

# *“I Would Prefer Not To”: Establishing the Missing Link between Invalid Voting and Public Protest in Latin America*

*Alberto Lioy* 

---

---

## ABSTRACT

While invalid voting is often treated as protest behavior in an electoral context, its association with actual political protests has not yet been empirically demonstrated. The relative scarcity of research on the topic is likely due to the hybrid nature of invalid voting as a both formal and informal political gesture. The novel availability of event-based data for public protests in Latin America allows for testing whether their occurrence is connected with changes in spoiled and blank ballots. Using an appropriate dynamic regression model covering variations in the 148 intervals between Latin American legislative elections in the 1979–2021 period, this study finds a strong connection between the emergence of antigovernment protests and surges in invalid voting (and vice versa). This relationship still holds at parity of economic conditions and it is reinforced by a lack of alternation in the party of power. Conversely, the appearance of workers' strikes appears to work as a substitute for this behavior, which is also chosen by voters when democracy deteriorates, while corruption has no independent impact on invalid voting. Overall this work's findings promise to send the research agenda on invalid voting in a new direction, previously unexplored because of an absence of fitting data.

*Keywords:* invalid voting, elections, public protests, democracy, political participation

## 1. INTRODUCTION

There is a political bloc that obtained around 9% of votes cast across all Latin American legislative elections between 1946 and 2021. It is not embodied by a political party or a social movement, nor it is a faction, an ethnic group, or a specific

---

Alberto Lioy is Assistant Professor and Post-Doctoral Researcher in Latin American Politics in the Department of Political Science, University of Hradec Králové, Hradec Králové, Czechia. [lioyal1@uhk.cz](mailto:lioyal1@uhk.cz). The author declares no conflict of interest concerning this original research article and its publication.

© The Author(s), 2024. Published by Cambridge University Press on behalf of University of Miami. This is an Open Access article, distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives licence (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided that no alterations are made and the original article is properly cited. The written permission of Cambridge University Press must be obtained prior to any commercial use and/or adaptation of the article. DOI [10.1017/lap.2023.29](https://doi.org/10.1017/lap.2023.29)

political ideology. Yet around one-fifth of Peruvian and Ecuadorian voters routinely select it as their preferred option at every general election. This international coalition of sorts groups together all those who went to cast a ballot, but preferred not to choose a political party in Latin American legislative elections. The 9% figure, therefore, reflects the share of *invalid ballots* cast by registered voters, by either leaving them completely blank or spoiling them in some way.

Even beyond Latin America, this nonconventional political behavior is globally relevant, yet its study is still underdeveloped. A relative scarcity of works on the subject might be due to the ambiguous nature of invalid voting as a political behavior with both institutional and informal characteristics, sitting in between electoral participation and all-out protest. In particular, we lack evidence concerning whether casting invalid ballots is directly associated with protest participation and under what conditions. This study addresses this literature gap with a dynamic regression model that tests its hypotheses through a novel dataset covering the 148 intervals between Latin American legislative elections in the 1979–2021 period. It features as its independent variables variations in the intensity of public protests, in their common causes, and in partisan competition, together with a small set of control variables.

This paper uses electoral data to answer two connected research questions, which operate under the assumption that the dynamics of invalid voting act as a complement for other types of protest actions and as a substitute for more institutional political behavior. In practice, the aim is to observe whether: (1) changes in invalid voting happen together with antigovernment protests and workers' strikes, (2) variations in democracy and political corruption still affect invalid voting once accounting for protests, and (3) the dynamics of electoral competition affect changes in invalid voting. These questions are relevant to the literature because they aim to clarify the nature of invalid voting, too often considered a marginal and passive political behavior. Together with a growing body of work on the subject, this paper aims to contribute to transforming the picture of the average invalid voter.

The results of this paper appropriately complement the existing scholarship on invalid voting, by offering some regional-level associations for Latin America that can be further tested on a national and subnational scale. The quantitative analysis succeeds in establishing the missing link, as it shows a clear and positive relationship between surges in public protests and the growth of invalid voting, which is significantly reinforced by the lack of political alternation. On the other hand, the correlation between invalid voting and the emergence of workers' strikes is surprisingly negative, showing how union-led participation might make invalid voting less necessary. Voters also use blank and spoiled ballots to protest democratic deterioration—as had been shown by previous works—while changes in political corruption have no independent effect on invalid voting variations. Finally, the endogeneity in the relationship between votes for outsider parties and invalid voting indicates that the two behaviors have similar determinants in Latin America.

After this summary, this study includes the following five sections. The first explores existing work on invalid voting, outlines the issues related to its dual nature as institutional and informal political behavior, and proposes two research questions to

generate seven empirical hypotheses. The second justifies a regional focus on Latin America and shows the evolution of invalid voting across the continent, exploring temporal trends, and mentioning historically relevant cases. The third section then presents the statistical model, its logic, and specification, while the fourth explores the results for the different quantitative models of changes in invalid voting, including interaction effects for four variables. The conclusion then comments upon the relevance of this study's findings and offers suggestions for further research.

## 2. LITERATURE REVIEW AND LATIN AMERICAN TRENDS

Even if invalid voting has a long history—having *de facto* existed since the adoption of the secret ballot in national elections—it receives significantly less attention from electoral scholars than related behaviors such as voter abstention. One reason might lie in some confusion between the two, and another is the inherent ambiguity of invalid voting as a political act that somehow constitutes both voting and its opposite. Most work on invalid voting focuses on institutional or individual-level causes, often interpreting this phenomenon as unhealthy civic behavior to be corrected. This contrasts with evidence from Latin America, where invalid voting is widespread and routinely used as a gesture of protest against institutionalized politics.

Conceptually, academic work differentiates between *unintentional* invalid voting—mistakes made in the ballot cabin—and *intentional* invalid voting—cast with some kind of protest motivation. The former typology is known as the “voter error” hypothesis and usually works through two different mechanisms. One is different ballot designs, assuming that more complexity results in more voting mistakes (Herron and Sekhon 2005; Herrnson et al. 2012; Pachón et al. 2017). This assumption implies that technological advancements should reduce invalid voting (Desai and Lee 2021) and is accompanied by the observation that invalid voting is generally segmented by voters' education level (McAllister and Makkai 1993; Fatke and Heinsohn 2017). Yet, this relationship is nondeterministic, as the introduction of simplified ballots in 1990s Brazil, for example, did not reduce invalid ballots. Moreover, invalid voting can still grow, even after literacy has spread globally. An alternative mechanism for involuntary invalid voting connects the large choice sets associated with party system fragmentation with the impossibility of making a choice (Moral 2016; Cohen 2018a; Lysek et al. 2020).

On the other hand, intentional *blank* and *spoiled* ballots are usually attributed to alienated, disenfranchised, disempowered, or unsupportive voters (Cohen 2018b). Across many studies of invalid voting, blank and spoiled ballots are considered an act of political protest (Power and Roberts 1995; Zulfikarpasic 2001; Power and Garand 2007; Uggla 2008; Cohen 2018b; Hennau and Ackaert 2019), which has also been observed in less democratic or even fully authoritarian regimes along a spectrum that goes from Serbia all the way to Azerbaijan and Iran (Samii 2004; Herron 2011; Obradović-Wochnik and Wochnik 2014). To organize the existing body of work on the subject, a recent publication has tested the validity of explanatory factors through

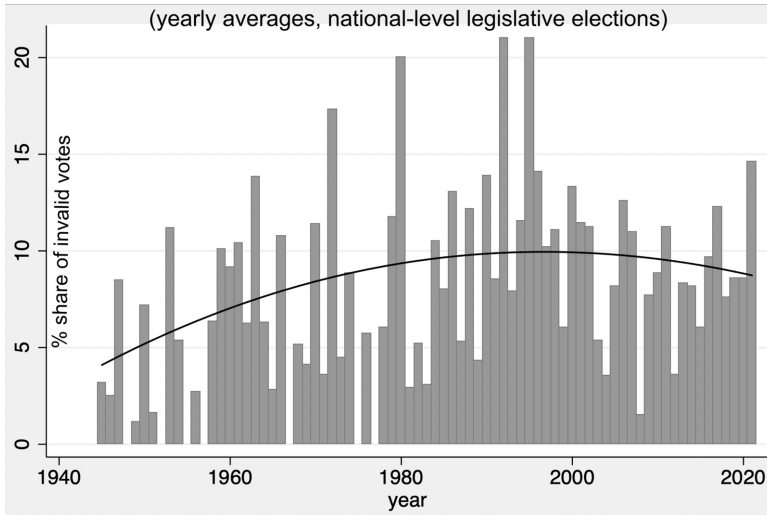
mutually exclusive categories (Kouba and Lysek 2019). This meta-analysis found that a majority of studies empirically confirm only three hypotheses: compulsory voting, party-system fragmentation, and low democratic quality are all associated with higher invalid voting. Evidence from other variables relative to the economy, political competition, and national institutions is contradictory at best, which makes the investigation of new explanatory paths necessary.

In a Latin American context, the invalid voting scholarship saw early progress through notable studies that combined aggregate electoral data from the 1980–2000 period with institutional, socioeconomic, and protest-related variables, showing the importance of factors such as urbanization and income inequality for invalid voting levels (Fornós et al. 2004; Power and Garand 2007). Recently, it has been also found that Latin American voters casting an invalid ballot are alienated from politics, but do not have antidemocratic tendencies (Cohen 2018b). In parallel, the same author captured the influence of political fragmentation through a dynamic model, finding that larger candidate sets are connected to more invalid voting, but that new actors reduce spoiled and blank ballots (Cohen 2018a). To this effect, this study explores *blank* and *spoiled* ballots cumulatively, because there is much confusion in the way that these two behaviors are calculated on an aggregate level in different countries and we lack empirical evidence that leads us to consider them as different. This choice is justified by the ample evidence that these two political behaviors are extremely similar and generally vary together in quantitative studies (Aldashev and Mastrobuoni 2019; Lioy 2021b), and that both are alternatively used with explicit protest intent in Latin America (Cisneros Yescas 2013; Sonnleitner 2019; Palacio Vélez 2022).

