes from the Santa Cruz department from the 7:40 TREP Excel archive, the MAS margin would have been 11.4 percentage points; if just the Santa Cruz municipality votes were excluded, the margin would have been 12.2 percentage points.

This raises the possibility that NEOTEC had always been using the BO2 server for the publication of the Excel archive, but had been using the BO3 (and BO2s) server for the publication of the publicly viewable web data and corresponding tally sheet images.¹⁵² In the interview, Andrade refers to “screenshots” of the results provided to the TSE.¹⁵³ This indicates that TSE officials were viewing results not based on the Excel archive, but on the web portal (which did not contain a complete set of results before completion of NEOTEC’s “contingency plan”) showing Morales with an 11–12 percentage point margin until just minutes before the press conference, according to Andrade.

If this analysis is correct, it may help explain why the TSE took the controversial decision to halt the TREP. NEOTEC’s implementation of its “contingency plan” gave the impression of a rapid change in the results at nearly the same time as the audit company transmitted a “maximum alert” about potential nefarious activity. As Andrade explained, the confluence of these factors explains the stoppage and the accusations of fraud levied at NEOTEC.

147 At 7:16, the BO2 server contained 27,270 tally sheets for president, of which 23,441 had been verified. At the same time, the BO2s server contained only 13,648 tally sheets for president, of which 12,131 had been verified. NEOTEC (2019).

148 Recall that Antonio Costas mentioned the “migration” of data from one server to another in his public comments about the TREP stoppage.

149 BsB (2019).

150 As mentioned previously, NEOTEC also claims that the TSE accused Guzmán de Rojas of fraud and that the TSE cited a change in the trend of the vote in favor of Carlos Mesa as a reason for stopping the TREP. NEOTEC rejected this allegation and, in its October 28 report, included a graph showing a steady and increasing margin in favor of Morales. NEOTEC (2019).

151 The Excel archives and public web portal continued to be available until recently. All data from the 2019 election has since been removed from the TSE website. OEP (2019c).

152 This is consistent with the fact that Ethical Hacking reports several complaints from the TSE communications department about citizens complaining that the graphic data is absent but the Excel data is available. Guzmán de Rojas replied claiming it had to do with “server capacity” issues. The cases cited refer to the *Cómputo*, not the TREP, but it is reasonable to assume a separate but similar publication architecture.

153 Separately, Ethical Hacking has alleged that the “hidden” BO1 server was used to provide the TSE with results ahead of publication. This makes little sense, especially given Andrade’s comments about “screenshots” — there was no need for a new server in order to view results republishation.

In the preliminary report on the audit, released November 10, there is a reference to an increase in traffic.¹⁵⁴ That report notes that, around the time when 81 percent of the vote had been counted, right before the TSE press conference, there was an “abnormal number” of tally sheets uploaded to the TREP system “from a server that was unknown at the time.” It is regrettable that the Final Report does not discuss or analyze this traffic burst.

Nevertheless, an analysis of the Excel TREP data shows that, just before the press conference, there was a rapid increase in the verification of tally sheets from overwhelmingly pro-Mesa geographical areas. In three minutes, the margin in the Excel archive between the top two candidates fell by about 0.4 percentage points.¹⁵⁵

Figure 14 shows MAS’s margin in each update of the TREP data across six geographic categories. Two of the graphs correspond to the departmental capital cities of Cochabamba and Santa Cruz de la Sierra, respectively; one corresponds to the city of El Alto, which, though not a departmental capital, is often grouped in the same category; one corresponds to all other departmental capital cities; one corresponds to all of Bolivia other than departmental capital cities and El Alto; and the final graph corresponds to voting centers abroad.

Each column in the (combined) bar graphs represents an equal number of tally sheets — approximately 2.5 percent of the total such that the columns in red correspond exactly to the two TREP updates made at 7:28 p.m. and at 7:31 p.m.

