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HE WHO COUNTS ELECTS:
DETERMINANTS OF FRAUD IN THE 1922 COLOMBIAN PRESIDENTIAL ELECTION

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ABSTRACT

This paper constructs measures of the extent of ballot stuffing (fraudulent votes) and electoral coercion at the municipal level using data from Colombia's 1922 Presidential elections. Our main findings are that the presence of the state reduced the extent of ballot stuffing, but that of the clergy, which was closely imbricated in partisan politics, increased coercion. We also show that landed elites to some extent substituted for the absence of the state and managed to reduce the extent of fraud where they were strong. At the same time, in places which were completely out of the sphere of the state, and thus partisan politics, both ballot stuffing and coercion were relatively low. Thus the relationship between state presence and fraud is not monotonic.

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“Lo que los conservadores han ganado con las armas no se puede perder con papelitos.”¹

1 Introduction

The preponderance of the literature on democracy has focused on the origins and timing of the introduction of universal suffrage (e.g., Rueschemeyer, Stephens and Stephens, 1992, Collier, 1999, Acemoglu and Robinson, 2006). While this approach is surely justified in many cases, it also leaves aside many puzzles. For instance, Argentina had universal male suffrage after the promulgation of the 1853 constitution, as did Mexico after its 1857 constitution, but neither country is typically counted as a democracy in the 19th century. In fact, the standard date for the introduction of democracy in Argentina is the passing of the Saenz Peña Law in 1914 whose main aim was to eliminate electoral corruption and fraud, things which had previously negated the effects of universal male suffrage. This law had profound consequences, destabilizing the political status quo and allowing the Radical Party to assume power, a process ultimately leading to the coup of 1930 (Smith, 1978). This example, and others like it, such as the introduction of the secret ballot in Chile in 1957 (Baland and Robinson, 2008), suggest that the consequences of variation in electoral fraud are possibly as large as that of the variation in the formal institutions of democracy.

Despite the importance of electoral fraud, it has been little studied, possibly because it is so difficult to measure and quantify. In consequence, we have little idea about what causes variation in the extent or incidence of such fraud. Moreover, there are many ways to undermine the true outcome of elections ranging from vote buying through disenfranchising potential voters, to using coercion to keep voters away, coercion to force voters to vote in particular ways, or creating fraudulent ballots (‘ballot stuffing’) in favor of one candidate. This lack of systematic evidence and the complexity of the underlying phenomenon makes it difficult to understand the determinants and implications of fraud.

In this paper we use two unique data sources from the 1922 Colombian presidential election to examine electoral fraud. First, we are able to construct a (necessarily imperfect) measure of the extent of fraudulent voting or ‘ballot stuffing’ at the municipal level. We do this by combining data collected on the vote totals reported by municipal electoral boards

¹“What the conservatives won with arms cannot be taken away by a few slips of paper.” El Espectador, February 10, 1922, quoted on Blanco, Solano, and Rodríguez, 1922, p. 306.

(*Jurados Electorales*) to the central government with estimates of the maximum potential franchise from the 1918 population census. This gives us at least a lower bound on the extent of ballot stuffing. For 508 out of the total 755 municipalities of Colombia for which we have data we find the reported vote totals to be larger than the maximum number of people who could possibly have voted. In such municipalities there was obvious ballot stuffing, and this was consequential. The ratio of stuffed ballots to total votes is very large, reaching over 35% on average. Indeed, according to this methodology the total number of stuffed ballots was 230,007, which was larger than the winning margin of 188,502 by which the Conservative candidate Pedro Nel Ospina defeated the Liberal loser Benjamín Herrera.

Table 1 shows some of the basic data from this exercise by Colombian department. One can see here that there is a lot of variation. For instance in Antioquia, traditionally a bastion of the Conservative party, the total number of votes cast was 76,420 of which we calculate 11,658 were fraudulent. On the other hand, in the Liberal stronghold of Santander, of the 55,492 votes ‘cast’ almost 24,000 were fake, a far greater proportion. Generally, ballot stuffing is larger in the eastern Andean region (Boyacá, Cundinamarca, and the Santanderes) as well as in the Coast (Bolívar and Magdalena).

Second, we use various sources of information, particularly the proceedings of a conference held in the Colombian city of Ibagué after the election, to code a variable measuring incidents of electoral violence or coercion (Blanco et al, 1922). This conference, held by the Liberal party in the wake of the 1922 election, contains numerous accounts of both ballot stuffing, fraud, and coercion.

We then study some of the potential sources of variation in ballot stuffing and coercion across municipalities. To form hypotheses about this it is useful to have in mind a simple ‘model’ of political conflicts and institutions in Colombia in the 1920s. Colombian politics since the 1850s had been characterized by intense conflict between the Liberal and Conservative parties, who contested elections and fought wars. Conflict revolved around several key issues, such as the power of the central state and the influence of the church, with the Catholic hierarchy being closely intertwined with the Conservative party. Conflict was not primarily about economic issues, however, and traditional economic elites were not predominantly aligned with either party (Safford, 1972, Delpar, 1981) and seem to have mostly opposed the partisan struggles because of the chaos and disruption they caused. All types of conflict, electoral and otherwise, took place in the shadow of state weakness to the extent that some parts of the country were almost autonomous of the central state - so called ‘inde-

pendent republics.’ Even though the Conservatives maintained control of the state between 1885 and 1930, after an intense civil war between 1899 and 1902 (the “War of a Thousand Days”), the parties innovated institutions to mitigate the propensity for conflict (Mazucca and Robinson, 2009). Specifically, they moved towards a system of institutionalized power sharing that was specifically ‘fraud proof,’ in that for legislative elections it gave 2/3 of the representation to the Conservatives and 1/3 to the Liberals. It left presidential elections open, however, though the Conservatives also passed a law specifically disenfranchising municipalities where the recorded number of votes was more than 1/3 of the total population. These laws were passed by political elites at the center because the weakness of the state and the parties made it difficult for them to discipline their own supporters in the peripheral parts of the country.

What does this ‘model’ suggest about some determinants of ballot stuffing and coercion? First, the attempts by central political elites to pass laws attempting to offset their lack of control of the periphery leads us to hypothesize that the state was not partisan but in fact ‘Weberian,’ in the sense that the greater presence of state officials would tend to reduce the amount of ballot stuffing and coercion. However, to the extent that some areas of the country were so autonomous that they were outside the scope of party politics, there could be a non-monotonic relationship between state presence and fraud. Those who controlled the “independent republics’ could not be disciplined by state officials, but neither were they integrated into party political conflicts.

Second, our account also leads us to hypothesize that ballot stuffing and coercion would be negatively correlated with the power of traditional economic (landed) elites. Landed elites opposed the disorder that historical sources suggest accompanied and facilitated fraud.

Finally, it is clear from the historical evidence that most fraud was perpetrated by the incumbent Conservative party. Given the electoral rules, coercion, to the extent it was practised, would be focused on stopping Liberals voting, and we would expect to find this coercion positively correlated with the presence of Catholic priests.

Using a variety of sources, we are able to investigate whether the variation in ballot stuffing and coercion is consistent with these ideas.² First, for the whole of Colombia, we find that the presence of the state is negatively correlated with the extent of ballot stuffing, though uncorrelated with coercion. In municipalities where there was a greater presence of

²Though we are not able to make strong claims about causality, we do uncover some very robust conditional correlations.

the army or more government bureaucrats, ballot stuffing was less. In addition, the presence of Catholic priests is positively correlated with coercion but negatively correlated with ballot stuffing.

Second, focusing on the important department of Cundinamarca for which we have much richer data, in addition to the above results, we find that ballot stuffing is negatively correlated with land inequality and the extent to which local politics is monopolized by individuals (which we refer to as ‘political concentration’). We also find that political concentration is significantly negatively correlated with electoral coercion.

These findings are very consistent with our hypotheses. First, they suggest that the Colombian state in 1922 was not partisan, but in fact rather ‘Weberian’ and attempted to control electoral fraud when it could. Unfortunately, however, its reach was limited.

Second, priests played an important role in coercion of Liberal voters and this coercion was aimed primarily at stopping them voting. In section 3 of the paper we present a simple model of how this finding can be consistent with the fact that the number of priests in a municipality is negatively correlated with the extent of ballot stuffing. This follows because even if priests kept Liberals from the polls, the number of priests would naturally be positively correlated with the number of Conservative voters in a municipality, which would give less ‘room’ for ballot stuffing.

Third, the fact that in Cundinamarca we find less ballot stuffing where land inequality is high is consistent with the hypothesis that traditional elites disliked fraud. It was precisely the core areas of the department with a strong consolidated landed elite – dating back to the colonial period in some cases – that had high levels of land inequality.

Finally, areas where political concentration was high featured less ballot stuffing and coercion because such concentration was a feature of ‘independent republics,’ which were to a large extent outside the control and circuit of Conservative politicians. In these areas there was no major contribution to the incumbent (Conservative) cause one way or another.

Though these findings about the political role of the Catholic Church may be surprising to some, they are in line with a rich historical literature on Colombia. For instance, Deas observes “the church was the electoral arm of the Conservatives. Liberalism was a sin: Colombian sermons were intense and obstinate on this point” (Deas, 1993, p. 210; see also Deas, 1996, Medina, 1991, and Posada-Carbó, 1995, p. 10).³

³For the purposes of this research we take the political preference of Catholic priests for the Conservative party as given. The church does not seem to have seriously considered altering its allegiances during this period (see the analysis of Warner, 2000, for post World War II Italy, France and Germany, or Gill’s, 1998,

Our results in Colombia contrast with and complement the small existing literature on electoral fraud. Most related is the seminal research of Lehoucq and Molina (2002), who studied the intensity and spatial distribution of over a thousand legal accusations of ballot rigging in Costa Rica between 1901 and 1946. They find that fraud accusations were more prevalent in the three poorest and least populated provinces of the country, where social differentiation was more pronounced and it was harder to protect civil liberties. Ziblatt (2009) using data on complaints of electoral misconduct from pre-1914 Germany finds that electoral fraud was greater in areas with high land concentration. His interpretation of this is that strong local elites captured local state institutions and used these to commit fraud and sustain their power. Finally, Baland and Robinson (2008) find that traditional landed elites in Chile coerced workers into voting for conservative parties prior to 1958.⁴

The findings of our paper are somewhat different from this literature. First, we try to investigate if the presence of the central state reduces fraud, which appears not to have been directly tested before. Second, unlike Ziblatt or Baland and Robinson, we find that higher land inequality is correlated with *less* electoral fraud, at least in the sense of ballot stuffing. We believe that the reason for this is that, unlike late 19th century Germany or 1950s Chile, local economic elites in Colombia were not closely associated with political parties. Therefore, they were not in a position to ‘capture’ local institutions in the way Ziblatt describes. Moreover, the central state was much weaker. Unlike Prussian Junkers or the *Hacendados* of Chile’s Central Valley, Colombian landowners could not rely on basic things such as social order, and they had little interest in encouraging the anarchy that went along with electoral fraud. Third, unlike Lehoucq and Molina, but similar to Ziblatt, we do not find a lot of evidence that ‘modernization’ reduced fraud since we find that electoral coercion is positively correlated with measures of human capital. This finding is in line with recent work on the empirical problems of simple modernization ideas (Acemoglu, Johnson, Robinson and Yared, 2008).⁵

analysis of whether the Catholic Church in Latin America supported or opposed dictatorships). Neither did it contemplate forming its own party (see Kalyvas, 1996, on the roots of European Christian democracy).

⁴Other related work is that of Cox and Kousser (1981), and there is also a rich case study literature on electoral fraud in the United States, see Bense (2004). See also Posada-Carbó (2000) on Latin America and Lehoucq (2003) for a conceptual overview.

