

Suffrage Restrictions and the Reach of the Nation-State

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August 2019

Working draft

Abstract

I examine the politics of mass education before universal suffrage and the legacies of literacy-based political exclusion. Educational barriers to the vote created electoral incentives to spread literacy skills unevenly across geography and social constituencies, in order to selectively (dis)enfranchise the population. Social inequalities anchored in this politics could outlive suffrage barriers themselves, forming a durable link between historical partisan cleavages and the reach of the education system, a carrier of national identities and civic values. I test these arguments with original microlevel data on the expansion of mass basic education across Colombia throughout the entire twentieth century. Using primary sources, spatial analysis, and exploiting discontinuities across neighboring municipalities, I show that the Conservative Party and the Catholic Church historically leveraged literacy restrictions on the suffrage for electoral gain, with effects on educational inequality that persist into the contemporary period. The findings suggest that the territorial extension of the modern state was mediated by partisan calculation and restrictions on the franchise.

1 Introduction

Although “the modern state has been constructed to create a uniformity or universality to life within its borders” (Migdal 2001, 232; Scott 1998), its capacities often extend very irregularly across the physical and social landscape. This unevenness within national territories underpins regionally stratified social orders, creates major governance challenges, and ultimately empties the promise of equal citizenship rights that authorizes rule by modern central states (O’Donnell 1993; Tilly 1998). One such right is education, historically the first major social welfare intervention by the state in the mass of the population and a pillar of nation-building (Weber 1976; Marshall 1950). In developing countries, the expansion of education to the mass of the people took place mostly in the twentieth century, as governments implemented literacy campaigns, deployed teachers throughout their territories, and built public schools that became primary sites of state-society interaction.

Classic arguments associate the expansion of primary education with the requirements that capitalist economic change placed on the workforce, particularly basic literacy and numeracy. Mass schooling has also been considered a ruling-elite strategy to cultivate national cohesion in threatening international environments, meet the administrative demands of fiscal-military state-building, or discipline social behavior without constant recourse to physical coercion (Aghion et al., forthcoming; Darden and Mylonas 2016; Gellner 1983). Other dominant approaches link the construction of mass education systems to democratization and the extension of the franchise, which allowed popular constituencies to voice demands for increased public good provision (Lindert 2004; Stasavage 2005; Ansell 2010).

These prominent national-level arguments, however, overlook how partisanship and political competition shaped the subnational expansion of mass literacy before the onset of full-suffrage democracy. In political thought and practice, literacy and citizenship have been historically tightly intertwined. This study argues that under such institutional frameworks that conditioned voting rights on the ability to read and write, the expansion of basic education directly influenced electoral prospects, and thus inherently entailed partisan-political struggle. Parties and elites in conflict with each other had a large stake in the control and deployment of the means of education. Such intrinsically political motivations could have an independent impact on

the extension of educational opportunities, as well as modulate the socioeconomic, nationalizing, and international forces that in classic theories push toward the expansion of the educational apparatus of the modern state. This interaction between partisan-electoral competition and literacy restrictions on the suffrage, a near-universal institution in the global history of democracy, remains an undertheorized yet crucial chapter of the trajectory of mass education, representative government, and state-building.

This article investigates the political logic of literacy expansion under education-based qualifications for voting. It shows that partisan-electoral calculations anchored in this once virtually-universal barrier to political participation played an important role in preconfiguring the territorial and social reach of the nation-state in the era of mass democracy. I argue that literacy restrictions on the vote, a widespread and not-so-distant institution in the history of representative government that has nevertheless received less attention than property or gender qualifications ([Przeworski 2009a](#)), created incentives for political actors to strategically invest in educating some social groups and, conversely, restricting access to basic instruction for others. Given literacy barriers to the vote, education could be leveraged as a tool to shape the size and composition of the electorate, and thus to shift the balance of political power.

Limited voting rights could therefore induce sizable inequalities in access to basic education, with broad-ranging consequences. There are strong private and social economic returns to human capital, of which literacy is a core component ([Becker and Woessmann 2009](#)). Schooling also regulates socioeconomic mobility and status ([Restuccia and Urrutia 2004](#)). Moreover, basic education is the key tool of social integration, diffusion of civic values, and citizen socialization into a shared national creed ([Darden and Grzymala-Busse 2006](#); [Pritchett 2002](#); [Weber 1976](#)). The disparities produced in the early period of expansion of schooling under restrictive suffrage institutions were thus likely to shape economic prospects, future patterns of social stratification, and the very process of integration into national cultural life.

These educational inequalities could also persist over time. Unless explicit equalizing measures were adopted to close the gaps produced by intense party competition under suffrage restrictions, educational patterns would be predisposed to exhibit path-dependency, as certain territories and social constituencies would enter the era of mass democracy with larger accumulations of human capital and educational infrastructure. By shaping the extension of educational institutions across territory during decisive periods

of state-building, historical competitive axes or cleavages could thus continue to structure life chances and the actual reach of the nation-state in the long run.

I pursue these arguments through a comprehensive examination of subnational patterns of literacy expansion and education provision in Colombia. I exploit original and spatially disaggregated historical data on education provision down to the municipality level and spanning the entire twentieth century, when literacy and basic schooling were extended to the mass of the population. Prominent subnational analyses of the growth of literacy exist for Western Europe (Furet and Ozouf 1982), but parallel systematic studies have not been conducted for Latin American cases, where the process occurred later and more unevenly.

Three main reasons make Colombia an ideal setting to investigate how suffrage restrictions and historical partisan cleavages shaped state capacities for education throughout a national territory. First, two main political parties with origins in nineteenth century Liberal-versus-Conservative struggles fought historically for political hegemony, both in the battlefield *and* the ballot box. Since the argument concerns the effects of party politics and exclusive suffrage rules in competitive settings, a case with a long electoral tradition and no major authoritarian interludes provides an ideal testing ground.

Second, literacy restrictions on the suffrage were in effect nationally during a decisive period in the expansion of basic education, from the late nineteenth century to the first decades of the twentieth. A Conservative constitution (re)introduced literacy qualifications in 1886, setting the necessary institutional environment to examine the processes of theoretical interest. After half a century, a reformist Liberal government enfranchised all men in 1936.¹ Third, the country is well-known for the historically limited territorial penetration of state institutions, as well as deep subnational contrasts in public goods provision. With its highly uneven reach, the Colombian state is an archetypical illustration of the enduring social and institutional effects that could result from the combination of suffrage restrictions and sharp partisan divides.

Drawing on primary qualitative evidence and several quantitative identification strategies, the article shows that the deep-seated fracture between Liberals and Conservatives that historically structured Colombian politics shaped the extension of the educational apparatus and literacy skills across Colombia's

¹Universal male suffrage existed in Colombia between 1853-1863, a period of political polarization and electoral mobilization that likely contributed to the early consolidation of mass partisanship. A federal constitution in 1863 devolved suffrage rights to the states, several of which reinstated wealth and/or literacy qualifications. The Conservative unitary constitution of 1886 reintroduced literacy and property requirements at the national level, until 1936. Women obtained the vote only in 1957.

territory. In close alliance with a powerful Catholic Church and enjoying monopolistic control over the state apparatus for a long period until 1930, the Conservative Party established the building blocks of the Colombian education system. I document that before the introduction of universal male suffrage, the spread of literacy was markedly uneven across the partisan divide, with comparatively greater state and Church efforts devoted to politically aligned areas in order to expand the ranks of the Conservative electorate. Conversely, historically Liberal areas remained comparatively under-served, so as to limit the pool of eligible Liberal voters.

I also track the legacy of literacy-based political exclusion and show that despite narrowing in recent decades, the literacy gap that emerged between Conservative and Liberal municipalities persisted throughout the century of mass education and into the contemporary period. Hence, the geography of state capacity, patterns of inequality, and Colombians' *de facto* access to the rights of citizenship remain partly grounded in the political cleavages of the era of limited democracy.

The remainder of this article proceeds as follows. The next section discusses the prevalence of literacy qualifications in the history of the suffrage. Section 3 then advances the theoretical argument that, as a method of selective (dis)enfranchisement, literacy barriers shaped the territorial extension of state institutions and cemented durable subnational inequalities in education. Section 4 outlines the history of state-building and mass education in Colombia. In section 5, I discuss qualitative evidence consistent with strategic political-electoral manipulation of literacy restrictions by Conservative elites and the Catholic Church. Sections 6 and 7 present the data and document persisting spatial inequalities in the reach of the education state that mirror the historical partisan Liberal-Conservative divide. The conclusion draws broader implications for the study of democratic institutions and state-building.

2 Literacy Barriers to the Suffrage

Given the centrality of the class cleavage in the history of democratization, economic restrictions on the suffrage, in the form of property, income, and tax-paying requirements have been a natural focus of scholarly attention (Acemoglu and Robinson 2000; Przeworski 2009a; Ziblatt 2008). These studies shed light on how

redistributive conflict between economic elites and the poor historically shaped the expansion of voting rights. Historically, however, literacy requirements were at least as widespread as economic barriers to voting, and sometimes more durable. In the United States, property barriers were eliminated early compared to the rest of the Americas (Engerman et al. 2012), but literacy tests are part of a well-known history of voter suppression. Several states maintained literacy tests well into the twentieth century, directed against the African American population, Asians, and new European immigrants. Noticeably, literacy-based political exclusion was not confined to the South.²

In Latin America, virtually all countries historically restricted the vote to literates for most of the nineteenth century. Throughout the region, literacy qualifications were at least as durable as those based on property or income, in fact outliving them in several cases (see Engerman and Sokoloff 2005, Table 3). Colombia lifted all restrictions to male suffrage in 1936, but countries like Chile, Brazil, Ecuador, Bolivia, and Peru continued to deny political rights to illiterates for almost the entire twentieth century.³ The restriction of voting rights to those who could read and write thus remained a source of political exclusion throughout the Americas even after economic—and sometimes also gender—restrictions had been lifted. Coupled with the late development of primary education systems and high rates of illiteracy, this barrier *de facto* disenfranchised large segments of the Latin American population historically.

Of course, the same class and racial fears that underlay economic barriers were typically behind educational requirements. However, literacy qualifications opened an alternative set of justifications for voter exclusion, either to supplement or replace arguments in favor of the *régime censitaire*. The notion that responsible citizenship and meaningful participation in collective affairs required reading competency was premised on Enlightenment ideals of individual autonomy and rational public deliberation, of which the illiterate were deemed incapable. Summarizing this view, a prominent member of the Colombian constitutional assembly that reintroduced literacy qualifications in 1886 noted that “the only thing that can provide guarantee of a sound election is that the voter can read and write; this is what in reality distinguishes the civilized man from the savage” (Constituyente 1913, José María Samper, 344). Such kinds of intellectual justifications were

²Seven southern and nine nonsouthern states introduced literacy requirements between 1889 and 1926, joining Connecticut and Massachusetts (Engerman and Sokoloff 2005). The scale of voter exclusion due to this restriction was lower in the US than in the rest of the continent given comparatively high literacy rates.

³The restriction was lifted in 1952 in Bolivia, 1970 in Chile, 1978 in Ecuador and Peru, and 1985 in Brazil (Engerman and Sokoloff 2005).

common among elites in Colombia and elsewhere, and they played an important role in sustaining literacy barriers independent of other criteria of exclusion, even if serving the same social class and racial agendas.

