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Para María Luisa y Manolo,  
que siempre han creído en mí.

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## **Abstract**

The dissertation addresses the troubled relationship between authoritarianism and public goods. Political scientists have mixed expectations about the incentives of dictators to provide public goods that foster economic development. Some scholars argue dictators' unrestrained power is an advantage in the pursuit of social transformations, particularly when state leaders restrict the political participation of the masses. I call this the autocratic-advantage thesis. Yet other scholars would reply that dictators simply lack incentives to foster economic and human development unless they restrict their power and allow social participation, which I call the democratic-advantage thesis.

I argue that authoritarianism is not the main obstacle in the pursuit of prosperity, but neither are authoritarian institutions a reliable advantage. The cohesiveness and infrastructural capacity of the state apparatus are more important than the political regime. In turn, to understand 'state capacity,' we must look at the historical origins of state institutions and their persistence over time.

The dissertation contributes in this direction by studying a path of institutional development: the aftermath of a social revolution. Specifically, I study the state-building dynamics after the Mexican Revolution (1920-1940) and their impact on the public education system. I show that the rivalry between the national leaders and their subnational allies was the driver of the massive expansion of primary education access. In turn, the varying political strength of the subnational allies explains the geographic patterns of schooling supply and their persistence in the long run.

The dissertation develops two theoretical pieces: one on the incentives of autocratic leaders to update the state's institutions; another one on the obstacles that state leaders face in



this endeavor. Chapters 2 and 3 are about incentives. Contrary to the democratic-advantage thesis, I argue that dictators, as leaders of a state, have strong reasons to provide developmental public goods. After a social revolution, state leaders reform and expand the reach of state institutions to tip in their favor the balance of power inside their coalition and consolidate their rule. The leaders achieve that objective in two ways: they displace their subnational allies as providers of public goods and they create direct political links to the population.

Chapter 4 is about the obstacles to the provision of developmental public goods. In contrast to the autocratic-advantage thesis, the main obstacle in the creation of a cohesive and purposeful state was Mexico's strong regionalism, not the precocious incorporation of the masses into the ruling coalition. Through four case studies, I identify different scenarios of subnational resistance to the supply of national schools based on the political resources of subnational elites: whether they are united against the center and whether they count on independent social bases of support. I further support my argument with schooling data on rural and urban education.

In chapter 5, I discuss and test alternative explanations. I analyze other authors' arguments individually and run multivariate regressions using data on schooling supply and demographic characteristics of Mexico's federative states from historical censuses. Finally, in chapter 6, I discuss why public education can be a source of political power. Through the case of Chiapas, I study how the role of teachers in mobilizing communities to request land redistribution made the national leaders stronger than their subnational allies. In this final chapter, I use original microdata formed with archival material on the location of public schools and land petitions submitted by rural communities in Chiapas.

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## Chapter 1: Introduction

My dissertation addresses the troubled relationship between authoritarianism and public goods. Political scientists have mixed expectations about the incentives of dictators to provide public goods that foster economic development. Some scholars would say that dictators' unrestrained power is an advantage in the pursuit of social transformations. Yet other scholars would reply that dictators simply lack incentives to foster economic and human development unless they restrict their power and allow social participation.

Historically, this debate was predicated on the diverse paths through which the states in the peripheries of the world economy, "late developers,"<sup>1</sup> went to 'catch up' with early industrial nations. There are only a few stories of actual catching up (i.e. the Asian Tigers and Japan), but there is wide variation in the institutional outcomes of these efforts; within Latin America, there are certainly major differences (Centeno, Ferraro, and Nemana 2019).

Political scientists consider power-access regimes (democracy vs autocracy) as key factors explaining the varied fates of late developers across the world.<sup>2</sup> One side of the debate considers that democratic regimes are better at fostering development because their checks and balances sustain robust capitalist institutions (e.g. Przeworski 1991; Olson 1993) and/or because their competition and inclusive coalitions incentivize the provision of developmental public

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<sup>1</sup> I use Gerschenkron's "late developer" term, which he applied to Germany, Italy, and Russia, for the sake of the discussion, given that industrialization in Latin America also required a strong state role. However, the context of Latin America was different than late-industrializing European countries, for which Hirschman (1968) called them "late late developers." It is a context of peripheral capitalism, always dependent on the West for exporting commodities and/or importing capital (Catalan and Fernandez de Sevilla 2019).

<sup>2</sup> The reader must distinguish between the state as an organization to establish order and rule a territory, and the rules to access the decision-making process or the steering wheel of such organization. These rules of access are the "regime," the "ensemble of patterns, explicit or not, that determines the forms and channels of access to principal governmental positions, the characteristics of the actors who are admitted and excluded from such access, and the resources or strategies that can use to gain access" (O'Donnell and Schmitter 1986, 73). While this notion of regime is widely accepted, as I will point out later, a common notion of the "state" is not as shared. Particularly, I aim to convince the reader that the (hidden) assumption of a geographically homogenous state is problematic.

goods (e.g. Lake and Baum 2001; Bueno de Mesquita et al. 2003; Acemoglu and Robinson 2012). I call this side the democratic-advantage thesis.

On the contrary side, the autocratic-advantage thesis considers that less-democratic states have an advantage in that their leaders' detachment from social commitments allows directing more resources towards investment rather than consumption (e.g. Huntington 1968). This argument echoes more recent literature that identified broad, cross-class coalitions as inhibitors of a strong developmental orientation (Waldner 1999).<sup>3</sup>

To be sure, the debate is not about the best kind of regime overall. Originally, the discussion was about the optimal sequence to eventually arrive at the desired, dual goal of development and democracy, resembling contemporary Western nations (Mazzuca and Munck 2014). However, the discussion is usually formulated either in terms of the optimal path towards development or the most secure path towards democracy. I am addressing the former formulation: paths toward development.<sup>4</sup>

The evidence on either side is inconclusive, as there are prominent developmental and redistributive states among democracies and autocracies (Przeworski et al. 2000; Mares and Carnes 2009). My research intervenes in this debate with a historically conscious, more nuanced view of authoritarian regimes, highlighting the importance of domestic and international contexts in the study of regimes and economic development.

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<sup>3</sup> It is essential to clarify that Waldner's (1999) argument *not* about political regimes. Actually, the author argues that the negative relationship between broad coalitions and institutional upgrading holds across regimes. However, when we think about the democratic (or inversely, autocratic) character of political regimes as a continuum, we can recognize that an elitist democracy is not very democratic. In Waldner's account of developmental states, 'narrow coalitions' implied the exclusion of the masses from the political system and not only from the ruling coalition, which runs against the criteria of universal or as-broad-as-possible participation for a regime to be considered democratic (e.g. Dahl 1971).

<sup>4</sup> The debate in terms of democracy as an outcome is related, for example, to the modernization school (Lipset 1959) and Linz and Stepan's (1996) prerequisite of 'stateness' for democratic consolidation.

My position is that authoritarianism is not the main obstacle in the pursuit of prosperity, but neither are authoritarian institutions a reliable advantage. Instead, I focus on extra-institutional factors: (a) the incentives derived from coalitional conflicts and (b) the obstacles associated with strong regionalism.

My theoretical framework does not aspire to apply to any authoritarian regime. My framework is about the aftermath of social revolutions, which have historically derived into autocracy. So, the two parts of my dissertation are weaved together as the *revolutionary path* to state-building and developmentalism under autocracy, relying on insights especially from Skocpol (1979) and Levitsky and Way (2012; 2013).

The centralization of the Mexican education system offers a neat example of such a path. My research explains the temporal and geographic dynamics of educational investment (1920-1940) as a function of elite conflict in the ruling coalition and the political strength of subnational elites. Specifically, the large-scale investment in primary education access—and the aggressive effort to centralize the state apparatus that accompanied it—followed the pace of elite conflict in the ruling coalition. In turn, the geographic dynamics of schooling expansion were entangled in the tug-of-war between regional forces resisting the national bureaucracy.

So, my dissertation develops two theoretical pieces—the *incentives* of state leaders to provide developmental public goods and the *obstacles* they face in the endeavor. Chapters 2 and 3 are about incentives. The Dependent Variable is the expansion of state institutions to provide developmental public goods and the Independent Variable is elite conflict in the ruling coalition. In chapter 2, I present my argument and contributions to a number of literatures; in chapter 3, I present the qualitative evidence supporting my argument: the case of primary education expansion after the Mexican Revolution (1920-1940). I argue that state leaders have incentives to

provide developmental public goods to tip the balance of power inside their coalition in their favor. The leaders achieve that objective in two ways: they displace their subnational allies as providers of public goods and they create direct political links to the population.

Chapters 2 and 3 problematize the democratic-advantage thesis through the case of a ‘generous’ authoritarian regime and a top-down developmental policy that did not require ‘social demand’ to motivate its provision. I also criticize the autocratic-advantage thesis, specifically, Waldner’s (1999) argument that elite conflict and early mass incorporation inhibit state capabilities.

Chapter 4 is about the obstacles to the provision of developmental public goods. In contrast to the autocratic-advantage thesis, the main obstacle in the creation of a cohesive and purposeful state was Mexico’s strong regionalism; not the incorporation of the masses into the ruling coalition. The alliance with lower classes allowed state elites to centralize the state and expand public education. Here, the Dependent Variable is the geographic variation of public goods provision and the Independent Variable is the political strength of subnational elites.

In chapter 5, I discuss and test alternative explanations using schooling data at the level of federative state (*estado*).<sup>5</sup> Finally, in chapter 6, I discuss one subnational case, Chiapas, to illustrate a way in which public education makes national leaders politically stronger than their subnational allies; a case of bureaucracy as a source of political power. Specifically, I study the role of national teachers in land reform, using original microdata.

In the rest of the introduction, I will briefly discuss a vignette that illustrates the relevance of re-focusing the debate on developmental institutions beyond the democracy vs autocracy debate. The case of Mexico’s education reforms in the 1990s shows that ‘state capacity’ matters

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<sup>5</sup> Throughout this document, I refer to federative states by their name in Spanish, *estado*, to avoid confusing them with the generic term ‘state,’ the political organization.



for economic and human development. Most importantly, the vignette shows why we must pay attention to the history of state formation to identify *how* ‘state capacity’ matters. In Mexico, the regionally fragmented structure of the state reappeared in the 1990s, once the political institutions created in the post-revolutionary critical juncture were removed in the neoliberal decentralization reforms.

### **Motivating Example**

In the 1990s, as a part of the Washington Consensus on economic policy, Mexico reformed its education system towards a more decentralized design that granted subnational authorities a greater role in the management of public schools. Carlos Salinas, one of the last presidents of the *Partido Revolucionario Institucional* (PRI), justified the reforms with rhetoric typical of the period, a transformation in governance towards more ‘quality’ and accountability in public education.

After three decades, the results of the decentralization reform have been disappointing. Most analysts and political leaders point at a single culprit: the gigantic and corrupted teachers union, *Sindicato Nacional de Trabajadores de la Educación* (SNTE), a traditional ally of the PRI.

The SNTE is often blamed for obstructing the accountability in and the general functioning of the national education system. The SNTE used its quasi-monopoly of teachers’ representation to effectively set education policy, a task that should be in the hands of Congress and the *Secretaría de Educación Pública* (Secretariat of Public Education, SEP). In turn, the PRI allowed the gigantic teachers union to corrupt the education bureaucracy in exchange for public support, which helped the Party survive in power through chronic economic crises and the neoliberal era of public-expenditure retrench. The SNTE continued supporting the successor

version of the party after losing the presidency for the first time in decades in the year 2000 and has obstructed further reform of SEP after democratization through collusion and blackmail.

The conclusion seems to be that the main obstacle towards a world-class education system, as Carlos Salinas had promised in the 1990s, was the power of the SNTE. When the SNTE is finally tamed, the argument goes, fixing Mexico's public education would be a technical challenge that the highly qualified technocrats of SEP would smoothly solve.

The commentary on the teachers union can be interpreted from the two points of view discussed above. On the one hand, the democratic-advantage thesis would say that the SNTE is an example of how authoritarianism breeds institutions that hinder economic development. The SNTE would be the materialization of the network of patronage and clientelism that maintained the PRI in power for decades.

On the other hand, the autocratic-advantage thesis would interpret the SNTE as the product of precocious societal participation in politics. The SNTE was born out of the pact between the revolutionary leaders and the bureaucracy (recruited from the lower social strata) in early modern times to receive class-based benefits in exchange for political support.<sup>6</sup> The revolutionary leaders made the mistake, under this view, of allying with the masses before creating the core institutions of the state, locking the state in a path of rent-seeking dysfunctionality.

Either because of too much authoritarianism or too much popular inclusion, Mexican policy-makers and analysts tend to conclude that the most pressing problem in Mexico's education system is the corrupt SNTE. They are not alone—the recent literature in comparative education has almost only focused on teachers' unions' obstructionism (Moe and Wiborg 2017).

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<sup>6</sup> The first version of the SNTE was modestly founded in 1932. The *Sindicato* acquired the name in 1943 when it absorbed the multiple local unions across the country.

However, as significant as bureaucratic unions are to explain institutional outcomes, states in the developing world have other, perhaps more serious problems. States of the Global South lack the cohesive and purposive organizations that most Western and some Asian nations take for granted.

The issue of ‘state capacity’ has not gone completely unnoticed. For example, a group of analysts from the Organization for Economic Cooperation and Development (OECD) observed the relationship of the Secretariat to SNTE is but one of the problems of Mexico’s education system—the subnational governments were as much of an obstacle to the implementation of Carlos Salinas’ educational reforms (Fierro Evans et al. 2009). Salinas’ decentralization reforms were a grand policy mandate designed in Mexico City; *estados* would manage their public schools but they all would have the same institutions of planning and accountability.