⁵Unfortunately it is not possible to investigate in Colombia several of the issues which the literature raises. For instance, it is impossible to collect meaningful data on either turnout or political competition during this period since elections were either very fraudulent, or were uncontested. Wilkinson (2004) for instance, finds that electoral violence is more likely in close elections in India and Ziblatt (2009) also finds more fraud in more competitive elections. Since we have no way to know if an election is close, we cannot

Our approach also has the advantage that for our measure of ballot stuffing we have actual data on the extent of fraud as opposed to complaints about fraud. Since accusations of fraud may be used strategically, it is useful to have a relatively objective source (though our data on coercion does come from such accusations).

In addition to this political economy literature, our paper makes a contribution to the historical literature on Colombian politics. Posada-Carbó (1997, p. 246, 248) notes “The Conservative Hegemony, particularly the last two decades of its rule, remains one of the relatively less studied periods in Colombia’s political history ... To what extent and under what circumstances the conservative regime was able to manipulate the electoral process is a question that merits further consideration.” The empirical work in our paper throws new light on precisely this issue. Our paper also builds on the work of the political economy of Colombia by Acemoglu, Bautista, Querubín, and Robinson (2008). We borrow heavily from their data construction for the case of Cundinamarca, and several of our findings are very consistent with theirs. In particular we find that the presence of high land inequality tends to be associated with good outcomes, and our interpretation of this is related to the one they propose.

The paper proceeds as follows. In the next section we give the historical background to the 1922 presidential election, and we describe the institutional set-up and contemporary accounts of fraud. Section 3 develops a simple model of ballot stuffing and coercion whose comparative statics illustrate some of our key hypotheses. Section 4 discusses the data construction and some descriptive statistics. Section 5 presents our econometric results, and section 6 concludes.

2 Historical Background and Context

2.1 Main antecedents and context⁶

Colombia’s long history of “democratic” elections make it an especially interesting place to study electoral fraud. In the words of Deas (1993) “The periods of authoritarianism or militarism have been very scarce and very short ... this republic has had more elections,

investigate this claim with our data. Moreover, since we are examining data for a national election, it is not clear if these ideas are relevant in our setting.

⁶This section draws mainly from Bushnell (1993), Mazzuca and Robinson (2009), Melo (1995) and Posada-Carbó (1997).

under more systems, central and federal, direct and indirect, hegemonic and proportional, and with more consequences than any American or European country” (p. 207).

This view of Colombian democracy must be qualified, however.⁷ Indeed, if elections have been traditional in Colombia, fraud has been an electoral tradition. In 1879, the following description could be found in the *Diario de Cundinamarca*:

“elections in Colombia are ... terrible confrontations of press, agitation, intrigue, letters, bribes, weapons, incentives for vengeance, politics, cholera, menace” (Guerra, 1922, p. 608).

The period that we study was in the midst of a long period of domination by the Conservative party that began in 1886, known as *La Regeneración* (‘The Regeneration’). This hegemony, underpinned by the 1886 constitution, lasted until 1930, though it was punctuated by a massive civil war between the parties between 1899 and 1902 (‘The War of a Thousand Days’). After the war a system of power sharing was developed that involved giving one third of the seats in the legislature to the Liberal party via an electoral system known as the ‘incomplete vote’ whereby the winner of the election received only two-thirds of the seats, with the other third going to the minority party no matter how few votes they got (Mazzuca and Robinson, 2009). These institutional changes did not influence elections for the executive however.

The War of a Thousand Days also led to the secession of the province of Panama, with the support of Theodore Roosevelt’s administration. In compensation in 1921 the United States government paid 25 million dollars as an “indemnity” payment. This influx of money was the biggest single windfall of public revenue the country had ever received and helped to trigger an age of prosperity known as “The Dance of the Millions.”

These developments increased the value of controlling the executive in 1922 and made a lot of money available for politically targeted public works. Given the radical centralization of power under the 1886 constitution,⁸ according to which governors were appointed by the

⁷This optimistic view is known in Colombia as the *Leyenda Rosada* (‘pink legend’) to distinguish it from the normal ‘black legend’ about bad institutions in Latin America from the 16th century writings of de las Casas onwards.

⁸A telling anecdote on the issue of centralization in the 1886 constitution occurred in 1921. President Holguín, attempting to facilitate the approval of the Urrutia-Thompson treaty, invited Liberals to participate in the cabinet. They refused, but according to Navarro (1935), when Holguín was asked what he would have done if the Liberals accepted his proposal, he answered: “Who cares if all ministers are Liberals if I am the President and the Constitution is the 1886 Constitution?” (p. 37).

executive and mayors by the governors, local political elites needed to influence national elections to secure a share of these rents.⁹

The 1922 elections also occurred at a time of momentous social change in Colombia.¹⁰ The economy experienced a period of unprecedented prosperity, the rise of the coffee economy, and an increase in other exports such as petroleum and bananas. Rapid urbanization, moreover, gave rise to the first significant glimmers of a labor movement in Colombia. In 1919 a Socialist Party was established for the first time, with significant electoral presence in major cities. By 1922, the country had already experienced a number of strikes, especially in the transportation sector and river port unions.

On the one hand, the changes of the late 1910's and early 1920's had strengthened the Liberal Party, as Liberal leaders consciously targeted urban masses and the incipient labor class. In addition, the Socialist party had also courted the Liberals; Socialists endorsed Benjamín Herrera for the 1922 election, adding considerable heft to the Liberal party's electoral power. On the other hand, the local bosses who had been the mainstay of the Conservative hegemony faced an enormous opportunity cost to leaving office, for they would be left out of the distribution of rents from the Panama Indemnity.¹¹ The confluence of these factors make this election an especially interesting one to study patterns of electoral fraud.

Finally, it is worth emphasizing that the election was unique in the period of *La Regeneración* for featuring an open, competitive contest between the Liberals and Conservatives. Prior to 1914 the election of the President was indirect. In 1914, the first direct elections of President since 1857 “took place with ‘an entire absence of party strife and feeling’” (Posada-Carbó, 1997, p. 261). For the 1918 elections, the Liberals, led by Benjamín Herrera, decided to “try again the old tactic of supporting a Conservative candidate, to promote divisions within the ruling party, which seemed impossible to beat in open confrontation” (Melo, 1995). By 1922, however, Liberals were convinced that their party had good chances of gaining office with fair elections, and fraud accusations were widely publicized in the liberal press.¹² Finally, the 1926 elections “could be described as the ‘private act of a few public

⁹In certain cases, political bosses became so entrenched in a municipality that both Liberal and Conservative administrations would appoint them to the post of mayor (Acemoglu et al, 2008, p. 14).

¹⁰The socioeconomic transformation of Colombia in the 1920's has received considerable attention (see, for instance, the references to the several economic histories that have been written for the period in Posada-Carbó, 1997, p. 254). See also Melo (1995) and Bushnell (1993, Chapter 7) for overviews of the period.

¹¹Deas (1993, p. 28, 220) suggests that the indemnity payment and the economic progress that came with it were indeed a strong shock to the political system.

¹²For instance, Representative García Vásquez, debating over electoral reform in 1915, exclaimed “I believe, and I could also prove this, that the Liberal party is majoritarian in the Nation” (ACR, 1915: 854)

employees” (Posada-Carbó, 1997, p. 260). This leaves the 1922 elections to examine. In sum, both because of their context and their uniqueness, the 1922 presidential elections are a fruitful venue for the study electoral fraud during *La Regeneración*.

2.2 Electoral Legislation during the *La Regeneración*

Legislative activity between the 1890s and 1916 reveals the ongoing concern of politicians to control fraud (see Montoya, 1938). The content of the numerous reform proposals shows that irregularities in the making of voting lists, vote buying, the strategic allocation of voting tables, double-voting, and participation of the armed forces in elections were among the elements that, in the views of politicians, corrupted elections.

An indication of the extent of this fraud comes from the fact that Conservative elites shared power with the Liberals via the “incomplete vote.” The appeal of this system was that by giving Liberals one third of the legislature, no matter how many votes they received, it dealt with the inability of Conservative national elites to stop local party officials and supporters from defrauding the Liberals (Mazucca and Robinson, 2009).¹³ This section details some of the debates over electoral law between the adoption of the incomplete vote in 1905 and the election of 1922.

2.2.1 Laws and Main Reforms, 1888-1916¹⁴

Law 7 of 1888 attempted to draft a comprehensive Electoral Code to organize electoral institutions. Though its scope was more limited than that of the Electoral Code to be adopted in 1916, Law 7 established the main electoral institutions and their functions. For our purposes the most important feature of these laws were the *Jurados Electorales* (electoral juries). One such jury was elected for each electoral district by the departmental *Junta de Distrito Electoral*. It compiled the lists of voters, elected the *Jurados de Votación* (voting overseers) to be allocated at each voting table, and counted the votes. The *Jurados Electorales*, therefore, had a great deal of influence over the final vote tallies in a municipality: they could decide whom to exclude from the voter rolls or, if they so chose, they could create official voting tallies that suited their political alliances. Also, since the lower rungs of this bureaucracy

¹³Other scholars have emphasized as well the unruliness of these political bosses. Deas (1993, p. 213) notes “A conservative governor admitted in 1854 that though these [caciques] were ‘friends’ he could have no control over them” and Reyes (1978) concurs, and argues that, in the early twentieth Century, “it was still hard for the Central government to confront a regional *cacique*” (p. 118).

¹⁴This section draws mainly from Montoya (1938) and Registraduría Nacional del Estado Civil (1991).

(e.g. the *Jurados de Votación*) were political appointees of higher ones, this meant that if a party dominated the national legislature it ultimately controlled the entire electoral system.

In the early 20th century there were many attempts to change electoral institutions with the Liberals continually arguing for changes they claimed would reduce fraud. One important reform, Law 85 of December 31 of 1916, proposed by the government to counter a Liberal project, was opposed by Liberal senator Fabio Lozano on the basis that it would not stop

“the outrageous scandal of the prodigious multiplication of Conservative votes to drown the Liberal majorities in the most important centers of the country ... In election time we will still have what specialists call *chocorazos* in Magdalena; *canastadas* in Boyacá and Cundinamarca; *milagros de Santa Isabel* in Tolima” (AS, 1917: 1117).

In spite of its deficiencies, Law 85 included several clauses aimed at reducing electoral corruption. Apart from stipulating that voting lists should be published, article 179 declared null elections in which the number of voters exceeded the number of those inscribed in the electoral census. Fines were also established for Police and Army officials influencing their subordinates in electoral matters, and imprisonment was established as the punishment for some electoral practices such as falsification of electoral documents and violence against electoral authorities.

Before the 1922 elections, two Laws were adopted that reformed some aspects of Law 85 of 1916: Law 70 of 1917 and Law 96 of 1920. A very illustrative article in Law 70 in terms of the politicians’ concern about ballot stuffing was added over the course of the debate by Senator Arango and other senators (AS, 1917: 386, 392). The article disenfranchised municipalities where the number of votes *exceeded one third of the total population of the respective municipality*.¹⁵ To this end, the municipalities’ population would have to be computed from the latest civil census available or, in its absence, from the latest national census available.¹⁶

In 1920, a group of Liberal politicians proposed a new modification of the Electoral Code of 1916, which included the introduction of a *cédula*, an electoral ID, and a lowered threshold for disenfranchising municipalities. The proposed threshold was 15% of the municipality’s

¹⁵As will be shown below, this rule became a binding constraint on the behavior of politicians rigging the election. In spite of the record magnitude of ballot-stuffing across the country, only six municipalities exceeded this upper bound.