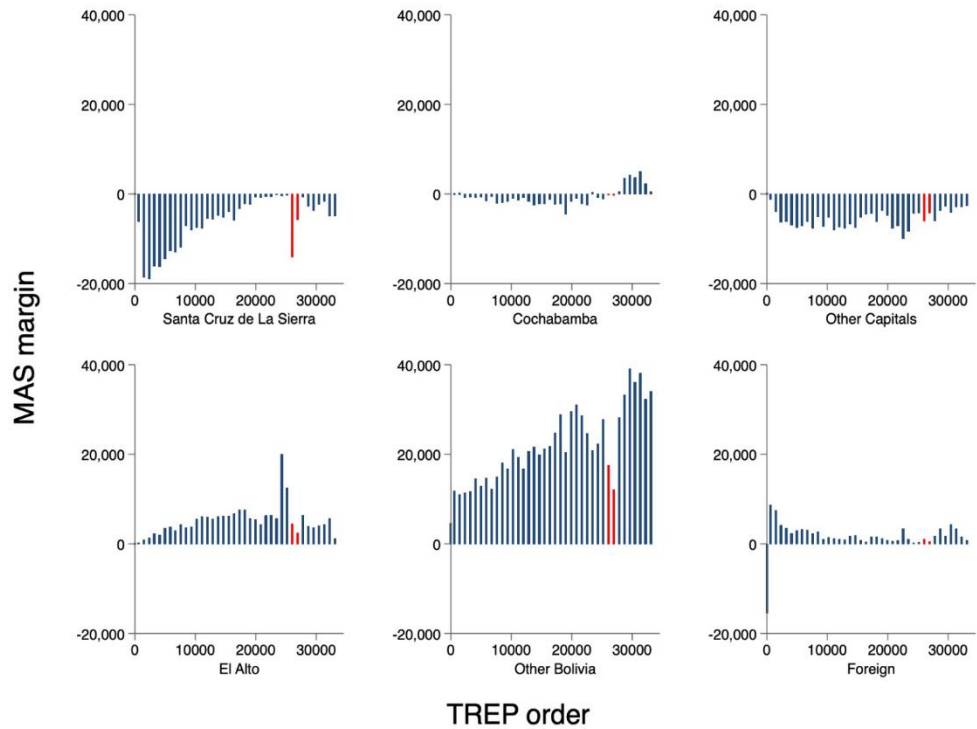
In the graph labeled “Other Bolivia” one can see a steady and increasing margin for MAS — as is reflected in the overall cumulative totals seen earlier in **Figure 1**. The two red columns, however, clearly stand out. Interestingly, those two updates coincided with an influx of pro-Mesa tally sheets from Santa Cruz, as can be seen in the Santa Cruz de La Sierra graph (top left).

¹⁵⁴ OAS (2019i).

¹⁵⁵ See Box 13 for a more detailed discussion of this “trend change” and the TSE allegations of fraud against NEOTEC.

FIGURE 14

MAS-CC Vote Margin as the TREP Updated



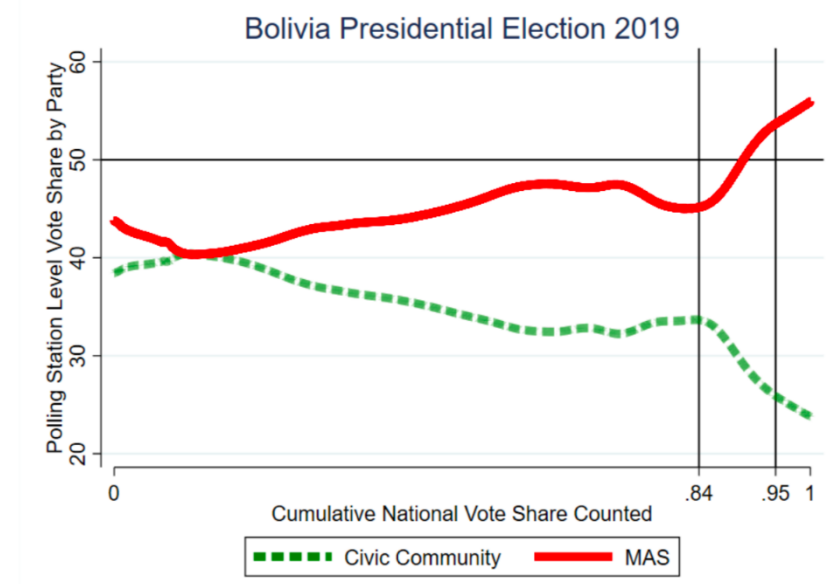
Source: OEP (2019d) and authors' calculations.

This is not an inherent indication of anything irregular. As can be seen in the El Alto graph, right before the “red” period, there was a large number of pro-Morales votes processed. The purpose of this analysis, however, is to provide greater context around the TSE’s decision to stop the TREP. Further, if, as the Final Report alleges, the BO1 server was an effort to intentionally manipulate the results of the election, it seems important to note that this influx appears to correspond to a rapid increase in the number of pro-Mesa tally sheets processed.