However, the blueprint designed by the central technocrats of SEP was implemented very differently in most *estados*, as it was negotiated with a micro-cosmos of subnational interests. Two decades after the reforms, the institutional configuration of the education system was far more complicated and regionally varied than expected, which added a burden to an already dysfunctional education system. Not surprisingly, Mexico has among the highest regional variation in educational supply in Latin America (Giraudy and Pribble 2018).<sup>7</sup>

My research sheds light on why the institutional outcome of the decentralization reforms was so regionally disparate. Fierro Evans et al. (2009) observed that the reforms were only faithfully implemented in about a third of *estados*, which were those with the smallest subnational education system or simply lacked their own schools. A surprising and largely overlooked fact is that this third of *estados* is roughly the same that had forcefully lost their

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<sup>7</sup> Using nighttime maps, Giraudy and Luna (2017) found that Mexico has the highest geographic variation in electricity infrastructure in Latin America, only after Haiti.

education systems circa 1940, in the tug-of-war between national and subnational authorities after the revolution.<sup>8</sup> So, President Salinas faced political constraints inherited from an earlier state-building cycle in which the education system was unevenly centralized. This institutional outcome persisted and came back to haunt the SEP fifty years later.

The lesson is that the tragedy of Mexico's education system goes beyond democracy and autocracy. My research advocates focusing on the state as an organization that can be more or less cohesive, and that can use its resources in a more or less effective and coherent way. In turn, to understand why state organizations fail, we must look at how they were formed and we must unpack the dimensions over which organizational capacity varies.<sup>9</sup> My research contributes to this direction.

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<sup>8</sup> See Table 5 in section 4.3 of chapter 4.

<sup>9</sup> See Soifer (2018) for a discussion of the different dimensions of 'state capacity,' such as bureaucratic professionalization and geographic reach.

## Chapter 2: Theory and Contributions

In this chapter, I explain my theory on the incentives of political leaders to upgrade state institutions to provide public goods that foster economic development. The Independent Variable is elite-level conflict in the ruling coalition. The mechanism linking DV and IV is the desire to correct the asymmetry of power inside the coalition between the leaders and the subordinates; that is, the leaders appropriate the political resources of the subordinates to stabilize or coup-proof the coalition. In this context, the leaders are heads of the national government, the subordinates are politicians in the subnational governments, and the political resources are the institutions to provide public goods and the alliance with popular organizations that these institutions make possible.

My theory is generalizable to other situations, especially post-revolutionary reconstructions—periods of state-building after violent struggles following the collapse of political order.<sup>1</sup> However, while most revolutions have similar features, there is nothing teleological about this process and the outcome depends on domestic antecedents and the location of a country in the system of nations. Revolutionary leaders<sup>2</sup> tend to build party-states but there are differences both in the ‘party’ and in the ‘state’ side of this kind of polity.<sup>3</sup>

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<sup>1</sup> The universe of cases is formed by countries that went through “classic social revolutions” (China, Cuba, Iran, Mexico, and Russia), and countries with “radical national-liberation struggles” (Angola, Mozambique, Vietnam, and Zimbabwe) (Levitsky and Way 2013). The Bolivian revolution is also a relevant case (Viedma 2014). Before the twentieth century, France (Skocpol 1979), and even England’s Glorious Revolution (Pincus 2007).

<sup>2</sup> I call the state-builders after a revolution “revolutionary leaders” (as opposed to post-revolutionary) following Levitsky and Way (2013), who distinguish between the state leaders that came out of a revolution (which is the case here) and the subsequent generation within the same political regime. The subsequent generation lack the moral authority and war-time bonds of their predecessors and, thus, rely more on patronage to keep the ruling coalition together (Levitsky and Way 2012).

<sup>3</sup> This kind of polity is often called one-party regime, with single- and dominant-party varieties (Magaloni and Kricheli 2013). In the twentieth century, the era of mass politics, revolutionary regimes were typically one-party autocratic regimes that relied both on patronage and non-material resources to elicit mass and elite acquiescence. When these regimes survived the disappearance of the revolutionary generation of leadership, they become exclusively reliant on patronage (Levitsky and Way 2012).

On the party side, most revolutionary leaders build resilient and durable political regimes due to the non-material resources they acquire in the state-building process, such as moral authority, strong emotional ties created in battles, and loyal party structures (Levitsky and Way 2012). But harnessing these resources for political stability requires an institutional craft that not all revolutionary leaders achieve; for instance, the Bolivian revolutionaries did not achieve it. In Bolivia, a combination of domestic antecedents prevented the revolutionary leaders to build a party-state that could resist subsequent political and economic crises. In contrast, Mexico did achieve a crisis-proof institutional structure and the regime proved to be resilient to political challenges and volatile economic cycles (Viedma 2014).<sup>4</sup>

On the state side, while most revolutionary leaders have successfully created resilient political regimes, the outcome of a cohesive and effective state organization has been the exception rather than the rule. The Chinese revolutionary state is an example of a (relatively speaking) cohesive and effective state apparatus arising from violent struggles (Vu 2010); the Soviet Union is likely another example. Mexico is not. Mexico looks more like Vietnam, where the initial polarized elite conflict arising from the revolutionary violence had to be tamed through compromise given their structural situation.

What is that structural situation? On the one hand, the revolutionary leaders inherited a regionally fragmented state and built a party over it. Instead, in China, a party built a (cohesive) state (Knight 2015). The Mexican revolutionary party was meant to bring a degree of coherence

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<sup>4</sup> I do not elaborate on the differences of the party-state structures among post-revolutionary regimes, as this is not the focus of my dissertation. Instead, I focus on the characteristics of the state institutions that impact public policy. In other words, while Viedma (2014) focuses more on the ‘party’ side of party-states, I focus more on the ‘state’ side. It will be enough to indicate the difference between the party structures of Mexico and Bolivia, according to Viedma’s account. In Mexico, the leaders successfully compartmentalized and centrally controlled their allies, who held political resources (of different varieties), so that these resources could be organized for stability. In Bolivia, the balance of power resources was tilted in favor of the allies, which hindered the leadership’s attempts of stabilization.

to a pre-existing fragmented state.<sup>5</sup> In China, a party took over the state and suppressed its opponents amidst polarized conflict, yielding a cohesive and coherent party-state machinery ready for radical modernization projects. In Vietnam, the local communist party also took over the state, but this party had to incorporate the elites of the old regime to achieve political stability, to the extent that the leaders suppressed the term ‘communist’ from the party’s name for a period (Vu 2010).

To be sure, China also had an extreme fragmentation of power after the collapse of the Empire (Skocpol 1979). But the regional centers of power in the Chinese territory were warlords, while Mexico inherited a periphery with established patrimonial machines.<sup>6</sup> While the Chinese center threw an army over these regional warlords, the Mexican center built the state over the existing patrimonial structure in the periphery. The Chinese center was a party that went to eliminate the rule of peripheral warlords, while the Mexican center formed a party with the revolutionary veterans that had gone to their home regions and encroached into the existing patrimonial machines inherited from the nineteenth century.

On the other hand, the peripheral situation in the international system meant that both Mexico and Vietnam were exposed to moderating pressures from the neighboring Great Powers with interest in preserving features of the status quo (China-USSR, in the Vietnamese case, and the US, in the Mexican case). After the radicalization of social reforms in the 1930s—which peaked when President Lázaro Cárdenas nationalized the oil industry dominated by US companies—Cárdenas faced the prospect of a major revolt in the ruling coalition with the

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<sup>5</sup> The fact that Díaz’s new, unfinished Capitol was repurposed for a Monument to the Revolution is a useful metaphor. Díaz was building a new Congress when the revolution happened. The core structure of the building (the dome and main columns) became the Monument to the Revolution in downtown Mexico City, where the bodies of the revolutionary heroes (allegedly) rest today.

<sup>6</sup> Mexico shares this antecedent with some countries of Latin America, like Argentina and Brazil, which were formed through a series of compromises between the political center and bastions of patrimonial power in the peripheries (Mazzuca 2021).

support of foreign powers.<sup>7</sup> He avoided the crisis by deaccelerating the social reforms and choosing a conservative successor who re-accommodated the coalition and compromised with the counterrevolutionary forces. Soon, the Cold War made the US and Mexico allies against the ‘Communist threat,’ which further shrank the revolutionary impetus.

Overall, Mexico in the twentieth century had more of a resilient political regime than an effective state apparatus. The Mexican state did achieve major social transformations, among them, comprehensive delivery of primary education through the *Secretaría de Educación Pública* (SEP). But SEP’s organizational deficiencies prevented these achievements from being as impressive as they could have been, given that the revolutionary generation had the chance of re-founding the state after the collapse of the old regime.<sup>8</sup> Mexico had a stronger and more centralized state than before, but its improved capacity was also fragile, as it hinged on the fusion between state and party; on the language of cooperation and dissent created by the cultural machine of the revolution and the corporatist organizations at the service of the national government.<sup>9</sup>

In this chapter, I focus on the achievements of the revolutionary generation of state builders who, although did not build a Leviathan as capable as in Western Europe, China, or the Soviet Union, created an organization that was more capable and more centralized than its

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<sup>7</sup> Cárdenas himself had become the head of the coalition through a revolt against his mentor, Plutarco Elías-Calles. Calles and his predecessor, Álvaro Obregón, had taken the leadership in a coup against President Venustiano Carranza.

<sup>8</sup> Many of the cultural transformations achieved by SEP were unintended, product of the negotiation with rural communities (Vaughan 1997). Unintended consequences tend to be a sign of state weakness (Soifer 2008), as it is often the case in the developing world. States in developing countries are “like big rocks thrown into small ponds: they make waves from end to end, but they rarely catch any fish” (Migdal 1988, 9).

<sup>9</sup> The revolutionary state was built over regionally fragmented state of the nineteenth century; its main difference was that the new state had “hegemony” in the Gramscian sense (Knight 2013). This hegemony had its material expression in the party and corporatist institutions at the service of the president, and its non-material expression in the language of dissent, cooperation, and loyalty disseminated through SEP and the multiple cultural projects of the revolutionary state. These hegemonic institutions gave cohesiveness to the regionally fragmented state institutions.



predecessor. In terms of education, the Mexican state caught up with the most capable states of the region in a relatively short period.

In other words, here I focus on Mexico's similarities to other revolutionary regimes; on the *incentives* that revolutionary leaders face to upgrade state institutions to provide public goods. In chapter 4, I turn to the *obstacles* faced by these leaders and the resulting uneven geographic reach of state institutions.

In the rest of the chapter, in section 2.1, I first present a contextualization of the political crisis after the Mexican Revolution so that the reader understands the actors and relationships involved in the theory. In section 2.2, I deliver a stylized version of my causal argument. In sections 2.3 and 2.4, I elaborate on the conceptualization of my Independent and Dependent Variables, respectively. Finally, in section 2.5, I explain my contributions to a number of literatures, and section 2.6 concludes.

## **2.1 Context**

During 1920-1940, a military faction of the 1910 revolution secured Mexico City and reconstructed the collapsed state. The national bureaucracy lacked presence in the federative states (*estados*) beyond the military personnel, and only controlled policy-making in the areas of exclusive federal jurisdiction: the country's capital and three federal territories.<sup>10</sup> There were no national parties and only incipient national popular organizations (labor unions and pro-land redistribution leagues).

Since its formation, the state was a regional configuration of patrimonial bastions encroached in subnational government, which had low institutional capacity. Porfirio Díaz had ruled indirectly by compromising and allying with these patrimonial bastions and advocating for

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<sup>10</sup> The post-revolutionary constitution of 1917 allocated the bulk of public administration in the hands of subnational authorities.

a stronger role of the national government in policy-making. In three decades, Díaz achieved a state that ruled more directly; in public administration, the role of the national government would be of coordination (not of central planning and direct implementation). It was a decentralized state design of shared responsibilities.

The revolutionary leaders inherited the same regionally fragmented state minus Díaz's political system of national coordination, which had collapsed with his regime. The revolutionary leaders built anew a similar system through alliances with regional politicians and their patrimonial bastions. But there was a novelty. Díaz's economic modernization had bred popular groups that further mobilized during the revolutionary wars. These groups allowed the veterans of the revolution to challenge the old oligarchy in the subnational levels of government when they went back to their home *estados* after the war and formed local parties and popular organizations (labor unions agrarian, leagues, and urban groups).

The revolutionary leaders in the national government allied with the regional veterans and their local social bases to rule the country. However, the coalition was unstable because of the power asymmetry between the leaders and their subordinates: the political resources of the coalition (i.e. popular organizations, most of the bureaucracy, and the reins of policy-making) were locally controlled. Taking advantage of the leaders' political weakness, ambitious members of the coalition continuously rebelled against their leaders.<sup>11</sup>

The first major revolt was against Venustiano Carranza, leader of the Constitutionalist faction, which had secured the capital after the war and published the revolutionary constitution in 1917. President Carranza was toppled by his right hand, Gen. Álvaro Obregón, in a succession

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<sup>11</sup> The national rulers at the outset of my period of study—the Generals of the Sonora group, Álvaro Obregón, Plutarco Elías-Calles, and Adolfo de la Huerta—had themselves taken the federal government through a coup against the previous leader, Venustiano Carranza, in 1919. These three generals had been the closest allies of Carranza in the military.

crisis before the 1920 presidential election. Obregón and his crony Gen. Plutarco Elías-Calles—called the Sonora Group after their home *estado*—ruled the country for the next fifteen years.

The Sonora Group faced new revolts, so they eventually changed their strategy of rule to correct the asymmetry of power in the coalition. The *Sonorenses* competed with the regional veterans for the political alliance with popular organizations, creating the first national-aspiring unions and agrarian leagues. A new political strategy also required a new state-building approach.<sup>12</sup> Instead of a coordinating role, the national government expanded its bureaucracy to compete with and eventually displace the subnational governments as policy-makers.

The centralization of the education system was a key part of that effort, as public instruction was the main area of administration of subnational governments.<sup>13</sup> But the centralization effort happened in a slow, sequential, and cautious way because the subnational elites strongly opposed the national government's intervention in their affairs. Moreover, the decentralized design of the 1917 constitution had been a victory against the centralizing ambitions of Porfirio Díaz.