¹⁶Unfortunately, there are no records of the debates on these articles in the *Anales del Congreso*.

population for elections of members of Local Councils and Departmental Assemblies (in which all males older than 21 years old could participate) and 10% of the population for presidential and congressional elections (in which male citizens had to fulfill the age requirement plus one of the following: being literate, owning property of \$1,000 pesos or more, or earning a yearly income of over \$300 pesos). Most of these modifications were derailed by Conservatives, but Law 96 of 1920 ultimately did include measures such as mandating publication of the electoral census in a visible place and within time frames that facilitated protests from citizens.¹⁷

It was against the backdrop of this institutional framework and ongoing debate on the electoral organization that the 1922 elections took place. We now review some key aspects of the 1922 presidential election and fraud episode.

2.3 The 1922 Episode and the Convención de Ibagué

The presidential contest between Ospina and Herrera in 1922 was very competitive. Herrera won in every major city. Ospina obtained high vote shares in the countryside. The elections were obscured, however, by fraud accusations, which were so widespread that they led Liberal elites to actively challenge the result. As Deas (1993) puts it, “In 1922 the Conservative divisions were exploited by an independent Liberal coalition, and the situation was saved by the use of force at the local level and a general reliance on fraud” (p. 218).

Liberal representative to the national electoral council, Luis de Greiff, demanded upon completion of vote counting that the following be added to the record: “the Liberal representative’s ... conviction [is] that such verdict is not the genuine expression of popular will, but the result of the most scandalous fraud, tolerated by authorities and facilitated, in many cases, by government agents” (quoted in Blanco et al, 1922, p. 403). The Conservative majority rejected the proposition and proclaimed Ospina as President without any mention of the fraud denunciations.

Following the elections, Herrera decided to call for an extraordinary Liberal convention in the city of Ibagué, to decide, among other things, on the posture that the party would take regarding the new government. According to Pedro Juan Navarro, after the 1922

¹⁷The debate over each of the elements of the reform was extremely animated. The spirit of the discussion may be illustrated with Conservative congressman Sotero Peñuela’s closing comment in one of his interventions: “When you in a family find an unruly young man, arrogant, vicious, if he is not Liberal, sooner or later he ends in that party. Doctor Tirado Macías once told us in the House that the women of certain life are all Liberal: the reason is clear” (ACR, 1920: 500).

elections and with the Convención de Ibagué “the nation’s horizon was tragically obscured by the possibility of a Civil War” (Navarro, 1935, p. 46). The threat gradually disappeared, however, and General Herrera’s motto at the time “The Nation before the parties” became famous. The Convención de Ibagué left a very complete record of Liberal complaints both in the official summary of the convention and in a book commissioned by the convention to demonstrate Conservative abuses.¹⁸

The irregularities denounced include the alteration of the electoral registry, the political activity of the clergy, and the homicide of Liberals. It is worth reproducing the following passage from *Los Partidos Políticos en Colombia*, where Liberals summarized their view on the tools that Conservatism used to remain in power:

“Conservatism takes shelter in a castle of illegal strengths ... The electoral law, interpreted and executed by an ad-hoc power of eminently political origin, autonomous only in appearance, yet docile mirror in reality of the executive will. It has been impossible to introduce, into this law, the reforms that Liberalism has requested over and over, except when those reforms are innocuous and do not effectively threaten the Conservative hegemony ... if we add the combative and at times implacable attitude of priests it is clear that we find ourselves, as a nation, witnessing maybe a unique problem in the world” (Blanco et al, 1922, p. 15, 17).

Even considering some degree of exaggeration in the Liberal discourse, it is clear that Conservatives used diverse fraudulent methods during the elections. Ballot-stuffing and coercion seemed to follow regional patterns. Regarding ballot stuffing, Liberals accusations claimed that the “fraudulent multiplication” of votes was largest in Cundinamarca and the Santanderes (the departments of Santander and Norte de Santander), where there were Liberal majorities and hence

“it was necessary ... to rely on the greatest fraud ever registered. The multiplication of votes caused vertigo” (Blanco et al, 1922, p. 27).

Regarding other departments, Liberals claimed that in Valle, Antioquia and Caldas, fraud consisted mostly of inscribing Conservatives in the voting lists even when they did not meet the legal requirements, and obstructing the registration of Liberals. Apparently,

¹⁸Several Conservative commentators attacked the Liberal claims (e.g. Guerra, 1922, Peñuela, 1922, p. 4).

fraud was less widespread there, “where, if there were irregularities, at least the scandalous ‘chocorazos’ of other departments were not observed” (Blanco et al, 1922, p. 399). In Atlántico and Magdalena, the substitution of voting lists with fake ones is regarded as the most common fraud, and finally in Nariño and Boyacá, where Conservatism was the norm amongst “illiterate farmers,” Conservatism “multiplied votes appallingly, and hence the two illiterate Departments lead the number of voters” (Blanco et al, 1922, p. 27). These claims are basically consistent with our data in Table 1. We indeed find very high levels of ballot stuffing in Cundinamarca and the Santanderes, but much less in Antioquia, Valle and Caldas.

In terms of coercion, it was especially pronounced in Atlántico and Bolivar, along the coast, and in the Santanderes. In both of these regions Conservative governors distributed thousands of rifles to Conservative towns so that they could form *guardias cívicas* (civic guards), purportedly to maintain order during the election. Predictably, these civic guards behaved like posses or vigilante groups, and they joined a highly politicized police force in keeping Liberals from the polls.

2.4 Corroborating the Mechanism¹⁹

Having described the background, context, and immediate aftermath of the election, we now turn to a more detailed discussion of fraud itself.

2.4.1 The Rewards of Fraud

Though we cannot directly observe the political kickbacks received by politicians who helped the Conservative party carry the election, the historical record has circumstantial but compelling evidence that those who stuffed the ballot dramatically benefited from a greater share of the economic rents coming from the Panama Indemnity.

As late as the end of 1921, Ospina lacked any significant political presence in Cundinamarca.²⁰ At the same time, local Conservative Alfredo Vásquez Cobo controlled five of six representatives to the department’s assembly (Colmenares, 1984, p. 38). Using this power, Vásquez Cobo had granted himself a monopoly over the department’s liquor rents and with those funds had created a formidable electoral machine in the region (Vélez, 1921, p. 17,

¹⁹This section draws largely from Chaves (2008)

²⁰In a last ditch effort to court Cundinamarca voters, Ospina started appearing in public dressed in the traditional garb of *Cundinamarques* peasants, a move that earned him repeated mockery from the national press (Colmenares, 1984, p. 102).

41, 75). Vásquez seems to have used his machine to support Pedro Nel Ospina in 1922, so Cundinamarca was ultimately one of the provinces that delivered the greatest number of fraudulent votes to Ospina's election. Tellingly, the first foreign loan processed by the Ospina administration (for five million dollars or one fifth of the entire indemnity payment) was destined to Vásquez's pet public works project: the Pacific railroad, in Vásquez's home region.

Probably the most apparent instance of Ospina's political indebtedness was toward the Boyacá *caciques*. Boyacá, an impoverished, fervently Catholic, rural department, was another epicenter of Conservative ballot stuffing in 1922. Ospina appointed several of these *caciques* to important political jobs for which they were not qualified. One, Aristóbulo Archila, was made the Treasury Minister, even though he was "as slow in financial matters and economic science, as he was experienced, sagacious, and domineering in the intricate small-town politicking of the Conservative party" (Navarro, 1935, p. 103). Moreover, Ospina appointed him in spite of well-founded rumors that the person could not speak English.²¹

2.4.2 Ballot-stuffing and *Jurados Electorales*

As we discussed above, ballot-stuffing was generally the work of Conservative-dominated *Jurados Electorales*. Liberals filed thousands of complaints detailing the many delays and irregularities in the formation of voting lists. A couple of examples, from Barranquilla, Atlántico (a historically Liberal city) and from Chiquinquirá, Cundinamarca, suffice to illustrate the type of legal and bureaucratic maneuvering used to tamper with vote tallies. Liberals in Barranquilla griped that "Here, all sorts of obstructions are being placed in front of Liberal voters, and the [electoral] census record has been distorted, once sealed and signed, to inflate it in the last minute with nine hundred additional names, and in spite of protests, it appears that this scandal will not be rectified" (Paz and Solano, 1922, p. 54, from a telegram by the Liberal Committee in Barranquilla). Similarly, reports surfaced from Chiquinquirá claiming that "In this city inscription activity involved only Liberals, who are the majority and reached one thousand names. However, in the definite lists six thousand Conservatives

²¹Political cartoonist Ricardo Rendon gave the sharpest commentary on naming an unprepared, if politically powerful, rural boss for this office. Rendon's cartoon shows Archila talking to Edwin Kemmerer, the Princeton economist who advised and supervised Colombia's financial transformations during Ospina's tenure. Instead of discussing bonds, interest rates, or money supply, Kemmerer is giving a primary school English lesson: "Pencil, book, ruler, paper, box pen," he says, pointing at the objects on the desk (quoted on Colmenares, 1984, p. 197).

appeared also, filling the allowed legal space” (quoted in Paz and Solano, 1922, p. 65, from Liberal Committee in Chiquinquirá).

2.4.3 Priests and Violence

Priests were instrumental in generating Conservative coercion against Liberal voters. The Chiquinquirá Liberals alluded to above summarized this best: in all the municipalities neighboring them, “Dominicans stoke[d] multitudinary hatred” (Paz and Solano, 1922, p. 65).

The fact that disenfranchisement and coercion were most prevalent in Santander and Norte de Santander, provinces with a long history of conflicts between religious fanaticism and radical Liberal anticlericalism, provides suggestive evidence for our view. Abel suggests that the clergy’s meddling in elections was much more pronounced and aggressive in the Santanderes. He concludes that the church was “completely politicized” in the Santanderes. Priests “inherited political alliances and were obligated to pander to the political whims of [their] benefactors . . . [they] could find himself without tithing [if they did not]” (Abel, 1987, p. 90).

The consequences of a fanatically politicized clergy were apparent throughout the 1922 presidential election. Liberals from the town of Vélez, in Santander, protested that the local parish priest had become a powerful political boss in his own right and was causing hundreds of Liberals to be disenfranchised. He had (successfully) “ordered [the electoral board] to deny Liberal reclamations about omissions in the electoral census, leaving only 200 Liberals officially registered to vote in the town” (*El Tiempo*, January 19th, quoted in Blanco et al, 1922, p. 324). Priests in the Santanderes, moreover, were especially successful at inciting partisan hatred and disseminating the kinds of stories that could spur Conservative violence (see Chaves, 2008).

2.4.4 Coercion and Disenfranchisement

As we mentioned above, coercion was mainly a tool used by Conservatives to disenfranchise Liberal voters. Politicians could plausibly have used violence to coerce voters to cast their ballot for a particular candidate, but by and large that is not what we observed in the historical record. Coercion generally played a complementary role to ballot stuffing. On the one hand, it lowered Liberal turnout; and on the other, it cowed the opposition in a municipality so that Conservative Electoral Juries could alter voting tallies without fearing a Liberal backlash. Though many of the Liberal complaints in Blanco et al. (1922) contain

more than a healthy dose of exaggeration, the overall pattern they suggest is confirmed by our econometric results. It is instructive to examine these complaints to gain a sense of the main uses and purpose of Conservative coercion.