There is, however, another impact of this sudden influx: it makes the change in the preliminary results from before the stoppage to when the count was restarted appear even more drastic. The graphs presented in the Final Report that allege to show an inexplicable change in the vote trend are problematic for a number of reasons, as discussed earlier. Still, even in those graphs, one can see this brief shift in favor of Mesa that occurred right before the TREP’s stoppage.

FIGURE 15

Final Report Trend Change



Source: OAS (2019g).

The Final Report points to a drastic change after the 84 percent marker on the x-axis, but as can be seen from the graph, in turn, the OAS is measuring from the bottom of the visible dip. The dip itself is explainable by the rapid influx of pro-Mesa votes directly before the TREP’s interruption at 84 percent. Even partially offset by the El Alto surge, Morales’s “polling station level vote share” (the y-axis in the above figure) is visibly reduced over this time period, as can be seen in the figure.

Though this “trend change” is barely visible in graphs showing the cumulative margins (such as Figure 1), it is clearly identifiable in the data, as the Final Report graph confirms. The Final Report measures from the TREP stoppage and claims a drastic trend change, however, all they have actually identified is the fact that the order in which tally sheets were processed was not random. In the same manner, the “trend change” that the TSE alleged to have seen just before it received an alert from Ethical Hacking was most likely just the product of votes from a certain area being processed at the same time and not an attempt at fraud against MAS.

It is unclear why the Final Report does not analyze the surge in verification traffic, given that it was this surge — and its transmission on an unmonitored server — that triggered the audit company’s maximum alert to the TSE and the subsequent stoppage of the TREP system.



Restart of the TREP and the Second “Hidden” Server

The Final Report notes the presence of a second “hidden” server in addition to the BO1 server discussed previously. Two of the final report’s findings of intentional manipulation relate to this second server (BO20). The Final Report states:

At the request of the members of the TSE and an individual described as their advisor, a server was set up on an Amazon network outside the TREP and count systems on a Linux AMI virtual machine. It should be noted that this individual *was not a TSE staff member* or an employee of the audit company or supplier company. It was confirmed that *user ec2-user* (also escalated to root privileges) accessed the machine on October 21, 2019, and while the TREP was in full swing in its second stage (after the freeze).

False information was provided on the use of the Linux AMI virtual machine, and a deliberate attempt was made to conceal the existence of server BO20 from the audit team. *[Emphasis added.]*

Indeed, there is no reference to this server (BO20) in the Ethical Hacking or NEOTEC reports referenced previously.¹⁵⁶ However, again, the Final Report excludes, buries, or misrepresents evidence about the BO20 server.

On October 21, under pressure from the OAS, the TSE agreed to restart the TREP.¹⁵⁷ Whereas before the stoppage the BO1 server transmitted tally sheet verification traffic, once the TREP restarted, that traffic was redirected to the BO20 server.

The Final Report alleges that the BO20 server was configured at the request of TSE officials and an unnamed advisor “who was not part of SERECI staff, was not hired by NEOTEC, was not part of DNTIC¹⁵⁸ staff, and certainly was not part of Ethical Hacking.” This, however, is contradicted by the letter DNTIC provided to the GOA and which the Final Report included as an annex. The DNTIC letter clearly states that the BO20 server was set up at the request of the TSE, and in coordination with NEOTEC, Ethical Hacking, and this unnamed advisor.¹⁵⁹

¹⁵⁶ NEOTEC issued a supplementary report addressing the BO20 server *after* the GOA identified the BO20 server. That supplemental report is included in the Final Report as an annex. OAS (2019j).

¹⁵⁷ A more complete timeline is provided in the Introduction.

¹⁵⁸ National Information Technology Directorate.

¹⁵⁹ OAS (2019f).

The advisor, the Final Report notes, was never presented to the audit team. The advisor's name is redacted in the report, but the day after its release, Alvaro Andrade of Ethical Hacking publicly identified the advisor as Sergio Martínez. The Final Report alleges that Martínez “was not a TSE staff member” with no supporting evidence; however, records from the comptroller general show that Martínez was formally employed by the TSE beginning on October 8, only four days after the TSE contracted Ethical Hacking.¹⁶⁰ Though Martínez did not speak with the GOA, he did voluntarily appear before prosecutors and provided a statement. He left the country the day the OAS released the Final Report, which directly accused him of participating in a fraud.¹⁶¹

The report further alleges that the BO20 server was “not under control of the audit company, and its network did not have any security from SERECI, DNTIC, or the audit company.” This is grossly misleading. The DNTIC letter included in the Final Report makes clear that the Linux AMI virtual machine was set up on the Amazon network of the TSE “in the presence of” both NEOTEC and Ethical Hacking. Further, DNTIC notes that control over this server was then given to NEOTEC, and with Ethical Hacking, the server was configured as a perimeter server so that SERECI could continue their verification of tally sheets. The mysterious ec2-user, as is obvious from the available log fragments and the Ethical Hacking reports, is Marcel Guzmán de Rojas of NEOTEC and not Sergio Martínez.¹⁶²

Additionally, as was the case with the BO1 server, Ethical Hacking was able to monitor any interaction between the BO20 server and the main results servers, which contained the audit company's monitoring software.