If regional-level studies on the subject are relatively scarce for Latin America, in several national contexts invalid voting has been explored as an alternative to partisan voting. Given the impossibility of covering the whole region, this paragraph covers some notable cases. For instance, the recent emergence of invalid voting in Mexico following the 2006 elections has sparked a lively debate over its general validity, impact, and different forms (Cisneros Yescas 2013; Freidenberg and Aparicio 2016; Sonnleitner 2019). Similarly, in Ecuador, invalid voting has been associated with the failure of traditional parties to elicit electoral support (Machado Puertas 2007) and recently with the grievances of the non-*Correista* left (Sandoval 2021). The sheer magnitude of invalid voting in Brazil has also been inescapable for the local scholarship, which has to dispel the false conviction that invalid votes will lead to a repeat election (Soares and D'Araujo 1993; Borba 2008; Chiarello and Sarai 2017; Cavalcante Nepomuceno and Seixas Costa 2019). Finally, in Colombia, blank ballots' political relevance has been explicitly recognized by the local academia as the expression of popular discontent and a potential driver of change (García Sánchez and Cantor 2018; Soracá Becerra 2018; Otálora Heredia and Díaz Martínez 2019; Palacio Vélez 2022).

A historical overview of invalid voting in Latin America, examining its magnitude and salient variations, is then performed through electoral data from the Institute for Democracy and Electoral Assistance (IDEA) elections dataset, cross-referenced with Nohlen (2005). Figure 1 shows the evolution of invalid voting across the continent.<sup>1</sup> The trend line traces the rise of invalid voting across Latin America from a 5% average in 1950 to

Figure 1. Invalid Voting Trends in Latin America



Note: Yearly averages, national-level legislative elections.

10% in 1999, followed by a slight decline and recovery by 2020. This volatility vis-à-vis the stability of national institutional arrangements highlights the inherent political component in invalid voting: different ballot designs or electoral systems may explain a certain level of invalid voting, but changes in invalid voting are the consequence of shifting political conditions. A scholarly conversation about these high invalid voting levels avoids dangerous neglect, as when too many voters decide not to choose a political party, democratic representation deteriorates. One explanation for these long-term regional trends is that the number of Latin American democracies increased as the Cold War ended, but widespread frustration with the new representative institutions also rapidly appeared (Benton 2005). Even if democracy alone was soon deemed insufficient for creating equality or development, street protests fell across the region (Schatzman 2005).

Table 1 reports general invalid voting statistics for legislative elections that took place throughout the 18 countries in the dataset. The left side of the table shows that the electorates of Brazil, Ecuador, Guatemala, Peru, and post-1991 Colombia cast invalid votes at much higher levels than the rest of the continent. All these party systems are highly fractionalized, with many parties gaining access to parliament, which indicates that high levels of invalid voting in Latin America are connected with political fragmentation and partisan volatility. Additionally, a sample-wide average of 9.1% for invalid voting shows its presence even where political stability is taken for granted, such as in Chile and Costa Rica.

Since extreme cases provide additional insight beyond average levels, the right side of table 1 summarizes the 18 largest positive variations of invalid voting. As expected given their average levels, Brazil, Ecuador, Colombia, and Peru are all featured, but the presence of eight different countries confirms that sudden surges of

Table 1. Invalid Voting in Latin American Legislative Elections

Summary statistics by country					Largest increases in invalid voting			
country	mean	#	periods	peak	country	year	level	variation
Argentina	6.51%	25	1946–73, 1983–2019	25.2% (1960)	<b>Peru</b>	1995	46.1%	+18.8%
Bolivia	7.33%	16	1956–66, 1979–2020	13.2% (1979)	<b>Argentina</b>	1963	21.2%	+17.6%
<b>Brazil</b>	<b>17.29%</b>	20	1945–2018	41.2% (1994)	Argentina	2001	21.0%	+17%
Chile	7.15%	13	1949, 1961–73, 1989–2017	17.7% (1997)	<b>Venezuela</b>	2000	31.5%	+17%
<b>Colombia*</b>	5.62%	21	1949–2018	26.4% (2010)	Argentina	1960	25.2%	+16%
Costa Rica	4.47%	17	1953–2018	11.2% (1953)	Peru	1990	27.3%	+15.5%
Dom. Rep.	3.47%	11	1978–2020	5.8% (1994)	Peru	2006	26.5%	+15.4%
<b>Ecuador</b>	<b>21.98%</b>	19	1947–54, 1979–2021	41.7% (2006)	Venezuela	1993	19.2%	+15.4%
El Salvador	7.52%	15	1968–72, 1988–2021	19.1% (1988)	<b>Ecuador</b>	2006	41.7%	+13.4%
<b>Guatemala</b>	<b>13.75%</b>	14	1959–70, 1985–2019	20.3% (2019)	<b>Brazil</b>	1986	28.1%	+13%
Honduras	5.54%	10	1965, 1981–2013	11.5% (2009)	<b>Colombia</b>	1991	12.9%	+12.5%
Mexico	4.46%	18	1970–2021	10.0% (1973)	Ecuador	1984	29.4%	+12.3%
Nicaragua	6.00%	7	1984–2016	8.5% (2006)	Brazil	1990	40.1%	+12%
Panama	5.56%	8	1988–84, 1994–2019	7.9% (2014)	Colombia	2010	26.4%	+12%
Paraguay	3.71%	7	1989–2018	8.2% (2018)	<b>Bolivia</b>	1964	12.2%	+10.1%

(continued on next page)

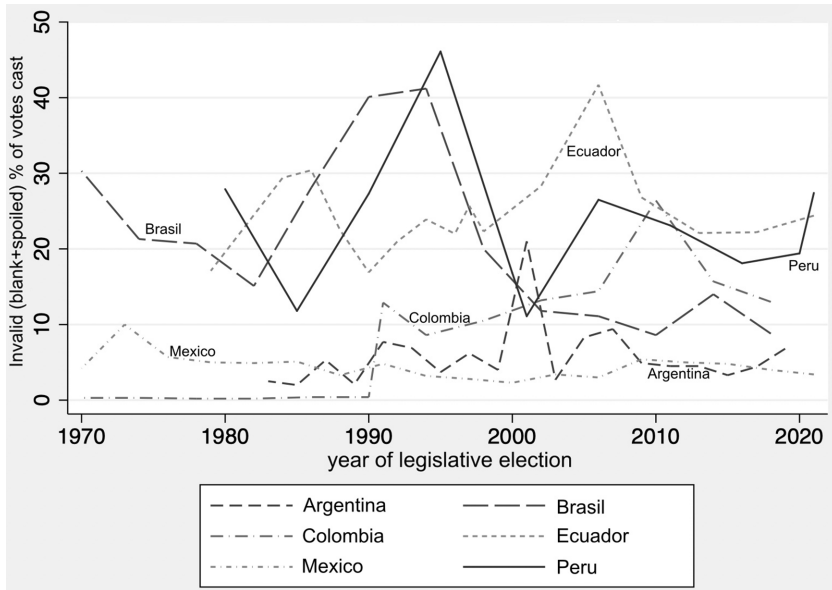
Table 1. Invalid Voting in Latin American Legislative Elections (*continued*)

Summary statistics by country					Largest increases in invalid voting			
country	mean	#	periods	peak	country	year	level	variation
<b>Peru</b>	<b>23.22%</b>	11	1980–2021	46.1% (1995)	Brazil	1962	17.7%	+9.3%
Uruguay	3.10%	9	1971, 1984–2019	4.7% (1994)	Brazil	1970	30.3%	+9.2%
Venezuela	8.59%	12	1958–2000, 2010–2015	31.5% (2000)	<b>Chile</b>	1997	17.7%	<b>+9.0%</b>
AVERAGE	9.09%	256	1946–2021	46.1% (Peru '95)				

Note: Countries with average invalid voting levels > 10% are in **bold**. \*After the 1991 Constitution, the Colombian average is 14.34%.

Note: Each country's largest variation is marked in **bold**.

Figure 2. Invalid Voting Trends in Six Latin American Countries



invalid ballots can occur in stable party systems, as happened in 1997 in Chile, where the debate on invalid voting has been recently revived (Ponce de León Solís 2019). In Central America, this phenomenon has been prevalent in the hyperfragmented Guatemalan context, where antipartisan politics are strong (Azpuru and Blanco 2008). Even if invalid ballot levels and volatility increased over time, sudden surges happened at political junctures, for example predating 1960s authoritarianization. Notably, in Argentina, despite low average invalid voting levels (6.5%), there have been three large variations, two of which took place when Peronism was banned (Baily 1965; Snow 1965) and a third during the economic crisis of 2001 (Escolar et al. 2002; Parma 2013). Figure 2 shows trends in six notable Latin American countries.