Underlying frequent riotous outbursts of partisan violence, there was an atmosphere of almost martial law in the regions of the Santanderes and the Atlantic coast. Most of the time this militarization was purposefully directed towards ‘problematic’ Liberal towns.²² A reporter for a national newspaper summarized the Conservative strategy, as he witnessed it in the town of Salazar, Norte de Santander, in the following way: “Conservatives in this town and its surroundings have begun a full-fledged military campaign ... Authorities have distributed arms to diverse towns in the province, and the government’s agents try to make ostentation [sic] of their strength, with the goal of frightening Liberal peasants, so that they do not show up to vote on election day” (quoted in Blanco et al., 1922, p. 306).

This strategy, in fact, was applied effectively across the country. Violent deaths were few precisely because coercion was so effective at driving away Liberal voters. In a town on the Atlantic coast, for instance, Liberals abandoned the polls because “the coastguard’s cannons were fixed on our Liberal masses, while on the rooftops of all the houses the *guardias civicas* were positioned to shoot . . . [We] left to avoid the bloodbath” (*El Espectador*, February 17th, Blanco et al., 1922, p. 115). Allegedly 4000 people in Lorica, Bolivar had to disperse without being able to vote on that occasion. In the town of Rosario, wrote *El Tiempo*, the police corps “had spread into a battle formation” to greet Liberals heading to the polls, “threatening to shoot if they tried to vote” (*El Tiempo*, February 16th, quoted on Blanco et al., 1922, p. 317). Liberal voters walked away without casting their ballots. San Cayetano, a town neighboring Cúcuta, and Salazar de las Palmas, both suffered a similar fate.

Once coercion had driven Liberals away from the polls, it would also be used to legitimize ballot-stuffing. Such was the case in San Luis and Concordia, in Norte de Santander. Polls had opened hours too early in San Luis, and the electoral board had declared all the registered voters accounted for before the bulk of Liberals had reached the ballot-box. The minority members of the electoral board, whose signature was needed to make the result official, had refused to authenticate the final tally, but under threats of violence from local police they were forced to certify it. Concordia’s minority members on the electoral board, claimed *El Tiempo*’s correspondent, were “nearly lynched [by the police] because they would not

²²In the town of La Florida, for instance, there was constant patrolling and ninety-six Liberals were arrested on the eve of the election after a Liberal riot (Blanco et al, 1922, pp. 329-332).

authorize a fraud committed in their very presence” (Blanco et al., 1922, p. 317).

What about Liberal wrongdoings? Unfortunately, possibly because they were victorious but also partly because Liberal fraud was less widespread, there is no comparable Conservative effort to denounce the Liberal abuses systematically. However, the Liberals themselves did recognize possible Liberal abuses, though they claimed they were minor (e.g., Blanco et al, 1922, p. 25). For this reason, the evidence on electoral fraud is heavily biased towards Liberal accusations. However, it seems very unlikely that Liberal fraud was very widespread. A review of complaints sent to the Minister of Government during the election showed hardly any written by Conservatives.

3 A Simple Model

We now develop a simple model of the relationship between coercion and ballot stuffing that helps to show how some of the main results we discussed in the introduction fit together. We do not aspire for generality and make simplifying assumptions to make the analysis tractable.

We focus on the decision problem of Conservative elites in a particular municipality who wish to supply votes to the national politicians. Given the overwhelming evidence that it was the incumbent Conservative party that was stuffing ballots we do not model the equilibrium extent of stuffing and coercion as a game, though this could easily be done. Conservatives have two instruments: ballot stuffing s and coercion c . They aim to maximize the margin of victory over the Liberals because the greater this margin, the more support they provide to the national Conservative presidential candidate. The historical evidence suggests that local Conservative elites expected to be rewarded for this, so we can think of there being a ‘price’ ρ associated with delivering support. Hence if the win margin in a particular municipality is

$$v^c + s - v^\ell$$

where v^c is the number of conservative votes and v^ℓ are the number of Liberal votes, we can think of the benefit as being $\rho(v^c + s - v^\ell)$. Obviously we assume that all stuffed votes are in favor of the Conservatives.

Both stuffing ballots and coercion are costly so the local elite will want to choose s and c to maximize the net benefits. Either activity may lead to violence and revolt by local Liberals, a possibility which may lead the local results to be annulled. Also, coercion may

disrupt local economic activities in which Conservatives politicians were invested. We assume that these costs can be captured by simple quadratic costs functions, so we can write the maximization problem facing local conservatives in the following way

$$\max_{s,c} \rho (v^c + s - v^\ell) - \frac{\phi}{2}s^2 - \frac{\psi}{2p}c^2. \quad (1)$$

In (1) ϕ and ψ are positive parameters, which we shall interpret later, and p is the number of priests in a particular municipality. Hence we assume that the marginal cost of coercion is decreasing in the number of priests in a municipality. This seems reasonable since the historical evidence suggests that priests were able to use the pulpit and their influence to solve the collective action problem for Conservatives and to organize coercive activities.

The main benefit of coercion was that it reduced the number of Liberal voters, freeing up space for ballot stuffing. Hence we postulate the following relationship

$$v^\ell = g(c) \quad (2)$$

with $g' < 0$ so that greater coercion reduces the number of Liberal votes. If coercion gets less and less effective we also have $g'' \geq 0$.

A constraint on (1) was that the total number of votes cast was limited by Law 70 of 1917, which threatened disenfranchisement if ballots ‘cast’ were greater than 1/3 of the population in a municipality. Denote this maximum number of votes v^{\max} . Then we have the constraint

$$v^c + s + v^\ell \leq v^{\max}. \quad (3)$$

Finally, it does not make sense to think of both v^c and p as varying in an unrelated fashion. Rather, it seems likely that in places where there were more priests, the greater were the number of Conservative voters. This may be because either the Catholic church tended to put more churches and priests in intrinsically Conservative areas, or because priests were successful at changing people’s political preferences. In either case we can capture this in a simple way by postulating that there is an increasing relationship between the number of priests and the number of Conservative voters

$$v^c = h(p) \quad (4)$$

where $h' > 0$. We also assume that $h'' \leq 0$.

Therefore local Conservatives would maximize (1) subject to (2), (3) and (4). In general, the inequality (3) may or may not bind. However, as we noted above, our data suggests that it almost certainly was binding, and we therefore assume that this will be the case.²³ In this case $s = v^{\max} - h(p) - g(c)$ and substituting the constraints into the objective function we can write:

$$\max_c \rho(v^{\max} - 2g(c)) - \frac{\phi}{2}(v^{\max} - h(p) - g(c))^2 - \frac{\psi}{2p}c^2$$

which has the first-order condition

$$-2\rho g'(c) - \frac{\psi}{p}c + \phi(v^{\max} - h(p) - g(c))g'(c) = 0. \quad (5)$$

Conservative elites set coercion such that the marginal benefits are equal to the marginal costs. The benefits of coercion are captured by the fact that $-2\rho g'(c) > 0$: increased coercion reduces the number of Liberal voters and thus increases the equilibrium amount of ballot stuffing and hence Conservative ‘votes’.

For (5) to characterize a maximum the second-order condition must be satisfied, which implies the second derivative is negative, or

$$-2\rho g''(c) - \frac{\psi}{p} + \phi(v^{\max} - h(p) - g(c))g''(c) - \phi[g'(c)]^2 \equiv \omega < 0,$$

which we assume holds.²⁴

The empirical predictions of our model come from computing the comparative statics implied by the first-order condition. Using the Implicit Function Theorem, we can derive

²³It is interesting to note here the quote from Paz and Solano we reproduced in section 2.4.2, which remarked on “filling the allowed legal space”.

²⁴Substitute the first-order condition in the second-order condition to verify we are in a local maximum:

$$\begin{aligned} [-2\rho + \phi(v^{\max} - h(p) - g(c))]g''(c) - \frac{\psi}{p} - \phi[g'(c)]^2 &< 0 \\ \left(\frac{\psi}{pg'(c)}c\right)g''(c) - \frac{\psi}{p} - \phi[g'(c)]^2 &< 0 \end{aligned}$$

the following

$$\begin{aligned}\frac{\partial c}{\partial \rho} &= \frac{2g'(c)}{\omega} > 0, \\ \frac{\partial c}{\partial p} &= \frac{\frac{\psi}{p^2}c - \phi g'(c) h'(p)}{-\omega} > 0, \\ \frac{\partial c}{\partial \phi} &= \frac{-sg'(c)}{\omega} < 0, \\ \frac{\partial c}{\partial \psi} &= \frac{c}{p\omega} < 0.\end{aligned}$$

The first result says that an increased ‘price’ for a stuffed ballot generates more coercion. This result captures the ‘Dance of the Millions’ on the ‘Panama Indemnity’ effect, which, as we noted, seems to have been important in raising the stakes in the 1922 election and the equilibrium extent of fraud. The second result, while obvious, is important for our discussion. More priests reduced the costs of coercion and induced more of it. The last two derivatives with respect to the parameters in the cost functions ϕ and ψ can be thought of in terms of our discussion of the ‘Weberian state’. Greater state strength, higher ϕ and ψ , made both coercion and stuffing more costly. This reduces the incentive to engage in coercion directly, but also indirectly since it discourages ballot stuffing, and it is the desire to create room for ballot stuffing that induces coercion.

We now turn to the implied comparative statics for stuffing, where we use the above comparative statics and the equation $s = v^{\max} - h(p) - g(c)$. We find

$$\begin{aligned}\frac{\partial s}{\partial \rho} &= -g'(c) \frac{\partial c}{\partial \rho} > 0, \\ \frac{\partial s}{\partial \phi} &= -g'(c) \frac{\partial c}{\partial \phi} < 0, \\ \frac{\partial s}{\partial \psi} &= -g'(c) \frac{\partial c}{\partial \psi} < 0.\end{aligned}$$

These three results are immediate. An increase in the price of votes raises the total number of stuffed ballots, and indeed this is the point of coercion. Since the Weberian state reduces coercion it also reduces the number of stuffed ballots. It is important to note, however, that these results are only true because they hold the number of conservative voters constant.

This is the source of subtlety in the next result.

$$\frac{\partial s}{\partial p} = \underbrace{-h'(p)}_{<0} + \underbrace{-g'(c) \frac{\partial c}{\partial p}}_{>0} \leq 0, \quad (6)$$

This shows that actually the impact of priests on the number of stuffed ballots is ambiguous. This is because a larger number of priests tends to be naturally associated with a lot of conservative voters (from equation (4)) and so we will tend to see a lot of priests associated with less ‘space’ available for stuffing. If the correlation between priests and Conservative preference vote is high enough relative to the increase in coercion and consequent fall in Liberal vote that comes about with more priests, then (6) will be negative. In this case the model would predict that priests would be positively correlated with coercion but negatively related to ballot stuffing. This is exactly as we find in the data, and it is interesting that very Conservative provinces, such as Antioquia, which are also renown for their piety, feature less ballot stuffing than provinces such as Santander, which are historically linked to the Liberal Party.

4 The Data

4.1 Ballot Stuffing

Our measure of ballot stuffing - the extent of fraudulent votes - relies on the comparison of the total number of votes cast in each municipality with a reasonable estimate of the size of the franchise from information of the 1918 National Census. This measure is imprecise since we do not have accurate data on the real level of turnout. The arbitrary exclusion of voters from the electoral registries, which historical evidence suggests was common, is especially problematic, as several of the municipalities that reveal no ballot stuffing in our database might have experienced stuffing nonetheless. Finally, our measure of ballot stuffing is not likely to be influenced by the strategic considerations affecting other measures of electoral fraud based on testimonies of party followers.²⁵

To estimate ballot stuffing we proceed as follows. As explained above, under the 1916

²⁵In *Los Partidos Políticos en Colombia*, where Liberal complaints were summarized, Liberals used the available statistics to draw some calculations in the spirit of the ones we construct in this section showing results for each department and the country as a whole, and attributing the “multiplication of votes” to the conservative party (see Rodríguez, 1922).