3 Parties Choosing Voters: Suffrage Restrictions and the Uneven Expansion of Literacy

The palpable redistributive basis of conflicts over suffrage institutions should not blind us from other important political processes unfolding around institutional barriers to the vote, nor from the *effects* of such restrictions in addition to their causes. Rather than asking why suffrage expansions occurred, this article reverses the question and examines the consequences of suffrage institutions.⁴ Studies that analyze suffrage rules as an independent variable have typically focused on their effects on turnout, party fortunes, or the incidence of election fraud (Kuo and Teorell 2017; Przeworski 2009b).⁵ I extend this line of research to social inequalities and the reach of state institutions, in particular the apparatus of primary education.

Building on accounts that emphasize the importance of *political* inter-elite competition and partisan electoral goals in franchise reform (Collier 1999; Teele, forthcoming; Ziblatt 2008), I argue that literacy qualifications made the extension of educational opportunities subject to strategic electoral calculation. By selectively targeting literacy instruction, politicians could *choose* voters, rather than simply being *chosen by* voters.

As long as electoral contests remained meaningful mechanisms, manipulating access to basic instruction implied redrawing the lines of eligible voters and was thus a means of influencing the allocation of political power. Indeed, it held the potential of decisively altering electoral chances. Within this broad method of (dis)enfranchisement, strategies could take the form of voter *mobilization* or *suppression*. On the one hand, elites could obtain an electoral boost by spreading literacy disproportionately among likely supporters in stronghold areas. On the other, literacy qualifications made the under-provision of basic schooling to potential opponents a viable tool for capping the vote of competitors. Each of these approaches demanded

⁴These questions are of course two sides of the same coin, as suffrage institutions are devised precisely in anticipation of certain electoral effects.

⁵Others have examined how suffrage institutions shape economic policies and growth, and vice versa (Llavador and Oxoby 2005).

varying degrees of institutional and financial effort.

The least costly strategy to take advantage of literacy restrictions consisted in restraining the supply of basic education among those expected to support partisan rivals. Such politically-calculated neglect is an important, but often overlooked angle of the politics of state-building: just as politicians may under-utilize existing state capacity in order to outperform their partisan competitors—“forbearance” (Holland 2016), they may strategically nip its development in the bud, out of the same motivations—negligence.

The flip side of this strategy consisted in increased investments in basic schooling directed toward enfranchising expected adherents. In contrast to calculated neglect, such investments were costly and required foresightedness. Yet actions like targeted adult literacy campaigns offered relatively immediate payoff, indirectly increased access for younger generations, and could directly stimulate demand for expanded educational opportunities. Further, if electoral incentives in general stimulate public goods provision—including primary education (Stasavage 2005)—under universal voting rights (Lake and Baum 2001), there is all the more reason to expect such effect when provision demarcated the very boundaries of the electorate (and hence decided political fortunes).

An additional disadvantage to a mobilization strategy lied in the non-zero probability that educational investments would fail to bind voters to the “right” party. In light of this commitment problem, mobilization inherently entailed higher risk than suppression. Ruling elites, however, could mitigate payoff uncertainty by focusing on stronghold areas and controlling not only the *supply* but also the *content* of basic education, which childhood socialization theories—along with regimes themselves—expect to have a formative effect on political dispositions (Darden and Grzymala-Busse 2006; Pritchett 2002).

In contexts of intense and prolonged partisan enmity, (selectively) expanding basic education could thus well be relied upon for constituency-building. Finally, partisan operatives and their civil society allies could also recur to a mix of strategies or midway approaches. These included targeted literacy workshops and itinerant campaigns, akin to voter registration drives.⁶

Common as the temptation to exploit literacy barriers electorally might have been across parties and

⁶Literacy tests typically consisted in writing one’s own name or reading a short passage, which made a minimal level of competency sufficient. Biased enforcement constituted another possible form of manipulation of literacy requirements for partisan gain. Liberal complaints about this type of discrimination on the part of Conservative governments also exist for Colombia, as discussed below.

politicians, however, not all possessed the power, infrastructure, and resources necessary to put it into practice. Opportunity was as important as the desire to act on these incentives.⁷ The above strategies were most available to those with access to and control over infrastructures that could organize and deploy educational effort. These included two main, analytically distinct but potentially overlapping segments of the political elite: first, those already in control of the state apparatus, who could harness it to achieve their partisan goals; second, those enjoying the support of extensive civil society institutions with the infrastructural capacity to serve as education delivery mechanisms, most prominently churches.

Long-term consequences of literacy-based disenfranchisement

The strategic game of expanding (and suppressing) literacy and public schooling where the ability to read and write was a precondition for voting had potentially durable implications. In countries with a solid tradition of elitist electoral competition, territories and social constituencies favored by the manipulation of literacy barriers lay ahead of other discriminated regions and social groups at the onset of full-suffrage democracy. All else constant, equal treatment in access to education from then on (once the electoral incentives built into literacy requirements had been removed) would perpetuate subnational educational gaps by the force of inertia. The existence of switching costs inclines institutional patterns toward stability (Pierson 2004). In order to break path-dependence, countries needed to adopt compensatory measures, now favoring those regions and citizens who lagged behind under limited democracy.⁸

Absent such catching-up policies, strategic partisan use of literacy barriers to the vote would leave a legacy of entrenched spatial and social disparities in human development. The rise of mass literacy constitutes one of the most important processes of historical social change, given the literacy's politically enabling effects, economic returns, and intrinsic value (Sen 1999). Further, parties' efforts to choose voters through the selective provision of basic education held implications for the actual reach of the nation-state. The expansion of literacy and schooling are inextricably linked to the construction of national identities, the

⁷I am borrowing from theories of contentious politics that call attention to the organizational prerequisites of collective action (McAdam et al. 2001).

⁸Other countervailing forces may facilitate convergence. Theoretically, however, it remains true that all else equal, spatial inequalities in education provision anchored in a literacy qualification would tend to persist after the qualification was lifted. I evaluate persistence empirically below.

socialization of individuals into citizenship, and the integration of diverse social groups and territories into a common culture (Anderson 1983; Rokkan 1999). The pursuit of partisan supremacy during the era of limited democracy could thus shape the very process of building the nation-state throughout a territory.

4 Partisan Competition and State-building in Colombia

In-depth, historically-oriented studies that exploit fine within-country variation using contemporary methods can illuminate enduring questions about the development of states and democratic institutions (Capoccia and Ziblatt 2010; Putnam 1993; Slater and Ziblatt 2013). I concentrate on the case of Colombia to analyze how one of the most prevalent historical barriers to political participation across competitive regimes shaped patterns of social stratification and state-building.

Two central empirical properties make Colombia fall right within the domain of the theory elaborated above, allowing its use as a crucial case (Gerring 2007).⁹ First, Colombia displays a largely uninterrupted electoral tradition, by which Liberals and Conservatives successfully closed off the electoral market and intensely vied for hegemony since the nineteenth century, under different suffrage arrangements; second, a strong historical alliance between the Conservative Party and the Catholic Church, which allowed the former to capitalize upon the infrastructural and social power of the latter. I discuss each of these elements in turn.

As in the rest of Latin America, a liberal-conservative antagonism emerged in Colombia after independence in the early nineteenth century, rooted in elite disputes about centralization and the place of religion in public life. The two-party system that formed around this cleavage achieved remarkably high levels of institutionalization. The Colombian Liberal and Conservative parties, oligarchic and internally-heterogenous clientelistic machines spearheaded by local notables, became the most durable party formations in Latin American history. The parties resisted the wave of popular politics that transformed other systems between the 1920s and 1940s and dominated electoral politics until the early 2000s (Roberts 2014).

Before any substantial state-building or even territorial consolidation (the country's current boundaries were only defined in 1903 with the separation of Panama),¹⁰ Colombian politics acquired a Schmittian,

⁹See (Ziblatt 2008) for a similar empirical application.

¹⁰On the weakness of the nineteenth-century Colombian state, see (Deas 1982; Saylor 2014; Soifer 2015).

in-group-versus-out-group logic around party lines (Dix 1987; Oquist 1980). Importantly, partisan loyalties did not remain confined to the elite but were precociously “massified” through the spiral of grievances produced by nine major partisan wars in the nineteenth century, the last and most bloody of which was the Thousand Days War of 1899-1902. When victorious in elections or wars, each party thoroughly colonized the state apparatus and employed it as a weapon to achieve supremacy. Ordinary citizens, who were typically caught in tight partisan patron-client networks, suffered systemic discrimination and harassment from state authorities whenever the out-party held power. Such factious use of the state raised the stakes of electoral competition and further hardened partisan identities, fueling new rounds of violent confrontation. Party labels themselves became the dominant sources of group identification and grew into “hereditary hatreds” that governed social life well beyond the political sphere.¹¹

The emergence of intense, polarized partisanship before a minimally effective state represents a crucial aspect of Colombia’s political development. Because of this historical sequence, state development itself became strongly conditioned by the intensity of domestic partisan disputes. Scholars have argued that the consolidation of political parties before the rise of professionalized bureaucratic structures produces chronic clientelism (Shefter 1994). Building on this insight on the importance of sequencing in state and party development, I argue that the Colombian case illustrates how early societal polarization along party lines may hinder the coherent territorial development of state institutions and turn the state into a selective provider of *club* goods, rather than *public* goods.

Two main processes linked deep partisan polarization to uneven state-building. First, measures to strengthen the state were typically part of a staunchly partisan project designed to achieve out-party subordination, rather than a response to a foreign enemy as in bellicist theories of state-building (Tilly 1992). Second, parties’ factional use of the governing apparatus heavily conditioned state-citizen relations—it blurred the distinctions between political affiliation with the party in opposition, on the one hand, and resistance to the state, on the other.

Yet another key factor keeping partisan divisions alive was an “unending succession of [electoral]

¹¹The widely-used description of Liberal-Conservative identities as inherited hatreds is attributed to Miguel Antonio Caro, a doctrinaire Conservative intellectual and politician who governed from 1894 to 1898.

campaigns” (Safford and Palacios 2002, 249). Elections were celebrated routinely throughout the nineteenth century, with universal male suffrage between 1853 and 1863 (see footnote 1). After a federal period in which states adopted their own suffrage rules, literacy restrictions were re-introduced for national presidential and legislative elections in the Conservative constitution of 1886. Under this centralist constitution, the president was elected indirectly every six years, and directly every four years after 1910.¹² The lower chamber was also elected directly every four years. In contrast, all males voted for local legislatures and municipal councilors every two years. Hence, local machines remained constantly active, recurring to patron-clientelism, voter intimidation, and various forms of electoral manipulation to maintain dominance (Posada-Carbó 1997).

The thorough “partidization” of the state apparatus left the party in opposition unable to win the presidential office unless factional splits within the incumbent party prevented it from coordinating around a single candidate. This is how Liberals lost power in the late 1870s, returned to the presidency in 1930, and lost again in 1946. Under normal circumstances, the opposition party anticipated defeat and often abstained from presidential elections, invoking a lack of guarantees (e.g. 1914, 1918, 1926, 1934, 1938, 1949). As a result, parties could remain in control of national power for long periods despite the presence of a balanced two-party system. Importantly for the rise of educational inequalities along party lines, Conservatives dominated the state for almost half a century until electoral defeat in 1930, six years before the abolition of literacy restrictions on the vote.

The strategic use of literacy qualifications on the suffrage for partisan gain occurred in this context of entrenched partisan animosity. Conservatives, however, were uniquely positioned to politically exploit literacy barriers for electoral gain. In addition to achieving control over the state after defeating the “Radical” faction of Colombian Liberalism in the civil wars of 1885 and 1899-1902, the Party enjoyed the unequivocal support of the Catholic Church. Religious issues were at the core of the Liberal-Conservative cleavage. Roman Catholicism dictated the programmatic outlook of the Conservative Party, and legitimated it as a moral force. The party’s founding elites “consciously chose the Church and Christianity as emotionally powerful symbols” to attract support from a pious population (Safford and Palacios 2002, 201). Further, the

¹²The unitary character of the 1886 Constitution reinforced the winner-take-all character of the political system. The president appointed governors who in turn appointed mayors, with the result that the entire state apparatus could monolithically turn Liberal or Conservative.