### 3. CONCEPTUALIZATION, RESEARCH QUESTIONS, AND HYPOTHESES

Generally, research on the topic still suffers from some persisting confusion about what the act of casting invalid ballots represents for voters. Even if elections are considered as the core of representative democracy, they are not the only relevant form of political participation. Unfortunately, the study of alternative forms of voting has long remained marginal because of a subfield separation between scholars of institutional politics and those of social movements, which illustrious scholars have lamented before (McAdam and Tarrow 2010). Conceptually, invalid voting sits between two modes of political participation (labeled I and II in table 2) that can be called



Table 2. Concepts, Types, and Typical Modes of Political Participation

Operational concepts		Types and commonly used labels	Specimens of typical modes
Minimalist definition	Target: government/politics/state	Political Participation-I <ul style="list-style-type: none"> <li>• conventional political participation</li> <li>• institutional political participation</li> <li>• elite-directed action</li> <li>• formal participation</li> <li>• ...</li> </ul>	<ul style="list-style-type: none"> <li>• voting</li> <li>• budget forums</li> <li>• party membership</li> <li>• contacting politicians</li> <li>• ...</li> </ul>
Targeted definitions		Political Participation-II <ul style="list-style-type: none"> <li>• unconventional political participation</li> <li>• non-institutional political participation</li> <li>• protest</li> <li>• political action contentious politics</li> <li>• elite-challenging action</li> <li>• everyday activism</li> <li>• ...</li> </ul>	<ul style="list-style-type: none"> <li>• signing a petition</li> <li>• demonstrating</li> <li>• blocking streets</li> <li>• painting slogans</li> <li>• flash mobs</li> <li>• ...</li> </ul>
	Aimed at: problems or community	Political Participation-III <ul style="list-style-type: none"> <li>• civic engagement</li> <li>• social participation</li> <li>• community participation</li> <li>• ....</li> </ul>	<ul style="list-style-type: none"> <li>• volunteering</li> <li>• reclaim-the-street-party</li> <li>• ...</li> </ul>
Motivational definition		Political Participation-IV <ul style="list-style-type: none"> <li>• expressive political participation</li> <li>• individualized collective action</li> <li>• personalized politics</li> <li>• ....</li> </ul>	<ul style="list-style-type: none"> <li>• political consumerism</li> <li>• boycotts</li> <li>• boycotts</li> <li>• public suicides</li> <li>• ....</li> </ul>

Source: van Deth (2014, 361).

conventional and unconventional, or institutional and noninstitutional (van Deth 2014). Invalid voting falls into a gray area because it has the formal components of electoral behavior that associate it with partisan voting, and some informal ones—such as writing on the ballot the name of a celebrated national hero—that bear resemblance to protesting in the streets. These issues in the conceptualization of invalid voting are not trivial, because different conceptualizations—institutional versus informal—result in divergent scholarly approaches, which are summarized as institutional, social, or protest-related explanations by McAllister and Makkai (1993), whose work draws heavily from the voter turnout literature.

On the institutional side, invalid voting is influenced by the structure of the political offer, visible through the relationships of strength between political parties, which is notoriously crucial to all voter choices (Wessels and Schmitt 2008). Rather than being disgruntled against institutions or opposed to representative democracy (Cohen 2018b), protest voters might simply be dissatisfied with a specific election's political equilibria. In elections where one's preferred party is weak and unlikely to win, invalid voting is a natural alternative, together with voting for marginal parties, which is positively correlated with spoiled and blank ballots (Uggla 2008). At their extreme, voters cast invalid ballots as an "impossible vote" if their desired option is outlawed, as happened with *Peronismo* in 1960s Argentina (Baily 1965).

Unlike abstention—a *passive* behavior even when intentional—invalid voting implies the *act* of casting a ballot. The average invalid voter is politically active, but often does not feel represented in the current climate, as opposed to abstainers who are generally less involved in politics (García Sánchez and Cantor 2018). As noted by Martínez i Coma and Werner (2019), abstention is an "exit" behavior, a way of rejecting the system, while invalid voting still represents a "voice" option, a form of political expression. Note how a notorious taxonomy of protest voting includes *insurgent party*, *tactical*, *BNS* (*blank, null, spoiled*), *organized*, and *officially sanctioned* protest voting (Alvarez et al. 2018), where these categories can also overlap.

From these considerations, a question arises: if invalid ballots are part of a "repertoire of contention," do they also act as a complement to public demonstrations and antigovernment mobilization? If blank and spoiled ballots are protest votes, then one can hypothesize a positive relationship with the occurrence of actual political protests. One problem for testing this assumption lies in empirically connecting these behaviors, with quantitative studies using proxies such as economic crisis, unemployment, hyperinflation, a lack of political legitimacy, and democratic deterioration.

In the academic literature, an authoritarian transformation of national politics is thought to be a significant driver of invalid voting, and previous studies found a robust negative relationship between democracy levels and blank/spoiled ballots (Power and Garand 2007; Cohen 2018a; Singh 2019; Carlin and Moseley 2022). If a desire to defend democracy motivates voters to cast invalid ballots in protest, then changes should compensate for variations in democracy levels. In Latin America, 1990s Peru offered the clearest example of this dynamic, as the rise of *Fujimorismo* was accompanied by a massive surge in blank ballots (Durand 1996; Carrión 2001; Franco 2001; Zolezzi Chocano 2006).

Recently, corruption has also been used as a proxy for protest in voting models, because a belief that politics is rigged can easily trigger antagonistic political behavior such as invalid voting. Generally, high perceptions of political corruption among government officials can hinder the efforts of political elites to bring people to the polls if they are perceived as insincere (Fossati and Martínez i Coma 2020). In terms of a direct relationship, the literature has found that at the aggregate level higher perceived corruption levels increase invalid ballots under compulsory voting (Martínez i Coma and Werner 2019). Cohen (2018b) has also used corruption perceptions as a control variable for testing whether antsystem motivations for invalid voting were in reality just a sophisticated reaction to perceived corruption. Another recent regression-based study of invalid voting chose not to include corruption (Lysek et al. 2020) and justified this choice by claiming that corruption scores are too correlated with per capita GDP and Freedom House values.

In addition to democratic deterioration and political corruption, economic conditions, inflation, and unemployment rates are frequently featured in quantitative modeling as sources of protest behavior that lead disgruntled economic voters to invalidate their ballots (Power and Roberts 1995; Driscoll and Nelson 2014; Dejaeghere and Vanhoutte 2016; Aldashev and Mastrobuoni 2019; Adeleke et al. 2022).

Even if the use of these proxy variables is common, the academic literature includes some indication of a direct link between protest participation and widespread invalid voting, which can be reasonably traced both for antigovernment protests and for labor strikes, which may be more or less common in different contexts. In Latin America, country-level evidence supports this connection, which is yet to be tested at the regional level. For example, in the 1980s the Ecuadorian and Brazilian social scientists commenting on invalid voting growth also discussed the simultaneous emergence of intense public protests (Pérez Sáinz 1987; Moisés 1990; Soares and D'Araujo 1993; Sánchez Parga 1994). Both behaviors—invalid voting and protest participation—were seen as a response to the insufficient democratization of Ecuador and Brazil.<sup>2</sup> The Brazilian case also helps to establish this connection in recent years, given how a new rise in invalid voting coincided with the massive protests that led to Dilma Rousseff's impeachment (Cavalcante Nepomuceno and Seixas Costa 2019).

From this discussion, a first research question can be drawn and made into specific hypotheses connecting types of protest behavior and its root causes. In other words, the hypotheses test whether invalid voting dynamics are connected to those of actual antigovernment protests and waves of labor strikes, or whether they are a reaction to changes in national levels of democracy and corruption.

### **RQ1: Does casting invalid ballots complement other protest behavior?**

**H1:** *Invalid voting increases with the emergence of public protests.*

**H2:** *Invalid voting increases with the emergence of workers' strikes.*

**H3:** *Invalid voting increases when democracy deteriorates.*

**H4:** *Invalid voting increases when corruption increases.*

Beyond political protest and its causes, one can explore the institutional component of the story, for which the literature proposes an association between electoral competition and invalid voting (McAllister and Makkai 1993). The main hypothesis is that invalid voting is a protest behavior that responds to political fragmentation or to waning political competition. Caution is needed, because the empirical relationship between institutional political behaviors and invalid voting is undetermined (Kouba and Lysek 2019) and may operate in the opposite direction (Aldashev and Mastrobuoni 2019).

First, the most common proxy for party competition is the margin of victory between the two largest parties: in more competitive electoral contexts votes are believed to be more valuable, not to be wasted by invalidating them. Second, lack of political alternation keeping the same party in power might correlate with growth in invalid ballots, because it reduces national-level political competition by entrenching a government clique. This goes along with previous studies that have shown that invalid voting is a last resort when no exit or voice option is viable (Hirschman 1970; Hooghe et al. 2011), or a protest tool against clientelist, antidemocratic actors (Carlin and Moseley 2022). Third, relevant to political competition and related to invalid voting is casting a ballot for political outsiders, which is another way to protest institutional politics. Following the results of Ugglá (2008), one can expect invalid voting to rise and fall together with votes for marginal parties. A recent study confirmed this association, by showing how invalid voting predicts electoral support for Italian populist parties (Aron and Superti 2022). Notice how small-party strength also captures party system fragmentation (Fatke and Heinsohn 2017), and the more fragmented the party system, the harder the choice process, ultimately resulting in more invalid ballots (Cunow et al. 2021).