Electoral Code, suffrage rights were restricted to adult males (over 21 years of age), and for presidential elections male citizens had to fulfill the age requirement plus one of the following: being literate, owning property of \$1,000 pesos or more, or earning a yearly income of over \$300 pesos. The income and wealth requirements implied by these thresholds are fairly restrictive. For example, nominal GDP per-capita in Colombia in 1922 was about \$84 (GRECO, 2002) so that to qualify to vote using the income criterion an illiterate person would have had to earn almost 3 times average income. Given that around 50% of adult males were literate in 1918, very few illiterates could have earned such high incomes. Using data on land ownership for the department of Cundinamarca in 1890 (see below) and adjusting for prices suggests that if one owned \$1,000 worth of land one would be in the top 21% of landowners. Hence, it seems very unlikely that an illiterate male would have been able to qualify to vote on the basis of wealth holdings either. In consequence we assume that everyone who could qualify to vote on the basis of land ownership and income was also literate. This assumption implies that landowners and earners of income over \$300 are subsets of the literate males, and that the number of adult literate males is a reasonable estimate of the franchise.²⁶

We therefore use the 1918 National Census to compute the number of males over 19 years of age in every municipality (the census does not report males over 21), and multiply this number by the literacy rate of men in each municipality. Since the presidential election was held in 1922 and the Census was made in 1918, we may be underestimating the franchise. Hence, assuming a rate of population growth consistent with the information from the 1918 and 1928 National Censuses, we also adjust our estimate of the adult literate male population to allow for population growth. This constitutes our measure of the size of the franchise in each municipality. It is clear that this measure of the franchise is an overestimate since it assumes a 100% voter turnout and since only people older than 21 could vote. This will therefore tend to create relatively conservative measures of electoral fraud.

We combine our estimate of the franchise with the total number of votes cast in each municipality according to the official electoral registries sent by local authorities to the *Gran Consejo Electoral*.

²⁶These assumptions are probably implausible in a number of cases. For instance, there are municipalities with extremely low literacy rates, which deliver extremely low estimates of literate adults (2 men, in the most extreme case in San Andrés de Sotavento, Bolívar). This implies that stuffed ballots as percent of estimated franchise in San Andrés de Sotavento was 22,000%! One could expect it to be likely that where so few men were literate there were some non-literate individuals with the income or wealth requirements to get voting rights. There is no easy solution to this problem other than to check that our results are robust to dropping such municipalities, which they are (details from authors upon request).

4.2 Measuring Coercion

To measure coercion we coded the information from the proceedings of the *Convención de Ibagué*. In the book there are many accusations of coercion, which we sorted into different types of coercion using dummy variables to capture whether or not a particular type of violence was present in a municipality. These are

1. Violence=1 if the municipality had reports of actual violence breaking out: brawls, gun-shots, confrontations with injuries or casualties.
2. Intimidation/Harassment=1 for reports of incarcerating Liberals, subjecting them to random searches and detainment, coercive measures to prevent Liberal propagandizing or activism.
3. Arms distribution/paramilitary activity=1 for reports of organized armed Conservatives who are not police or army, or distribution of arms for these bodies. Acts of intimidation by these bodies.
4. Coercion=1 indicator for the union of violence, intimidation, arms etc. 1 if any of the above happened.

In the empirical work we investigate only Coercion. See the data appendix for more details on the construction of these data.

4.3 Explanatory Variables

One of the most important hypotheses we wish to investigate in our paper is that the presence of the state reduced the extent of ballot stuffing and coercion. As proxies for the presence of the state in different dimensions we use data from the 1918 population census on the number of public employees and the number of agents of the armed forces in each municipality. We use these variables on their own and also add them to construct a simple index of the presence of the state.²⁷

The historical literature also emphasizes the important political role of clergy during elections, and as we have already seen, this was also much remarked upon by Liberals at the

²⁷Ideally, we would like to examine the impact of the police and the army separately. Unfortunately, the 1918 Census does not distinguish between the two.

time. From the 1918 Census we have the number of priests in each municipality, which we express as a proportion of the total population.

Unfortunately we do not have a good control for the level of economic development at the municipality level. Though the Census does report data on literacy and schooling we obviously cannot use this as a control variable for ballot stuffing since, given that we use the literate male population to construct the number of stuffed ballots, they are mechanically related to our measure of ballot stuffing. We do use these as control variables when coercion is the dependent variable however. Nonetheless, the Census does include the proportion of people in a municipality who were vaccinated. Since this is very likely related to income per-capita we use this variable as an imperfect control for income when ballot stuffing is the dependent variable.

The literature also suggests that there may be large differences between core and peripheral areas of municipalities, and it is desirable to control for this directly. To do so we include the earliest foundation date of the municipality. We expect newer and more peripheral municipalities to exhibit more fraud, as the presence of the state is likely to be weaker in such municipalities.²⁸

4.4 Descriptive Statistics from Colombia

Table 2 Panel A reports the descriptive statistics for the whole of Colombia. The first row reports the ratio of stuffed ballots to adult males for the 546 municipalities for which we have complete data (we lack occupational data for Boyaca, Bolivar and Magdalena). The first row shows that the mean number of stuffed ballots was 19% of the total adult male population. Looking across this row it is interesting to note that the proportion of ballots stuffed seems to vary little between municipalities with and without recorded coercion.

With respect to the presence of the state, the proportion of the population which were clergy was 50% greater in areas with low stuffed ballots (municipalities less than the median), while the presence of members of the army and of the bureaucracy also seems to be higher in places with relatively low levels of ballot stuffing (0.55 instead of 0.47).

Though as noted, we cannot say anything about the relationship between human capital and ballot stuffing, the table also suggests with respect to coercion that schooling is greater in places with coercion compared to those without.

²⁸We also used distance (in kms) to the departmental capital, which gave similar results.

Looking at the vaccination rate, this is higher in municipalities with low ballot stuffing but, interestingly, higher in places where coercion is present than in those where coercion is absent, though the difference is quite small.

4.5 Data on Cundinamarca

In addition to the data on stuffed ballots and coercion and the covariates from the 1918 Census we have a variety of other historical data for Cundinamarca from Acemoglu et al. (2008). These authors used cadastral (land census) data collected by the state of Cundinamarca in 1879 and 1890. We use a very standard measure of land inequality from their paper - the *land gini* coefficient, which measures land inequality among landowners.²⁹ For each municipality at each date, we construct the gini coefficient using the standard formula

$$g_{mt} = \frac{1}{n_t^2 \bar{y}_t} \sum_{i=1}^{n_t} \sum_{j=1}^{n_t} |y_{i,t} - y_{j,t}| \quad (7)$$

where $i = 1, \dots, n_t$ denotes the total number of land owners at time t , $y_{i,t}$ is the value of land owned by individual i at time t , and $\bar{y}_t = \frac{1}{n_t} \sum_{i=1}^{n_t} y_{i,t}$ is the average value of land at time t . Throughout most of our analysis, we average the gini coefficients across the two dates for each municipality to arrive to our measure of (average) *land gini*. The average gini over this entire period was 0.65 (see Table 2 below).

To measure political concentration Acemoglu et al. (2008) collected data on politician (mayor) names from the *Registro del Estado* and *Gaceta de Cundinamarca*, official newspapers that published the names of principal and substitute mayors appointed in each municipality between 1875 and 1895. They used these data to construct a measure of the concentration of political power. Their measure of political concentration for municipality m at time t is computed as:

²⁹Despite its widespread use, the land gini suffers from an obvious problem. An area in which all land is held by two very large landowners will have a low value of the land gini, because land is equally distributed among landowners. But if we looked at the population as a whole, there would be tremendous amount of land inequality. To alleviate this problem, Acemoglu et al. (2008) constructed an alternative measure, *overall land gini*, which again computes equation (7), but uses the total number of families and assigns zero land holdings to the families who do not appear in the *catastro*. We found this variable to be completely uncorrelated with ballot stuffing and other outcomes, and it did not influence any of the results we report here, so we dropped it from the analysis.

$$p_{mt} = -\frac{\text{Number of Different Individuals in Power}_{mt}}{\text{Number of mayor appointments}_{mt}}.$$

The negative sign in front is introduced so that higher values of the index correspond to higher political concentration (thus making the interpretation of the coefficients easier). Consequently, our political concentration index takes a value of -1 when there is very low political concentration, and values close to 0 for high levels of concentration. We computed this index for the whole period 1875-1895. The mean of this variable is -0.55.

In Table 2 Panel B we report some descriptive statistics just for Cundinamarca. For the variables we discussed above there are a few differences. For instance, ballot stuffing is now much higher in municipalities without coercion (0.34) compared to municipalities with coercion (0.19). In terms of our new explanatory variables the land gini is higher in places with low ballot stuffing (0.67 compared to 0.63), while political concentration is also higher in municipalities with less than median levels of ballot stuffing. This table also suggests that schooling and literacy are higher in places with less ballot stuffing and more coercion.³⁰

5 Econometric Analysis

Having presented the main features of our measures of ballot stuffing and coercion, this section analyzes some of the correlations between those measures and other variables at the municipality level, in an attempt to describe which characteristics were associated with a higher incidence and intensity of ballot stuffing and coercion.

5.1 Ballot stuffing and Coercion in Colombia

Table 3 present the results of simple ordinary least squares regressions for the whole of Colombia's municipalities. The basic model we estimate is

$$y_m = \mathbf{G}'_m \boldsymbol{\beta} + \chi_d + \mathbf{X}'_m \boldsymbol{\zeta} + \varepsilon_m \quad (8)$$

³⁰In the raw data there is now a distinct negative correlation between coercion and ballot stuffing. We also see a strong negative correlation between both land inequality and political concentration and ballot stuffing. The presence of the clergy is negatively correlated with ballot stuffing and positively correlated with coercion. Results available upon request.

In (8) y_m is our explanatory variable of interest. In panel A this is $\log\left(1 + \frac{s_m}{p_m}\right)$ where s_m represents the number of stuffed ballots in municipality m and p_m the adult male population of the municipality. In panel B the dependent variable is c_m , which is a dummy such that $c_m = 1$ if municipality m experienced a coercion incident. In (8) \mathbf{G}'_m is a vector of variables capturing the presence of clergy and of the state in municipality m , χ_d is a department fixed effect, where the subscript d indexes department, and \mathbf{X}'_m is a vector of covariates, such as the vaccination rate or the foundation date of the municipality and also includes a constant. The error term ε_m captures all omitted influences, including any deviations from linearity. Equation (8) will consistently estimate the parameters of interest β if $\text{Cov}(g_m, \varepsilon_m) = 0$ for all $g_m \in \mathbf{G}_m$. Nevertheless, we emphasize that these covariance restrictions are unlikely to hold in practice, since the presence of the state and political outcomes such as ballot stuffing and coercion are all jointly determined, and this is why we do not emphasize causal interpretations of our findings.

We first turn to panel A and regressions where the dependent variable is $\log\left(1 + \frac{s_m}{p_m}\right)$. The first three columns introduce sequentially the proportion of the population which are clergy, armed forces, or bureaucracy. All regressions have departmental fixed effects. The first column shows that the presence of clergy is significantly negatively correlated with ballot stuffing. The estimated coefficient is -23.54 with a standard error of 5.85 and so is highly significant.