President Obregón (1920-1924) started with a consensus-based approach, similar to what Díaz had done in the nineteenth century, in which the newly created Secretariat of Public Education (*Secretaría de Educación Pública*, SEP) had a coordinating role. But as I describe in the next chapter, soon the SEP unilaterally decided to expand its own schools, which eventually displaced *estados* and municipalities as the main providers of the service. Overall, the national government provided access to primary education at a scale that contradicts most contemporary

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<sup>12</sup> Here, it is necessary to distinguish between “state-building,” the transition from indirect to direct rule, from the multiple institutional arrangements through which a national state can rule directly. State-building across the world produced institutional heterogeneity, not homogeneity (Waldner 1999).

<sup>13</sup> The animated debates about public education during the post-revolutionary reconstruction were not merely about education policy but about the place of the national government in local affairs (Arnaut Salgado 1998).

models of political economy and with a speed that could only be done through a highly centralized design, given the poor institutional capacity of the subnational governments.<sup>14</sup>

Elite conflict in the ruling coalition incentivized these changes and accelerated the expansion of SEP. Without the political instability of the post-revolution, the Sonora Groups likely would have followed a less risky state-building strategy; one built on consensus rather than conflict, as Porfirio Díaz before them. But Obregón and his cronies faced rebellions every presidential succession (see a summary of coalitional rebellions in Table 6 of chapter 5), besides the hostility of societal forces outside the coalition (e.g. Catholic organizations and guerrillas, and foreign companies). For the Sonora Group, building a stronger state in a short period was an existential imperative; they risked being deposed in the next succession conflict.

The choices faced by the revolutionary leaders are summarized in the next section.

## **2.2 A Logic of Public Goods Provision**

Here I present a stylized version of my causal argument. I first go over the initial scenario, then over the preferences and actions of the actors involved in the theory. Finally, I explain why these actors choose a certain course of action and indicate what the results look like in reality.

In the initial setting, the state rules indirectly. The national government has a hard time implementing policy because it depends on allied subnational elites to make the state machinery work. The ruling coalition is formed by an alliance of national and subnational elites; the latter mediate between the leaders of the coalition and the popular organizations of the alliance.

The preferences of the actors involved in the setting are as follow:

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<sup>14</sup> Although there is no systematic data (yet), scholars of education studies situate 20th-century Mexico among the most centralized education systems of the region at the outset of the decentralization wave (e.g. Tatto 1999; Ornelas 2003; also, in political science, Falleti 2010). Political scientists also tend to see the PRI's Mexico as one of the most centralized states of the region, given the extra-constitutional powers of the president (e.g. Weldon 1997)—the aforementioned hegemonic institutions.

- The subnational elites' priority is keeping the center at bay to preserve their political domination in their regions.
- The national elites want to establish the primacy of the center in policy-making.

While the national leaders have strong incentives to centralize public administration to take away the resources of subnational elites, they face a dilemma. They can take two actions:

- (1) Adopt a consensus-building strategy that would in the long-term—through accumulated reform—consolidate the primacy of the national government over the state apparatus.
- (2) Impose centralized governance institutions that aid them to concentrate political resources.

There are risks associated with each action. On the one hand, option (1) creates an unstable coalition because the national leadership is perceived as weak, making it easy prey for disloyal insiders. On the other hand, option (2) risks a backlash from the subnational allies (who may support disloyal insiders of the national government).

Under political instability, the national leadership will choose option (2), an imposition, because the risk of being toppled in a coup or coalitional breakdown is greater than the risk of subnational backlash. If the national leadership initially adopts option (1), a more prudent course of action, they soon learn about its costs through repeated coalitional conflict. Moreover, if done quickly, the risk of backlash diminishes as the national bureaucracy creates stable links with the population.

Now, I will explain the empirical foundations of my framework. First, I assume a ruling coalition with regional allies because, as territorial organizations, nation-states *always* have them. The variation is in the balance of power within this alliance, which in turn impacts the

division of authority between them. Second, the national leaders prefer more than less direct rule because subnational bureaucracies are weak and underfunded, but also because traditional, pre-modern interests more easily hinder top-down modernization efforts at the local level.<sup>15</sup>

Finally, subnational elites strongly dislike direct rule because they would get displaced and lose the political control of their regions. The preference for regional autonomy is not exclusive of traditional interests encroached on local governments. Post-revolutionary Mexico shows that even ideologically compatible regional elites would defend their autonomous sources of power. This is why the cleavage of conflict here is about the balance of national-subnational authority and not a conflict between economic modernizers and landed aristocrats, as is the case in previous accounts of institutional development based featuring elite conflict.<sup>16</sup> I call the former “territorial cleavage” and the latter “modernization cleavage.”

National leaders would normally go for a consensus-building approach, option (1), which achieves an institutional outcome of shared responsibilities. Such a scenario looks like Mexico’s pre-revolutionary education system under Porfirio Díaz (Martínez Jiménez 1973), Peru under Civilismo (Soifer 2013), and mid-19th-century Chile (Soifer 2009).

The Chilean national state deployed its bureaucracy earlier than any other country in the region and is often regarded as the most centralized case. But its centralized architecture should not be exaggerated. At least regarding its education system, the so-called “centralization” of the Chilean state means that state authority was elevated from the local to the provincial level and that the national government had the upper hand as coordinator through an effective system of inspectors. The outcome was *not* that the national state unilaterally designed policy and funded

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<sup>15</sup> In the context of high inequality of Latin America, decentralized institutions are an obstacle to modernization, as powerful landed oligarchs effectively avoid being taxed to fund public goods. So, it is safe to assume along with Soifer (2015) that, under these circumstances, national authorities always prefer more centralization.

<sup>16</sup> Implicitly in Waldner (1999) and explicitly in Albertus, Fenner, and Slater (2018).

and administered schools. Thus, what scholars of state formation call centralization nineteenth-century Latin America is more like “semi-centralization,” at least in public administration.

A semi-centralized system is also the initial education system of post-revolutionary Mexico, in the presidency of Álvaro Obregón (1920-1924). However, Obregón changed strategy very soon, adopting a more aggressive position about the role of the national government to displace subnational governments as the main providers of public goods.<sup>17</sup> In this regard, Mexico is an outlier in Latin America. Despite having a federalist constitution, Mexico achieved an outcome close to a unitary state (Diaz-Cayeros 2006).<sup>18</sup>

Why did the national government become aggressively centralizing? A major factor was the instability of the ruling coalition. In other words, the balance of power between leaders and subordinates was tilted towards the latter; the subordinates, based on the subnational levels of government, controlled a substantial portion of the valuable resource: mass political support. So, the national state was perceived as weak and faced chronic military challenges arising in every leadership succession (presidential elections). Moreover, the high fragmentation of political power all but blocked the implementation of the president’s preferred modernization reforms. The main obstacles were the president’s allies in the subnational governments: the veterans of the revolution that went back to their home *estados*.

Before 1924, President Obregón had adopted a strategy similar to the pre-revolutionary dictator, Porfirio Díaz: they monitored the loyalty of subnational elites, and whenever they showed signs of disloyalty, plotted to replace them or toppled them through legal and extra-legal means. But the tumultuous times before that year taught the national leaders that their coalitional

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<sup>17</sup> The animated debates about public education during the post-revolutionary reconstruction were not merely about education policy but about the place of the national government in local affairs (Arnaut 1998).

<sup>18</sup> Venezuela is also an outlier, but the centralization of the state was achieved in the nineteenth century, under different circumstances (Diaz-Cayeros 2006).

strategy was not enough by itself. To consolidate the national state and modernize the country, the leaders had to control the political resources of the coalition. Then, the national leadership unilaterally decided to centralized public administration and lawmaking so that only the center could promise and deliver progressive policies.

Along with labor and agrarian policy, the national government proceeded to centralize the education system, which was the most important public service at the time. When Gen. Plutarco Elías-Calles became president in 1924, unilaterally announced that the shared-authority policy was over and the national government would build a parallel education system. Instead of appointing a public figure with a national reputation as Secretary of Public Education, as his predecessor had done, Calles appointed a loyal politician.

To appreciate the contentious nature of the issue and the risks of imposing a direct design, consider the ‘double speech’ of the national leadership. In public interventions and official documents, the President and the Secretary stressed and promised that their strategy was compatible with the spirit of federalism and that, contrary to the protesting voices of governors, the national government’s intention was only to complement subnational education systems in areas out of their reach (outside cities). However, the national government was not only intervening in rural areas, where local education was absent, but was ‘nationalizing’ education; first, school by school, encouraging local teachers to request their incorporation to SEP, and later, absorbing entire *estado* and municipal systems.

To appreciate how willing the national government was to assume risks, consider that along with the deployment of national schools across the territory, President Calles also enacted policies that were deeply unpopular among the population. To address the perceived challenge of an archenemy, the Catholic Church, Calles strictly regulated private education, forbidding



religious instruction, set limits to the number of priests, closed churches, and outlawed public demonstrations of religiosity. In my dissertation, I will not study the conflict with the Catholic Church, as it mostly (although not always) had a dynamic independent from the conflict with regionally-based elites. I will leave this issue for a side project.

To sum up, public education became entangled in the conflicts between leaders and subordinates of the ruling coalition. The instability of the ruling coalition incentivized the national leaders to adopt governance institutions that were strongly disliked by their political subordinates. Instead of expanding education access through a design of shared responsibilities, the national leaders imposed a centralized design.

### **2.3 Independent Variable**

In this section, I elaborate on the meaning of my IV, “elite conflict.” All autocracies have elite-level conflicts that are resolved through a combination of repression and accommodation (Svolik 2012). But not all these conflicts are the same. Recent literature has focused on conflicts between political elites and traditional elites (i.e. wealthy oligarchs, religious organizations); for instance, the cases of “revolution from above” in General Velasco’s Peru (Albertus 2015b) and Ataturk’s Turkey (Trimberger 1978).<sup>19</sup> The common plot is that state reformers repress the wealthy oligarchy that opposes modern economic reforms.

In other instances—which historians identify as “social revolutions”—the collapse of the political order creates a more pressing conflict: between political elites that aspire to impose their own version of modernity.<sup>20</sup> Because the existing order collapses, the conflict involves a level of violence and popular uprising absent in revolutions from above. The reconstruction of the

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<sup>19</sup> Other cases of revolution from above are Meiji Japan and Nasser’s Egypt (Trimberger 1978),

<sup>20</sup> Here, I add myself to Pincus’ (2007) conceptualization of social revolutions—their main driver is not a conflict between tradition and modernity but a conflict between modernizers.

political order happens amidst the conflict between political elites and not only with traditional elites. In this section, I explain the revolutionary dynamics of state-building and how they interacted with the particularities of the Mexican case.

What happened after the pre-revolutionary regime collapsed? What is a revolutionary dynamic of state-building? When a state collapses, new groups fight for the reins of the new order, and the coercive apparatus that dissuades social rebellion disappears. The combination of contentious elite politics and mass rebellion creates a situation of extreme vulnerability. Some aspects of this vulnerability may be more imagined than real, but whoever is in power perceives continuously a real possibility of violent deposition.

State elites, perceiving an extreme existential threat, ally with the masses to counter the power of their enemies and enact profound state reforms both to pay for their broadened alliance and to deplete their enemies of their sources of power. These reforms are typically *not* planned; or more accurately, the *depth* of these reforms is not planned. But, amid these dynamics of contention and rebellion, revolutionary elites profoundly transform the structure of state and society in a span shorter than the decades-long evolution of states through negotiation and accommodation.<sup>21</sup>

The unexpected reorganization of state and society is the case of Mexico. Neither of the ‘founding fathers’—Carranza, Obregón, Calles, and Cárdenas—were radical thinkers or had strong commitments to a centralized territorial system of rule. There was supposed to be “no grand restructuring of society” (Knight 1990, 513). Rebuilding the economy after the revolutionary wars and modernizing Mexico required harmonious class relations and, more

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<sup>21</sup> As indicated before, the Mexican reformers stopped short for finishing the centralizing reforms as they were doing them. Their progress was derailed by structural factors.

urgently, an environment of secure property rights to get international recognition, renegotiating the foreign debt, and accessing credit markets.

This situation echoes what Doner, Ritchie, and Slater (2005) called “systemic vulnerability:” a combination of broad coalitional commitments, material constraints, and threats to the existence of a state. In this case, the threat is not external, as the cases of South Korea and Taiwan that these authors analyze, but stems from an internal situation.<sup>22</sup>

To understand the specifics of Mexico’s path to state-building, we must understand the internal situation. If revolutions have in common the collapse of the existing order and the violent confrontation between reformers, each one has its idiosyncrasies related to antecedent conditions.<sup>23</sup> A key antecedent in the Mexican Revolution is the state’s regional fragmentation, which supplied the actors and the cleavage of a core dynamic that shaped the state-building path. A core conflict driving the dynamic of state-building was between central and peripheral elites; a conflict about the balance of power of the national and national authorities.

The Mexican state is regionally fragmented by design; it is a “birth defect,” if you will. Similar to Brazil and Argentina, a federalist formula of territorial governance was the condition to form a country with disparately different regions.<sup>24</sup> So, every leader after the foundation had faced a constellation of “patrimonial bastions” in the peripheries that cannot be conquered. These

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<sup>22</sup> Latin America lacked the kind of long-lasting geopolitical frictions that drove the growth of European states (Centeno 2002), or the continuous tensions of East Asia from which Doner, Ritchie, and Slater (2005) derived their “systemic vulnerability” thesis. Partly for that reason, Mexico’s vulnerability proved to be more manageable and less enduring than in East Asia.