## **RQ2: Does casting invalid ballots substitute for institutional voting behavior?**

**H4:** *Invalid voting increases when the margin of victory widens.*

**H5:** *Invalid ballots increase when there is no alternation in power.*

**H6:** *Invalid voting increases together with votes for outsider parties.*

## **4. RESEARCH METHODOLOGY AND VARIABLE OPERATIONALIZATION**

The decision to assemble a novel dataset of Latin American elections up to 2021 is justified by the lack of up-to-date empirical results for the whole region. A Latin American focus is also fit for theory testing because of the variation provided by (1) enforced compulsory voting in half of the countries, (2) patterns of protest and worker unionization, and (3) different levels of democratic consolidation and corruption. Furthermore, invalid voting is common across the region, where it often channels popular dissatisfaction toward the partisan alternatives on the ballot, and

where the amount of *blank* and *spoilt* ballots cast often shows intense volatility between elections.

A good empirical model of invalid voting should investigate the overarching associations between formal and informal political behavior, but it is often hard to compare data from different countries. This paper addresses these issues through a dynamic model: the dependent variable is the change in the percentage of invalid ballots between consecutive legislative elections and the independent variables are also in the differences. This choice enables the researcher to test the factors *altering* voters' decision to invalidate their ballot, and previous electoral studies have adopted a dynamic approach for congressional turnout in the United States (Clouse 2011) and for invalid voting in Latin America (Cohen 2018a). Using variables in differences presents the following advantages over a static specification:

1. It sets aside each country's baseline level of invalid voting, avoiding reliance on institutional variables or fixed effects specifications.
2. It makes different countries' political contexts more comparable, as it looks at changes in citizens' behavior that depend on a changing national environment.
3. One can hardly argue that *changes* in invalid ballots are involuntary or simple errors. When many suddenly cast invalid votes, they "preferred not to" vote for existing parties, resorting to passive resistance.<sup>3</sup>
4. Looking only at changes blurs the lines between blank and spoiled ballots, allowing their cumulative use as two different manifestations of invalid voting.

Even if a *fixed effects* model seemed unnecessary, the Hausman specification test confirmed that a standard panel model with *random effects* is to be preferred for the regression analysis, with a p-value > 90% across different model specifications. The model is also run with robust standard errors, to make up heteroskedastic error terms across the sample. Finally, the dataset was checked for accuracy and consistency across sources to ensure homogeneity.

To overcome the existing literature's limits and fragmentation, this paper tests for the existence of a direct link between simultaneous trends in invalid voting and mass protest. A novel events-based dataset including yearly assessments of the intensity of antigovernment protests and workers' strikes throughout all of Latin America over the past 40 years is what made this study possible (Martínez 2021). In practical terms, this new dataset quantified protest occurrence and intensity in a given year on a uniform basis, using the *Latin American Weekly Report* as a cross-national source.

Here the main independent variable is measured as the *change in the intensity of public protests* (H1) between the two electoral years under scrutiny, normalized on a 0 to 4 scale. After coding the static variable for both in a given election year, the variable in differences can then range from  $-4$  to  $+4$ . A positive variation indicates that the intensity of protests in the electoral year increased in comparison with the previous election, and vice versa for a negative variation. In the regression model, the change-in-protest variable is then made to interact with variables that measure changes in democracy levels, power alternation, political corruption, and compulsory voting.

This captures whether different behaviors influence each other and whether public protests and invalid voting correlate only under some conditions. For example, it would be important to know if the emergence of massive demonstrations results in more protest voting only when political corruption spirals out of control or when an authoritarian transition is feared. The same goes for compulsory voting—thought to increase blank and spoiled ballots by raising the cost of abstention—which could perhaps reinforce the relationship between invalid voting and protest participation.

As mentioned in the theoretical section, connected with, and alternative to, antigovernment protests is the *emergence of workers' strikes* (H2)—also included in the same dataset (Martínez 2021)—which enters the model as a variable capturing variations on a  $-4$  to  $+4$  scale. The big difference between the two variables lies in the strong regional disparities in unionization levels, which should make workers' strikes a less reliable factor. To address a possible criticism, and to be jointly effective, the indexes for protests and strikes should have limited overlap. A correlation test for the two variables in differences returns a very low value of  $\rho = 0.0892$ , which justifies the inclusion of this additional variable.

Coming now to H3, the model uses the difference in the Freedom House index<sup>4</sup> to capture whether *variation in democracy levels* has an independent effect on invalid voting between consecutive elections as an independent variable. Knowing that this index grows when a country becomes more authoritarian and falls when it democratizes, note that fewer than half of observations are “0” (stability), as democracy in Latin America changes quite frequently. Also notice how dramatic changes in the number of invalid ballots have already occurred in highly democratic contexts (Lioy 2021b).

As for H4, any serious study of protest and voting must include a variable capturing corruption perceptions, taken here in changes between electoral years in the Political Corruption Index included in the V-Dem dataset (McMann et al. 2016). Operationally, this index summarizes six different types of corruption and ranges from 0 to 1, where a higher number indicates more corruption. This is a common proxy adopted as a driver of invalid voting in the absence of a direct assessment of collective protest behaviors, and here its inclusion tests for whether corruption has a separate impact on invalid voting even once protests and strikes are taken into account. This is because those who protest in the street could not be the same people who cast invalid ballots, with both behaviors triggered instead by heightened political corruption levels in the country.

To answer its second set of hypotheses related to electoral competition, this work includes the change in the victory margin between consecutive legislative elections (H4), assuming a growth of invalid voting when the gap between parties expands, and vice versa for closer elections. Second, another competition-related variable captures power *alternation in the party of government* (H5). It is a simple dichotomous variable taking a “1” value for a change in power and a “0” for an incumbent victory, assuming that voting for the institutionalized opposition substitutes more informal political behaviors like invalid voting. Finally, the outsiders' component is measured as the variation in the vote shares of all parties outside the top three. The expectation is for a

positive relationship with invalid voting (H6), given how small-party voting constitutes a form of protest voting against the largest parties.

Coming now to the control variables, within a dynamic model, institutional transformations should still matter. For example, compulsory voting is universally considered to increase invalid voting levels through higher abstention costs (Reynolds and Steenberg 2006; Power and Garand 2007; Ugglá 2008; Cohen 2018a; Singh 2019). Here, *changing compulsory voting rules* are expressed as a  $[-1, 0, +1]$  trinomial variable taking a positive or negative value when they are adopted or dropped (most observations will therefore be a 0). It is also established that in the election after the “founding” or “*post-transition*” election after an authoritarian period, voter turnout levels generally fall, as the initial mobilizing enthusiasm wanes (Kostelka 2017). The model tests for its possible negative effect on invalid voting, given how invalid voting increases when turnout is near universal (Kouba and Lysek 2016). The same goes for including the *change in concurrent elections*, which should see a positive gap in invalid voting between general and legislative-only elections, in countries holding both.

Moreover, the scholarship has shown that whenever the electoral registry adds new potential voters, it includes many electorally inexperienced citizens, less likely to go to ballot stations (Franklin 2004). This negative relationship for aggregate voter turnout was confirmed in a Latin American context by Kellam (2013), which makes its absence from most invalid voting models rather puzzling.<sup>5</sup> Among them, only Power and Roberts (1995) use the percentage of enfranchised voters as an independent variable. The literature also considers literacy levels important, as less literate voters might be less able to choose in the ballot cabin (Zulfikarpasic 2001), even if empirical evidence is mixed (Kouba and Lysek 2019). Yet, in a dynamic model, changes in literacy are an ineffective proxy, because they show a positive trend. This work fills the gap, assuming a positive relationship between *trends in registered voters* and changes in invalid voting.

Finally, existing studies use the change in the growth of gross national product between consecutive elections and the change in inflation between consecutive elections as economic correlates of protest and invalid voting. This work follows their lead, and their simultaneous presence alongside the protest variable checks whether its correlation with invalid voting works even at parity of economic conditions. Conversely, including a change-in-unemployment variable would have sacrificed too many observations, given the spotty availability of labor statistics across Latin America.

To ensure coherence across theoretical, methodological, and empirical components, this paper focuses on legislative elections, where political parties have more permanence than presidential candidates. Although Latin American political parties have a comparatively short life span (Roberts 2013), patterns of partisan competition survive in consecutive elections and often longer. Table 3 offers summary statistics.

Regarding sources, all electoral data comes from the IDEA election dataset and is cross-referenced with Nohlen (2005), which supplies data for partisan shares until 2003. To solve discrepancies, and for post-2003 party/coalition shares, national

Table 3. Descriptive Statistics

	Mean	Std_dev	Min	Max	N
$\Delta$ (Invalid voting <sub>t</sub> )	0.298	6.15	-29.3	18.8	221
$\Delta$ (Democracy level <sub>t</sub> )	0.035	0.78	-3.0	3.5	187
$\Delta$ (Economic growth <sub>t</sub> )	-0.138	7.08	-21.7	23.8	232
$\Delta$ (Inflation <sub>t</sub> )	-2.196	1,942	-13,477	13,454	207
$\Delta$ (Political outsiders <sub>t</sub> )	1.050	11.03	-54.3	39.6	226
$\Delta$ (Strikes <sub>t</sub> )	0.000	0.83	-3.0	4.0	152
$\Delta$ (Corruption <sub>t</sub> )	-0.003	0.05	-0.25	0.19	275
$\Delta$ (Anti-govt. protests <sub>t</sub> )	0.110	1.43	-3.0	4.0	152
$\Delta$ (Registered voters <sub>t</sub> )	15.471	18.62	-25.1	153.6	265
$\Delta$ (Compulsory voting <sub>t</sub> )	-0.072	0.12	-1	1	276
Post-transition election	0.089	0.28	0	1	245
$\Delta$ (Concurrent election <sub>t</sub> )	0.003	0.51	-1	1	266
Power alternation <sub>t</sub>	0.376	0.48	0	1	231
$\Delta$ (Main opposition <sub>t</sub> )	2.082	10.78	-20.7	66.1	226
$\Delta$ (Margin of victory <sub>t</sub> )	-0.314	13.87	-47.7	41.0	226

electoral tribunals' websites and official reports were used. Economic variables come from the Penn World Tables, with missing data from the central banks of Argentina, Brazil, Nicaragua, and Venezuela. The corruption data is taken from the V-Dem dataset. The initial sample included 220 election-on-election variations of invalid voting, with 36 observations lost through founding elections and authoritarian takeovers. Including public protests and workers' strikes further reduces the number to 148, as their source dataset (Martínez 2021) begins in the late 1970s.