This is a quite large effect quantitatively. As a reference point, a one percent decrease in the ratio of stuffed ballots to adult males around the mean value of this variable nationwide implies a fall from 0.30 to 0.27 . The average municipality in the base sample has around 670 adult males. Thus, every one percent decrease in the ratio stuffed ballots around the mean implies a fall in the number of stuffed ballots of about 20 ($0.03 \cdot 670$). To see the impact of the clergy, take the estimate in column (1). An increase in the number of clergy from the mean national value of 5 priests per one thousand inhabitants to 14 priests per thousand inhabitants, corresponding to a one-standard deviation increase, leads to a fall of about 2% ($((0.09/100) \cdot 23.5 \cdot 100)$) in the ratio of stuffed ballots to adult males. Per the above calculation, this means about 40 stuffed ballots less in such municipality.

The second column shows that though the estimated coefficient on armed forces is negative it is not statistically significant. In the third column the proportion of the population which is bureaucrats is estimated to have a coefficient of -4.38 (s.e.= 2.11), which is again significant.

Column 4 adds all of these three explanatory variables at the same time. Though this reduces the coefficient on bureaucracy and makes it insignificant, the correlation with the clergy is almost unchanged as is the level of significance. Since there is a concern about the presence of multicollinearity, in column 5 we amalgamate the data for army and bureaucracy by simply adding them to form an index of state presence. This has a negative coefficient though is not significant, and nothing happens to the coefficient on clergy or its standard error.

In column 6 we drop the departmental capitals because the case study literature suggests that the political dynamics of these places may be distinct. Nevertheless, this has little impact on the results.

In column 7 we add the foundation date of the municipality as a simple control for how central or peripheral it is in the municipality. Municipalities which were founded more recently tend to be more isolated and further from the departmental capital. This seems to be positively correlated with ballot stuffing suggesting, as we would have conjectured, that more recently founded and more peripheral municipalities have more ballot stuffing, but it does not qualitatively change the other results.

Finally, in column 8 we add the proportion of the population who is vaccinated as a simple control for the prosperity of the municipality. The coefficient on this variable is negative, as we would have anticipated, but it is not significant. Moreover, it has little influence on the results of interest suggesting that it is unlikely that our findings are being driven by the simple fact that ballot stuffing is lower in more prosperous municipalities.

Panel B estimates very similar regressions except that now the dependent variable is the dummy variable for coercion. One can think of these regressions then as a linear probability model. The big fact that jumps out of this panel of the table is that the presence of the clergy is positively correlated with coercion. The effect is very robust across the different specifications and no other variable appears to be significantly correlated with coercion.

It is interesting to examine some of these results graphically. Figure 1, for instance, plots the data for the ratio of clergy to municipal population against the extent of ballot stuffing. There is evidence of a quite distinct negative relationship. Figure 2 replaces the clergy by the number of government bureaucrats and again shows evidence of a negative relationship.

5.2 Preliminary Interpretation

The results from the regressions for Colombia as a whole suggest a couple of things. First, the presence of priests is positively correlated with coercion but negatively correlated with ballot stuffing. The first fact is certainly consistent with the claims of Liberals at the time and a great deal of historical literature. What is important for interpreting the second correlation, however, is the *form* of coercion in which priests were involved. Specifically, this was targeted at keeping Liberals away from the polls. Hence where there were priests, Liberals were stopped from participation, thus turnout was lower, and thus the extent of ballot stuffing according to our measure would be lower. One could imagine that using coercion to keep Liberals away from the polling booths would have given Conservatives the freedom to engage in even more egregious ballot stuffing. Our results suggest, however, that while this may have increased the margin by which Conservatives won in a particular municipality, other things equal, it actually reduced the extent of ballot stuffing relative to the potential franchise.

Second, the regressions also provide some weak support for the notion that the presence of state bureaucrats is negatively correlated with ballot stuffing, though this does not appear very robust.

5.3 Ballot stuffing in Cundinamarca

We now focus just on the department of Cundinamarca. Table 4 re-estimates the models of Table 3 using only our data for Cundinamarca. This shows some interesting patterns. First, as for the whole of Colombia, the presence of clergy is negatively correlated with ballot stuffing and positively correlated with coercion. The coefficients are nearly always statistically significant, and their magnitude is not very dissimilar than that for the entire country.

Table 4 Panel A however shows much more robust effects of state presence on ballot stuffing. The presence of the bureaucracy is always significantly negatively correlated with ballot stuffing and the estimated impact of the army, though not typically significant at standard confidence levels, is always negative.

Finally in Panel A the vaccination rate is also significantly negatively correlated with ballot stuffing, and while this reduces the impact and significance of the presence of clergy, it has little impact on the correlation between bureaucracy and ballot stuffing. We would

interpret these results as suggesting that our findings are not being driven by unobservables such as income per-capita.

Turning to panel B we see once more a very robust relationship between clergy and coercion. Coercion and the clergy go together. This part of the table also suggests two other relatively robust findings. First, the presence of the army reduces coercion. Second, coercion is greater in places with higher human capital. For instance, in column 9 the schooling rate has an estimated coefficient of 0.323 (s.e.=0.096), suggesting that greater schooling is associated with greater coercion. As with our findings with respect to vaccination, we believe these findings shows that our results cannot be driven by some simple implicit modernization thesis along the lines that coercion and ballot stuffing are lower in relatively prosperous places.

In Table 5 we introduce our new explanatory variables, which we only have available for Cundinamarca. Again in panel A our measure of ballot stuffing is the dependent variable. The findings here are very robust across specifications. In column 1 we see that the land gini is negatively correlated with ballot stuffing, with a coefficient of -0.675 (s.e.=0.203). In the same column we see that the correlation between political concentration and ballot stuffing is also negative. In column 1 for example the coefficient on political concentration is -0.467 (s.e.=0.202) and both the estimated coefficient and standard error are very robust as we change the set of covariates in different columns. For instance, in column 4 when the land gini and political concentration are both introduced the estimated coefficient on political concentration is -0.44 (s.e.=0.21) and thus still highly significant.

Panel A therefore suggests that both land inequality and political concentration are negatively correlated with ballot stuffing.

In panel B we estimate the same model except that the coercion dummy is now the explanatory variable, and we can now also use our education data (in columns 9 and 10). There is one very robust finding from these regressions, which is that there is a significant negative correlation between political concentration and coercion. Interestingly, column 9 of this panel also suggests that there is a positive significant correlation between schooling and coercion. Note also that the presence of the army always has a negative and significant effect on coercion.

Figures 3 and 4 re-examine the relationships in Figures 1 and 2 with data just from Cundinamarca, where we now use the names of the municipalities since this is reasonably clear. Both show evidence of the same negative correlation. One might be concerned in

Figure 3 that this was being driven by Bogotá, but recall that our regression results are robust to dropping departmental capitals. Figure 5 depicts the scatterplot between the land gini and ballot stuffing. Here there is a quite distinct negative relationship. Municipalities on the Sabana de Bogotá, the plain surrounding the city where the first Spanish conquistadors settled in the early 16th century, such as Mosquera or Sopó, have high land inequality and relatively low levels of ballot stuffing. Figure 6 examines political concentration and ballot stuffing. It is much less clear from this picture that there is any significant correlation between the variables.

5.4 Interpretation

Building on Acemoglu et al. (2008) and our earlier observations, there seems to be some immediate interpretations of these findings. Though the Colombian state may have been weak in 1922, where it was present it served to reduce the extent of fraud. Bureaucrats reduced ballot stuffing, and the army seems to have reduced coercion. As Montoya (1935, p. 42) argues,

“It is undeniable that for a long time and under different political regimes, the Colombian government used the armed forces as an instrument for fraud, and that members of the army were docile and at times eager agents of such condemnable system; but it is not less evident, to the honor and joy of our Nation, that those practices have disappeared”

The role of the church was very different however. Even if during the colonial period the church is often seen as synonymous with the state, this was clearly not true in Colombia in 1922. Our evidence is very consistent with historical work and contemporary sources which stressed the close relationship between the clergy and the Conservative party. It was the Conservatives who mostly persecuted the fraud of 1922, and they were helped by clergy organizing anti-Liberal violence.

The most interesting findings of this section, however, relate to land inequality and political concentration. Land inequality and political concentration are negatively correlated with ballot stuffing. and this is very robust. In addition we found political concentration to be significantly negatively correlated with coercion. These findings can be fitted together. In Cundinamarca landed elites were not competing with the state, as they may have been in 19th century Germany (Ziblatt, 2009) or Chile in the 1950s (Baland and Robinson, 2009).

Instead, they were substituting for it and in doing so reduced the extent of fraud. This explains why high land inequality is negatively correlated with ballot stuffing. Finally, our results of political concentration are easy to understand. As Acemoglu et al. (2008) point out, places where political concentration was high were peripheral areas where power was often in the hands of a powerful *cacique*. These places were hardly involved in national politics, so as a result one sees little coercion or ballot stuffing. There is an interesting non-monotonicity here. In Cundinamarca, in places at the core of the department where the state functioned or landed elites could substitute for it, there was relatively little coercion and ballot stuffing. Further away, as the grip of the state and elites weakened, ballot stuffing and coercion increased. Yet in the most distant parts of the department, where caudillos ruled almost without concern for the state, electoral fraud fell off because these areas were disconnected from the partisan rivalries that tore the nation apart.

6 Conclusions

In this paper we have investigated electoral corruption in Colombia's 1922 presidential elections by offering measures of the presence and extent of ballot stuffing and the incidence of coercion at the municipality level. Our findings, summarized above, are quite distinct from existing studies. For one, our focus is very much on the role of the state. Though politics in Colombia was highly partisan, our results suggest that by 1922 some element of a 'Weberian state' had emerged in Colombia and that state officials, particularly in the army, were focused on reducing, not implementing fraud. The church, on the other hand, played a significant role in coercing Liberal voters and keeping them away from the polls. For another, we found that land inequality is negatively correlated with ballot stuffing. Contrary to other studies which have found evidence suggesting that landed elites are implicated in fraud, the data from Colombia suggests the opposite. We argue that this is a consequence of state weakness. Though the state might have fought against fraud, its ability to do so was highly limited. Consequently, landed elites in Colombia found it in their interests to substitute for the state, not undermine it, and as such fought against the chaos and illegality that went along with electoral fraud.

Nevertheless, one should keep in mind the problems with the data sources that we have used to draw these conclusions. Though we have real data on recorded vote totals from the 1922 election we had to estimate the franchise because we have no objective information on

turnout. We believe that this means that our estimates are a lower bound on the extent of ballot stuffing, but this obviously introduces potential biases into our estimates that are hard to evaluate because we do not know what influenced the extent of turnout across municipalities or the extent to which it might have been correlated with our explanatory variables. This measure of fraud is complementary to existing measures, which only rely on accusations of fraud. Indeed, we used accusations ourselves to construct a measure of electoral coercion. Nevertheless, there seems to be a lot of potential in using the type of information we used in this paper for examining electoral corruption.