<sup>23</sup> Countries that went through what social scientists understand as ‘social revolution’ share exceptional attributes related to the collapse of the state and the ensuing violent political and social transformations (Levitsky and Way 2013). But an in-depth look at the initial conditions (and the historical time) of each case reveals why the dynamics and outcomes of each case also present idiosyncrasies. For example, the French and Russian revolutions share characteristics that make them instances of the same phenomenon, but the fact that the former happened before the industrial revolution made a world of difference in the outcomes with respect to the latter (Skocpol 1979).

<sup>24</sup> Additionally, Mexico’s liberals were strongly committed to a decentralized political system, as they inherited the connections to the provincial groups that joined the independence war (Mallon 1995).

bastions persisted because of the peripheral position of Latin America in the system of nations: the leaders that built the institutional apparatus of the state were not trying to conquer territory, as the European nations, but trying to integrate to the world markets as exporters of raw materials. Commodity trade offered a quick and easy source of funds for the state, and it required accommodating the patrimonial elites of the peripheries rather than defeating them (Mazzuca 2021).

A perennial task for Mexican state leaders is how to make this regionally fragmented organization work as a cohesive state apparatus, for the combination of federalism and institutionally weak or patrimonial subnational governments is a receipt for poor state capacity.<sup>25</sup> As in other Latin American nations, the solution involved deploying national bureaucracy across the territory to at the very least supervise and coordinate the functioning of the subnational layers of authority (Soifer 2015).

The Porfirian state gradually achieved a greater involvement of the national government in provincial affairs, as a coordinator rather than as a direct-policy maker. As the area of public education allows us to see, the national government was trying to achieve a role of coordinator and to supply assistance for the gradual institutionalization of the subnational levels of government (Martínez Jiménez (1973)).<sup>26</sup>

The price of a greater national involvement was that Díaz respected the privileges of the subnational elites in their patrimonial bastions. For certain aspects, it was also convenient to the export-oriented economic project. For example, the subnational elites of the central region of Mexico expanded their agricultural estates at the loosely defined lands of rural communities,

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<sup>25</sup> This is why Italy's founders chose a unitary territorial formula rather than Germany's federal system (Ziblatt 2004).

<sup>26</sup> In the meantime, the political system was manageable through the persona of Díaz. Díaz exploited the rivalry of regional factions as the only leader capable of solving them, and whenever possible, imposed a loyal governor.

many of which had received lands from the Spanish Crown. So, the persistence of patrimonial bastions produced strong rural mobilization that challenged the security of agricultural estates but was kept at bay by the security apparatus of Díaz (Coatsworth 1988). The most famous of all was the movement led by Emiliano Zapata.

When these rural groups—and many others that held grievances against the modernization reforms of Díaz—saw a ‘crack’ in the repressive apparatus when Francisco Madero, a landed oligarch, rebelled against the state, they rose in arms in a few months (uncoordinatedly). The situation became uncontrollable, leading to Díaz’s resignation and self-exile. However, his successor (Madero) could not control the situation either and was assassinated by an army faction. That was the beginning of the revolutionary wars (Ávila and Salmeron 2015).

Many of these rural rebellions were finally suppressed by the revolutionary factions—Carranza killed Zapata, and Obregón killed Villa. But the aspirations of the popular movements were incorporated into the 1917 constitutions and the revolutionary veterans picked them up to mobilize the masses when they went back to their home *estados*. So, while the veterans championed the most radical expectations of the masses, the national leaders faced the conflicting tasks of meeting the promises of the revolution and responding to the international environment (i.e. fostering inward-looking growth through an environment of secure property rights and harmonious labor relations).

These were the terms of the conflict between the national leaders and their subnational allies. The veterans wanted subnational autonomy to advance their own projects and consolidate their political leadership and the national leaders wanted the reins of policy-making to juggle the contradicting pressures of the political landscape. The national government faced centrifugal

forces inside its ruling coalition and responded with an even greater centripetal impetus. The outcome was a more centralized system of governance, very different from what Díaz had achieved, what the 1917 constitution had achieved, and what Álvaro Obregón had started in 1920.

However, the centralization impetus was trumped by exogenous forces, as explained at the beginning. Thus, the revolutionary state came to rely on the fusion of party and state to grant the latter a substantial degree of cohesiveness, but that fell short of the most cohesive states of the region (e.g. Chile).

## **2.4 Dependent Variable**

In this section, I elaborate on the concept behind the Dependent Variable. My research focuses on primary or elementary public education, but my argument is not circumscribed to this particular policy; public education is a case of something broader. Public education is an example, a prominent one, of a state institution to provide “public goods” or “public services.”

Here, I understand “public goods” in a broader sense than the typical political economy definition with two characteristics: non-rivalry and non-excludability. I understand public goods as policies aimed at transforming the economy one way or the other, as opposed to policies that are solely redistributive but do not necessarily spur development. Transformative policies mobilize resources and populations, disrupting the fundamental structures of society, which redistributive-only policies do not necessarily. A better term is perhaps “developmental public goods.”

Policies to improve access to basic instruction are at the intersection of developmental public goods and redistributive policies.<sup>27</sup> Public goods have the effect of transforming society as a whole and only indirectly affect the well-being of individuals, inasmuch they enlarge the economy as a whole and provide potential channels of social mobility. For example, investing in public infrastructure and institutions to regulate competition. Redistributive policies directly impact the well-being of individuals; for example, welfare and social security institutions.

The policies to increase access to basic instruction (of which public schooling is the most common) not only have a transformative effect on society by improving the productivity of the workforce (they are an investment in ‘human capital’). These policies also have a direct effect on the well-being of individuals by increasing their capabilities to act with more freedom and improve their own lives (Sen 1999). However, for my research, I focus on their public-good dimension. I understand them as part of top-down projects to modernize the workforce and create citizens of a liberal social order.

To materialize such transformative policies, leaders must reform the state to become a more effective, far-reaching, and intrusive organization. So, the provision of developmental public goods requires reforming the state to make it strong, which in turn often requires centralization. By centralization, I do not necessarily mean a unitary constitution but simply the established primacy of the national authority over the territory, even if subnational authorities retain significant faculties. In this sense, the provision of public goods, state reform, and state-building go hand in hand, and I use them close to each other in my dissertation.

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<sup>27</sup> It is telling that public education is seldom discussed in books or syllabi on the Welfare State, and neither has it featured much in textbooks and courses on ‘economic policy.’ Public education is studied in courses on the ‘political economy of development’ and has its own community of researchers and area of study.

Other authors have used concepts close to my notion of public goods, as well as similar distinctions with less impactful policies. For example, consider the distinctions in Table 1. These authors were talking, at least partially, about “late developers” their dilemmas to achieve political stability and economic modernization at the outset of industrialization.<sup>28</sup> We are all talking about similar things, but I want to be more explicit about what public education is a case of in my dissertation.

*Table 1. Concepts used in the literature*

<b>Concepts</b>	<b>Authors/Publications</b>
“Investment” vs “consumption”	Galenson (1959), de Schweinitz (1959), Huntington (1968)
“Indivisible goods” vs “divisible goods”	Waldner (1999)
“Universal” or “encompassing” vs “targeted”	Birdsall and Haggard (2000)
“Public goods” vs “private goods”	Bueno de Mesquita et al. (2003)
“Broad” vs “narrow” distribution	Albertus, Fenner, and Slater (2018)

I assume that the supply of schools is an indicator of the provision of developmental public goods and a stronger state (although an incomplete and imperfect measure). It is important to acknowledge that the supply of schools may have different meanings in different contexts. The goals of leaders cannot be set a priori, they must be historicized (Singh and vom Hau 2016). For example, in a contemporary middle-income country, it may signify simply that a party in government is allocating more resources to this particular area; in other words, a redistributive act, without necessarily an increase in state capabilities. But in early modern times and/or a state-building phase, expanding the provision of public goods and services very likely implies strengthening the state.

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<sup>28</sup> These authors’ historical focus vary from an ambitious scope of all human history (Bueno de Mesquita et al. 2003) to specific developing countries in a specific set of years (e.g. Waldner 1999).



Not all research provides or adopts a language to distinguish the time-varying meaning of state reforms and public expenditures. A recent example of research using a history-dependent language is Albertus, Fenner, and Slater (2018). They separate the provision of public goods into phases: displacement, enmeshment, and upkeep. State-building periods roughly correspond to the phases of displacement and enmeshment, when the institutions to provide developmental public goods are put into place for the first time.

I differ from Albertus, Fenner, and Slater (2018) in that they are not necessarily talking about policies that foster economic development. For example, they locate large-scale land reform and public education in the same category of “comprehensive distribution.” Policies that distribute comprehensively share with public goods their universal aspirations but they do not necessarily upgrade the economy and transform social relations.

However, “comprehensive distribution” is not too far from developmental public goods either. For example, large-scale land reforms often happen in contexts of modernization, alongside policies to transform the economy and society. They are not regular occurrences but happen at moments when state leaders commit to deep socioeconomic transformations. So, especially in early industrial times, redistributive policies may go hand in hand with developmental policies (Doner, Ritchie, and Slater 2015).

Finally, state-building can happen through a more or less decentralized design, which is even less straightforward to identify with aggregated data and without immersion into the corresponding legislation. The authors in the table do not distinguish whether the state reform implied a centralized or decentralized design. I do introduce the distinction and highlight that Mexican state-builders adopted an extraordinarily centralized governance structure.

The centralized design is an institutional exceptionality for Latin America, which is telling about the incentives of the state leaders to invest in public education—they imposed a centralized design because the national-subnational asymmetry of power created an existential threat. It was an exceptional (and risky) solution to an extraordinary situation of a social revolution that destroyed the existing order.

## **2.5 Implications and Contributions**

In the final section of this chapter, I discuss the implications of my theory of public goods provision for the literatures on state formation and authoritarian politics. These implications can be summarized in three claims:

- State leaders can build institutions that foster economic development under contexts of elite unity and elite conflict. How well they do it is closely related to domestic and international structural factors.
- Scholars of state formation in Latin America should pay attention to national-subnational arrangements as political outcomes, as there is substantial variation in the degree of centralization of authority regardless of whether the constitution is federal or unitary.
- Elite conflict does not exclusively happen across the modernization cleavage (tradition vs modernity).<sup>29</sup> The territorial cleavage, concerning the balance of authority between national and subnational governments, is a possibility.

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<sup>29</sup> By modernization cleavage I mean the conflict between state elites and aristocrats, especially landed elites (e.g. Albertus, Fenner, and Slater 2018). To be sure, aristocrats are seldom *completely* opposed to modernization projects, as international forces create irresistible imperatives. But aristocrats still fight to maintain social hierarchies as much as possible, *within* the changes that capitalist and republican reforms inevitably incite.

## **I. Elite Unity and Conflict**

The literature on state formation in Latin America often features a theme of unity among elite-level actors, especially between state leaders and economic oligarchs. For example, Centeno (2002) argues that creole factionalism inhibited the state-building effects that international wars had in Europe. Soifer (2015) argues that, in countries like Colombia, the lack of elite unity around an urban center prevented a single state project. And, when state elites successfully allied with economic oligarchs, countries like Chile and Argentina reformed their states to integrate into the world economy as exporters of raw materials (Saylor 2014).

The theme of unity is not circumscribed to the nineteenth century. Waldner's (1999) interwar comparison of the Middle East and East Asia stresses the causal relevance of elite unity in Korea and Taiwan to build strong state organizations that privilege social investment over particularistic distribution. In contrast, the factious elites of Turkey and Syria handicapped their state organizations by institutionalizing the particularistic demands of their lower-class allies. This argument is relevant for Latin American countries, which followed a similar economic integration as Turkey and Syria.

Instead, others argue that state-building under elite conflict can also lead to capable institutions, such as in the case of revolutionary China (Vu 2010). There, the process of reconstruction started with the constant conflict between the Communists and the Kuomintang. These two parties were intermittently allies and rivals until one of them, the Communists, expelled the other (Skocpol 1979). What started in conflict ended up with unity in the sense that only one side remained; not because the two sides found a *modus vivendi*.

Differently than China, the revolutions of Vietnam and Mexico started with elite conflict and ended with elite accommodation; not with the utter defeat of one side, which was the kind of

‘unity’ observed in China. One can imagine a counterfactual in which the Mexican revolutionaries went all the way to suppress the moderating forces in the ruling coalition and built a centralized state machinery. Instead, the process of displacing rival factions was stopped due to structural factors, especially because of the peripheral situation of Mexico in the system of nations. The process of displacement was already slow because of the antecedent of strong regionalism so that it eventually faced the closing effects of international forces.

My position is that both unity and conflict can lead to cohesive and coherent state organizations. More than how the state-building cycle starts, what matters is how it ends.<sup>30</sup> For Waldner (1999) the problem with elite conflict is the incorporation of the masses into the coalition, as it creates institutions prone to rent-seeking, and thus, a dysfunctional state. But the case of Mexico shows that the problems with the state as a policy-making machine were more than just about the corrupted influence of the official unions (refer to the example of education reform in chapter 1).

The origins of the incoherent and incapable state machinery in Mexico are also about the regionally disjointed state institutions and the persistence of patronage machines in the peripheries. These “patrimonial bastions” have been there since the creation of the country (Mazzuca 2021). If anything, the mass alliances of the revolution allowed the central leadership to compensate for that ‘birth defect.’ The PRI presidents had an all-mighty image and because their mass-based party granted them extra-constitutional powers. The Party was a glue that kept together the fragmented and incoherent state organization inherited from the nineteenth century.

My position is *not* that Waldner (1999) was completely wrong since I do not have the material to reject his argument. Perhaps the class-wide redistributive commitments of the

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<sup>30</sup> Thanks to Dan S. for this insight. I must continue refining it but I think it is the right path.

revolution did handicap the state to catch up with the Western developed economies. Even if the latter was true, these same commitments allowed the Mexican state to overcome the dysfunctionalities inherited from the nineteenth century. Thus, a broad coalition led to a stronger and more capable state apparatus.<sup>31</sup>

Two factors underlie my disagreement with Waldner (1999). On the one hand, when talking about ‘state capacity,’ the author seems to exclusively focus on the professionalization of the central bureaucracy (the “Weberianness” of the state), overlooking the infrastructural dimension. To fully understand the institutional variations of different paths to state-building, we need to unpack the dimensions over which a state may be said to have more or less capacity.<sup>32</sup>

On the other hand, Waldner did not take into account that the distribution of private goods to create a broad coalition may very well go hand in hand with social investments (Doner, Ritchie, and Slater 2015), which strengthen the state’s infrastructural capacity and social embeddedness. In chapter 6, the case of Chiapas, I elaborate on how private and public goods may go together.