Before proceeding with the regression analysis, a series of tests were run for the possible presence of endogeneity in the data, because electoral outcomes of different kinds happen simultaneously, as the combined effect of voters' individual decisions. The tests of endogeneity compared two similar models: one with changes in invalid voting as the dependent variable and one where one of its determinants was used as the dependent variable, with invalid voting featured as an explanatory factor.

The results of the tests showed that two of the main variables—changes in the victory margin and changes in outsider party vote—are endogenous to the outcome of interest. These two variables were accordingly removed from the general models to avoid distorting the estimators, meaning that it will not be possible to test H4 and H6 through the regression model and the impact of political competition will be measured through H5. Crucially, because voting for outsider parties shares similar determinants



to invalid voting, the two are strongly related. Conversely, the tests that used power alternation and changes in the intensity of public protests or workers' strikes as dependent variables returned a p-value of zero, meaning that these factors are unrelated to the error term.

## 5. EMPIRICAL RESULTS

Table 4 summarizes the results of the regression analyses, with models including the same core combination of variables encompassing transformations in public protests, their causes, electoral competition, and national institutions featured in column A. Specifications in models B–E also incorporate interaction terms with public protest variations.

First of all, empirical evidence from the regression models clearly supports H1, finding that changes in the intensity of antigovernment protests directly affect invalid voting variations in the direction predicted. The effect size is already important in model A, where a change from the baseline (0) to intense public protests (4) between consecutive elections is linked to a 3.8% increase in invalid voting. It is important to notice how in a linear model this effect also applies to negative variations, meaning that in years where protests fall in intensity, so do blank and spoiled ballots. This result shows that regardless of whether invalid voters actually show up at antigovernment protests, they are an integral part of a national context of political contention. This effect remains even after the interaction terms are introduced, except for the model that includes interactions with compulsory voting.

As for H2, the quantitative evidence from the statistical model contradicts the initial predictions, which saw labor mobilization as similar to antigovernment protests. The emergence of workers' strikes seems to operate on invalid voting in a negative fashion, perhaps to signal that workers' unions capable of mobilizing large numbers of protesters tend to be associated with the institutional politics of supporting large parties, not with protest voting. The Argentinian context is perhaps the most fitting for observing this kind of mechanism empirically in the positive, both after Peronism and since the 2001 crisis (De Riz 2008), while the end of workers' strikes in early 1990s Bolivia also coincided with a fall in invalid voting. The two behaviors—antigovernment protest and workers' strikes—therefore appear to be *substitutes* at the national level. The size of the effect was only slightly smaller than what was found for H1, just working in the opposite direction.

Concerning H3, a direct relationship between democratic deterioration and invalid voting is present with a large coefficient. In other words, the onset of more authoritarian politics prompts voters to protest by invalidating their preferences, while the number of valid votes for political parties increases in more democratic times. In model A, a one-point change in the democracy between two elections correlates on average with a 4.1% change in invalid voting of the same sign, all other factors being equal. This is an important result because it shows that democratic deterioration affects invalid voting directly, and independently from antigovernment rallies and workers' strikes.

Table 4. Determinants of Invalid Voting Variations in Latin America

Variable	Model A	Model B	Model C	Model D	Model E
$\Delta(\text{Anti-govt. protests}_t)$	<b>0.9462*</b>	<b>0.9812*</b>	<b>1.6726***</b>	<b>1.0095**</b>	0.8212
<b>H1</b>	(0.3800)	(0.3888)	(0.5006)	(0.3705)	(0.6756)
$\Delta(\text{Strikes}_t)$	<b>-0.8623*</b>	-0.8136	<b>-1.0233*</b>	<b>-0.8479*</b>	<b>-0.8827*</b>
<b>H2</b>	(0.4304)	(0.4235)	(0.4523)	(0.4025)	(0.433)
$\Delta(\text{Democracy level}_t)$	<b>4.1553*</b>	<b>4.1808**</b>	<b>4.4034**</b>	<b>3.7885*</b>	<b>4.0906*</b>
<b>H3</b>	(1.6147)	(1.6220)	(1.6109)	(1.5174)	(1.7725)
$\Delta(\text{Corruption}_t)$	15.0205	11.3522	10.6761	16.9542	15.3062
<b>H4</b>	(13.1173)	(12.2810)	(12.9707)	(13.7498)	(12.9723)
Power alternation <sub>t</sub>	0.4298	0.6321	0.5070	0.5412	0.4878
<b>H5</b>	(1.2121)	(1.1539)	(1.1748)	(1.1621)	(1.2442)
$\Delta(\text{Economic growth}_t)$	<b>0.1321*</b>	<b>0.1407*</b>	<b>0.1387*</b>	<b>0.1270*</b>	<b>0.1355*</b>
	(0.0646)	(0.0697)	(0.0637)	(0.0625)	(0.0572)
$\Delta(\text{Inflation}_t)$	0.0004	0.0004	0.0005	0.0003	0.0004
	(0.0003)	(0.0003)	(0.0003)	(0.0003)	(0.0003)
$\Delta(\text{Registered voters}_t)$	-0.0566	-0.0587	-0.0468	-0.0598	-0.0556
	(0.0489)	(0.0511)	(0.0483)	(0.0496)	(0.0486)
$\Delta(\text{Compulsory voting}_t)$	-3.5002	-3.2766	-4.2862	-3.6769	-3.7013
	(5.0448)	(5.2325)	(4.2130)	(5.2975)	(5.1005)
Post-transition election	0.7616	0.6582	0.9154	0.4309	0.7785
	(4.1288)	(4.0394)	(4.2059)	(4.1054)	(4.1825)
$\Delta(\text{Concurrent election}_t)$	-1.3572	-1.3472	-1.2342	-1.2721	-1.3261
	(0.8517)	(0.8977)	(0.9449)	(0.8761)	(0.8404)
$\Delta(\text{Protests}_t) * (\text{corruption}_t)$		8.6546			
		(5.8725)			
$\Delta(\text{Protests}_t) * \text{alternation}_t$			<b>-1.4992*</b>		
			(0.6807)		
$\Delta(\text{Protests}_t) * \Delta(\text{democracy}_t)$				-1.1267	
				(0.6943)	
$\Delta(\text{Protests}_t) * \text{compulsory}_t$					0.2601
					(0.8330)

*(continued on next page)*

Table 4. Determinants of Invalid Voting Variations in Latin America (*continued*)

Variable	Model A	Model B	Model C	Model D	Model E
_cons	0.2559 (0.8083)	0.2036 (0.8059)	-0.0091 (0.8017)	0.3150 (0.7790)	0.2211 (0.7955)
N	148	148	148	148	148
Determination coef. ( $R^2$ )	0.2805	0.2880	0.3074	0.2924	0.2813

Note: Random effects GLS regression, panel-robust standard errors in parentheses.  $^{\circ}$ p < 0.10, \*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001.

Conversely, the result for H4 clearly shows that at the aggregate level changes in political corruption do not have a direct impact on invalid voting in Latin America once other factors are held constant. Although we know from previous studies that corruption is undoubtedly related to protest voting at the individual level, after taking into account variations in democracy, protest participation, and workers' strikes, the corruption variable is not statistically significant in any of the five regression models. One can still comment on the sign of the coefficient, which respects the general expectations in the hypothesis by presenting a positive relationship between corruption and invalid voting.

Finally, regarding the specifications that include interaction terms, model B shows that the corruption variable is still not statistically significant even after making it interact with changes in political protest, and does not mediate the relationship between protest and spoiled/blank ballots. Model C explains the largest amount of variation out of all models, with a coefficient of determination ( $R^2$ ) slightly above 30%. It also indicates that when public protests surge or wane, power alternation mediates their relationship with invalid voting. If the incumbent carries the election, the emergence of public protests at different intensities [1–4] corresponds to increases in invalid voting of 1.7–6.7%. When public protests wane under a lack of alternation in power, the negative relationship with invalid voting is similarly large. Consider instead that if the incumbent loses the election, protest surges are connected with negligible invalid voting increases of 0.1–0.4%.<sup>6</sup> The difference between the two scenarios is quite impressive and this key result indicates that Latin American citizens tend to participate in protests and recur to invalid voting when national politics see a lack of alternation.

Next, model D suggests a negative interaction between authoritarianization and public protests, even if the added term is not statistically significant. The sign indicates that the relationship between protest and invalid voting may be stronger when democratic conditions improve. Finally, model E contributes a surprising result, showing that compulsory voting leaves the relationship between changes in public protests and invalid voting unchanged. The coefficient for the adoption of compulsory voting is not statistically significant and constantly negative.