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Table 1

Department	Total votes	Pedro Nel Ospina	Benjamin Herrera	Ospina-Herrera	Stuffed Ballots	Stuffed	Total Population in 1918
						Ballots/Total votes	
Antioquia	76,420	47,987	28,403	19,584	11,658	15.3%	821,027
Arauca	425	146	278	-132	10	2.4%	6,070
Atlantico	9,905	4,840	5,064	-224	1,488	15.0%	117,915
Bolivar	49,548	33,650	15,888	17,762	29,207	58.9%	416,561
Boyaca	83,764	61,977	21,747	40,230	39,688	47.4%	590,587
Caldas	50,186	28,610	21,566	7,044	7,104	14.2%	419,697
Caqueta	363	270	93	177	124	34.1%	2,957
Casanare	68	10	58	-48	1	2.1%	1,382
Cauca	23,024	13,644	9,367	4,277	8,416	36.6%	238,071
Choco	7,214	3,467	3,746	-279	2,649	36.7%	61,371
Cundinamarca	117,471	76,634	40,723	35,911	48,517	41.3%	800,439
Guajira	1,460	1,063	397	666	1,407	96.4%	2,908
Huila	13,864	8,830	4,997	3,833	2,513	18.1%	181,202
Magdalena	18,577	11,657	6,918	4,739	7,465	40.2%	186,254
Meta	2,477	1,255	1,221	34	808	32.6%	10,695
Narino	29,843	23,880	5,959	17,921	4,237	14.2%	327,367
Norte de Santander	35,705	26,894	8,804	18,090	17,449	48.9%	222,552
Putumayo	850	660	190	470	414	48.7%	5,009
San Andres y Providencia	566	465	100	365	0	0.0%	5,953
Santander	55,492	37,784	17,699	20,085	23,926	43.1%	439,161
Tolima	39,083	19,019	20,057	-1,038	18,485	47.3%	320,084
Valle	35,547	17,284	18,249	-965	4,440	12.5%	266,371
TOTAL	651,852	420,026	231,524	188,502	230,007	35.3%	5,443,633

Table 2

Variable	Descriptive statistics										
	All municipalities			By level of stuffed ballots				By coercion			
	N	mean	sd	Low		High		No coercion		Coercion	
				mean	sd	mean	sd	mean	sd	mean	sd
Panel A: Colombia											
<i>Electoral Outcomes</i>											
Stuffed Ballots/Adult Males	546	0.19	0.27	0.01	0.02	0.36	0.30	0.21	0.29	0.24	0.28
Log of 1+Stuffed Ballots/Adult Males	546	0.15	0.20	0.01	0.02	0.29	0.20	0.17	0.21	0.20	0.20
Coercion Dummy	388	0.18	0.38	0.13	0.34	0.21	0.41	0	0	1	0
<i>Share of population in each category, 1918 census (in percent)</i>											
Clergy	546	0.05	0.09	0.06	0.10	0.04	0.08	0.04	0.06	0.08	0.16
Armed forces	546	0.06	0.35	0.07	0.39	0.05	0.30	0.05	0.39	0.14	0.39
Bureaucracy	546	0.51	0.36	0.55	0.41	0.47	0.29	0.49	0.35	0.55	0.37
Literate	546	28.8	11.9	31.9	12.4	25.7	10.4	28.9	12.0	28.8	12.3
Goes to school*	546	25.4	17.7	27.4	19.7	23.4	15.2	24.9	13.9	27.7	31.9
Vaccined	546	30.8	19.8	33.6	21.2	28.0	17.8	27.7	16.4	29.2	17.9
Date of foundation	530	1740	117	1738	115	1742	120	1747	110	1709	121.8
Panel B: Cundinamarca											
<i>Electoral Outcomes</i>											
Stuffed Ballts/Adult Males	107	0.30	0.31	0.05	0.05	0.56	0.25	0.34	0.32	0.19	0.24
Log of (1+Stuffed Ballots/Adult Males)	107	0.24	0.23	0.04	0.05	0.43	0.16	0.26	0.23	0.16	0.19
Coercion Dummy	101	0.20	0.40	0.27	0.45	0.13	0.34	0	0	1	0
<i>Economic and Political Inequality</i>											
Land Gini (average 1879, 1890)	97	0.65	0.10	0.67	0.09	0.63	0.10	0.64	0.11	0.68	0.07
Political Concentration Index (1875-1895)	105	-0.55	0.10	-0.53	0.10	-0.57	0.09	-0.54	0.09	-0.60	0.08
<i>Share of population in each category, 1918 census (in percent)</i>											
Clergy	107	0.06	0.12	0.08	0.16	0.04	0.04	0.04	0.04	0.11	0.20
Armed Forces	107	0.10	0.59	0.16	0.81	0.04	0.19	0.09	0.65	0.14	0.36
Bureaucracy	107	0.43	0.38	0.49	0.48	0.37	0.23	0.37	0.22	0.52	0.45
Literate	107	26.0	10.1	28.3	11.7	23.6	7.6	24.3	8.9	29.3	12.1
Goes to school*	107	24.6	26.4	27.9	33.8	21.3	15.5	20.7	12.7	37.6	53.1
Vaccined	107	34.8	17.4	37.7	17.1	31.8	17.4	33.6	16.8	39.8	19.9
Date of foundation	107	1672	110	1668	111	1676	109	1685	108	1652	113

Notes: For variable definition and sources, see Data Appendix. Low ballot stuffing if below the median of Stuffed Ballots/Adult Males, High otherwise. *Ratio of population attending school to population from 5 to 14 years of age, in percent. All other ratios are relative to total population.

Table 3

Ballot Stuffing, coercion, and state presence in Colombia										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>Panel A. Dependent Variable: Log of 1+Stuffed Ballots/Adult Males</i>										
Clergy	-23.54*** (5.849)			-21.22** (8.797)	-20.57** (8.425)	-22.14** (9.147)	-16.74* (8.715)	-17.65* (9.244)		
Armed forces		-1.896 (3.517)		0.549 (4.204)		1.057 (4.822)	0.583 (4.265)	0.714 (4.088)		
Bureaucracy			-4.383** (2.110)	-2.95 (2.387)		-1.165 (2.667)	-3.348 (2.226)	-2.897 (2.412)		
Bureaucracy+Armed Forces					-1.253 (2.095)					
Foundation Date							0.182** (0.074)			
Vaccination rate								-0.0845 (0.054)		
Observations	546	546	546	546	546	530	530	546		
R-squared	0.17	0.16	0.16	0.17	0.17	0.18	0.19	0.18		
<i>Panel B. Dependent Variable: Coercion Dummy (=1 if any form of coercion)</i>										
Clergy	79.17*** (20.840)			71.82*** (21.490)	71.45*** (21.980)	53.09** (26.870)	66.77*** (21.850)	70.66*** (21.720)	66.80*** (22.810)	71.41*** (22.030)
Armed forces		6.969 (7.886)		1.17 (4.844)		-3.073 (2.411)	1.322 (4.693)	1.118 (4.858)	1.06 (4.732)	1.145 (4.824)
Bureaucracy			10.66* (5.872)	5.666 (5.025)		4.802 (5.762)	5.439 (5.019)	5.599 (5.021)	5.568 (5.027)	5.62 (4.997)
Bureaucracy+Armed Forces					3.104 (3.844)					
Foundation Date							-0.28 (0.189)			
Vaccination rate								0.0267 (0.114)		
Schooling rate									0.102 (0.151)	
Literacy rate										0.013 (0.180)
Observations	388	388	388	388	388	376	388	388	388	388
R-squared	0.10	0.07	0.08	0.10	0.10	0.07	0.11	0.10	0.10	0.10

Notes: OLS regressions with robust standard errors in parenthesis. Departmental dummies included. Column 6 excludes departmental capitals.

Table 4

Ballot Stuffing, coercion, and state presence in Cundinamarca										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>Panel A. Dependent Variable: Log of 1+Stuffed Ballots/Adult Males</i>										
Clergy	-35.80*** (8.138)			-22.69** (10.760)	-30.76*** (11.660)	-26.59*** (9.766)	-17.97 (10.890)	-11.11 (13.440)		
Armed Forces		-3.982*** (1.370)		-2.354 (1.925)	-2.704 (1.702)		-2.74 (2.019)	-1.421 (1.961)		
Bureaucracy			-12.90*** (3.593)	-10.06*** (3.416)	-10.78*** (3.598)		-9.934*** (3.490)	-9.612** (3.692)		
Bureaucracy+Armed Forces						-4.555*** (1.529)				
Foundation Date							0.224 (0.203)			
Vaccination rate								-0.251* (0.151)		
Observations	107	107	107	107	106	107	107	107		
R-squared	0.04	0.01	0.05	0.07	0.06	0.05	0.08	0.10		
<i>Panel B. Dependent Variable: Coercion Dummy (=1 if any form of coercion)</i>										
Clergy	124.4*** (30.400)			121.6*** (43.150)	145.0** (67.600)	131.5*** (32.420)	111.9** (46.130)	118.1*** (41.250)	103.8** (45.770)	110.1** (45.570)
Armed Forces		2.095 (6.040)		-3.065 (1.862)	-2.794 (1.922)		-2.693 (1.945)	-3.390* (2.011)	-3.662** (1.665)	-3.888** (1.936)
Bureaucracy			29.64* (15.840)	4.042 (18.520)	4.129 (18.380)		6.238 (18.670)	2.766 (19.540)	6.538 (18.220)	1.689 (18.850)
Bureaucracy+Armed Forces						-2.132 (3.011)				
Foundation Date							-0.255 (0.372)			
Vaccination rate								0.103 (0.246)		
Schooling rate									0.323*** (0.096)	
Literacy rate										0.361 (0.474)
Observations	101	101	101	101	100	101	101	101	101	101
R-squared	0.09	0.00	0.04	0.10	0.06	0.09	0.10	0.10	0.14	0.10

Notes: OLS regressions with robust standard errors in parenthesis. Column 5 excludes Bogotá.

Table 5

Ballot stuffing and coercion in Cundinamarca: state presence, and economic and political concentration									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A. Dependent variable: Log of 1+ Stuffed Ballots/Adult Males									
Land gini	-0.675*** (0.203)	-0.692*** (0.200)	-0.617*** (0.209)	-0.589*** (0.213)	-0.619*** (0.207)	-0.591*** (0.216)	-0.477* (0.257)		
Political concentration index	-0.467** (0.202)	-0.469** (0.211)	-0.440** (0.205)	-0.494** (0.203)	-0.508** (0.201)	-0.492** (0.208)	-0.526** (0.204)		
Clergy	-29.28** (13.03)			-24.86* (13.57)	-26.49** (13.32)	-25.01* (13.88)	-16.49 (15.75)		
Armed Forces		-3.071** (1.447)		-2.887* (1.576)		-2.863* (1.675)	-2.413 (1.574)		
Bureaucracy			-8.980** (3.957)	-8.032** (3.713)		-8.031** (3.727)	-8.372** (3.698)		
Armed Forces+Bureaucracy					-4.245*** (1.377)				
Foundation Date						-0.00943 (0.210)			
Vaccination rate							-0.186 (0.179)		
Observations	97	97	97	97	97	97	97		
R-squared	0.126	0.117	0.131	0.148	0.143	0.148	0.164		
Panel B. Dependent variable: Coercion Dummy (=1 if any for of coercion)									
Land gini	0.101 (0.303)	0.296 (0.323)	0.200 (0.327)	0.130 (0.339)	0.146 (0.314)	0.153 (0.355)	0.159 (0.365)	0.148 (0.333)	0.0763 (0.377)
Political concentration index	-1.024** (0.449)	-1.232** (0.473)	-1.128** (0.481)	-1.088** (0.480)	-1.093** (0.472)	-1.132** (0.534)	-1.093** (0.477)	-1.003** (0.466)	-1.093** (0.484)
Clergy	120.9* (63.30)			126.9** (63.18)	131.8** (62.16)	130.5* (66.52)	129.1** (62.46)	117.8* (64.06)	117.9* (66.13)
Armed Forces		-5.177** (2.108)		-5.796*** (1.932)		-6.166*** (2.317)	-5.677*** (2.094)	-6.088*** (1.813)	-6.314*** (2.118)
Bureaucracy			10.42 (23.08)	-2.036 (21.99)		-3.579 (23.37)	-1.679 (22.77)	0.878 (21.57)	-3.264 (22.32)
Armed Forces+Bureaucracy					-5.363* (3.188)				
Foundation Date						0.153 (0.487)			
Vaccination rate							-0.0504 (0.279)		
Schooling rate								0.299*** (0.0903)	
Literacy rate									0.255 (0.491)
Observations	91	91	91	91	91	91	91	91	91
R-squared	0.113	0.087	0.085	0.121	0.121	0.122	0.121	0.161	0.124

Notes: OLS regressions with robust standard errors in parenthesis.