Church was not shy about stepping into the electoral arena. Parish priests helped mobilize the Conservative vote and “indoctrinate[d] the faithful with a partisan political catechism” (286).

Because Conservatives ultimately emerged victorious from the partisan wars of the nineteenth century, the Church also retained near-full control over the design and operation of educational institutions (Helg 1987). Although Radical Liberals attempted to secularize schooling and curtail Church privileges during the 1860s and 1870s, the Conservative constitution of 1886 and the Concordat of 1887 restored the organic linkages between the Church and the Colombian state. Clergy retained the prerogative of training and supervising teachers, as well as designing the curricula and textbooks. In accordance with Vatican policy, public education was free but not mandatory.

In short, the Church—to some extent more of a national institution than the state itself—served as a territorially-extensive organizational carapace for Conservative Party politics. Like other denominational parties elsewhere (Kalyvas 1996), Conservatives could rely upon the Church’s personnel and infrastructure, which stretched across the Colombian countryside and often reached areas of thin to null state presence, to obtain competitive advantages. Liberals, in contrast, lacked an ally in civil society with equivalent organizational muscle. Overall, with their control over the public education system and their capacity to leverage church-based networks, Conservative elites were uniquely positioned to use literacy qualifications on the vote for electoral gain.

5 Electoral Calculation and Literacy Barriers: Qualitative Evidence

Did Colombian parties and politicians realize that selective educational expansion could be electorally advantageous? The theory advanced above implies that elites envisaged suffrage institutions as tools to shape electoral outcomes and, more specifically, understood (and acted upon) the electoral incentives embedded in literacy barriers to the vote. Qualitative evidence derived from congressional debates and other primary sources, along with the timing and sponsorship of franchise reforms, support these logical premises.

“Smoking gun” evidence that Conservative elites were aware of how literacy barriers could be exploited

electorally can be found in the writings of José Vicente Concha, who served as president from 1914-1918, during the Conservative Hegemony. A noted Conservative lawyer, Concha observed that “when a certain degree of instruction is required to exercise electoral functions, the class in control of government is given a motive to keep the number of voters who do not belong to that class from growing, from which results that public instruction...not only will not receive the support of these ruling classes, but will find them to be an obstacle, or at least indifferent” (1923, 60). Although the argument is presented here in terms of “class,” we can easily substitute with *party*. In any case, Concha articulates here the incentives regarding the education of co-partisans and out-party supporters for those in power.

Liberals were also conscious of the strategic electoral considerations intrinsic to literacy barriers. Already in the mid-nineteenth century, Liberal Bogotá craftsmen founded the Society of Artisans. The Society became “the model for liberal political mobilization of the popular classes” and, revealingly, focused its activities “on literacy instruction to expand the ranks of their voters” (Safford and Palacios 2002, 199). Liberals and their secondary associations were reacting to their opponents strategy and vice versa, in dialectical fashion. Yet, the capacities of such Liberal social organizations paled in comparison with those of the Church, which officially ran the public education system and participated in the coordination and implementation of *ad hoc* anti-illiteracy campaigns.¹³

Further evidence of the electoral use of literacy barriers lies in Liberal complaints of discrimination in schooling, as well as of biased enforcement of suffrage rules. In 1935, prior to the extension of voting rights, the Liberal Directorate of a predominantly Conservative municipality of the Huila department telegraphed a message alerting the National Congress of “a real political-religious war,” systematic Conservative harassment, and Church electioneering. Liberals denounced the parish priest of Acevedo for “standing at the school’s door to impede the entry of [Liberal] children” along with municipal councils of Conservative majority for “rapidly suppressing budget appropriations for urban schools, so that schools must be closed.”¹⁴ The Liberal Congress passed in 1936 legislation explicitly prohibiting any type of discrimination in school enrollment.¹⁵

¹³Municipal boards created to spread literacy, for example, were formed by the mayor, five citizens, and the parish priest. See Decree 722, 1940. Ministerio de Educación. *Diario Oficial* 24340.

¹⁴Anales del Senado, n.96-97, October 19, 1935, p.806.

¹⁵Law 32 of 1936.

Biased enforcement of literacy requirements was a complementary strategy to capitalize suffrage rules for electoral gain. In defending the expansion of the suffrage in the constitutional debates of 1935-36, Liberal congressmen expressed that “the Electoral Juries my deem literate the co-partisan who can barely scribble his name, and illiterate the supporter of the opposite party who fails to read a confusing manuscript in a foreign language.” Moreover, “during the half century of Conservative domination it became clear that [property and literacy] requirements were only made effective for Liberal voters.”¹⁶ Still, members of the more conservative wing of the Liberal Party defended literacy restrictions—unsuccessfully—ahead of the 1936 reform in these terms: “Apart from being reasonable...there is another reason to demand from voters the ability to read and write before they can participate. Seeing a large part of their masses barred from the ballot box, the *egoism of the parties* gives them resolve to habilitate them to exercise the vote, contributing to the eradication of illiteracy among the people.”¹⁷

Finally, a comparison of literacy and gender restrictions illustrates the importance of electoral calculations in determining party positions about suffrage rules. Liberals resented Conservative exploitation of literacy barriers and anticipated direct electoral gains from enfranchising the mass of illiterates. Thus shortly after winning the presidency in 1934, a uniformly Liberal Congress opened constitutional debates to reform the Conservative constitution and abolished literacy restrictions in 1936.¹⁸

However, the same Liberal elites anticipated losses from enfranchising women, and thus denied them the vote despite existing legislative proposals to the contrary.¹⁹ A prominent Liberal leader reasoned that “in countries [like ours] where religion heavily influences the private and public conduct of women, the female vote may severely threat the interests of democracy.” Another Liberal representative plainly asserted that “the proposal must at present be rejected, on the basis of the interests of Liberalism.”²⁰ Such mixed enfranchising strategy constitutes another piece of evidence that suffrage institutions were subject to elite

¹⁶Anales de la Cámara de Representantes, n.52, September 20, 1935.

¹⁷Anales de la Cámara de Representantes, n.12, August 3, 1935.

¹⁸The Conservative Party was still in disarray after its 1930 defeat and abstained from the 1934 elections to delegitimize them. Liberals had not been unambiguously supportive of universal male suffrage, especially after unexpectedly losing a presidential election with universal male suffrage in 1856, an outcome they attributed to the Church (Tirado Mejía 1981, 424). By the 1930s, however, the progressive wing of Liberalism was reaching out to a growing urban working class and calculated that enfranchising illiterates, along with pro-labor policies, land reform, and social legislation would help them consolidate a popular coalition.

¹⁹Representative Anselmo Gaitán proposed to adopt universal suffrage irrespective of gender, property, or education in 1935.

²⁰Anales de la Cámara de Representantes, n.101, November 19, 1935. Consistent with this account, a new constitution drafted during the extremist Conservative presidency of Laureano Gómez expanded the vote to women. Gómez was overthrown in a coup before the constitution was enacted, but the short-lived military dictatorship nevertheless enfranchised women in 1957.

electoral calculations. In reforming them, Liberals were responding not to an unqualified commitment to broad political participation, but to their rivals' relative ability to leverage different suffrage barriers for their own gain.

Political elites were therefore keenly aware of the electoral uses of literacy requirements and of suffrage institutions more broadly. Having established the historical plausibility of the theory, I now test whether "the egoism of the parties" systematically shaped literacy expansion across Colombia and uncover the legacies of electoral competition under education-based political exclusion.

6 Data and Measurement

I compiled a novel historical dataset of Colombian municipalities using archival sources, census documents, and unexploited government records. Descriptive statistics of all variables can be found in the Appendix. The main indicator in the empirical analysis below is the municipal literacy rate, which I calculated using multiple censuses since the early twentieth century. Ideally, we would begin the analysis in the nineteenth century, but the inexistence of data for this period makes it impossible. However, access to education was so restricted in Colombia at the end of the nineteenth century that the analysis covers the transition to mass schooling and literacy since its very early stages.²¹

The first big push to reduce illiteracy took place between the 1910s and 1930s. The 1912 census, the first to survey literacy skills throughout the country, reported a very high illiteracy rate, of around 83% for the population above eight years of age (Helg 1987, 35). By the 1938 and 1951 censuses, illiteracy among those older than seven had been approximately halved, to 46.2% and 42.5%, respectively.

The dataset contains measures of the municipal literacy rate at eight time points: 1912, 1918, 1938, 1951, 1964, 1973, 1985, and 2005. These correspond to census dates. The data were coded from historical census documents, save a few exceptions.²² The literacy rate is expressed relative to the total municipal population in all years, with the exception of 1985 and 2005, where the denominator is the population above fifteen

²¹Circa 1900, primary school enrollment for the total population hovered around 3.5%, compared to 8.4% in Argentina or 5.3% in Chile. Large differences existed within Colombia. In the traditionally Conservative department of Antioquia, enrollment neared 6.7% in 1905, compared to only 4.1% in Tolima, 1.8% in Santander, or 1.2% in Atlántico (Ramírez and Téllez 2007).

²²1918 figures were obtained from Acemoglu et al. (2015). 1985 and 2005 come from the Centro de Estudios sobre Desarrollo Económico (CEDE) at Los Andes University.

years.²³

To complement the analysis of literacy, I also collected historical data on enrollment in public schools at the municipality level. Because literacy instruction could sometimes occur through itinerant campaigns or other *ad hoc* efforts, the use of this indicator tests for an association with permanent educational infrastructure proper. School enrollment rates are an accepted measure of state penetration, beyond coercive and extractive functions (Soifer 2015; Ziblatt 2006). The figures used in the analysis are for 1918 and 1957, just before the formation of the National Front (1958-1974), a bipartisan power-sharing agreement designed to stop partisan violence (Hartlyn 1988).²⁴ Finally, in addition to the contemporary measures of literacy, I use the total number of public schools per thousand citizens in 2005 to examine long-run legacies.²⁵

As a first approximation to the relationship between historical partisanship and educational outcomes, I classified municipalities as having a Conservative or a Liberal majority, using the average vote share for candidates of each party in the 1930 and 1946 presidential elections. As explained by a leading Colombian scholar, these two elections “present unique characteristics that make averaging them the superior alternative for measuring the traditional partisan identification of municipalities” (Oquist 1973, 67). Data are unavailable for the nineteenth century, and the party in opposition abstained in other years. In contrast, the 1930 and 1946 elections were contested by the two main parties, were untainted by major accusations of fraud, and produced democratic turnover.²⁶ Conservatives received more votes in 1930 but lost the presidency to the Liberals due to a split of their support base in two candidates. The exact opposite occurred in 1946. These are therefore the only two historical presidential elections from which accurate measures of partisan support can be obtained.

Support for each party at the municipality level is strongly correlated across the two elections ($N = 661$, $\rho = 0.75$, $p < 0.001$), confirming the stickiness of partisan identification and the very low levels of cross-cleavage voter mobility. Although support for each camp was balanced on the aggregate, only 18%

²³This change in the denominator creates minor comparability issues, but since my interest is in the trend followed by Liberal versus Conservative municipalities rather than absolute literacy rates, this is not a major concern.

²⁴The 1918 data are from the census. The 1957 data come from an official government report available in the historical collection of Colombia’s National Library [Ministerio de Educación Nacional \(1957\)](#).

²⁵Calculated using data from CEDE.