## **II. National-Subnational Arrangements**

The second implication of my theory is that the balance of national and subnational authority is a political outcome. Scholars of state formation in Europe only recently paid attention to it as an object of study (Ziblatt 2004). In Latin America, we have paid little attention perhaps due to the region’s common progression towards centralization before the neoliberal turn of the twentieth century, in contrast to the United States where the center accommodated rather than overawed

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<sup>31</sup> Indeed, when the social bases of the PRI eroded in the process of democratization, the regional fragmentation of the Mexican state, the problem persistent of “patrimonial bastions” resurfaced (Armesto and Olmeda 2020).

<sup>32</sup> Soifer (2008) offers a thorough discussion on how to unpack the notion of ‘state capacity’ to move beyond the strong-weak dichotomy.

territorial interests (Eaton 2011).<sup>33</sup> However, when we look closer, there is substantial variation in the division of labor and authority between national and provincial governments, as well as between provincial and lower levels of government, within a given unitary or federal state (Gibson and Falleti 2004).

Mexico stands up in Latin America starting in the interwar period, becoming an unusually centralized state (despite a federal constitution) and an exceptionally mass-mobilizing and stable autocratic regime. Mexico followed the revolutionary path to state-building which, as in other similar episodes involved sustained and violent conflict between political elites.<sup>34</sup> This path explains the outcome of Mexico's education system, also exceptional in Latin America.

Figure 1 illustrates the sudden change in the path that Mexico had been following since the late nineteenth century. The countries of the sample are those that made the most extensive state reforms in the region towards an economic strategy of industrialization by import substitution (Ibarra del Cueto 2018), except for Peru. I added Peru because Mexico's (pre-revolutionary) education system looked a lot like Peru's at the end of the nineteenth century.<sup>35</sup>

The aggregate indicator of primary enrollment does not allow us to appreciate the institutional transformations in education (on which I elaborate in chapter 3), as the data counts together enrollments in private and public education, national and subnational. But it roughly shows an anomalous effort, mainly due to the national government, and a sudden drop after 1930

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<sup>33</sup> In Latin America, the common trend towards centralized state architectures has to do with the common trend towards land concentration. The post-independence decentralized territorial systems proved to be ungovernable as powerful landlords used their clout to avoid funding the provision of public goods at the municipal level (Soifer 2013).

<sup>34</sup> Revolutions have in common the conflict between elites representing different modernization projects, as opposed to reformers against defenders of the pre-modern order (Pincus 2007).

<sup>35</sup> Based on Soifer's (2013) description.

related to the closing of many subnational schools after the Great Depression and the accommodation of the counterrevolutionary forces in the ruling coalition.

*Figure 1. Primary school enrollment (%)*

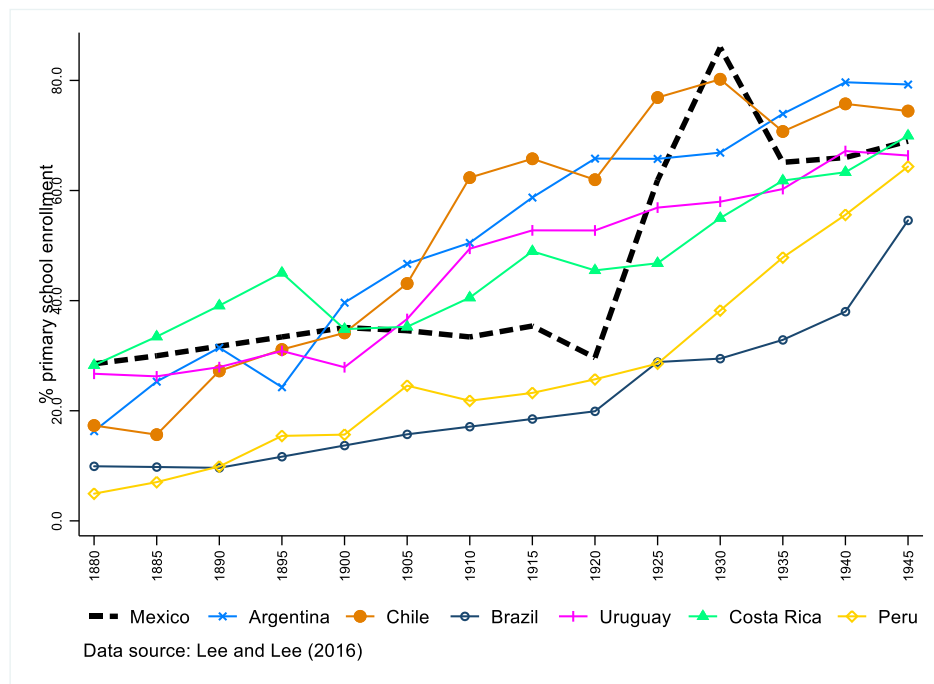
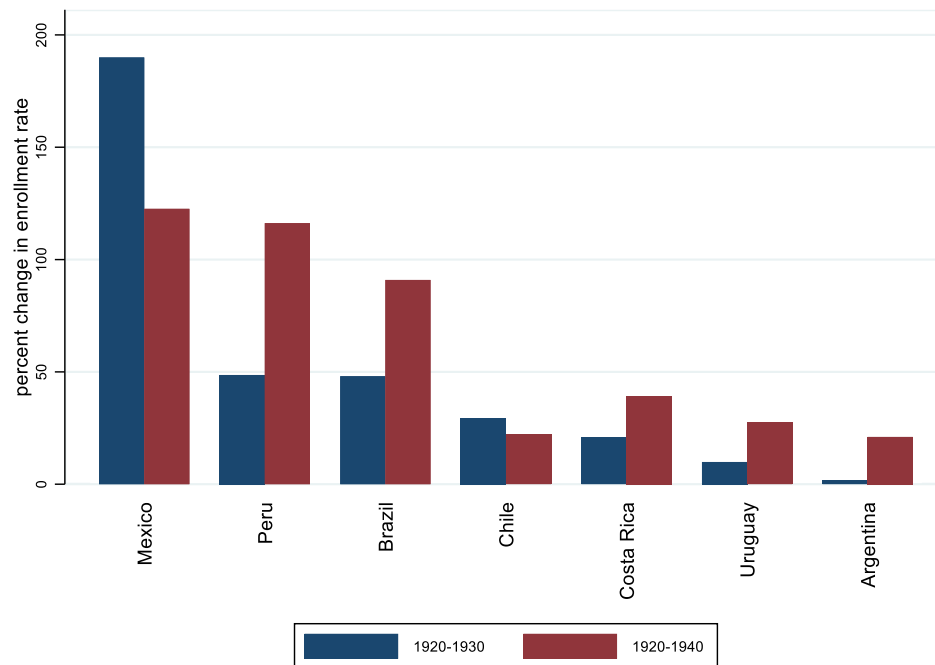


Figure 2 shows the percentage change in the primary enrollment rates, using the same data. Mexico had by far the fastest growth in primary enrollments in the decade after WW1; primary enrollments almost tripled from less than 30 to over 80 percent.<sup>36</sup> After the Great Depression, enrollment rates drop so that Mexico end up still having the fastest growth rates, closely followed by Peru and Brazil. The other four countries had already made substantial achievements in education and perhaps had already enrolled the population ‘easiest’ to reach.

<sup>36</sup> The rates are the percentage of children in schooling age enrolled in primary education (Lee and Lee 2016).

*Figure 2. Percent change of primary enrollment rates, (1920-30 and 1920-40)*



Argentina and Chile integrated into the world markets earlier than Mexico, so it is no surprise that their semi-centralized states led at the beginning of the twentieth century. As other peripheral countries, they became commodity exporters, which in turn supported incipient industrialization and urbanization that facilitated enrolling students. In contrast, Mexico took advantage of the international demand for raw materials in the late nineteenth century (with Porfirio Díaz). And the semi-centralization of public education was only achieved a few years before the revolution. Mexico's pre-revolutionary education system evolved closer to Liberal Peru's system (Civilismo's Aristocratic Republic), given their delayed reforms.

In an exercise of imagination, had Porfirio Díaz not fallen in 1911, Mexico would have continued a path similar to Peru's educational development: steady but gradual improvements fueled by urbanization and managed by provincial governments in coordination with the central authority. Instead, Mexico became a centralized system despite its federal constitution, and the



rural population was rapidly enrolled in schools.<sup>37</sup> In a postwar book on federalism, William Riker (1964) compares Mexico's "highly centralized" state (42) to the federations of the Soviet Union and Yugoslavia, where a one-party system ensures that "the central government is invariably able to overawe the constituent governments" (130).

Revolutions are rare and certainly exceptional at this time in Latin America, but by no means irrelevant: the countries that experienced social revolutions were among the most enduring autocracies in modern history (Levitsky and Way 2013). In large part, the durability of revolutionary autocracies is related to the depth of their state reforms.

Contrast a revolutionary situation to the other interwar reforming countries of Latin America, where the international situation also pitted modernizers against pre-modern interests like landed oligarchs. There, the modernization conflicts were resolved in a relatively non-violent way through political re-accommodations. They were somewhere in the middle between a path of reform by conflict and by unity.

The non-revolutionary countries that also reformed their economies in the interwar period—Chile, Brazil, Costa Rica, Uruguay, and Argentina—also sought a greater role for the national government in policy-making but their achievements were relatively moderate. These leaders were not motivated enough to assume the *risks* of deeper state reforms, which may produce a backlash from the beneficiaries of the status quo and a fatal fate for the reformers.

These non-revolutionary reforms based on political re-accommodations look more like the liberalization reforms of the 1990s, although in the opposite direction of more rather than less state intervention. The neoliberal reforms of the late twentieth century were also mostly peaceful

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<sup>37</sup> Although the tendency to privilege the rural population was reversed in the following decades as the country industrialized. There is no systematized cross-national data on rural vs urban and national vs subnational enrollments or schools. So, it is not possible to test my judgement regarding the urban-rural focus of different countries. This is an area of opportunity for future research.

and required forming a new coalition with the ‘winners’ and compensating the ‘losers’ of these changes (Frye 2007). The institutional outcomes were substantial but not as revolutionary as they would have been if the state apparatus had collapsed beforehand.

### **III. Territorial Cleavages and Interests**

A third implication is that we should not interpret the conflict over the national-subnational balance as an expression of the conflict between modernizers and traditional interests (i.e. landed oligarchs and the Catholic Church). State leaders that enact modernization projects typically face resistance from traditional interests, which can be encroached into subnational levels of government. When the latter is the case, the conflict over the balance of national-subnational authority looks like a conflict with economically or symbolically powerful actors.

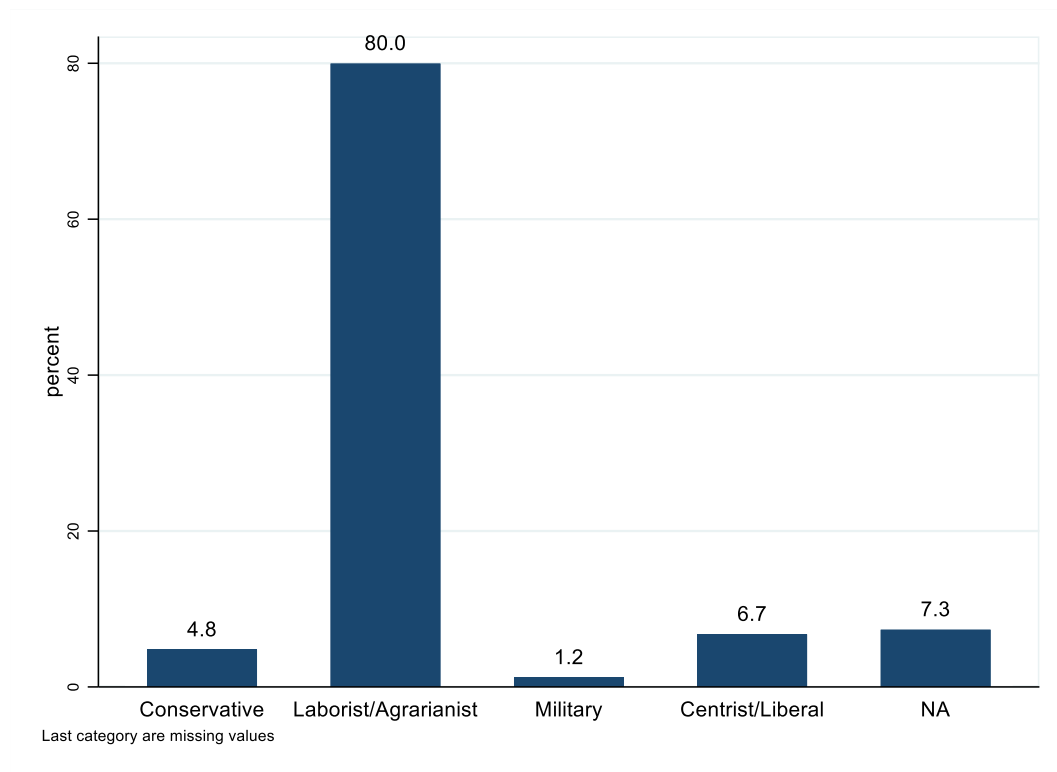
However, the subnational actors opposing the enactment of national directives can be non-traditional. For example, nineteenth-century liberals in Mexico faced opposition from other liberal elites in the regions. After the revolution, the national leaders faced the strongest opposition to their bureaucracy from revolutionary veterans.<sup>38</sup> According to my own data (Figure 3 below), the governors in 1923-1940 were eighty percent of the time leaders one way or the other affiliated with the revolution or Laborist/Agrarianist (pro-labor and/or pro-land reform); conservative governors (allied with landowners and the Church) were in power less than five percent of the time.<sup>39</sup>

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<sup>38</sup> As a historian of Mexico put it, the arch of Mexican political development has been as much about the national-subnational conflict as about the terms of citizenship for the masses and about class conflict (Voss 1990).