Figure 1

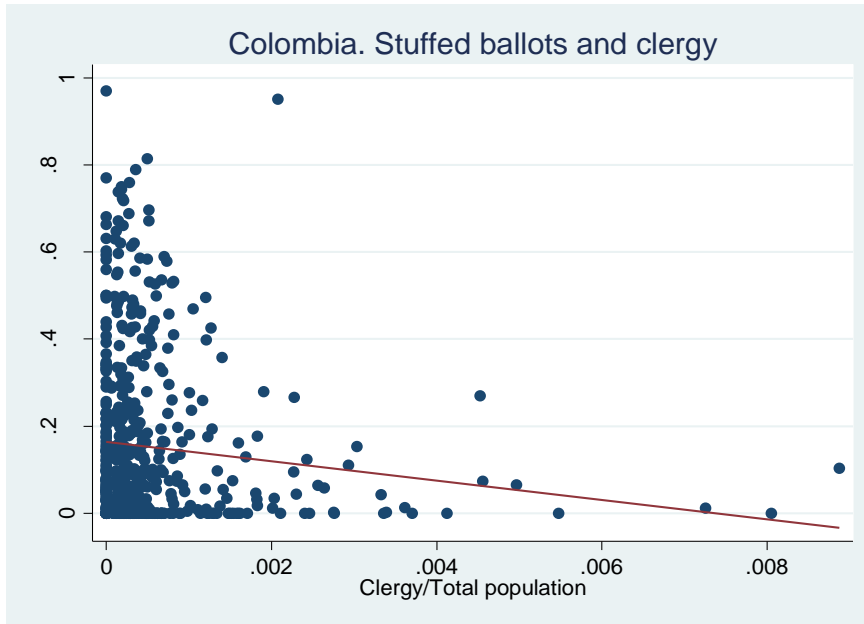


Figure 2

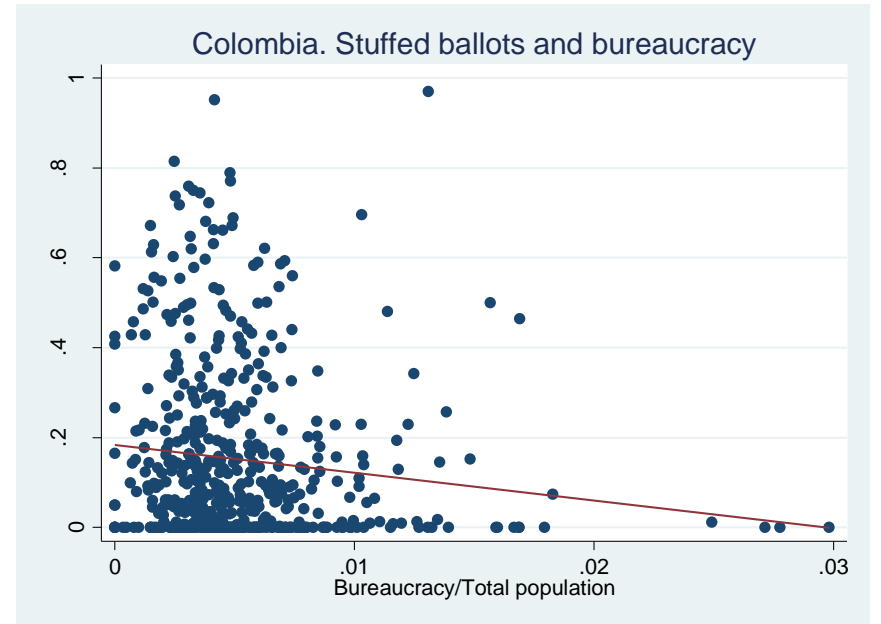


Figure 3

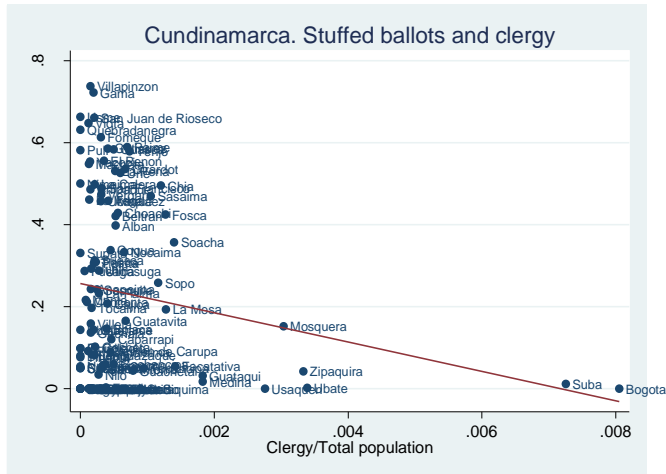


Figure 4

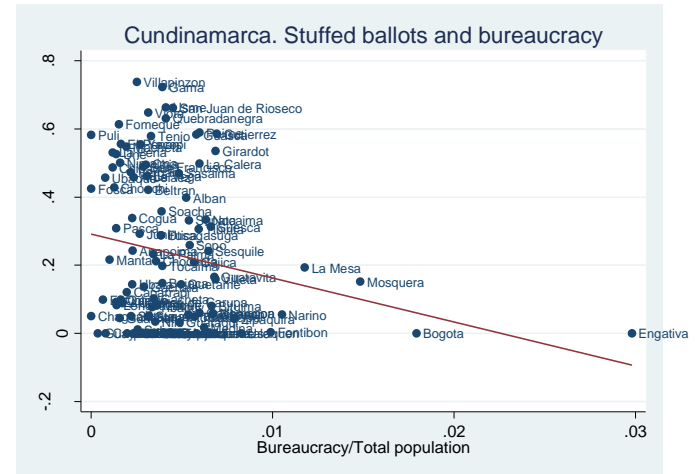


Figure 5

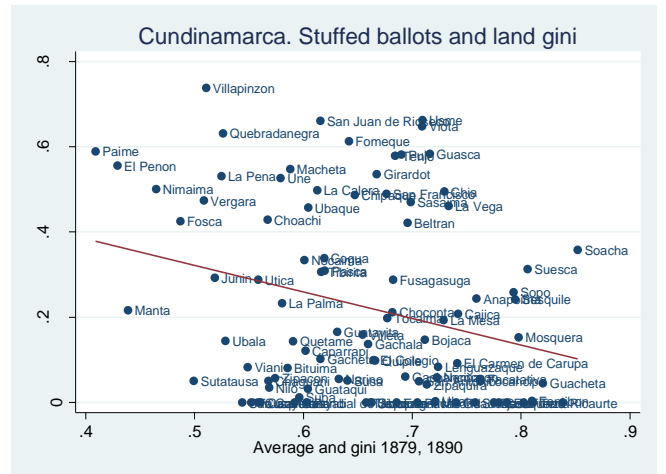
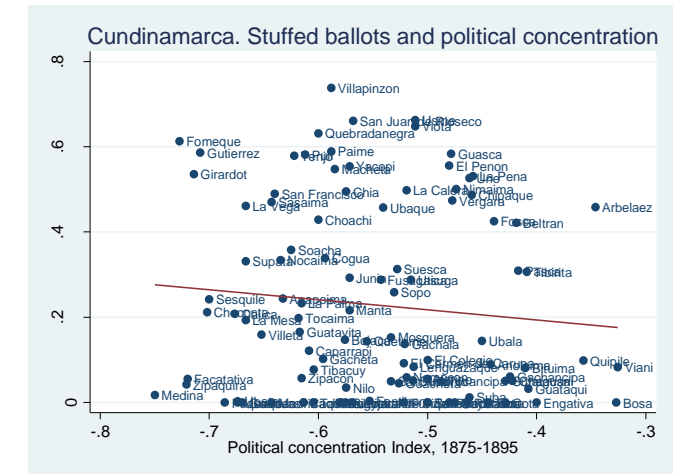


Figure 6



Data Appendix
(not for publication)

Variable Sources and Description		
Variable	Description	Source
Stuffed Ballots		
Stuffed Ballots	$\max\{0, \text{Total votes} - \text{Estimated Franchise}\}$	
Total votes	Votes cast in each municipality in the 1922 Presidential elections.	Telegrams sent by Consejos Electorales to the Gran Consejo Electoral. (National Archive, Asuntos Electorales)
Estimated franchise	Estimated literate male population over 19 in 1918 multiplied by 1.09. This corresponds to an adjustment for a yearly growth rate of 2% in population.	
Estimated literate male population over 19 in 1918	Male literacy rate * Male population over 19 years of age	1918 National Census
Male literacy rate	Literate male population to total male population ratio. Population with unspecified literacy distributed proportionally between the two groups. Available at the municipality level except from the department of Guajira, where the departmental rate, of 231/10591 was applied to all municipalities.	1918 National Census
Male population over 19 years of age	Male population over 19 years of age with population with unspecified age distributed proportionally between the two groups	1918 National Census
Coercion		
Coercion Dummy	Indicator equals to 1 if there is indication of (i) violence, (ii) intimidation or harassment, or (iii) arms distribution, and zero otherwise. Details of events included in (i)-(iii) below.	
violence	If the town had reports of violent clashes or violence against civilians. Limited to confrontations that actually result in people being injured or deceased.	Telegrams sent by Consejos Electorales to the Gran Consejo Electoral (National Archive, Asuntos Electorales), and liberal complaints summarized in <i>Los Partidos Políticos en Colombia</i> .
intimidation or harassment	If there are reports of authorities or organized Conservatives intimidating civilians: incarcerating Liberals, subjecting them to random searches and detainment, or other coercive measures to prevent Liberal propagandizing or activism. Includes "pedreadas" (throwing stones) to Liberal houses or establishments and mob violence.	
arms distribution	If there are reports of organized armed Conservatives who are not police or army; distribution of arms for these bodies. Activities of intimidation by these bodies.	

Variable Sources and Description continued

Other variables

Land gini in XIXth Century	For Cundinamarca only. Average land gini from 1879 and 1890, calculated only for rural plots.	Acemoglu, Bautista, Querubin, and Robinson (2008)
Political Concentration Index (1875-1895)	For Cundinamarca only. Political concentration for municipality m at time t is constructed as the (negative) of the ratio of the number of different individuals in power in such place and time to the number of mayor appointments. Very low political concentration (-1) indicates as many mayors as appointment opportunities, and high levels of concentration (close to 0) indicate a low ratio of people in power to number of appointments. The index is for the period 1875-1975	Acemoglu, Bautista, Querubin, and Robinson (2008) from the Diario Oficial de Cundinamarca.
Armed forces proportion	Ratio of armed forces agents to total population	1918 National Census
Clerical proportion	Ratio of religious ministers to total population	1918 National Census
Bureaucracy proportion	Ratio of public employees to total population	1918 National Census
Literacy rate	Literate population to total population ratio. Population with unspecified literacy distributed proportionally between the two groups.	1918 National Census
Schooling rate	Ratio of population attending school to population from 5 to 14 years of age	1918 National Census
Vaccination rate	Ratio of vaccinated population to total population	1918 National Census
Foundation date	Earliest known foundation date of the municipality	Bernand and Zambrano (1993)
Departmental dummies	Dummies for each department. Excluded departments are those with just a few municipalities (Arauca, Caquetá, Casanare, Choco, Guajira, Meta, Putumayo, San Andrés y Providencia)	