²⁶Recall that Liberals failed to run a candidate in 1914, 1918, and 1926, as did Conservatives in 1934, 1938, and 1942. The 1922 elections were full of irregularities (Posada-Carbó 1997).

and 20% of municipalities were competitive in 1930 and 1946, respectively, using an average electoral margin of less than 20 points as a generous threshold of competitiveness.

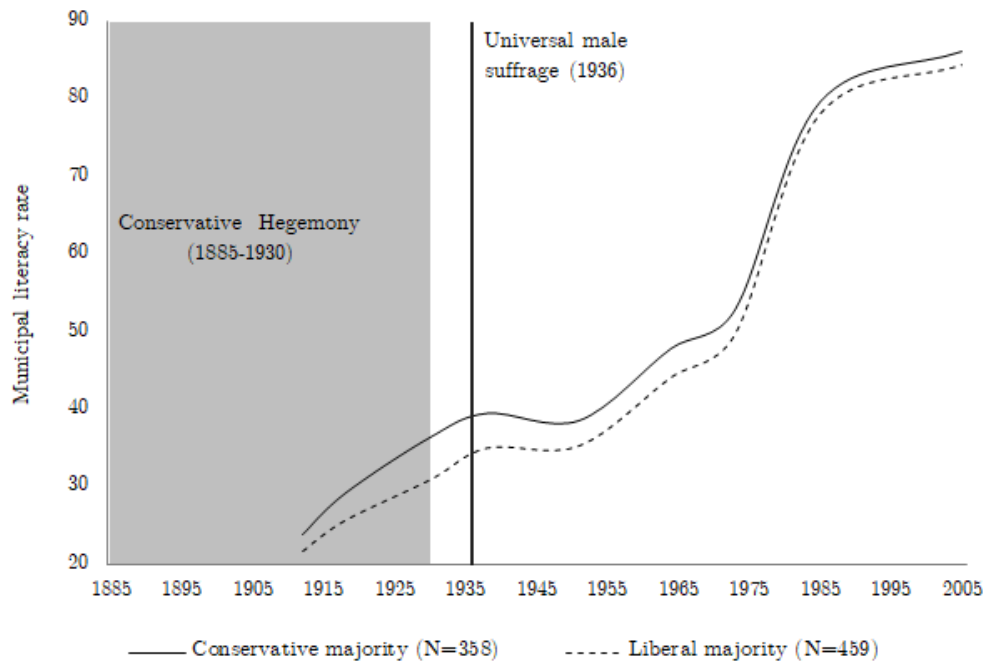
Figure 1 presents the unconditional relationship between the historical partisan leaning of Colombian municipalities and average literacy rates for various years from 1912 to 2005. Overall, the observed pattern is consistent with the argument advanced above. In all years for which data are available, there is a statistically significant (5% or lower) difference in the mean literacy rate for municipalities historically aligned with the Conservative versus the Liberal Party. A gap of around 2 percentage points is already visible with the first observable figures (1912). Although it cannot be tested with the available data, part of this initial difference already possibly responded to the electoral exploitation of literacy barriers by Conservatives up until that moment. Recall that nineteenth-century elections were competitive, a literacy requirement was reintroduced nationally in 1886, and Conservatives were dominant until 1930, with uninterrupted support from the Church.

The theory outlined above would expect a relatively limited expansion of literacy in Liberal municipalities to dwarf the Liberal electorate, and reversely a faster increase in Conservative areas. Consistently, when literacy qualifications are in force, the Conservative advantage in literacy grows to 3.5 points in 1918 and 4.5 in 1938 (just two years after Liberals enfranchised all men). A gap of this size involved hundreds of thousands of Colombians.

If we restrict the comparison to solidly Conservative versus solidly Liberal municipalities (>60% average support) on the basis that (under)investing in party strongholds mitigated risks of miscalculation, the observed advantage for Conservative municipalities reaches 5.7 percentage points in 1938. From then on, the difference slowly narrows, but persists, throughout the century of literacy expansion. Historically Liberal municipalities appear to start catching up at a faster pace after the dissolution of the National Front in 1974, but in 2005 they still trailed Conservative municipalities by about 1.8 points.

This unconditional comparison, while already suggestive, does not take into account municipal characteristics other than partisanship that may explain the observed pattern. I now evaluate the specific weight of partisan politics more formally.

Figure 1: Average literacy rate across Colombian municipalities by historical partisan affiliation



7 Empirical Strategy

The key identification problem in studying the relationship between the partisan composition of municipalities and subsequent educational achievement is that other municipal characteristics could explain both the relative strength of the parties *and* educational outcomes. An immediate question for an argument based on partisanship is what explains the distribution of partisan support. Leading Colombia scholars agree that support for Colombian parties did not reflect socioeconomic factors in any obvious way, whereas partisan labels themselves acquired autonomous weight as sources of identification (Pinzón de Lewin 1989; Dix 1987).

Both parties mobilized support from diverse cross-sections of Colombian society, and although some broad patterns exist, culturally, socioeconomically, and regionally equivalent towns or municipalities could fall on any side of the partisan divide. Weinert argues that “the identification of a town with one or the other party was probably accidental. It perhaps began with the association of a patron in the 19th century with one party, which implied the association of his peons with the same party... By the early 20th century, the original reasons for the association had died, but the association persisted, stimulated occasionally by strife

along party lines and partial mobilization for elections” (1966, 344).

The role of idiosyncratic factors and contingent historical events in determining the original partisan allegiance of villages and municipalities implies that, in the Colombian case, there is no obvious confounding variable when partisanship is the explanatory variable. Others have made a similar case (Chacón et al. 2011). Importantly, the fact that Colombia’s partisan geography had largely been established by the end of the nineteenth century, before literacy expansion or substantial state-building, alleviates the potential concern that patterns of literacy expansion themselves determined partisan allegiance.

Having made this initial point, I take five main steps in the main analysis to deal with the inferential challenge of isolating the effect of partisanship on educational outcomes from other factors. Additional robustness checks, using alternative identification strategies, are described later.

First, I estimate models with lagged values of the dependent variable to examine *change* within municipalities relative to a baseline, rather than absolute levels. This accounts for different initial conditions at the beginning of literacy expansion and cancels out the effect of any constant influences on municipal literacy. Second, I rely exclusively on variation within Colombian departments (the second level of government) to remove all observed and unobserved factors shared by municipalities located in the same department. This is done by estimating all models with departmental fixed effects. Third, I exploit changes in the partisan affiliation of municipalities from 1930 to 1946. In particular, I examine whether for the group of municipalities that shifted partisan allegiance across these two elections, access to literacy skills changed in ways consistent with the theory (i.e., whether municipalities that turned Liberal experienced less literacy growth than those that did not). This adds another temporal component to the analysis and removes potential bias from all municipal factors remaining constant across the two election cycles. Fourth, in order to adequately document and measure legacies, I estimate the relationship between historical partisan control and literacy at various intermediate time points in the twentieth century.

Finally, I collected detailed municipal-level historical data to account for alternative explanations and potential confounders. Existing arguments suggest that political institutions that give “voice” to ordinary citizens lead to the expansion of education (Lake and Baum 2001; Lindert 2004). This argument would expect a marked change in the trajectory of literacy after the elimination of suffrage restrictions in 1936. Figure 1

shows that substantial increases in literacy were already occurring before this broadening of the political voice (the 1938 census reported a literacy rate of approximately 54% for the population above seven years of age), and in fact expansion slows down for a period after literacy barriers are lifted. Other theories of democracy expect targeting of distributive benefits to swing areas (Stokes 2005). Below I include an indicator variable for competitiveness at the municipality level to evaluate whether they received greater educational investments.

Modernization arguments associate the expansion of mass education with urbanization and commercialization of the economy, which increase demand for literacy skills. This classic argument (Gellner 1983) has been made for Colombia (Urrutia 1976). In the models below, I include a range of control variables to account for the potential confounding effect of socioeconomic structure.

First, I add census measures of urbanization and (log) total population. Urbanization is a widely accepted measure of the socioeconomic forces behind the rise of mass education (Ansell and Lindvall 2013). I also include several covariates that capture Colombia's varying geography and simultaneously pick up aspects of productive structure and development. These include altitude (m), average annual rainfall (mm), surface area (km²), the share of land suitable for agriculture and livestock, and an indicator variable for department capitals.²⁷ Further, as a measure of economic and political centrality, I add the distance (km) between the municipal seat and the department's capital along the geodesic, calculated using geographic software.

Finally, it would be reasonable to believe that as the rise of mass literacy started its course, faster increases occurred in municipalities with an already stronger and more effective state overall. We could be wrongly attributing to partisan calculation under literacy barriers an outcome of preexisting across-the-board differences in state capacity. To alleviate this concern, I draw on original historical data on fiscal capacity and overall state presence across Colombian municipalities. Some model specifications add the number of public employees per 1,000 citizens in 1924 for each of the three levels of government, as well as (log) municipal tax revenues per capita in 1926.²⁸

²⁷Variables come from CEDE and the dataset compiled by Acemoglu et al. (2015).

²⁸Notice that levels of fiscal extraction per person also help control for wealth differences. I linearly interpolated the most proximate census figures to obtain yearly population estimates. Data on state employees and taxation were obtained from the 1924 statistical yearbook and historical reports from the *Ministerio de Hacienda y Crédito Público* (1927), respectively.

7.1 Empirical tests

Did Conservative governments and their Church allies target literacy instruction to strategically expand or suppress the electorate across Colombia? I begin by regressing the literacy rate in 1938 on the electoral strength of the Conservative Party in the municipality with departmental fixed effects. 1938 is the best available time point to evaluate the theoretical argument, given the introduction of universal male suffrage in 1936. It also represents the first time the census reported as literate the majority of the population above seven years of age (53.8%), a considerable improvement of the 1912 figure of 17%.²⁹ Conservative support is measured as the vote share received by the two Conservative candidates in the 1930 presidential election. Table 1 presents the results. Coefficients in all models are estimated via OLS.

Consistent with the theory, support for the Conservative Party in the municipality is positively and significantly associated with the rate of growth of the literacy rate in all specifications. Starting with column 2, all models include the 1918 figure as a control to account for baseline differences across municipalities.³⁰ Therefore, the models examine *change* in literacy *within* municipalities between 1918 and 1938, rather than absolute levels.³¹ Controlling for the lagged value of the dependent variable also removes all constant determinants of the municipal literacy rate, thus helping alleviate potential endogeneity.

The coefficient on Conservative support is thus interpreted as the size of the increase in the literacy rate between 1918 and 1938 associated with a one-percentage point increase in the Conservative vote share in 1930. This directly tests for a differential treatment of Conservative municipalities during a period of exclusion of illiterates. As expected, the coefficient on Conservative Party support remains positive and significant at conventional levels, indicating larger increases in literacy the more Conservative the municipality.

²⁹A map displaying the variation in the literacy rate across Colombia in 1938 appears in the Appendix.

³⁰Data are missing for the department of Magdalena in the 1912 census, which included municipalities in present-day Magdalena and Cesar. This decision is not consequential because literacy increased only marginally between 1912 and 1918 and all results are robust to using 1912 as a baseline.

³¹Notice that algebraically, the estimate for Conservative support is identical whether the 1918 literacy rate is included as a predictor or the dependent variable is specified as a first difference (1938 *minus* 1918).