<sup>39</sup> These are percentages of each *estado*-year in my longitudinal dataset. Appendix 1 presents an explanation of each ideological category. The full dataset of classifications is available by request.

Figure 3. Ideology of governors (1923-1940)



So, when talking about elite conflict, it is relevant to distinguish between the state leaders' conflicts with 'territorial interests' and with 'traditional interests.'<sup>40</sup> What are territorial interests? Actors whose main purpose is to hinder the enactment of national directives in specific spaces over which they aspire to exert influence (Eaton 2012). When political scientists talk about territorial interests, they typically refer to violent actors, such as guerrillas and drug cartels. But keeping the central state at bay can be done through non-violent means, as in the case of subnational authoritarian enclaves (Giraudy and Luna 2017).

In post-revolutionary Mexico, the revolution's veterans hindered the advancement of SEP through informal means, like leveraging their dominance of an *estado* to negotiate a lower

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<sup>40</sup> In other words, with two separate cleavages: national-subnational and modernity-tradition. Lipset and Rokkan (1967), for example, considered 'center-periphery' to be a cleavage independent of other sources of conflict in the formation of party systems of postwar Europe.

presence of personnel and to sabotage the work of teachers. The veterans were not opposed to universal literacy access and the spread of modern pedagogies, but they wanted to maintain their mediating role between the national government and the communities. In other words, the veterans preferred to provide public goods themselves.

To further understand the distinction, we may invoke Michael Mann's two dimensions of the state's infrastructural power: spatial and relational. Nation-states aspire to establish control across regions and social groups (Soifer and vom Hau 2008).<sup>41</sup> Some groups aspire to restrict the state's activity within a specific territory and not generally (through informal, non-legal means), causing the state to have an uneven capacity to enact their mandates across geography (O'Donnell 1993; Snyder 2011).

At stake in this discussion is the distinction between kinds of elite conflict and their different effects. When studying elite conflict in authoritarian regimes, political scientists have paid comparatively more attention to conflicts between political and economic elites (e.g. Albertus 2015a) or have not distinguished between kinds of elites at all (e.g. Svolik 2012). Research on state formation has also paid more attention to conflicts involving traditional elites, such as landed oligarchs (Soifer 2013) and religious groups (Ansell and Lindvall 2013).

However, different conflicts have different effects. For example, in post-revolutionary Mexico, the conflict with the Catholic Church (a traditional interest) was not the main driver of the expansion of primary education; the conflict with subnational elites was. Instead, the effect of the conflict with the Church was visible in the private education (e.g. ban on religious instruction) and civil rights (e.g. ban of public displays of religiosity).

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<sup>41</sup> Without trying to assign *all* states a specific objective, as the only thing they have in common is the means through which they do it (i.e. monopoly of violence). However, establishing rules and homogenizing subjects are very often the state's objectives.

## **2.6 Conclusions**

This chapter has laid out a rationale through which authoritarian regimes with revolutionary origins provide public goods that foster economic development, specifically, universal access to primary education. My theoretical framework builds on Mexico's revolutionary regime, that is, the state-building cycle after the social revolution of the 1910s.

I argue that autocratic leaders have incentives to provide primary education access to redistributive power resources inside the ruling coalition. In a context in which a new political class took over the state apparatus, the coalition's leaders expand the provision of public goods to displace their subnational allies as providers. In this way, the leaders centralize the control of the bureaucracy and the institutionalized links to the population.

My theoretical framework has implications for a number of literatures, particularly for the theory of state formation in Latin America and the relationship of political regimes to public goods. Additionally, in chapter 7, I discuss implications for the study of autocracies, specifically for the way political scientists think about ruling coalitions in non-democratic regimes.

In the next chapter, to support the theoretical framework described above, I will describe the effects of the national-subnational conflict on public education during the revolutionary cycle of state-building (1920-1940).

### **Chapter 3: The Case of Mexico's Primary Education System**

In this empirical chapter, I present the case study of Mexico's centralized expansion of primary education in 1920-1940. From this case study, four general conclusions follow. First, at the outset, the expansion of public education was not much different than in the pre-revolutionary regime. It was a top-down project that mimicked the nation-building and modernization projects of European state-builders, especially, the French Third Republic (Vazquez 1970). So, the 'isomorphism' argument derived from Parson's 'world system theory' (Boli and Ramirez 1987) would be enough to explain the outset of education expansion.

Second, however, the expansion gradually accelerated and the institutions of expansion became radically different than they initially were. Public education became part of a broader effort to centralize public administration and decision-making. At the outset of my period of analysis, public education was mainly a subnational affair, with the national government running schools only in areas of exclusive federal jurisdiction.<sup>1</sup> By the end of the revolutionary cycle of institutional creation, the picture was strikingly different. Consider the numbers in Table 2.

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<sup>1</sup> These were the Federal District (comprehending Mexico City), the territory of Quintana Roo (in the Yucatán Peninsula), and the North and South territories of the Baja California peninsula.

Table 2. Funding sources of primary schools <sup>2</sup>

1925		1942	
Source of funding	Percent of total	Source of funding	Percent of total
National (federal)	18.5	National (federal)	58.6
Subnational ( <i>estado</i> & municipality)	69.6	Subnational ( <i>estado</i> & municipality)	28.9
		Agricultural estate (paid by owner; teacher appointed by national gov.)	2.9
		Mixed public-private	6.7
Private	11.9	Private	2.9

Source: Federal Statistical Yearbooks, 1930 and 1942

In 1925, the national government managed less than 20 percent of all primary schools in the country, while subnational governments (federative states and municipalities) managed about 70 percent. In 1942, the national government had almost tripled its share, and subnational governments managed less than half as before.

These numbers underestimate the authority gained by the national government. The national government forcefully absorbed a third of subnational education systems.<sup>3</sup> New laws established that the national government would be in charge of the education strategy of all public schools, national or subnational. And municipal schools almost disappeared, including the oldest of all: the school system of Mexico City was completely centralized when the national congress suppressed the autonomy of the capital's boroughs in 1928.

The owners of agricultural estates were mandated to fund a school for their workers (around 3 percent in 1942), but the teacher was appointed by the national government.

<sup>2</sup> The educational statistics disaggregated by source of funding start in 1925, but the *estados* and municipalities were already investing in public education since the mid 1910 decade, and the federal government since 1923 in its areas of exclusivity (federal territories and the capital).

<sup>3</sup> These absorbed systems appear in the proportion of subnational schools because the governors had the responsibility to fund them, even if they did not manage them at all.

Appointing teachers was a political move to keep landed elites under surveillance, as teachers were crucial for enforcing the labor rights of estate workers.

Private education deserves a few words, although it is outside the scope of my dissertation. Circa 1920, private schools (mainly Catholic) were very lightly regulated and the federal government had no interference. By the 1940s, private schools were surpassed by public education, managing less than a third of their previous share and almost 7 percent of schools had a mix of public and private funds. The federal government had now the upper hand: religious education was completely banned, all pedagogical plans were decided by the government, and schools received regular visits from federal inspectors.<sup>4</sup>

The timing and geography of education expansion reveal ulterior motives beyond simply a nation-building and economic modernization project. The institutional transformations of the education system accelerated after the coalitional conflicts happening around presidential elections. Figure 4 illustrates the trend, as the number of schools per capita increased spasmodically after presidential elections (indicated with vertical lines). The chart only roughly illustrates the trend; the institutional changes were more consequential, as I will show in this chapter.

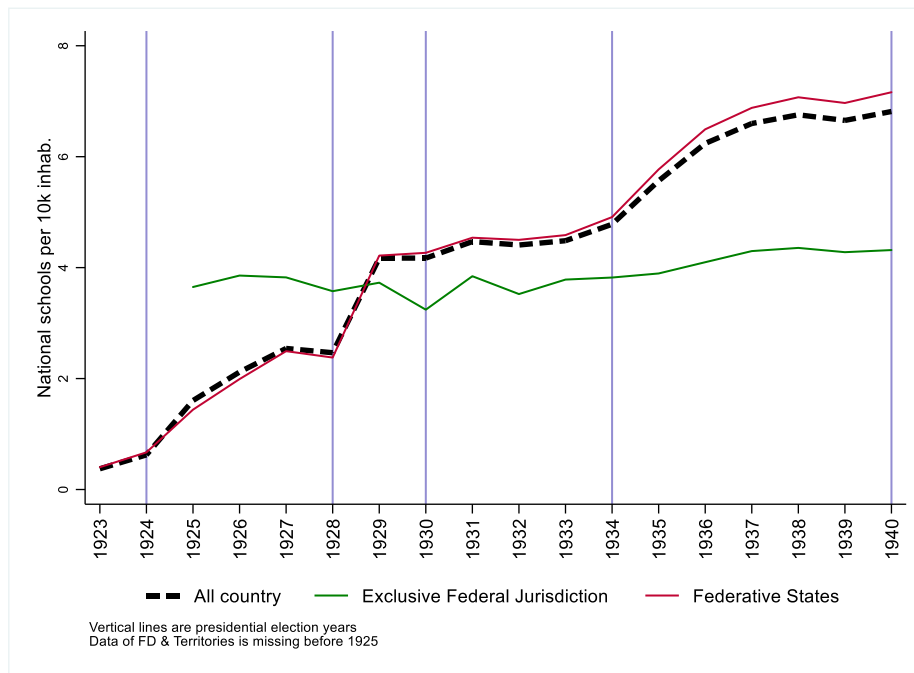
The geography of expansion also illustrates my causal argument. Figure 4 reveals that national education started in areas of exclusive federal jurisdiction but gradually became more focused on *estados*. Had public education been solely about national integration and economic modernization, we would not see such divergence between *estados* and federal territories.

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<sup>4</sup> With time, the ban on religious education became loosely enforced and only used as a bargaining chip with religious groups.



Figure 4. National schools in federative states vs areas of exclusive federal jurisdiction



Third, as significant as the changes in public education were (and more generally, on the structure of public administration), the reforms were incomplete. The initial polarized elite conflict ended in elite accommodation, rather than the domination of a homogenous ruling elite. An ending closer to the revolutionary state-building cycle of Vietnam than China (Vu 2010), as mentioned in chapter 2. The state leaders were forced by factors related to Mexico's peripheral location in the international system to accommodate the 'counterrevolution,' which came from both inside and outside the ruling coalition.

On the one hand, some regionally-based veterans (part of the ruling coalition) prioritized the defense of their patrimonial bastions against the social reaction to the revolutionary reforms, over the ambitions of President Lázaro Cárdenas. On the other hand, Cárdenas had affected powerful interests that were more than willing to support a coalitional revolt against him. Cárdenas had redistributed large amounts of land, agitated and supported workers' unions, and expropriated the oil industry in the hands of foreign capital.

To counteract these forces, Cárdenas picked Gen. Manuel Ávila-Camacho, his Secretary of War, as his successor. Ávila-Camacho had a reputation of conservatism but loyalty to the president. Cárdenas' successor ended the social reforms but did not reverse their achievements and consolidated the political reforms. President Ávila-Camacho consolidated the corporatist channels of representation for workers, peasants, and bureaucrats and put into law the new structure of centralized public administration.

In education, President Ávila-Camacho consolidated the national teachers union and made into law what the Secretariat of Public Education was already doing: centrally-planning all public education. The SEP also maintained the division of labor with *estados* in which the latter attended urban education while the national government provided rural areas, except in a third of *estados*, where the SEP absorbed all public education.

In the rest of the chapter, I elaborate on this narrative. In section 3.1, I describe the baseline scenario, the initial situation in public education, inherited from the nineteenth century. Then, I describe three phases of public education expansion, summarized in                      in the Appendix. In section 3.2, I briefly describe the outcome of public education at the end of the revolutionary cycle of state-building. Section 3.3 concludes.

### **3.1 Process of Centralizing Primary Education**

#### Baseline: Decentralization and Indirect Rule

Mexico has a strong federalist tradition and a history of weak subnational governments unable to provide basic public goods to the population. Unsurprisingly, the combination yielded poor schooling investment and low literacy rates. Surprisingly, the situation persisted from independence to the post-revolutionary reconstruction, i.e. my period of study 1920-1940. Why?

On the one hand, because of the ideological commitments of the state-builders. The founders were liberals<sup>5</sup> and Mexican liberalism was closely committed to federalism (Vázquez de Knauth 1970). The liberal-federal tradition was forged after independence, in the republican faction of the independence army. Many of them were regionally-based elites that had been excluded from the colonial bureaucracy and contributed to the fight by mobilizing peasant communities (Mallon 1995). Another segment of the anti-colonial army, the conservative side, was formed by monarchists (i.e. bringing a non-Spanish European prince) and other conservatives that accepted a republic but advocated for a unitary state design.

The liberal-federal faction ruled Mexico for most of the nineteenth century, with two short periods of conservative rule (two monarchies and one unitary republic). The conservatives were eventually defeated after two civil wars and the victorious liberals founded a republic based on a federal constitution written in 1857. In this constitution, municipalities (the lowest levels of government) were the basis of policy-making and the national government had little to no attributions outside the capital and federal territories. The outcome was both a federal republic and a political system of indirect rule: policy-making was completely regionalized and the central authorities had no attributions to create national policies in almost any realm.