Indeed, the Final Report contains server logs from the results database server showing interactions with the BO20 “hidden” server and showing that verification traffic from SERECI was routed through the BO20 server. The GOA also had access to the BO20 server itself. After the GOA raised the issue with Marcel Guzmán de Rojas of NEOTEC, he provided additional information on the server. In a November 4 report, which is included in the Final Report as an

160 The idea that Sergio Martínez was unknown to officials involved in the election, as the Final Report insinuates, is clearly misleading. Emails included in the Ethical Hacking report reveal that the audit company included Sergio Martínez on multiple email chains discussing technical election-related matters in the days before the election. Pages 12, 13, and 22 of Ethical Hacking (2019a). The Comptroller General makes sworn assets and rent records publicly available. Contraloría General del Estado (2020).

161 Martínez has since issued a public statement responding to some of the allegations in the OAS report. The de facto authorities have since arrested the prosecutor — who had previously jailed dozens of electoral officials — for not arresting Martínez when he provided his statement. Martínez's wife was also arrested, accused of conspiring with the now-jailed prosecutor. Jaramillo Velarde (2019), Martínez Beltrán (2019).

162 Page 80 in Ethical Hacking (2019b) shows a log where user ec2-user logs in from computer called “Mac-Marcel.”

annex, Guzmán de Rojas explained that the BO20 server was a perimeter server and a good security practice.

The Final Report rejects this explanation, finding that “no explanation was forthcoming about why” the BO20 server was used when other established perimeter servers appeared to be functioning normally. But the public record indicates a number of clear reasons why TSE officials may have wanted to configure a new server in their own network. When the TSE stopped the TREP, it was because NEOTEC violated protocol and the audit company issued a maximum alert. While the audit company investigated the BO1 server, there was clearly a lack of trust among all parties — as evidenced by the fact that TSE officials accused NEOTEC of fraud. If the Final Report had presented an accurate accounting of what really led to the TREP’s interruption, it would be clear why TSE officials may have wanted to configure a new server — because they didn’t trust NEOTEC to handle this on their own. Of course, an impartial investigation into the occurrences and potential wrongdoing that precipitated the TREP stoppage (and the related “violations” that resulted thereafter) could help shine light on this.

The Final Report, after publishing misleading and partial evidence on the stoppage of the TREP and the “hidden” servers recommends further investigation into this BO20 server, and notes that it passed along relevant information to the Bolivian Prosecutor General. At the time of writing, some 40 electoral officials are in custody or under house arrest, in clear contravention of their rights.¹⁶³ The likelihood of an impartial investigation is almost nonexistent given the current situation in Bolivia.

Conclusion

This report is not intended to validate the results of the 2019 election in Bolivia. There were significant problems in the management of, and response to, the election. Ultimately, the responsibility lies with TSE officials and other electoral officials tasked with carrying out the elections. Certainly, the failure of the TSE to provide a clear public explanation for the decision to halt the TREP contributed greatly to the electoral crisis, damaged the election’s credibility, and further polarized an already tense political atmosphere. Responsibility also lies with leaders of the political opposition, who publicly pledged not to respect the results of the election if

¹⁶³ EU Election Expert Mission (2019), Nuorgram (2019).

Morales did win. The situation speaks to the necessity of independent regional actors that are able to credibly engage in dispute resolution.

It was within this context that the Bolivian government requested that the OAS perform an audit of the election. As the principles outlined earlier demonstrate, when done correctly, a postelection audit can help to provide clarity, investigate wrongdoing, and restore credibility to democratic processes plagued by hyperpolarization and allegations of fraud. There is clearly a hemispheric need for a neutral and independent institution that has the credibility to observe elections and resolve the oft-occurring political disputes that follow. The OAS is not that institution, as its actions in Bolivia demonstrate.