Table 1: Conservative Party support and literacy expansion, 1938

	1938 Municipal literacy rate							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Conservative vote share (1930)	0.049*** (0.014)	0.033** (0.012)	0.040** (0.013)	0.055*** (0.013)	0.041** (0.014)	0.062*** (0.013)	0.034** (0.011)	0.045*** (0.013)
Lagged DV (1918 literacy)		0.482*** (0.059)	0.475*** (0.061)	0.401*** (0.060)	0.323*** (0.058)	0.270*** (0.056)	0.157*** (0.037)	0.131** (0.050)
Switched Con (1930) to Lib (1946)			-1.951* (0.867)	-2.116* (0.888)	-2.341** (0.859)	-2.871*** (0.852)	-0.488 (0.733)	-0.341 (1.152)
Competitive municipality (1930)				0.206 (0.806)	-0.294 (0.786)	-0.417 (0.762)	-0.060 (0.718)	
Log population (1918)				-0.039 (0.583)	-0.227 (0.594)	1.025 (0.657)	-0.723 (0.738)	-0.845 (1.053)
% urban pop (1938)				0.140*** (0.028)	0.139*** (0.028)	0.073* (0.028)	0.175*** (0.027)	0.237*** (0.039)
Municipal officials per 1,000 (1924)						0.742** (0.258)	0.662* (0.294)	1.117** (0.374)
Dept. officials per 1,000 (1924)						0.480 (0.262)	0.341 (0.248)	0.029 (0.326)
National officials per 1,000 (1924)						0.185 (0.213)	-0.094 (0.219)	-0.685* (0.341)
Log municipal taxes per capita (1926)						3.050*** (0.691)	1.478* (0.698)	1.706 (0.915)
Constant	49.007*** (1.487)	32.874*** (2.472)	33.315*** (2.557)	32.926*** (5.699)	40.096*** (5.942)	24.393*** (6.729)	36.769*** (8.411)	39.134*** (11.667)
Geographic controls	NO	NO	NO	NO	YES	YES	NO	YES
Departmental fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
Neighbor-pair fixed effects	NO	NO	NO	NO	NO	NO	YES	YES
N	672	644	631	631	622	603	914	558
R ²	0.46	0.60	0.60	0.63	0.66	0.69	0.79	0.75

Geographic controls include distance to the department capital (km), surface area (km²), altitude (m), department capital (dummy), average annual rainfall (mm), and shares of agriculture-suitable and livestock-suitable land. Parentheses contain heteroskedasticity-robust standard errors. The number of observations drops in some models due to the administrative creation or elimination of municipalities and missing values in some of the predictors. In columns 7 and 8 the estimation sample is formed by pairs of adjacent municipalities controlled by opposite parties (50% and 60% cutoff, respectively).
[†] $p < 0.1$ * $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

The fact that the 1938 figures technically include eight years of Liberal governments since 1930 may be a cause for concern. It is unlikely, however, that educational efforts in the short period Liberals had held power by the time of the census have a major impact on the estimates. Conservatives controlled the Education Ministry until 1934, as the moderate Liberal administration of 1930-1934 feared antagonizing a powerful Church (Helg 1987). Further, education and literacy campaigns continued to be mostly Church-led. Importantly, then, notice that Liberal efforts to close the partisan gap in literacy would bias the estimated coefficient for Conservatism *downwards*. Thus the coefficients are, at worse, lowerbound estimates.

Starting with model 3, I include an indicator variable for the 23% of municipalities that switched from a Conservative to a Liberal majority between the 1930 and 1946 elections, with the objective of evaluating whether this change in partisan affiliation was met with lower effort by Conservative and clerical operatives to expand literacy in these areas.³² This specification is yet more demanding in that it isolates the effects of partisanship in these municipalities from all observable and unobservable characteristics that remained constant over the time period, and that could be related to their literacy levels.

Changes in the partisan affiliation of municipalities across elections are explained by voter intimidation and the sectarian use of the state apparatus by the party in power, rather than conventional campaign effects (Guerrero 1991; Gutiérrez Sanín et al. 2007). Election results reflect the previous point. Between 1930 and 1946, with the Liberals in power, 154 (23%) of 661 municipalities switched from a Conservative to a Liberal majority, while only 10 experienced the opposite change. Between 1946 and 1958, with Conservatives back in the presidency, 17% of 772 municipalities switched to a Conservative majority, and none in the reverse direction.³³

Consistent with the argument of partisan bias in Conservative-clerical educational effort, the coefficient on the variable capturing municipal defection to the Liberal camp is negative and significant, while the coefficient on the Conservative vote share increases in size. Counterfactually, newly-Liberal municipalities

³²Recall that Conservatives controlled the Education Ministry until 1934. There is an obvious time issue in modeling literacy increases between 1918 and 1938 as a function of party switching from 1930 to 1946. I am forced to make this choice because Conservatives did not run a presidential candidate before 1946. This is not a major concern, however, given that Liberals reached power since 1930 and thus a “punitive” Conservative reaction against Liberalizing areas would already be reflected in the 1938 literacy figures. Additionally, models of growth in literacy between 1918 and 1951, which are unaffected by this issue, also show slower growth for formerly Conservative municipalities that defected to the Liberal camp.

³³Legislative election results for 1958.

would have observed an average increase in the literacy rate at least 2 percentage points larger between 1918 and 1938, had they not abandoned the Conservative ranks. A third of these 153 municipalities were located in the departments of Boyacá and the Santanders, which Conservatives would explicitly mention, in future debates about the origins of *La Violencia*, as sites where “triumphant Liberals had let loose persecution on the defeated Conservatives” starting in 1930.

Columns 4 to 6 progressively add controls to the specification in column 3. Column 4 includes an indicator variable for competitiveness, (log) of total population in 1918, and the share of the municipal population living in urban areas in 1938.³⁴ A prior measure of the latter variable would be desirable to minimize potential problems of post-treatment confounding, but it was first reported in the 1938 census. However, the 1938 figure is in all likelihood a good proxy for previous urbanization rates, because rapid urban growth in Colombia started only in the 1950s (Schoultz 1972).

Column 5 adds a full set of controls for geography and column 6 the pre-1930 measures of state presence relative to population for each of the three levels of government, as well as municipal fiscal capacity in 1926. The coefficients on both Conservative Party strength and the variable indicating change from Conservative to Liberal majority across elections remain stable and precisely estimated after the inclusion of controls. Based on the full specification in column 6, municipalities one standard deviation above from the mean in Conservative support (approximately 30 points) saw an *extra* increase of 1.85 points in the literacy rate. Those that switched from a Conservative to a Liberal majority experienced a 2.9 points smaller increase in the literacy rate than those that remained aligned with the same party.

As could be expected, urbanization is associated with larger increases in literacy, but no discernible empirical association is found for electoral competitiveness. Interestingly, once the partisan composition of municipalities is accounted for, fiscal capacity is positively associated with educational achievement. Yet notice that the coefficient on Conservative strength becomes *larger* with the inclusion of per capita tax revenues as a control, reflecting an underlying *negative* association between Conservatism and taxation.

In the Appendix, I include a table with average per capita tax revenues in municipalities across party lines for various years since the early twentieth century, and contrast it with literacy rates. Irrespective of

³⁴The population living in localities of more than 1,500 people is considered urban.

whether we focus on taxes collected by the national or local governments, total taxes, or direct taxes on income and wealth, tax extraction per person is significantly *higher* in historically Liberal municipalities in all years with available data (1926, 1940, 1950, 1964, 2005). In short, when looked through the lens of the partisan cleavage that structured the formation of the Colombian state, the “massification” of literacy followed an *opposite* pattern than the development of fiscal capacity, a key component of state power.

This pattern warns against the use of one-dimensional measures of the state and all-encompassing arguments about the development of state capacity. Under strong domestic polarization, the very logic of domestic conflict may produce contrasting patterns of state development across territory and functional domains *simultaneously*, a point I examine in detail in other work.

7.2 Long-run effects and other educational outcomes

The above findings document a sizable gap in literacy along the partisan cleavage across Colombia under limited voting rights. Did such gap persist? Is it also observable for alternative measures of educational achievement? The remainder of the analysis explores these questions. Following a new period of civil war, the two parties agreed to share the state and rotate the presidency during the National Front (1958-1974) (Hartlyn 1988). This was a period of educational expansion in which existing inequalities could have been corrected. Multiple reforms in recent decades have also broadened access to education, putting Colombia close to the objective of universal literacy and full coverage in primary education.

At the same time, governments and reformers continued to operate on the basis of inherited patterns and state infrastructures. Absent countervailing forces and explicit policies to redress educational inequalities rooted in the political exclusion of illiterates, we would expect patterns of literacy to exhibit path-dependence and outlive suffrage restrictions themselves. Educational outcomes across territory would thus inertially reflect the partisan struggles of the past.

Table 2 presents results for fully-specified models that examine the level of persistence in literacy differentials.³⁵ The dependent variables in columns 1 to 5 are the literacy rate in 1951, 1964, 1973, 1985, and

³⁵As before, results do not depend on the inclusion or exclusion of certain covariates. Only fully specified models are presented for reasons of space.

2005. Because here the measured outcomes are all post-1946, unlike above, I now use the average vote share in 1930 and 1946 to measure Conservative Party support. As discussed, this is the best available measure of the traditional strength of the parties in each municipality.³⁶ All models include the 1918 literacy rate as a predictor, which allows interpreting the results as the extent to which the partisan cleavage shaped the extension of literacy skills relative to a baseline year (when the literate formed a small elite). Excluding this lagged value of the dependent variable from the models produces larger and always statistically significant coefficients for Conservative strength (results not shown).

Regardless of the year examined, the conclusion is the same. There is a persistent difference in literacy associated with historical partisan politics. Under restrictions to the suffrage, Conservative municipalities experienced faster growth in education than those identified with the Liberal Party; the resulting gap remains visible a century later. The coefficient gradually decreases in size over time, indicating progressive legacy erosion. However, municipalities one standard deviation (27 points) above from the mean in historical Conservative support were still associated with an extra 0.7 points in the literacy rate by 2005.

Is the Liberal-Conservative inequality visible when we examine other outcomes? I now look at direct measures of the state's infrastructural penetration and the reach of the public school system. Teacher and school supply could be one of the channels through which partisan polarization and voting qualifications shaped literacy levels. Table 3 presents results for models examining relative *change* in school enrollment between 1918 and the 1950s, as well as in the number of schools per capita in 2005, as functions of the historical partisan affiliation of municipalities.

The dependent variable in columns 1 to 3 is the number of students enrolled in public primary schools in 1957, as a share of the municipal population. At this time, a major expansion of public education was already occurring (Ramírez and Téllez 2007). Column 1 presents the basic relationship with departmental fixed effects. Column 2 adds electoral competitiveness, socioeconomic variables, and the vector of geographic controls. Column 3 incorporates pre-1930 state presence and fiscal capacity. Columns 4 to 6 replicate the school enrollment models but with the number of schools per 1,000 people in 2005 as the dependent variable.

³⁶Results are nevertheless robust to measuring Conservative strength using the 1930 election only. Models are not shown given space constraints.