On the other hand, the situation of poor education investment persisted because the subnational levels of government were institutionally weak. The causes are related to extreme inequality and the predominant plantation economies, a situation identified by Sokoloff and Engerman (2000). The concentration of wealth created a powerful oligarchy that escaped

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<sup>5</sup> To be sure, Mexican liberals were a motley crew in that there were factions influenced by different branches of European liberalism; see, for example, Hale (1972). What matters here is that they were all historically committed to federalism (Vázquez de Knauth 1970). It will suffice to say that some liberals were influenced by the Lockean tradition, closer to the US founding fathers, while others were influenced by the continental branches, especially Auguste Comte. The intellectual leaders that modernized the state during Porfirio Díaz's regime were closer to the Comptean type (e.g. José Yves-Limantour and Justo Sierra-Méndez), who was president in the last decades of the 19th century.

taxation or simply captured local governments so that these could not fund the provision of basic public goods (Martínez Jiménez 1973; Acevedo-Rodrigo 2019). An expression of elite capture is the complex administrative structures inside each federative state, with layers between the *estado* and the municipality, as well as the continuous changes in municipal boundaries through which the oligarchs prevented rural communities from acquiring self-governance.

Because governing an unequal society through municipalities was impossible, the liberal presidents, starting with Benito Juárez in the 1860s, advocated for a stronger role of the national government in policymaking.<sup>6</sup> In other words, state-building began. I understand “state-building” as the process of transiting from indirect to direct rule, which can be achieved either through a federal or a unitary design.<sup>7</sup> State-building means a process of ‘nationalizing’ politics of giving the central authorities the power to create national policies,<sup>8</sup> either through the coordination of subnational authorities or through centralized policy-making.

The process was extraordinarily slow because the liberal coalition was composed of elites based in regions who resented any involvement of the center in their affairs, but at the same time, were too weak to materialize a new liberal order. The liberal presidents faced governors and legislative representatives that were either an ally committed to a new liberal order but at the same time defended the primacy of local administration, or they were landed oligarchs that hindered the advance of the liberal order through local administration. Friends or foes, these regional or subnational elites had a common interest in maintaining the decentralized state design

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<sup>6</sup> Most Latin American countries faced the problem of decentralized rule and extreme inequality for which started to get the national government involved in policy-making at different points in time (Soifer 2015). See Soifer (2013) for a discussion on the limits of Sokoloff and Engerman’s (2000) argument to explain the cross-country variation in public goods provision within Latin America.

<sup>7</sup> Following Gibson and Falletti (2004), I distinguish between the national formation, the decision over the territorial design of governance, and the degree of centralization within that design.

<sup>8</sup> For a discussion of the different ways in which the term ‘state-building’ has been used, see Waldner (1999).

of the 1857 constitution. So, state-building and modernization stagnated in the first decade of liberal rule.

The greatest achievements in state-building during the liberal period were led by Porfirio Díaz, a military general that led a coup in the late 1870s and governed until 1911, exiled by the revolutionary uprising. Díaz achieved a system that looked the closest Mexico had ever been to a modern nation-state, through a new strategy of accommodation of territorial interests. Differently from Juárez, Díaz allied with whoever could guarantee political stability in a given region, liberal or conservative, and when possible, manipulated the local rivalries to achieve more national involvement.<sup>9</sup>

The outcome of Díaz's reforms was a state with more national involvement in local affairs, but unevenly across administrative areas. Díaz achieved central supervision of taxation and military power, and a single currency, which to a degree, amount to a federal system of direct rule. However, the administration of public services remained completely a local affair. In education, by far the most important public service at the time, the first involvement of the national government outside the capital and federal territories was achieved in 1911, a few months before Díaz resigned and was exiled amid the revolutionary uprisings.

For most of Díaz's period, the Secretaries of Justice and Public Instruction,<sup>10</sup> such as Joaquín Baranda and Justo Sierra, tried to enact a national education policy through persuasion and example. Baranda and Sierra organized a series of National Pedagogical Conferences (1889-1891), which brought together leading pedagogues and representatives of *estados* to discuss the subject. The Secretaries also showed their vision through the example of Mexico City's education system (an exclusive federal jurisdiction), where they enacted laws of mandatory and

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<sup>9</sup> For a description of what Díaz's political system looked like, see for example Meyer (1977)

<sup>10</sup> There was not a separate secretariat of education before 1905.

secular education (Martínez Jiménez 1973; Bazant 1993).<sup>11</sup> In other words, in education, Díaz ruled the country *indirectly* simply because the reforms came too late.

Nonetheless, the Díaz regime was a state reformer and was in the way of achieving a nationalized state that ruled directly (through coordination), so that it stepped on the toes of territorial interests. As with most revolutions (Pincus 2007), the Mexican Revolution was led by discontent with the state reforms of the *ancien régime*. So, the 1917 constitution picked up the decentralization flag of the revolution and disappeared all the governability achieved at the end of Díaz's regime.<sup>12</sup>

The decentralized orientation of the 1917 constitution has parallels with France's "municipal revolution" in the first revolutionary government (Skocpol 1979). But also similarly to France, the new political class soon discovered that Mexico was ungovernable without substantial involvement of the central authority in regional affairs. Like the Jacobins, the victorious factions of the Mexican Revolution backed off from their initial commitment to subnational autonomy (Knight 2015). Moreover, the dynamic of intra-coalitional conflict led to more than just direct rule; the conflict moved the state reforms away from a decentralized design with national coordination (where Díaz had left off) and towards a highly centralized state design despite the federalist constitution.<sup>13</sup>

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<sup>11</sup> The 1857 constitution established that public education would be free but not mandatory; each *estado* had to decide on the latter. The constitution neither defined public education as secular; the liberals adopted a minimalistic version of their vision ('liberty of education' to avoid the involvement of the Catholic Church, instead of full prohibition of priests in publicly funded schools), as a concession to the defeated conservatives.

<sup>12</sup> An issue involved in all the grievances against Porfirio Díaz was the involvement of the national government in regional and local affairs. For example, the rural communities that rose in arms were not only demanding the restoration of their lands but advocated for the primacy of municipal governance (Kourí 2017). So, the constitutional project of the revolutionary factions of Emiliano Zapata and Francisco Villa featured municipal autonomy. Other revolutionary leaders, like Francisco Madero (the first revolutionary president) and Venustiano Carranza (who defeated Zapata and Villa and organized the writing of the 1917 constitution), had been governors of their *estados* and sympathized with a decentralized state design.

<sup>13</sup> Riker (1964) compared the Mexican federation to the faux federalism of the Soviet Union and Yugoslavia.

In the previous chapter, I explained the dynamics of elite conflict that spawned the odd mix of federalism and centralization of the Mexican state. In this chapter, I focus on the process of centralization of the education system. Below I explain the process of centralization in three phases. Each phase involved a more aggressive and blatant attempt at centralizing public education and happened after major elite-level conflicts inside the ruling coalition. I summarize each phase in of Appendix 2.

#### Phase 1: Decentralization with National Coordination (1920-1924)<sup>14</sup>

General Álvaro Obregón became president in 1920 after a coup against Venustiano Carranza. Obregón created the first federal ministry of education with jurisdiction in all the country, the Secretariat of Public Education (*Secretaría de Educación Pública*, SEP). There had been a short-lived antecedent at the end of Díaz's regime, the Secretariat of Public Instruction and Fine Arts (*Secretaría de Instrucción Pública y Bellas Artes*, SIPBA), founded in 1905 by Justo Sierra, but only had jurisdiction in the nation's capital and federal territories.

While the 1917 constitution said that the municipalities were the cornerstone of policy-making, there was a loophole: article 123 on public education did not specify that schooling was exclusively a municipality service, which offered SEP an opportunity. However, Obregón was cautious. His ruling coalition was composed of regionally-based veterans with strong social bases; at that time, the most important unions and agrarian leagues were based in each *estado* and their relation to the national leadership was mediated by the regional veterans. Since public services were subnationally provided, public budgets and the reins of policymaking were in the

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<sup>14</sup> The rest of the chapter are based in the superb historiography of Mexico's education system after the revolution, especially the work of Mary Kay Vaughan (1982; 1997), Engracia Loyo (1998; 1999; 2003), and Alberto Arnaut (1998; 1994). Whenever I use the work of different authors, I indicate it in the text, including the classical publications by John A. Britton (1976) and David L. Raby (1974).

hands of the president's regional allies.<sup>15</sup> So, Obregón's position as head of the revolutionary coalition was fragile—if he upset his allies, they may plot against him, but if he failed to build an effective state apparatus, he risked being replaced. After all, Obregón had betrayed Carranza along with a segment of the ruling coalition.

President Obregón adopted a state-building strategy similar to Díaz: consensus towards a national coordinating role; in other words, keeping the decentralized design with national involvement. In education, Obregón's government began by organizing a National Pedagogical Conference, similar to what Díaz's secretaries had done. In the Conference, the representatives of *estados* expressed their opposition to the direct involvement of the national authorities in public education, for fear that it would be an excuse to weaken the federal pact (Arnaut Salgado 1998). Obregón's response was an act of unity: he appointed a prominent national intellectual (as opposed to a crony) as head of SEP, which would provide financial and technical aid to each *estado* individually to strengthen the decentralized system of education.

The new Secretary, José Vasconcelos, former Dean of the National University, prioritized the quantitative expansion of schooling and literacy over the ideological position of the constitution regarding education. While the constitution was firmly secular, Vasconcelos did not push for a national pedagogical strategy and let *estados* decide on the contents of the instruction. For the national schools, Vasconcelos simply retained the textbooks of the Porfirian period and adopted a rhetoric of nation-building and 'Westernization.'<sup>16</sup>

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<sup>15</sup> The bureaucratic political resources were in the hands of veterans whenever they were in the governorship. According to data collected by the author, veterans of the revolution with populist leanings were governors around 80 percent of the time (i.e. of the *estado*-years) between 1923 and 1940.

<sup>16</sup> Vasconcelos is known for his ideological writings (published years after his period in SEP) on the uniqueness of the Mexican 'race,' the "cosmic race" or the "bronze race" that assimilated Europe and the Ancient American civilizations. However, he also saw European cultural elements at the top of Mexican society, for which his nation-building was about 'Westernization' and 'cultural assimilation' for all practical purposes.



Vasconcelos toured the country and met with political leaders to persuade them about the benefits of investing in public education. He even encouraged the expansion of private education, which at the time was mostly run by Catholic groups. One of Vasconcelos' most remembered innovations was the "Cultural Missions," a program to send SEP personnel to remote areas to train locals to become national teachers. It was because of this program that teachers were called "missionaries" at the time, a term that also invoked the Secretary's almost mystic zeal.

The appointment of Vasconcelos was meant to accommodate the different positions of the revolutionary coalition. At the time, the coalition was divided over pedagogy. For instance, the most radical wing of the coalition, mainly located in the *estados* of the Gulf of Mexico, established pedagogies inspired by Anarchism and Marxism.<sup>17</sup> However, most regionally-based veterans were unwilling to assume the risks of imposing the spirit of the secular and progressive 1917 constitution over a religious and distrustful population.

Vasconcelos' SEP also used rhetoric sympathetic to federalism and only established national schools in *estados* with the permission of each governor. The SEP reached individual agreements with many governors to provide financial help for their perennially struggling schools, in exchange for a say in the subnational system and to establish national schools in rural areas. As in the Porfirian regime, subnational schools only reached urban areas, which gave SEP a strong argument for entering the governors' turfs.

In practice, though, Obregón and Vasconcelos were paying lip service to federalism. The informal practices of SEP showed the President's increasing impatience with his regional allies.

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<sup>17</sup> A prominent example was the "rationalist school" of pedagogy, inspired in the teachings of famous Spanish anarchist, adopted by the governor of Tabasco, Gen. Tomás Garrido-Canabal, who also innovated in the closing of churches and incarceration of priests.

Vasconcelos was not shy in expressing publicly his opposition to municipal autonomy in education because municipalities would always be too weak to achieve the modernization ideals of the revolution. Furthermore, he informally encouraged governors to pull education policy one level of authority up (from municipalities to *estados*).

In parallel, national teachers were going over the SEP-*estado* agreements and establishing schools in semi-urban areas. National officials were also informally encouraging subnational schools to request their incorporation to SEP with the promise of better salaries for teachers and directors (Alfonseca Giner de los Ríos 2015).

Vasconcelos resigned before the end of Obregón's administration (1921-1924) because the President did not support him as the official presidential candidate. Obregón chose his Secretary of the Interior, Gen. Plutarco Elías-Calles, which upset many more besides Vasconcelos. The succession conflict led to an insurrection in the ruling coalition led by another of Obregón's cronies, Gen. Adolfo de la Huerta, the Secretary of Public Finances.

De la Huerta was supported by a third of the military and many regional veterans, but Obregón and Calles survived with the help of their allies, including regional strongmen leading guerrillas of workers and peasants. The De la Huerta revolt confirmed to the remaining members of the Sonora Group that the direct control of mass organizations was a key political resource to survive.

As President, Calles reached more aggressively to local labor unions to incorporate to the Sonora Group's official union, the *Confederación Regional Obrera Mexicana* (CROM). He also appointed the head of CROM, Luis N. Morones, as Secretary of Labor, in charge of both harmonizing economic relations and expanding the reach of the national leadership in *estados*.

But to create a stable and broad social base and displace his regional allies, Calles needed state presence in every corner of the country. The SEP was the means to achieve this purpose.

### Phase 2: Centralization through Parallel Systems (1925-1930)

President Calles (1925-1928) changed of state-building strategy towards a more direct involvement of the national state in policy-making. Calles appointed a close collaborator as Secretary of Public Education, José Maria Puig-Cassauranc, who canceled all the SEP-*estado* agreements signed by Vasconcelos. Instead of subsidizing subnational schools, SEP would now channel resources to national schools, focusing on rural areas. In other words, SEP stopped asking for permission.<sup>18</sup>

In direct contradiction with the SEP's new policy, Puig displayed pro-federalist rhetoric in public speeches and documents and ensured the governors that SEP would not intervene in local affairs. The governors were not Calles's only audience—foreign investors and their ambassadors were worried about the radicalization of the revolution in the *estados* such as Yucatán, Tabasco, Veracruz, and Tamaulipas. The orientation of the national education system, a key part of Calles's modernization project, was one of many channels to send signals of a business-friendly and property-respecting government. So, SEP adopted a capitalism-friendly pedagogy by appointing Moises Saenz as Under Secretary of Public Education.