As for changes in the four institutional variables in the model, none of them yield any statistically significant results for invalid voting variations. Yet, it is possible to comment on the sign for changes in compulsory voting and the switch from concurrent elections to separate legislative and presidential elections. In both cases, the sign is negative, which confirms the insight from previous studies. Post-transition elections similarly have a slightly higher level of invalid voting, although the variation is not statistically significant. As for the economic variables, the change in the economic growth rate has a (surprisingly) positive sign and is significant across specifications. Still, previous studies showed that GDP growth in isolation is often ineffective in producing real improvements in Latin American lives (Janvry and Sadoulet 2000). One can make a plausible argument that times of economic growth can increase the distance between politicians' and citizens' economic evaluations. In parallel, changes in national-level inflation yield no significant results in any of the models.

## 6. CONCLUSIONS

This final section summarizes this study's main findings and comments on their relevance. Thanks to the availability of a new events-based dataset, the statistical model featured in this work offers a series of novel contributions to the literature on invalid voting, testing for the first time whether the appearance of antigovernment protests and workers' strikes is directly linked to rising levels of invalid voting. Until now this connection had only been explored through a series of proxy variables relative to the economy, corruption, and democracy. Furthermore, the use of a Latin American elections dataset for the 1979–2021 period ensures the broad applicability of its results in a region with high levels of invalid voting.

First and foremost, this article successfully establishes the presence of a strong empirical link between the surge and wane of antigovernment protests and the rise and fall of invalid voting across Latin America. Going along with the assumption in H1, it shows that blank and spoiled ballots increase in election years when public protests arise, and decline when protests subside. This relationship is clearly mediated by a lack of political alternation, which dramatically increases the impact of mass demonstrations on blank and spoiled ballots, as happened in Peru during Fujimori's rise in the 1990s or during Correa's successful 2006 run in Ecuador. Conversely, in contexts where the largest party in parliament changes, public protests and invalid voting become weakly related to each other. In those elections, voters choose to cast a preference for the winning opposition while also protesting against the government, instead of invalidating their vote, as was the case in Chile in 2013, when the candidature of Michelle Bachelet successfully channeled disgruntled voters.

Concerning workers' strikes, their growth is connected to a reduction in invalid voting, showing that the two political phenomena are substitutes in Latin America. Perhaps even more important is the opposite effect: when strikes disappear from the national political scene, invalid voting grows to compensate. In addition, this work confirms the robustness of a commonly tested relationship: democratic deterioration is independently responsible for raising blank and spoiled ballots. Most importantly,

this result still holds in models that incorporate direct assessments of public protests, showing that growing authoritarianism has an independent impact on voters' choices. This result can be tested empirically by paying attention to future political evolutions in the region, such as those related to the next elections in El Salvador (2024) and Bolivia (2025). This is not the case for changes in political corruption, which do not appear to affect invalid voting, all other things being held constant. Their impact might actually be present and observable at the individual, not aggregate, level.

Surprisingly, economic growth also increases invalid voting and has a positive effect on its relationship with public protests, signaling that GDP growth might not be the best assessment of voters' life conditions. In parallel, the hypotheses related to partisan competition show that power alternation does not per se affect changes in invalid voting, but only works on the relationship between public protests and this voting behavior. Also, note that variations in voting for outsider parties and in victory margins were excluded from the quantitative model because they are statistically codetermined with invalid voting. In particular, changes in outsider party voting and in invalid ballot levels share the same determinants.

As the next step, the same hypotheses will have to be tested with individual-level data. While this study shows that invalid voting and public protests vary simultaneously, whether the same people who are casting blank or null ballots are also taking to the streets is unclear. The two behaviors could be both present at the same moment but associated with different societal groups. Additionally, quantitative evidence on the importance of public protests for invalid voting should spur researchers to complement this work with qualitative analysis. Driscoll and Nelson's (2014) analysis of the unique context around the first-ever national judicial election in Bolivia—where an astonishing 60% of ballots were invalid—cannot be generalized to explain all invalid voting, but provides fundamental guidance for extreme cases.<sup>7</sup>

The necessity of a regionwide survey of invalid voting also emerged. Such an endeavor should produce broad comparative literature that uses national political processes to trace different patterns for aggregate-level invalid voting. For example, the parallel evolution of invalid voting in Colombia and Venezuela before and after the respective constitutional changes of 1991 and 1993 could offer hindsight for scholars and policymakers alike. A mapping effort should also capture each country's academic and media discourse on invalid voting, and how it has shaped (and reacted to) its patterns.

Last, this study would also like to encourage the creation of event-based datasets to capture other factors. For example, some parties or candidates have made public calls for blank ballots on at least five occasions: in 1960s Argentina when the Peronists were barred (Snow 1965), in Peru when Fujimori was reelected in 1995 and 2000 (Carrión 2001), in Ecuador at the onset of *Correísmo* (Machado Puertas 2007), in the 2009 Mexican election (Cisneros Yescas 2013), and most recently by Nayib Bukele in El Salvador (Cedillo Delgado 2022). Adding this factor would likely increase the model's accuracy and was crucial in the Basque context (Superti 2020). Just as invalid voting is a silent political behavior that does not matter until some media report or scholarly commentary highlights its existence and importance, our scholarly efforts only matter as part of a collective effort.

## SUPPORTING INFORMATION

Replication files are available upon direct request to the author.

## NOTES

1. The suspension of national elections under authoritarianism reduced the number of observations, while pre-1970 election reports from Chile, Peru, and Paraguay omitted invalid ballots. Years at 0 lacked legislative elections, and are “missing data.”

2. Beyond Latin America, in Indonesia, there always was a natural association between invalid voting and protest participation (Fossati and Martinez i Coma 2020), and in Spain’s Basque province, blank/null ballots can be directly traced to protest mobilization because local organizations explicitly called for invalid voting among sympathizers (Superti 2020).

3. One may label them *Melvillian* voters.

4. Inverted, because the Freedom House index grows when a country is more authoritarian, which would confuse the reading.

5. Since voter turnout is often a percentage of registered voters, “growth in registered voters” is a mandatory control variable in any quantitative model of turnout changes.

6. A recent voter turnout model (Lioy 2021a) underlined how opposition strength matters more for democratic participation.

7. Encouragingly, invalid voting continues to be the subject of publications (Haman 2021; Aron and Superti 2022).

## REFERENCES

- Adeleke, Richard, Opeyemi Alabede, and Kehinde Amusan. 2022. Geospatial Analysis of Invalid Voting in the 2019 Presidential Election in Nigeria. *Journal of Geovisualization and Spatial Analysis* 6, 2: 23. DOI: [10.1007/s41651-022-00118-w](https://doi.org/10.1007/s41651-022-00118-w).
- Aldashev, Gani, and Giovanni Mastrobuoni. 2019. Invalid Ballots and Electoral Competition. *Political Science Research and Methods* 7, 2: 289–310. DOI: [10.1017/psrm.2016.36](https://doi.org/10.1017/psrm.2016.36).
- Alvarez, R. Michael, D. Roderick Kiewiet, and Lucas Núñez. 2018. A Taxonomy of Protest Voting. *Annual Review of Political Science* 21: 135–54. DOI: [10.1146/annurev-polisci-050517-120425](https://doi.org/10.1146/annurev-polisci-050517-120425).
- Aron, Hadas, and Chiara Superti. 2022. Protest at the Ballot Box: From Blank Vote to Populism. *Party Politics* 28, 4: 638–50. DOI: [10.1177/1354068821999741](https://doi.org/10.1177/1354068821999741).
- Azpuru, Dinorah, and Ligia Blanco. 2008. Guatemala 2007: Un año de contrastes para la democracia. *Revista de ciencia política (Santiago)* 28, 1: 217–44. DOI: [10.4067/S0718-090X2008000100011](https://doi.org/10.4067/S0718-090X2008000100011).
- Baily, Samuel L. 1965. Argentina: Reconciliation with the Peronists. *Current History* 49, 292: 356–60. DOI: [10.1525/curh.1965.49.292.356](https://doi.org/10.1525/curh.1965.49.292.356).
- Benton, Allyson Lucinda. 2005. Dissatisfied Democrats or Retrospective Voters? Economic Hardship, Political Institutions, and Voting Behavior in Latin America. *Comparative Political Studies* 38, 4: 417–42. DOI: [10.1177/0010414004273856](https://doi.org/10.1177/0010414004273856).
- Borba, Julian. 2008. As bases sociais e atitudinais da alienação eleitoral no Brasil. *Revista Debates* 2, 2: 134–57. DOI: [10.22456/1982-5269.6989](https://doi.org/10.22456/1982-5269.6989).
- Cisneros Yescas, Gerardo Isaac. 2013. Movilización, escolaridad y voto nulo: La elección federal de 2009 en México. *Política y Gobierno XX*, 1: 39–78.