Table 2: Linear models of Conservative Party support and literacy expansion, 1951-2005

	Municipal literacy rate				
	1951 (1)	1964 (2)	1973 (3)	1985 (4)	2005 (5)
Conservative vote % (avg 1930 & 1946)	0.058*** (0.012)	0.054*** (0.010)	0.041*** (0.010)	0.031** (0.011)	0.026** (0.009)
Lagged DV (1918 literacy)	0.244*** (0.068)	0.196*** (0.050)	0.186*** (0.044)	0.122* (0.049)	0.108** (0.041)
Switched Con (1930) to Lib (1946)	-2.761*** (0.718)				
Competitive municipality (1930)	-0.393 (0.718)	-0.211 (0.602)	-0.186 (0.639)	-0.210 (0.737)	0.356 (0.605)
Competitive municipality (1946)		-0.347 (0.581)	-0.148 (0.645)	0.200 (0.692)	-0.017 (0.589)
Log population (1918)	0.622 (0.644)	1.010* (0.500)	1.331* (0.557)	0.736 (0.579)	0.185 (0.501)
% urban pop (1938)	0.080*** (0.024)	0.065*** (0.019)	0.068** (0.020)	0.045* (0.022)	0.024 (0.018)
Municipal officials per 1,000 (1924)	0.604* (0.243)	0.537** (0.184)	0.390 (0.206)	0.515** (0.197)	0.158 (0.194)
Dept. officials per 1,000 (1924)	0.721* (0.303)	0.336 (0.354)	0.335 (0.375)	0.558 (0.287)	0.132 (0.228)
National officials per 1,000 (1924)	0.143 (0.200)	0.089 (0.178)	0.125 (0.166)	-0.061 (0.136)	-0.016 (0.157)
Log municipal taxes per capita (1926)	3.309*** (0.603)	2.520*** (0.488)	2.459*** (0.543)	2.343*** (0.522)	1.869*** (0.463)
Constant	27.096*** (6.446)	29.614*** (5.259)	32.935*** (5.576)	68.961*** (6.140)	81.726*** (5.003)
Geographic controls	YES	YES	YES	YES	YES
Departmental fixed effects	YES	YES	YES	YES	YES
N	584	595	594	601	602
R ²	0.72	0.66	0.70	0.55	0.50

Geographic controls include distance to the department capital (km), surface area (km²), altitude (m), department capital (dummy), average annual rainfall (mm), and shares of agriculture-suitable and livestock-suitable land. Robust standard errors in parentheses.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3: Linear models of Conservative Party support and state capacity in education, 1957-2005

	Public school enrollment (1957)			Schools per 1,000 people (2005)		
	(1)	(2)	(3)	(4)	(5)	(6)
Conservative vote % (avg 1930 & 1946)	0.024*** (0.004)	0.021*** (0.004)	0.022*** (0.004)	0.010*** (0.002)	0.007*** (0.002)	0.005* (0.002)
School enrollment (1918)	0.096*** (0.021)	0.106*** (0.022)	0.102*** (0.022)	-0.035** (0.013)	0.007 (0.012)	0.012 (0.011)
Log population (1918)		0.110 (0.190)	0.207 (0.218)		-0.056 (0.101)	-0.053 (0.106)
% urban pop (1938)		-0.022*** (0.006)	-0.023*** (0.007)		-0.026*** (0.003)	-0.019*** (0.003)
Municipal officials per 1,000 (1924)			0.036 (0.080)			-0.012 (0.038)
Dept. officials per 1,000 (1924)			0.128* (0.057)			-0.007 (0.023)
National officials per 1,000 (1924)			-0.063 (0.046)			-0.040 (0.024)
Log municipal taxes per capita (1926)			0.047 (0.203)			-0.438** (0.141)
Constant	8.276*** (0.418)	9.569*** (1.750)	8.348*** (2.084)	2.104*** (0.197)	2.025* (0.930)	2.110* (1.050)
Geographic controls	NO	YES	YES	NO	YES	YES
Departmental fixed effects	YES	YES	YES	YES	YES	YES
N	667	655	633	694	682	657
R ²	0.32	0.39	0.41	0.29	0.46	0.49

Geographic controls include distance to the department capital (km), surface area (km²), altitude (m), department capital (dummy), average annual rainfall (mm), and shares of agriculture-suitable and livestock-suitable land. Robust standard errors in parentheses.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The results indicate that the stronger the Conservative Party was in the municipality, the greater the increase in primary school enrollment between 1918 and 1957. Based on the full specification in column 3, every standard deviation increase in Conservative support is associated with an extra increase of 0.6 percentage points in enrollment for the total population. Using the 1951 census to approximate the primary school-age population, this amounts to an *extra* increase of 4.3 points in the enrollment rate for every standard deviation increase in Conservative support.

Thus Liberal municipalities in any given department—whose residents on average payed more in taxes—tended to be comparatively under-served by the Colombian state when it came to schooling. Further, there is indication of a positive empirical association between the level of support for the Conservative Party in the first half of the century and schooling infrastructure in the long run, consistent with path-dependent effects of early state-building investments.

Taken together, the findings support the argument that partisan competition and the Church's political activism prior to the extension of the franchise spawned divergent trajectories of educational development across Colombia's territory. Mass literacy and public education represented major societal transformations in which the Colombian state, despite its well-known weaknesses, played a prominent role. Yet the state was not a neutral agent of collective interests, but a power instrument for partisan forces fighting for supremacy. Enduring patterns of educational inequality can be traced to the sharp cleavage that structured the domestic extension of the state.

7.3 Robustness checks

I performed three sets of robustness checks to alleviate potential concerns about unobserved factors driving the results. First, I validated my core result about the relationship between the partisan orientation of municipalities and literacy expansion using a neighbor-pair fixed effects estimator. Using spatial analysis software, I identified all pairs of municipalities that (a) share a border, (b) are located within the same department, and (c) were historically controlled by opposite parties. Municipalities within a single region and that are directly adjacent to each other are likely to share a large number of observed and unobserved characteristics, allowing for “cleaner” tests of the theory (yet at the cost that the findings may not be

generalizable to the full sample, unlike before).

This strategy bears close resemblance to matching methodologies and geographic discontinuity designs, but exploits variation across all municipal discontinuities throughout the country rather than at a single particular region or location and accounts for all unobservables that are constant across the specific municipal boundary. Each neighbor-pair receives a pair-specific fixed effect. In addition, I include the full set of controls and departmental fixed effects. Regressions take the form:

$$literacy_{1938c} = \theta literacy_{1918c} + \beta conservativevote_{1930c} + \gamma \mathbf{X}'_c + \psi_{cl} + \varepsilon_c \quad c \in C$$

$$literacy_{1938l} = \theta literacy_{1918l} + \beta conservativevote_{1930l} + \gamma \mathbf{X}'_l + \psi_{cl} + \varepsilon_l \quad l \in L$$

C denotes the subset of Conservative municipalities with Liberal adjacent municipalities, represented by L . c and l index the municipalities controlled by each party, while ψ is a fixed effect for each neighbor pair (c, l) that captures all unobservables that are common across the municipal boundary. As before, the models examine change in literacy, rather than absolute levels, by including $literacy_{1918}$ as a control. β contains the coefficients of interest, and \mathbf{X}' and ε are the municipality-specific controls and error term, respectively.

Results for models using two different cutoffs to construct the estimation sample appear in columns 4 and 5 in Table 1. In the first, I code as Conservative (Liberal) every municipality where Conservatives (Liberals) won the majority of the vote in the 1930 presidential election. The estimates are therefore based on comparisons between municipal neighbors with a different partisan majority. All municipalities surrounded by neighbors of the same party are dropped from the sample. In the second case, I further restrict the analysis to pairs of adjacent municipalities where each party received at least 60% of the vote in its element of the pair. Therefore, competitive municipalities (and their neighbors), where literacy campaigns could produce uncertain results for Conservative operatives, are also excluded.³⁷ Regardless of the cutoff employed, the coefficient on Conservative support is positive, precisely estimated, and similar in magnitude to the main results.

Secondly, I replicated all models in Tables 1, 2, and 3 relaxing the standard assumption of spatial

³⁷To illustrate, the Appendix includes a map showing the municipal pairs included in the sample under this second classification.

independence of observations. The concern is that estimates of the effect of partisanship might be picking up spatial spillovers, by which the education outcomes of a given municipality influence those of nearby units. I model spatial dynamics by including spatial lags of the dependent variable in each specification and simultaneously allowing for spatial dependencies in the disturbances. Estimates for the spatial lag, the spatial error term, and average direct and spillover effects of the explanatory variables appear in the Appendix.

There are in fact moderate but statistically significant positive spillover effects of literacy on neighboring municipalities in the first half of the twentieth century, early in the diffusion of literacy skills throughout the population, but not in the second half. Spillovers also appear to exist in school enrollment and schooling infrastructure, consistent with investments in state capacity in one spatial unit motivating investments among neighbors (Acemoglu et al. 2015). In all cases, however, my core conclusions remain unchanged. As before, Conservatism is always a positive and statistically significant predictor of the size of literacy increases, school enrollment, or school infrastructure in the long run. The average total effect on each outcome is similar to the estimates presented above.

Finally, as a placebo test, I ran similar specifications of the models above using post-1936 literacy rates as a baseline and later years as the dependent variable. One simple explanation for the observed larger increases in literacy in Conservative areas is that Conservative governments were favoring loyal areas in public goods provision. According to this potential objection to my argument, the comparatively smaller growth of the Liberal electorate could simply be a byproduct of Conservatives rewarding core supporters, rather than adopting a deliberate strategy to take advantage of suffrage rules. The qualitative evidence discussed above is consistent with such intentionality on the part of Conservatives and the Church. Quantitatively, the implication is that we should observe differential increases in literacy based on partisanship when the suffrage was restricted to literates, but not necessarily after. The placebo regressions provide further evidence in favor of my interpretation. Once universal suffrage is introduced, there is no systematic of partisan bias in literacy expansion.

8 Conclusions

To conclude, I return to some of the larger theoretical points about the relationship between political cleavages and state-building. I have focused on the interaction between party politics, suffrage restrictions, and the process of expanding the educational state in one country, but the examination is theoretically revealing. While dominant bellicist theories of state formation based on the Western European experience look outwards (Centeno 2002; Tilly 1992), domestic processes and fractures are key determinants of how states develop. Because the state is an instrument to exercise power over others, deep domestic polarization and conflicts between rival political camps lead rulers to build the state in partisan ways and develop uneven linkages with society, based on political identity or group membership. Who builds the state, and who is excluded, are therefore crucial determinants of the geography of state power, which may durably reflect historical domestic oppositions (Sánchez-Talanquer 2017).

Patterns of territorial unevenness, however, may differ across institutional domains, precisely because partisan antagonisms dictate a different logic in the construction of the various apparatuses and institutions that make up the state. To the very least, this should caution against extrapolating findings from one dimension of the state to others. State-building is a malleable, multipronged process in which the strategic micro-level calculations of parties vying for power shape what types of state capacities develop, where, and for whose benefit.

The deep-seated partisan cleavage played this structuring role in Colombia, but other salient divides, based on alternative dimensions of conflict, may have shaped the institutional configuration of the state in similar ways in other cases. My findings suggest that scholars interested in territorial inequalities and the spatial component of nation-state building must be attentive to the cleavages that ordered politics at the time which states extended basic infrastructures and public goods.

Similarly, scholars interested in the history of democracy, partisan politics, and suffrage rules may find a parallel electoral use of literacy barriers in other cases. Given the prevalence of literacy qualifications on the vote at a global scale until quite recently, electoral competitors in other countries are likely to have resorted to similar tactics of manipulation. Anecdotal evidence suggests that political actors exploited the

restriction of citizenship to literates for electoral gain in other cases. In Bolivia, for example, where universal suffrage was not introduced until 1952, the Aymara indigenous leader Avelino Siñani, considered one of the founders of Bolivian popular education, signed in the 1910s an agreement with a congressman who, seeking to expand his voting bloc and aware of Siñani's literacy work, offered a payment to every new literate indigenous person-turned-voter (Irurozqui 1996). Similar stories may be part of the history of democracy and citizenship elsewhere. In the United States, only the 1965 Voting Rights Act made literacy tests to exercise the vote unconstitutional. My argument indicates that in any given competitive polity, parties that historically enjoyed control over educational infrastructure and the support of extensive civil society organizations like churches were uniquely positioned to leverage literacy barriers for political gain.