In a series of statements and reports released between late October and early December, the OAS alleged that serious irregularities occurred during the vote count following Bolivia's October 20 elections with the implication that there was deliberate manipulation of the results that changed the outcome of the election. In previous papers, we have shown how the very data that the OAS based its initial allegations on clearly contradicted these claims. John Curiel and Jack Williams, two researchers at the Massachusetts Institute of Technology (MIT) Election Data and Science Lab, have replicated our findings, and concluded that “we cannot find results that would lead [...] to the same conclusion as the OAS.”¹⁶⁴

In this study, we have focused primarily on the Final Report of the OAS audit of the election results. It is clear that the authors of that report misrepresent the data and evidence found in the audit in an attempt to further bolster their claims of intentional manipulation on the part of Bolivia's former electoral authorities. The Final Report:

- is based on flawed statistical analyses and incorrect assumptions;
- buries or conceals altogether the results of its verification exercises despite the fact that they are highly relevant;
- presents no evidence pointing to the manipulation of election results;
- presents no information indicating that problems with the TREP, real or alleged, compromised the Cómputo or that the Cómputo was fraudulently altered;
- fails to provide clarity around the TREP stoppage and, as a result, perpetuates a false narrative of fraud.

¹⁶⁴ Curiel and Williams (2020).

The unethical conduct of the OAS in Bolivia did not just fail to resolve the electoral crisis; it has had deeply disturbing consequences. The fraud narrative that the OAS helped promote contributed to Evo Morales, the country's democratically elected president, fleeing the country — aboard a plane sent by Mexico — months before his term ended; other officials — including former members of Bolivia's electoral authority — sit in jail; an unelected de facto government has assumed power with the support of the military and has engaged in violent repression of protests and the persecution of political opponents.

Without discounting local power dynamics, it is impossible to understate the impact of the OAS's actions. This is all the more important given that there are new elections scheduled for May 2020 and the OAS has already pledged to send another observer mission. The most significant impact of the OAS's actions may be felt over the long term.

As IFES researchers noted:

Reflecting on lessons from Afghanistan, Haiti and Kosovo, audits may ultimately facilitate peaceful and largely accepted election outcomes, but may harm the longer-term consolidation of democracy in the country, requiring new leaders and the election bodies to gradually rebuild public trust. While serious political and security turmoil can arise in elections, the assertion that unique circumstances call for unique solutions can lead to the adoption of ad hoc processes — a scenario that should be avoided through extensive prior planning, preparation for contingencies, and adherence to established procedures.

In 2010, when the OAS audit in Haiti recommended changing the results of the election, the institution changed the political trajectory of the country. In many ways, the democratic process in Haiti has never recovered from that intervention. Haitians' faith in their electoral system — and in the OAS and other international actors who supported the intervention — has continually eroded in the years since, and periodic political crises and delayed elections have become the norm.

Just as the OAS audit of the 2010 Haiti election failed to comply with the basic principles put forth by IFES, the OAS audit of the Bolivian election fell woefully short as well.

The OAS did not work with, or define a role for, the local electoral authorities. In fact, by the time the OAS submitted its Final Report, five of the six members of the TSE were held in preventative detention. Far from setting clear standards and procedures for the audit, the work

was performed in an ad hoc manner and without a clear or appropriate methodology. It is unknown what type of training the auditors received — the OAS has yet to release the names of those involved in the audit and there is no author listed on the report itself. Further, there was not even an established code of conduct for the GOA. The agreement signed between the Bolivian state and the OAS includes clear immunity protections for members of the GOA, but outlines absolutely nothing in relation to a code of conduct. Most damning, however, is the Final Report’s reliance on partial data and misleadingly presented evidence to make far-reaching conclusions. This is flatly contrary to best practices. Further, the Final Report itself, as de facto government officials have made clear, has formed the basis for much of the legal persecution of electoral officials.

The OAS could have chosen a different path. Its failure to do so is the sole responsibility of the institution itself and specifically of the secretary general and the director of DECO. As this report makes clear, the problem was not the conclusion that the OAS could not verify the results of the election. As significant amounts of original electoral material were destroyed in postelection protests, it was technically impossible to “verify” 100 percent of the results. However, by perpetuating a false narrative, and directly leveling serious and unfounded accusations, the OAS opted for a political intervention over a technical intervention.

This has ramifications in Bolivia, but perhaps more importantly, this has ramifications for the entire hemisphere. If the OAS is able to operate without any accountability, the likelihood for further political intervention will only increase — with disastrous consequences for democratic consolidation in the region.

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