- Carlin, Ryan E., and Mason W. Moseley. 2022. When Clientelism Backfires: Vote Buying, Democratic Attitudes, and Electoral Retaliation in Latin America. *Political Research Quarterly* 75, 3: 766–81. DOI: [10.1177/10659129211020126](https://doi.org/10.1177/10659129211020126).
- Carrión, Julio F. 2001. Las elecciones peruanas de 2001: Desmantelando la herencia autoritaria. *Reflexión Política* 3, 6: 1–12.
- Cavalcante Nepomuceno, Thyago C., and Ana Paula Cabral Seixas Costa. 2019. Invalid Votes, Deliberate Abstentions, and the Brazilian Crisis of Representation. *Politics & Policy* 47, 2: 381–406. DOI: [10.1111/polp.12298](https://doi.org/10.1111/polp.12298).
- Cedillo Delgado, Rafael. 2022. Nuevas Ideas de El Salvador. Un partido movimiento en América Latina. *Apuntes Electorales* 21, 67: 45–79. DOI: [10.53985/ae.v21i67.844](https://doi.org/10.53985/ae.v21i67.844).
- Chiarello, Felipe, and Leandro Sarai. 2017. Reflexões críticas sobre o voto em branco e sobre voto nulo no Brasil. *Revista de Direito Brasileira* 18, 7: 331. DOI: [10.26668/IndexLawJournals/2358-1352/2017.v18i7.3301](https://doi.org/10.26668/IndexLawJournals/2358-1352/2017.v18i7.3301).
- Clouse, Clayton. 2011. Changes in Congressional Turnout, 1972–2006. *Journal of Elections, Public Opinion & Parties* 21, 4: 453–72. DOI: [10.1080/17457289.2011.609620](https://doi.org/10.1080/17457289.2011.609620).
- Cohen, Mollie J. 2018a. A Dynamic Model of the Invalid Vote: How a Changing Candidate Menu Shapes Null Voting Behavior. *Electoral Studies* 53, June: 111–21. DOI: [10.1016/j.electstud.2018.04.015](https://doi.org/10.1016/j.electstud.2018.04.015).
- . 2018b. Protesting via the Null Ballot: An Assessment of the Decision to Cast an Invalid Vote in Latin America. *Political Behavior* 40, 2: 395–414. DOI: [10.1007/s11109-017-9405-9](https://doi.org/10.1007/s11109-017-9405-9).
- Cunow, Saul, Scott Desposato, Andrew Janusz, and Cameron Sells. 2021. Less Is More: The Paradox of Choice in Voting Behavior. *Electoral Studies* 69, February: 102230. DOI: [10.1016/j.electstud.2020.102230](https://doi.org/10.1016/j.electstud.2020.102230).
- De Riz, Liliana. 2013. Argentina, una vez más en la encrucijada. *Temas y Debates* 16: 9–27. DOI: [10.35305/tyd.v0i16.70](https://doi.org/10.35305/tyd.v0i16.70).
- Dejaeghere, Yves, and Bram Vanhoutte. 2016. Virtuous Villages and Sinful Cities? A Spatial Analysis into the Effects of Community Characteristics on Turnout and Blank/Invalid Voting in Local Elections in Belgium 2006–2012. *Acta Politica* 51, 1: 80–101. DOI: [10.1057/ap.2014.38](https://doi.org/10.1057/ap.2014.38).
- Desai, Zuheir, and Alexander Lee. 2021. Technology and Protest: The Political Effects of Electronic Voting in India. *Political Science Research and Methods* 9, 2: 398–413. DOI: [10.1017/psrm.2019.51](https://doi.org/10.1017/psrm.2019.51).
- Driscoll, Amanda, and Michael J. Nelson. 2014. Ignorance or Opposition? Blank and Spoiled Votes in Low-Information, Highly Politicized Environments. *Political Research Quarterly* 67, 3: 547–61. DOI: [10.1177/1065912914524634](https://doi.org/10.1177/1065912914524634).
- Durand, Francisco. 1996. El fenómeno Fujimori y la crisis de los partidos. *Revista Mexicana de Sociología* 58, 1: 97–120. DOI: [10.2307/3541026](https://doi.org/10.2307/3541026).
- Escolar, Marcelo, Ernesto Calvo, Natalia Calcagno, and Sandra Minvielle. 2002. Últimas imágenes antes del naufragio: Las elecciones del 2001 en la Argentina. *Desarrollo Económico* 42, 165: 25–44. DOI: [10.2307/3455975](https://doi.org/10.2307/3455975).
- Fatke, Matthias, and Till Heinsohn. 2017. Invalid Voting in German Constituencies. *German Politics* 26, 2: 273–91. DOI: [10.1080/09644008.2016.1194398](https://doi.org/10.1080/09644008.2016.1194398).
- Fornós, Carolina A., Timothy J. Power, and James C. Garand. 2004. Explaining Voter Turnout in Latin America, 1980 to 2000. *Comparative Political Studies* 37, 8: 909–40. DOI: [10.1177/0010414004267981](https://doi.org/10.1177/0010414004267981).

- Fossati, Diego, and Ferran Martínez i Coma. 2020. Exploring Citizen Turnout and Invalid Voting in Indonesia: Two Sides of the Same Coin? *Contemporary Politics* 26, 2: 125–46. DOI: [10.1080/13569775.2019.1690210](https://doi.org/10.1080/13569775.2019.1690210).
- Franco, Carlos. 2001. Perú: Entre el proceso electoral y las incertidumbres del futuro. *Nueva Sociedad* 74, 15–21.
- Franklin, Mark N. 2004. *Voter Turnout and the Dynamics of Electoral Competition in Established Democracies Since 1945*. Cambridge: Cambridge University Press. DOI: [10.1017/CBO9780511616884](https://doi.org/10.1017/CBO9780511616884).
- Freidenberg, Flavia, and Francisco Javier Aparicio. 2016. México 2015: Entre la fragmentación partidista y el descontento ciudadano. *Revista de ciencia política (Santiago)* 36, 1: 219–38. DOI: [10.4067/S0718-090X2016000100010](https://doi.org/10.4067/S0718-090X2016000100010).
- García Sánchez, Miguel, and Carlos Felipe Cantor. 2018. Hechos recurrentes, fenómenos diferentes. Abstención electoral y voto en blanco en las elecciones presidenciales del 2014. In *Polarización y posconflicto. Las elecciones nacionales y locales en Colombia, 2014–2017*, eds. Felipe Botero, Miguel García, and Laura Wills-Otero. Bogotá: Universidad de los Andes. 209–26. DOI: [10.30778/2018.33](https://doi.org/10.30778/2018.33).
- Haman, Michael. 2021. Invalid Votes under Compulsory Voting: Poverty and Runoff Voting in Peruvian Municipalities. *Acta Politologica* 13, 1: 1–21. DOI: [10.14712/1803-8220/33\\_2020](https://doi.org/10.14712/1803-8220/33_2020).
- Hennau, Sofie, and Johan Ackaert. 2019. Local Elections in the Low Countries: Evolutions and Reforms. *Politics of the Low Countries* 3, 157. DOI: [10.5553/plc/258999292019001003001](https://doi.org/10.5553/plc/258999292019001003001).
- Herrnson, Paul S., Michael J. Hanmer, and Richard G. Niemi. 2012. The Impact of Ballot Type on Voter Errors. *American Journal of Political Science* 56, 3: 716–30. DOI: [10.1111/j.1540-5907.2011.00579.x](https://doi.org/10.1111/j.1540-5907.2011.00579.x).
- Herron, Erik S. 2011. Measuring Dissent in Electoral Authoritarian Societies: Lessons from Azerbaijan's 2008 Presidential Election and 2009 Referendum. *Comparative Political Studies* 44, 11: 1557–83. DOI: [10.1177/0010414011410171](https://doi.org/10.1177/0010414011410171).
- Herron, Michael C., and Jasjeet S. Sekhon. 2005. Black Candidates and Black Voters: Assessing the Impact of Candidate Race on Uncounted Vote Rates. *The Journal of Politics* 67, 1: 154–77. DOI: [10.1111/j.1468-2508.2005.00312.x](https://doi.org/10.1111/j.1468-2508.2005.00312.x).
- Hirschman, Albert O. 1970. *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge, MA: Harvard University Press.
- Hooghe, Marc, Sofie Marien, and Teun Pauwels. 2011. Where Do Distrusting Voters Turn if There Is No Viable Exit or Voice Option? The Impact of Political Trust on Electoral Behaviour in the Belgian Regional Elections of June 2009. *Government and Opposition* 46, 2: 245–73. DOI: [10.1111/j.1477-7053.2010.01338.x](https://doi.org/10.1111/j.1477-7053.2010.01338.x).
- Janvry, Alain de, and Elisabeth Sadoulet. 2000. Growth, Poverty, and Inequality in Latin America: A Causal Analysis, 1970–94. *Review of Income and Wealth* 46, 3: 267–87. DOI: [10.1111/j.1475-4991.2000.tb00843.x](https://doi.org/10.1111/j.1475-4991.2000.tb00843.x).
- Kellam, Marisa. 2013. Suffrage Extensions and Voting Patterns in Latin America: Is Mobilization a Source of Decay? *Latin American Politics and Society* 55, 4: 23–46. DOI: [10.1111/j.1548-2456.2013.00213.x](https://doi.org/10.1111/j.1548-2456.2013.00213.x).
- Kostelka, Filip. 2017. Does Democratic Consolidation Lead to a Decline in Voter Turnout? Global Evidence Since 1939. *American Political Science Review* 111, 4: 653–67. DOI: [10.1017/S0003055417000259](https://doi.org/10.1017/S0003055417000259).