The analysis also points to the importance of further exploring how the resolution of the religious conflict in different Latin American countries shaped the development of states and education. In Colombia, Conservative control over the state for long historical periods and the retarded secularization of the public school system translated into systematic under-provision in Liberal areas. In the 1960s, a sense of neglect from the central state and unfulfilled expectations about the expansion of social citizenship rights, including education, loomed large in the decision of radicalized Liberal groups in the countryside to engage in armed resistance. Based on the findings, it is not a coincidence that *Peligro*, a leader of the Liberal guerrillas of the early period of the protracted Colombian conflict, was "the illiterate son of a farmer" (Karl 2017, 67).

The clear implication of the findings in this article is that, in the realm of education, the subnational expansion of the nation-state was mediated by the interaction between partisan interest and literacy restrictions on the franchise, which are part of the history of many democracies. Theoretically, this highlights the importance of taking into account the role of parties and politicians in strategically building or suppressing state capacity to achieve their ends. Such perspective complements and extends other arguments that instead focus on "deep" socioeconomic factors, like the structure of class relations, in explaining trajectories of state development in Latin America (Kurtz 2013).

The basic insight is that the expansion of the state and the incorporation of people into national communities was a partisan process that must be examined not only as a product of external pressures and macro-level forces, but at the level of political calculations and enmities within countries. While others

have demonstrated that politicians *devised* suffrage institutions based on electoral considerations (Ziblatt 2008), this study suggests that they also actively *exploited* existing restrictions on the suffrage for partisan advantage. In Colombia, their calculations cemented durable inequalities in literacy and the reach of the state across the historical partisan divide. Yet, this is just one instance in which polarized partisan politics has defined the geography of state power and the very internal boundaries of the nation.

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Online Appendix

Table A1: Descriptive statistics. Colombian municipalities

	Obs	Mean	SD	Min	Max
<i>Education variables</i>					
Literacy rate (1912)	680	22.75	12.41	0	82.38
Literacy rate (1918)	770	25.52	11.89	0.56	84.31
Literacy rate (1938)	802	36.92	13.09	3.46	76.36
Literacy rate (1951)	779	36.89	12.11	2.13	68.62
Literacy rate (1964)	869	45.34	10.14	7.26	70.10
Literacy rate (1973)	927	50.63	11.09	7.73	80.39
Literacy rate (1985)	1,101	77.65	10.54	0.11	97.25
Literacy rate (2005)	1,102	83.89	8.50	30.04	98.31
School enrollment (1957)	772	9.55	2.72	1.35	18.77
Schools per 1,000 (2005)	1,098	2.81	1.66	0.19	9.43
<i>Taxation variables</i>					
Per capita municipal tax revenues (1926)	762	1.58	2.07	0	41.24
Per capita municipal tax revenues (1940)	750	0.61	0.69	0	8.27
Per capita municipal tax revenues (1950)	753	2.10	3.09	0	43.30
Per capita municipal tax revenues (1964)	844	11.81	12.53	0.16	166.2
Per capita municipal tax revenues (millions) (2005)	1,096	0.06	0.06	0	0.65
Per capita property tax revenues (millions) (2005)	1,096	0.02	0.03	0	0.50
Per capita national tax revenues (1950)	741	2.62	11.47	0	199.8
Per capita income tax revenues (1950)	682	0.61	4.41	0	93.64
<i>Other variables</i>					
Conservative support (1930)	685	54.78	29.86	0	100
Conservative support (average 1930 & 1946)	817	47.09	27.19	0	100
Switched Conservative (1930) to Liberal majority (1946)	661	0.23	0.42	0	1
Competitive municipality (1930)	685	0.19	0.39	0	1
Competitive municipality (1946)	793	0.20	0.40	0	1
Log population (1918)	771	8.61	0.75	5.37	11.88
% rural population (1938)	802	15.67	22.89	0	98.7
Municipal employees per 1,000 (1924)	729	3.03	5.94	0	155
Departmental employees per 1,000 (1924)	729	1.76	1.80	0	23.75
National employees per 1,000 (1924)	729	1.06	2.87	0	41.42
Log municipal taxes per capita (1926)	762	0.12	0.81	-7.02	3.72
Distance to department capital (km)	1,102	73.50	58.14	0	392
Surface area (km ²)	1,101	811.59	2,226	15	41,653
Altitude (m)	1,101	1,138	903	2	3,087
Department capital	1,102	0.03	0.17	0	1
Annual rainfall (mm)	1,018	1,895	1,067	160	9,200
% agriculture-suitable land	1,004	0.50	0.34	0	1
% livestock-suitable land	1,004	0.27	0.28	0	1

Table A2: Average literacy rate across Colombian municipalities by historical partisan affiliation

Year	Conservative majority (N=358)	Liberal majority (N=459)	Percentage point difference
1912	23.98	21.79	2.2*
1918	29.3	25.76	3.54***
1938	39.59	35.08	4.51***
1951	38.76	35.29	3.46***
1964	47.95	44.2	3.75***
1973	52.94	49.73	3.21***
1985	79.69	78.08	1.61*
2005	86.18	84.37	1.81***

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The literacy rate is calculated for the population above fifteen in 1985 and 2005. In all other years the denominator is the total municipal population. Municipalities were classified as Liberal or Conservative based on the average vote share for candidates of each party in the 1930 and 1946 presidential elections. See text for details.

Source: Own calculations based on a historical dataset of my own construction. Election data come from DANE (1973). Municipal literacy rates were calculated using national censuses.

Table A3: Average tax revenues per capita across Colombian municipalities, by historical partisan affiliation

Type of revenue	Year	Cons majority (N=358)	Lib majority (N=459)	Percentage difference
Municipal taxes (per capita)	1926	1.18	1.93	-38.9% ***
	1940	0.45	0.75	-40% ***
	1950	1.61	2.58	-37.6% ***
	1964	9.49	13.82	-31.3% ***
	2005 (all taxes)	50,370	62,270	-19.1% **
	2005 (property tax)	19,478	24,955	-22% **
National taxes (per capita)	1950 (all taxes)	1.36	3.66	-62.8% **
	1950 (income tax)	0.2	0.96	-79.2% *

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figures are in current Colombian pesos of each year and include all direct and indirect taxes collected by municipalities or the national government, unless otherwise indicated. Other types of government revenue are excluded. Municipalities were classified as Liberal or Conservative based on the average vote share received by candidates of each party in the 1930 and 1946 presidential elections. See text for details.

Source: Own calculations based on a historical dataset of my own construction. Tax revenues in each municipality were compiled from various official government records and documents collected through archival research.

Table A4: Conservative Party support and literacy expansion, 1938

	1938 Municipal literacy rate				
	(1)	(2)	(3)	(4)	(5)
Conservative vote share (1930)	0.050** (3.04)	0.038** (2.88)	0.036** (3.00)	0.040** (3.18)	0.038** (2.74)
Lagged DV (1918 literacy)		0.732*** (16.02)	0.523*** (10.54)	0.475*** (7.81)	0.335*** (5.82)
Switched Con (1930) to Lib (1946)				-1.951* (-2.25)	-2.062* (-2.53)
Log population (1918)					-0.291 (-0.50)
% urban pop (1938)					0.142*** (5.06)
Distance to dept capital					-0.014 (-1.17)
Surface area					-0.001† (-1.88)
Altitude					0.003*** (4.36)
Department capital					2.852 (1.33)
Constant	35.538*** (34.87)	16.589*** (13.17)	31.286*** (15.01)	33.315*** (13.03)	35.362*** (6.29)
Geographic controls	NO	NO	NO	NO	YES
Departmental fixed effects	NO	NO	YES	YES	YES
N	672	643	643	631	631
R ²	0.014	0.45	0.62	0.60	0.65

Parentheses contain heteroskedasticity-robust standard errors. The number of observations drops in some models due to the administrative creation or elimination of municipalities and missing values in some of the predictors.

† $p < 0.1$ * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A5: Direct and spillover effects on literacy, 1938-1951

	Literacy rate							
	1938 (1)	1938 (2)	1938 (3)	1938 (4)	1938 (5)	1938 (6)	1951 (7)	1951 (8)
Spatial lag	0.027*** (0.075)	0.023*** (0.005)	0.022*** (0.005)	0.018*** (0.005)	0.014** (0.005)	0.01† (0.005)	0.022*** (0.005)	0.01* (0.004)
Spatial error term	0.075*** (0.011)	0.048*** (0.013)	0.052*** (0.014)	0.067*** (0.014)	0.062*** (0.014)	0.071*** (0.014)	0.094*** (0.012)	0.011*** (0.012)
<i>Direct effects</i>								
Conservative vote share (1930)	0.031* (0.013)	0.024* (0.012)	0.03* (0.012)	0.043*** (0.013)	0.033* (0.014)	0.051*** (0.013)	0.019† (0.011)	0.046*** (0.011)
Lagged DV (1918 literacy)	0.416*** (0.054)	0.409*** (0.055)	0.409*** (0.055)	0.333*** (0.051)	0.285*** (0.049)	0.235*** (0.047)	0.402*** (0.063)	0.201*** (0.055)
Switched Con (1930) to Lib (1946)			-1.648* (0.819)	-1.733* (0.816)	-1.862* (0.81)	-2.29** (0.799)	-1.446* (0.705)	-1.952** (0.632)
Competitive municipality (1930)				0.23 (0.734)	-0.047 (0.72)	-0.262 (0.698)		-0.294 (0.58)
Log population (1918)				-0.518 (0.584)	-0.537 (0.574)	0.454 (0.621)		0.204 (0.586)
% urban pop (1938)				0.143*** (0.024)	0.135*** (0.024)	0.073** (0.024)		0.086*** (0.02)
Municipal officials per 1,000 (1924)				0.595* (0.246)	0.595* (0.246)	0.595* (0.246)		0.446* (0.211)
Dept. officials per 1,000 (1924)				0.34 (0.234)	0.34 (0.234)	0.34 (0.234)		0.502* (0.242)
National officials per 1,000 (1924)				0.208 (0.184)	0.208 (0.184)	0.208 (0.184)		0.232 (0.16)
Log municipal taxes per capita (1926)				3.539*** (0.634)	3.539*** (0.634)	3.539*** (0.634)		3.252*** (0.551)
<i>Spillover effects</i>								
Conservative vote share (1930)	0.004* (0.002)	0.003† (0.002)	0.003* (0.002)	0.004* (0.002)	0.002† (0.001)	0.002 (0.001)	0.002 (0.001)	0.002* (0.001)
Lagged DV (1918 literacy)		0.048*** (0.012)	0.045*** (0.012)	0.029** (0.01)	0.019* (0.008)	0.01† (0.006)	0.043*** (0.01)	0.009* (0.004)
Switched Con (1930) to Lib (1946)			-0.181† (0.103)	-0.15† (0.088)	-0.127 (0.078)	-0.1 (0.07)	-0.155† (0.082)	-0.087* (0.046)
Competitive municipality (1930)				0.02 (0.064)	-0.003 (0.049)	-0.011 (0.032)		-0.013 (0.026)
Log population (1918)				-0.045 (0.056)	-0.037 (0.044)	0.02 (0.028)		0.009 (0.026)
% urban pop (1938)				0.012* (0.005)	0.009* (0.004)	0.003 (0.002)		0.004* (0.002)
Municipal officials per 1,000 (1924)						0.026 (0.019)		0.02 (0.013)
Dept. officials per 1,000 (1924)						0.015 (0.013)		0.022 (0.015)
National officials per 1,000 (1924)						0.009 (0.01)		0.01 (0.009)
Log municipal taxes per capita (1926)						0.155 (0.096)		0.144* (0.068)