- Kouba, Karel, and Jakub Lysek. 2016. Institutional Determinants of Invalid Voting in Post-Communist Europe and Latin America. *Electoral Studies* 41: 92–104. DOI: [10.1016/j.electstud.2015.11.021](https://doi.org/10.1016/j.electstud.2015.11.021).
- . 2019. What Affects Invalid Voting? A Review and Meta-Analysis. *Government and Opposition* 54, 4: 745–75. DOI: [10.1017/gov.2018.33](https://doi.org/10.1017/gov.2018.33).
- Lioy, Alberto. 2021a. Electoral Revolutions: Towards a General Theory of Rapid Changes in Voter Turnout. *Parliamentary Affairs* 75, 3: 492–516. DOI: [10.1093/pa/gsab035](https://doi.org/10.1093/pa/gsab035).
- . 2021b. The Blank Ballot Crisis: A Multi-Method Study of Fraud in the 2006 Italian Election. *Contemporary Italian Politics* 13, 3: 352–81. DOI: [10.1080/23248823.2021.1955190](https://doi.org/10.1080/23248823.2021.1955190).
- Lysek, Jakub, Tomáš Lebeda, and Karel Kouba. 2020. Turning Out but Not Voting: Invalid Ballots in Post-Communist Parliamentary Elections. *Comparative European Politics* 18, 2: 190–214. DOI: [10.1057/s41295-019-00168-3](https://doi.org/10.1057/s41295-019-00168-3).
- Machado Puertas, Juan Carlos. 2007. Ecuador: El derrumbe de los partidos tradicionales. *Revista de ciencia política (Santiago)* 27: 129–47. DOI: [10.4067/S0718-090X200700100008](https://doi.org/10.4067/S0718-090X200700100008).
- Martínez, Christopher A. 2021. Presidential Instability in Latin America: Why Institutionalized Parties Matter. *Government and Opposition* 56, 4: 683–704. DOI: [10.1017/gov.2020.18](https://doi.org/10.1017/gov.2020.18).
- Martínez i Coma, Ferran, and Annika Werner. 2019. Compulsory Voting and Ethnic Diversity Increase Invalid Voting while Corruption Does Not: An Analysis of 417 Parliamentary Elections in 73 Countries. *Democratization* 26, 2: 288–308. DOI: [10.1080/13510347.2018.1524879](https://doi.org/10.1080/13510347.2018.1524879).
- McAdam, Doug, and Sidney Tarrow. 2010. Ballots and Barricades: On the Reciprocal Relationship between Elections and Social Movements. *Perspectives on Politics* 8, 2: 529–42. DOI: [10.1017/S1537592710001234](https://doi.org/10.1017/S1537592710001234).
- McAllister, Ian, and Toni Makkai. 1993. Institutions, Society or Protest? Explaining Invalid Votes in Australian Elections. *Electoral Studies* 12, 1: 23–40. DOI: [10.1016/0261-3794\(93\)90004-4](https://doi.org/10.1016/0261-3794(93)90004-4).
- McMann, Kelly M., Daniel Pemstein, Brigitte Seim, Jan Teorell, and Staffan I. Lindberg. 2016. Strategies of Validation: Assessing the Varieties of Democracy Corruption Data. V-Dem Working Paper 2016:23, last modified May 24. Available at SSRN. DOI: [10.2139/ssrn.2727595](https://doi.org/10.2139/ssrn.2727595).
- Moisés, José Alvaro. 1990. Dilemas de la consolidación democrática en Brasil. *Nueva Sociedad* 105: 16–28.
- Moral, Mert. 2016. The Passive-Aggressive Voter: The Calculus of Casting an Invalid Vote in European Democracies. *Political Research Quarterly* 69, 4: 732–45. DOI: [10.1177/1065912916662356](https://doi.org/10.1177/1065912916662356).
- Nohlen, Dieter. Ed. 2005. *Elections in the Americas: A Data Handbook*. Oxford: Oxford University Press. DOI: [10.1093/oso/9780199283583.001.0001](https://doi.org/10.1093/oso/9780199283583.001.0001).
- Obradović-Wochnik, Jelena, and Alexander Wochnik. 2014. Invalid Ballots and the “Crisis of Representative Democracy”: Re-Inventing Protest at the 2012 Serbian Elections. *East European Politics and Societies and Cultures* 28, 4: 808–35. DOI: [10.1177/0888325414547430](https://doi.org/10.1177/0888325414547430).
- Otálora Heredia, Paula A., and Juan José Díaz Martínez. 2019. El voto en blanco como una necesidad constitucional. *Universitas Studiantes* 19: 99–122.
- Pachón, Mónica, Royce Carroll, and Hernando Barragán. 2017. Ballot Design and Invalid Votes: Evidence from Colombia. *Electoral Studies* 48: 98–110. DOI: [10.1016/j.electstud.2017.05.005](https://doi.org/10.1016/j.electstud.2017.05.005).

- Palacio Vélez, Andrés Camilo. 2022. Una reconstrucción conceptual y política del voto en blanco en Colombia. Crónica de un debate. *Estudios Políticos (Medellín)* 63: 186–208. DOI: [10.17533/udea.espo.n63a08](https://doi.org/10.17533/udea.espo.n63a08).
- Parma, Ezequiel Eduardo. 2013. Veinte años de gobernabilidad y reforma política en Argentina: Las causas de la crisis de Diciembre de 2001. *Polis (Santiago)* 12, 35: 483–96. DOI: [10.4067/S0718-65682013000200021](https://doi.org/10.4067/S0718-65682013000200021).
- Pérez Sáinz, J. P. 1987. Crisis, conflictividad y coyunturas sociales en Ecuador (1981–1985). *Ecuador Debate* 13: 47–74.
- Ponce de León Solís, Viviana. 2019. Validez del voto en blanco en Chile: Un análisis crítico. *Revista de derecho (Valdivia)* 32, 1: 171–91. DOI: [10.4067/S0718-09502019000100171](https://doi.org/10.4067/S0718-09502019000100171).
- Power, Timothy J., and James C. Garand. 2007. Determinants of Invalid Voting in Latin America. *Electoral Studies* 26, 2: 432–44. DOI: [10.1016/j.electstud.2006.11.001](https://doi.org/10.1016/j.electstud.2006.11.001).
- Power, Timothy J., and J. Timmons Roberts. 1995. Compulsory Voting, Invalid Ballots, and Abstention in Brazil. *Political Research Quarterly* 48, 4: 795–826. DOI: [10.2307/448975](https://doi.org/10.2307/448975).
- Reynolds, Andrew, and Marco Steenbergen. 2006. How the World Votes: The Political Consequences of Ballot Design, Innovation and Manipulation. *Electoral Studies* 25, 3: 570–98. DOI: [10.1016/j.electstud.2005.06.009](https://doi.org/10.1016/j.electstud.2005.06.009).
- Roberts, Kenneth M. 2013. Market Reform, Programmatic (De)alignment, and Party System Stability in Latin America. *Comparative Political Studies* 46, 11: 1422–52. DOI: [10.1177/0010414012453449](https://doi.org/10.1177/0010414012453449).
- Samii, A. W. 2004. Reviewed Works: Lost Wisdom: Rethinking Modernity in Iran by Abbas Milani; The Unthinkable Revolution in Iran by Charles Kurzman. *Middle East Journal* 58, 4: 688–90.
- Sánchez Parga, José. 1994. La política sin “centro” y el centro sin sociedad: Mayo 1994. *Ecuador Debate* 32: 65–75.
- Sandoval, Javier Rodríguez. 2021. El voto nulo y el triunfo de la derecha en Ecuador. *Nueva Sociedad* 293: 4–13.
- Schatzman, Christina. 2005. Political Challenge in Latin America: Rebellion and Collective Protest in an Era of Democratization. *Journal of Peace Research* 42, 3: 291–310. DOI: [10.1177/0022343305052013](https://doi.org/10.1177/0022343305052013).
- Singh, Shane P. 2019. Politically Unengaged, Distrusting, and Disaffected Individuals Drive the Link between Compulsory Voting and Invalid Balloting. *Political Science Research and Methods* 7, 1: 107–23. DOI: [10.1017/psrm.2017.11](https://doi.org/10.1017/psrm.2017.11).
- Snow, Peter G. 1965. Parties and Politics in Argentina: The Elections of 1962 and 1963. *Midwest Journal of Political Science* 9, 1: 1–36. DOI: [10.2307/2109212](https://doi.org/10.2307/2109212).
- Soares, G. A. D., and Maria Celina D’Araujo. 1993. A Imprensa, os Mitos, e os Votos nas Eleições de 1990. *Revista Brasileira Estudos Políticos* 76: 163–89.
- Sonnleitner, W. 2019. La diversidad del voto nulo en México. *Revista Mexicana de Sociología* 81, 4: 697–735.
- Soracá Becerra, S. P. 2018. Voto en blanco y Descontento Social en Colombia. *Cuestiones Políticas* 34, 61: 16–31.
- Superti, Chiara. 2020. Protesting with the Ballot: Diffusion of Methods of Electoral Protest in Spain. *Electoral Studies* 65: 102139. DOI: [10.1016/j.electstud.2020.102139](https://doi.org/10.1016/j.electstud.2020.102139).
- Ugla, Fredrik. 2008. Incompetence, Alienation, or Calculation?: Explaining Levels of Invalid Ballots and Extra-Parliamentary Votes. *Comparative Political Studies* 41, 8: 1141–64. DOI: [10.1177/0010414007301702](https://doi.org/10.1177/0010414007301702).
- van Deth, Jan W. 2014. A Conceptual Map of Political Participation. *Acta Politica* 49, 3: 349–67. DOI: [10.1057/ap.2014.6](https://doi.org/10.1057/ap.2014.6).

- Wessels, Bernhard, and Hermann Schmitt. 2008. Meaningful Choices, Political Supply, and Institutional Effectiveness. *Electoral Studies* 27, 1: 19–30. DOI: [10.1016/j.electstud.2007.11.010](https://doi.org/10.1016/j.electstud.2007.11.010).
- Zolezzi Chocano, Mario. 2006. El Voto En Blanco y El Nulo Están Ganando *Revista Quehacer* 158: 93–97.
- Zulfikarpasic, Adélaïde. 2001. Le vote blanc: Abstention civique ou expression politique ? *Revue française de science politique* 51, 1: 247. DOI: [10.3917/rfsp.511.0247](https://doi.org/10.3917/rfsp.511.0247).