Table reports average direct and spillover effects obtained from spatial autoregressive models with autoregressive disturbances (often referred to as SARAR or SAC). Autoregressive parameter estimates were obtained using a first-order binary contiguity spatial matrix and the generalized spatial two-stage least-squares estimator derived by Kelejian and Prucha (2010). Errors are treated as heteroskedastic. All models are spatial equivalents of those presented in the main text and include departmental fixed effects. In addition to reported variables, models 5, 6, and 8 include the vector of geographic controls of analogous specifications in the text (estimates not shown). Standard errors in parentheses. † $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A6: Direct and spillover effects on literacy, 1964-2005

	Literacy rate			
	1964 (1)	1973 (2)	1985 (3)	2005 (4)
Spatial lag	0.005 [†] (0.003)	0.002 (0.003)	0.002 (0.002)	-0.001 (0.002)
Spatial error term	0.099*** (0.013)	0.093*** (0.014)	0.097*** (0.013)	0.106*** (0.012)
<i>Direct effects</i>				
Conservative vote % (avg 1930 & 1946)	0.047*** (0.01)	0.033** (0.01)	0.025* (0.01)	0.017* (0.009)
Lagged DV (1918 literacy)	0.161*** (0.041)	0.158*** (0.036)	0.108** (0.041)	0.08* (0.033)
Competitive municipality (1930)	0.06 (0.545)	0.108 (0.583)	0.046 (0.662)	0.335 (0.549)
Competitive municipality (1946)	-0.273 (0.494)	0.056 (0.559)	0.128 (0.597)	-0.012 (0.476)
Log population (1918)	0.588 (0.449)	0.891 [†] (0.531)	0.586 (0.541)	0.246 (0.472)
% urban pop (1938)	0.069*** (0.016)	0.074*** (0.018)	0.049* (0.019)	0.029 [†] (0.015)
Municipal officials per 1,000 (1924)	0.414** (0.156)	0.276 (0.176)	0.422* (0.168)	0.115 (0.167)
Dept. officials per 1,000 (1924)	0.248 (0.291)	0.266 (0.312)	0.413 [†] (0.239)	-0.006 (0.181)
National officials per 1,000 (1924)	0.03 (0.155)	0.117 (0.156)	-0.026 (0.125)	-0.01 (0.132)
Log municipal taxes per capita (1926)	2.621*** (0.451)	2.545*** (0.502)	2.393*** (0.482)	1.844*** (0.411)
<i>Spillover effects</i>				
Conservative vote % (avg 1930 & 1946)	0.001 (0.001)	0.0002 (0.0004)	0 (0.0003)	0 (0.0001)
Lagged DV (1918 literacy)	0.004 (0.002)	0.001 (0.002)	0.001 (0.001)	0 (0.001)
Competitive municipality (1930)	0.001 (0.012)	0.001 (0.004)	0 (0.007)	-0.001 (0.003)
Competitive municipality (1946)	-0.006 (0.011)	0.0004 (0.004)	0.001 (0.006)	0 (0.001)
Log population (1918)	0.013 (0.013)	0.006 (0.011)	0.006 (0.007)	-0.001 (0.002)
% urban pop (1938)	0.002 (0.001)	0.001 (0.001)	0 (0.0005)	0 (0.0002)
Municipal officials per 1,000 (1924)	0.009 (0.007)	0.002 (0.003)	0.004 (0.004)	0 (0.001)
Dept. officials per 1,000 (1924)	0.006 (0.007)	0.002 (0.004)	0.004 (0.005)	0 (0.0005)
National officials per 1,000 (1924)	0.001 (0.004)	0.001 (0.002)	0 (0.001)	0 (0.0003)
Log municipal taxes per capita (1926)	0.059 (0.038)	0.018 (0.031)	0.025 (0.023)	-0.005 (0.013)

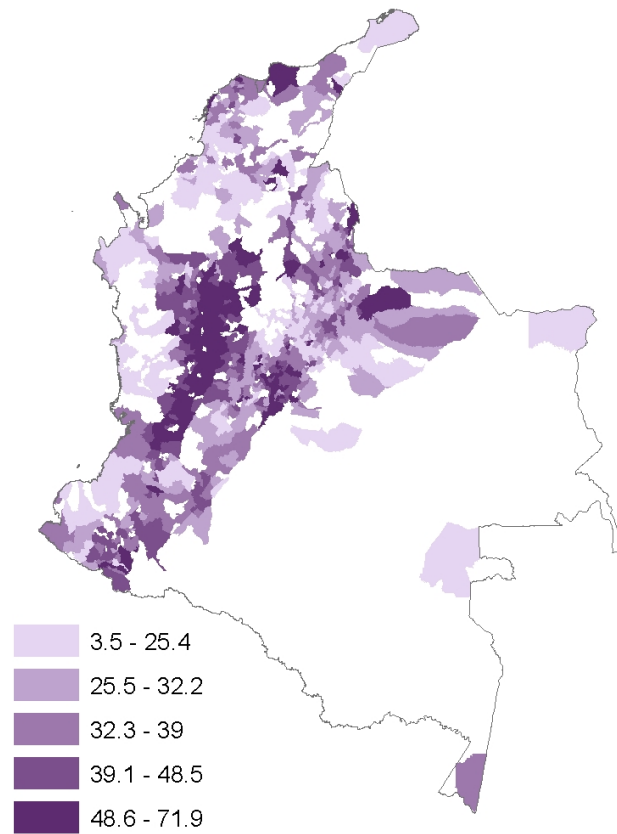
Table reports average direct and spillover effects obtained from spatial autoregressive models with autoregressive disturbances. Parameter estimates were obtained using a first-order binary contiguity spatial matrix and the generalized spatial two-stage least-squares estimator derived by Kelejian and Prucha (2010). Errors are treated as heteroskedastic. In addition to reported variables, all models include departmental fixed effects and the vector of geographic controls of analogous specifications in the main text (estimates not shown). Standard errors in parentheses. [†] $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A7: Direct and spillover effects on enrollment and schools, 1957-2005

	Public school enrollment (1957)			Schools per 1,000 people (2005)		
	(1)	(2)	(3)	(4)	(5)	(6)
Spatial lag	0.011 [†] (0.006)	0.016** (0.005)	0.017*** (0.005)	0.005 (0.012)	0.039*** (0.011)	0.36** (0.011)
Spatial error term	0.06*** (0.013)	0.041** (0.013)	0.047*** (0.014)	0.103*** (0.012)	0.072*** (0.015)	0.066*** (0.017)
<i>Direct effects</i>						
Conservative vote % (avg 1930 & 1946)	0.022*** (0.004)	0.02*** (0.004)	0.022*** (0.004)	0.009*** (0.002)	0.007*** (0.002)	0.006** (0.002)
School enrollment (1918)	0.082*** (0.017)	0.098*** (0.019)	0.092*** (0.019)	-0.014 (0.011)	0.013 (0.011)	0.017 (0.011)
Log population (1918)		-0.038 (0.182)	0.021 (0.208)		-0.207* (0.1)	-0.197 [†] (0.109)
% urban pop (1938)		-0.02** (0.006)	-0.023*** (0.006)		-0.024*** (0.003)	-0.019*** (0.003)
Municipal officials per 1,000 (1924)			0.009 (0.076)			-0.017 (0.034)
Dept. officials per 1,000 (1924)			0.136* (0.052)			-0.014 (0.023)
National officials per 1,000 (1924)			-0.043 (0.042)			-0.04 [†] (0.024)
Log municipal taxes per capita (1926)			0.184 (0.193)			-0.297* (0.118)
<i>Spillover effects</i>						
Conservative vote % (avg 1930 & 1946)	0.001 [†] (0.001)	0.002* (0.001)	0.002** (0.001)	0 (0.001)	0.002* (0.001)	0.001* (0.001)
School enrollment (1918)	0.004 [†] (0.003)	0.008* (0.003)	0.008* (0.003)	0 (0.001)	0.003 (0.003)	0.003 (0.002)
Log population (1918)		-0.003 (0.015)	0.002 (0.017)		-0.044 (0.031)	-0.038 (0.03)
% urban pop (1938)		-0.002* (0.001)	-0.002* (0.001)		-0.005** (0.002)	-0.004* (0.002)
Municipal officials per 1,000 (1924)			0.001 (0.006)			-0.003 (0.007)
Dept. officials per 1,000 (1924)			0.011* (0.006)			-0.003 (0.005)
National officials per 1,000 (1924)			-0.004 (0.004)			-0.008 (0.006)
Log municipal taxes per capita (1926)			0.015 (0.017)			-0.057* (0.028)

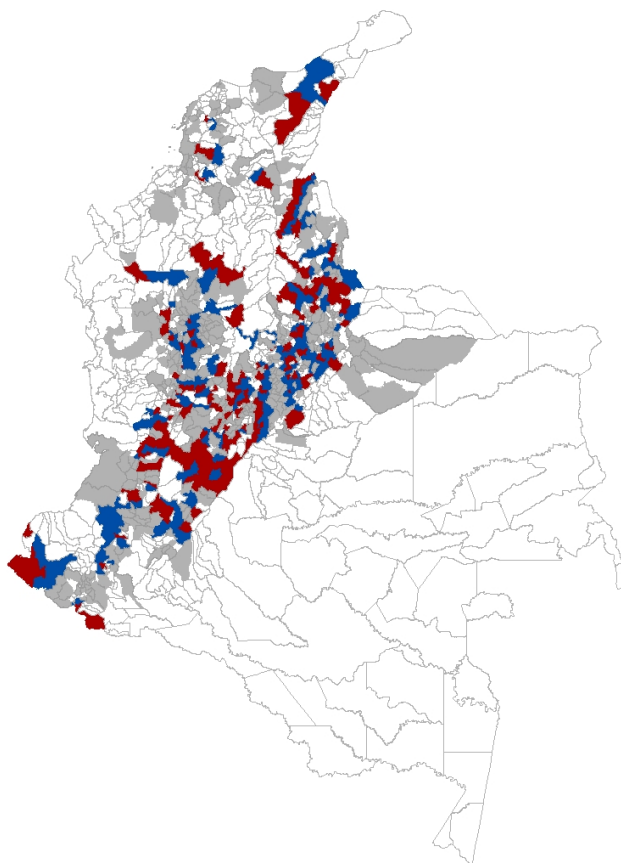
Table reports average direct and spillover effects obtained from spatial autoregressive models with autoregressive disturbances. Parameter estimates were obtained via generalized spatial two-stage least-squares using a first-order binary contiguity spatial matrix. Errors are treated as heteroskedastic. All models are spatial equivalents of those presented in the main text and include departmental fixed effects. In addition to reported variables, models 2, 3, 5, and 6 include a vector of geographic controls (distance to the department capital (km), surface area (km²), altitude (m), department capital (dummy), average annual rainfall; estimates not shown). Standard errors in parentheses. [†] $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure A1: Literacy rate in Colombian municipalities (1938)



Note: Data were grouped in quintiles. Data are unavailable for the area in white, which contained less than 5% of the total population and was not subdivided into municipalities. Municipalities created after 1938 also appear in white.

Figure A2: Neighboring municipalities with opposite party control, 60% support cutoff (1930)



Note: The map shows municipal pairs included in the neighbor-pair fixed-effects regression reported in column 8 of Table 1. Red municipalities are those where the Liberal Party received more than 60% of the vote in 1930 *and* have a neighbor where the Conservative Party obtained equivalent support. Blue municipalities are those that satisfied the same conditions but were Conservative. Gray municipalities are excluded from the specification because their neighbors were controlled by the same party or because no party reached 60%. White municipalities did not exist at the time or have missing data.

Appendix References

DANE. 1973. "Boletín Mensual de Estadística." XIII (268-269): 63–334.

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