Saenz had studied with John Dewey at the University of Columbia and brought to SEP the “action pedagogy,” focused on teaching practical skills and values of modern citizenship. Dewey's teachings were innocuous compared to the “rationalist pedagogy” of the schools of Yucatán and Tabasco, who taught children about the exploitation system sustained by the economic oligarchy and the Catholic Church.

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<sup>18</sup> Puig also concentrated all decision-making in SEP's headquarters in Mexico City (as opposed to its initial decentralized hierarchy), an institution that lasted until the 1970s.

However, less innocuous was the presence of national bureaucracy in every corner of the country. SEP required the support of governors to elicit the cooperation of rural communities, which had to provide land and inputs for the school and collaborate with teachers in their cultural campaigns. But the governors were highly suspicious of the activities of SEP activity. The national bureaucracy was setting the stage for the national government to become a stronger political player in *estados*. The teachers became a direct link with communities that subnational politicians did not even reach. Moreover, the teachers were particularly ideologically motivated and they soon created links with agrarian and labor movements, despite receiving instructions to stay out of local politics.

So, the governors resisted and negotiated the presence of SEP personnel. The internal communications of SEP's officials and teachers left testimonies of the hostile attitudes of many governors and their local parties. Furthermore, the most radical governors expanded their schooling systems to compete with SEP. So, the rapid expansion of primary schools in the 1920s was to an important degree due to the competition between SEP and the governors.

With time, the governors' suspicious turned out to be correct. In the 1930s, the national teachers became foot-soldiers of the revolution, helping in the implementation of social reforms and creating direct links between the national government and the masses. As the most widespread branch of the national bureaucracy, teachers were key to eliminate the mediating role of regional veterans in the ruling coalition, and in this way, achieving long-term political stability.<sup>19</sup>

Calles's SEP set the foundations for the political mobilization of teachers. Secretary Puig went beyond Vasconcelos' Cultural Missions and invested in the first teacher colleges (*Escuelas*

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<sup>19</sup> In chapter 6, I provide an example the political activities of teachers: their role in mobilizing the population to request land redistribution.

*Normales*) run by the national government. Moreover, the SEP ‘purged’ its ranks from non-revolutionary elements so that many of the teachers that arrived in the countryside were highly motivated to get involved in politics. Indeed, when the SEP joined the efforts to expand land reform in the 1930s, the Secretariat was feeding wood to the fire rather than starting it.

The impetus to reach remote areas despite limited resources is also visible in the “circuit schools.” The SEP would establish a ‘model’ school in a rural village that would be imitated by locals that could not be reached by a national teacher. In this phase, SEP also created the first Department of Indigenous Affairs, in charge of sending teachers to indigenous communities. The Department also founded the first charter school to train young men from indigenous villages to become teachers and go back to their communities to spread Spanish-language literacy and Western civilization.

Finally, the SEP went beyond public education. Although it is not the focus of my dissertation, the policy towards private education is very telling of Calles’ centralizing impetus. During a polarized conflict with the Catholic Church and lay organizations, the national Congress mandated that SEP would supervise private schools, which at the time were mostly Catholic, and banned religious instruction. SEP created the first body of inspectors that would supervise private education, further expanding its bureaucratic reach.

### Phase 3: Centralization through Displacement (1930-1940)

#### ***Radicalization of the revolution***

The succession crisis of 1928 and the Great Depression radicalized the revolutionary reforms. In 1928, President-Elect Obregón was assassinated by a Catholic ‘fanatic’ just after his (re)election and the *Obregónistas* were plotting against the exiting President Calles, fearing that he would

completely dominate the coalition.<sup>20</sup> To prevent a political crisis, Calles founded the first version of the party-state in early 1929 (the National Revolutionary Party, PNR) to unite the revolutionary factions.

Calles also chose an interim president that showed good faith to the leftmost wing of the coalition—Emilio Portes-Gil, the populist governor of Tamaulipas.<sup>21</sup> The institutionalization of compromise and central decision-making allowed Calles to become the power behind the presidency until 1935 when he was betrayed by his mentee, President Lázaro Cárdenas. The period is commonly known as *Maximato* (c. 1929-1935), after the way people called Calles: *Jefe Máximo* of the revolution.

Soon after the domestic crisis was avoided, the crash of Wall Street in October of 1929 threw waves around the world. In Mexico, the Great Depression led to a new political crisis by emboldening the populist faction (left-wing) of the revolution. Since the constitution was published in 1917, there had been disagreement on the revolution's modernization project. There were roughly two sides: the moderate modernizers (e.g. Obregón and Calles) and the populists (e.g. the governors of Yucatán, Tabasco, Veracruz, and Tamaulipas).<sup>22</sup>

Obregón and Calles advocated for moderate social reforms and harmonious economic relations; their strategy of economic recovery was to create a business-friendly environment for inward-looking development.<sup>23</sup> The decline in the world prices of commodities (oil, silver,

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<sup>20</sup> Álvaro Obregón had been president in 1921-1924, followed by Plutarco Elías-Calles in 1925-1928. Calles modified the 1917 constitution to allow Obregón's non-consecutive reelection and keep the presidency in the Sonora Group, despite 'no reelection at all' having been a revolutionary flag against Porfirio Díaz.

<sup>21</sup> Portes-Gil was one of the governors that dominated their *estados* with mass-based parties. His presidential cabinet incorporated other prominent names of coalition's left wing, who would now become part of Calles' close circle; for example, Tomás Garrido-Canabal (governor of Tabasco) as Secretary of Agriculture and Lázaro Cárdenas (governor of Michoacán) as Secretary of War.

<sup>22</sup> The disagreement were on the details, they were a matter of degree: how much land reform, how much agitating labor unions against foreign companies.

<sup>23</sup> In the 1920s, Obregón and Calles had mostly redistributed land to the communities of central Mexico that had been fighting for the legal recognition of their colonial-time properties against the expansion of agricultural estates

agriculture) since WW1 made the export-oriented economic model of the Porfiriato inviable and endangered the future of the revolutionary state. During the 1920s, the national army absorbed a growing portion of the budget, as it faced continuous military uprisings and the Cristero rebellion. Moreover, the Mexican state inherited a heavy foreign debt (from the US and the European powers) and the quest for international recognition to access credit markets was contingent on the relationship with foreign capitalists and their embassies.<sup>24</sup>

Meanwhile, the populist governors created authentic laboratories of radical reform in their *estados*. The governors of the Gulf of Mexico, and others like Gen. Lázaro Cárdenas in Michoacán, enacted progressive labor legislation, encouraged the invasion of agrarian estates, and created effective mass parties that dominated local politics. These regional laboratories of reform created political pressure on Obregón and Calles to materialize the promises of the revolution.

The moderates held the reins of the coalition until the Great Depression destroyed the credibility of international capitalism and Calles' business-friendly path to recovery. Moreover, the Communist International called out Calles' new National Revolutionary Party for its accommodating approach to social reform, labeling it a 'bourgeois party.' After the stunt,

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during the nineteenth-century export boom (Saffon Sanin 2015). There had been some redistribution in other regions led by populist governors allied with agrarian activists and squatters. But these subnationally-led reforms had been at best partially recognized by the federal authorities and at worst reversed through a combination of presidential pressure and the militias organized by landed oligarchs. On labor rights, Calles had expanded a state-sponsored union (led by his Secretary of Labor) that delivered quick improvements in work conditions in exchange for moderate labor activism, especially away from the Communist Party (Krauze et al. 1977). Their rabid anti-clericalism was the exception that confirmed the rule. The Marxism-inspired historiography tends to interpret Calles' confrontation with the Catholic Church as a theater to compensate for the lack of deeper social reforms (e.g. Vaughan 1982).

<sup>24</sup> A second American invasion was also a looming possibility if foreign capital perceived the threat of expropriation (Meyer et al. 1977). The US navy had occupied Veracruz in 1914, in the midst of the political uncertainty after the military coup against Francisco Madero (the first elected government after Porfirio Díaz left the country).

Mexico broke diplomatic relations with the Soviet Union, which further challenged Calles' revolutionary credentials.

To avoid a coalitional crisis, the *Jefe Máximo* stirred the ruling coalition to the left, but in a way that could still accommodate the multiple, contradictory interests of the political landscape. Calles relied on radical rhetoric more than on radical policy, turning to the growing reputation of Soviet-led developmentalism to give a fresh voice to the revolution. The Party adopted a rhetoric of class conflict and the SEP adopted a new pedagogy, "socialist education."

To be sure, Calles did incorporate more radical policies on labor and land, but these policies always had a centralizing design and a moderating effect; that is, the opposite of the populist governors' intentions. For example, in 1934, new legislation allowed the workers of agricultural estates to request land from their employer's property. But as significant as the legislation was, it also empowered the center and slowed the process: land petitioners were asked to go over complicated legal channels, instead of taking land through force, as some rogue governors had allowed agrarian activists to do. The long and cumbersome legal process culminated in the president's desk, who approved or rejected all petitions.

The 1934 agrarian code would allow in the following years the acceleration of land redistribution, but it only happened because Calles was betrayed and exiled by his mentee President Cárdenas. Anyway, with these changes, Calles was incorporating many of the practices innovated by the populist governors and getting the leftmost wing of the ruling coalition closer to him for the sake of unity.

In sum, the radicalization of the revolution was the product of the conflict *inside* the ruling coalition. This dynamic is not too different than other post-revolutionary reconstructions. For example, after the French Revolution, the pressures of the international system (the reaction



of Europe's monarchies) led to conflicts in the post-monarchical republic (the Convention) and the ascendance of the Jacobins. The Jacobins radicalized the political and social reforms to build a social base that empowered them against their rivals and prepared the state for war. And after the Chinese Revolution, the Communists incorporated land reform to their (urban-based, labor-focused) agenda to mobilize the peasantry against their reluctant, intermittent ally, the Kuomintang (Skocpol 1979).

### *Radicalization of education policy*

Soon after, the Party adopted the term “socialist education.” Based on the term, it may be tempting to interpret the centrality of public education to the revolutionary state-builders as an ideology-driven policy (i.e. the choice of a “socialist” government). However, the ‘radicalization’ of public education was *not* initially meant to happen; Calles initiated these changes as a necessary evil to keep the ruling coalition together.<sup>25</sup> Calles and his cronies mimicked the populist governors (in a controlled fashion) to overawe them and attract their followers. In other words, it was part of the process of making all local politics a national affair, and all national affairs go through the presidential office.<sup>26</sup>

Socialism hardly described the revolutionary leaders. The Sonora Group was often at odds with the Mexican Communist Party, and even when the most radical president of the revolution, Lázaro Cárdenas, allied with the Communists, he soon dismissed and disbanded them after the Communists were no longer useful (Fallaw 1999). There was simply no clear definition of what the Party's six-year plan of 1934 meant by “socialist education.” A *New York Times*

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<sup>25</sup> Besides the intra-coalitional conflicts, the conflict with the Catholic Church (which restarted after the peace accords that ended the Cristero rebellion) certainly played a part in the ‘radicalization’ of pedagogy, but it is hard to argue that it was the main reason. The new pedagogy emphasized *class conflict* rather than only secularism. The Church was *not* a rival provider of mass education; their schools were private and confined to cities. And, in the 1930s, the Catholic-sponsored labor unions were not rivals for the revolutionary unions, as they had been in the early 1920s.

<sup>26</sup> Consider that the revolutionary coalition was constantly at odds with the Mexican Communist Party.

correspondent claimed to have found thirty-three different definitions (Lerner 1979). For many SEP teachers, “socialist education” was something felt rather than defined (Raby 1974). Viewed from the top chambers of power, socialism was a slogan opportunistically adopted in the context of the international crisis of capitalism and the rise of the Soviet Union; a flag around which the new political class could rally around amid the Great Depression.

While the changes in SEP were initiated by Calles, the conditions on the ground were ripe for them as the Secretariat of Public Education hosted an important segment of the coalition’s leftmost wing.<sup>27</sup> As president in the 1920s, Calles had purged the educational bureaucracy from conservative, pre-revolutionary elements. And the revolutionary bureaucracy had experienced first-hand the living conditions and conflicts of the peasantry. In the course of the 1920s, the federal teachers radicalized and became social activists on their own initiative (Vaughan 1982).

The changes started when Calles appointed an agrarian lawyer as Secretary of Public Education, the self-proclaimed Marxist, Narciso Bassols. Secretary Bassols set the terms of a new relationship of the Mexican state with teachers. Federal educators became labor and agrarian agitators and the “foot soldiers” of a “cultural nationalist movement” (Vaughan 1997, 45) that changed the voice of the Mexican state towards class conflict and populism. In the first decade of reconstruction, the official pedagogy had more similarities than departures from the educational project of the Liberal-Porfirian regime; the SEP had continued using the textbooks of the late nineteenth century. But in the 1930s the SEP edited new material that introduced class conflict and a more popular image of the nation (as in the murals of Diego Rivera).

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<sup>27</sup> It was Calles, as power behind the presidency, who brought the agrarian lawyer (and self-proclaimed Marxist) Narciso Bassols to the SEP (Britton 1976)

In contrast to Waldner's (1999) account of state-building under elite conflict, the revolutionary regime expanded public education *in tandem with* the redistributive policies that kept the cross-class coalition together. The teachers that contributed to the large-scale redistribution of land in Cárdenas' presidency (1935-1940), later disseminated a culture of literacy in rural Mexico; in places like Chiapas, for the very first time. The reports of SEP's inspectors and the magazine *El Maestro Rural* left for posterity a testimony of the teachers' commitment to the radical transformation of social structures and not simply the liberal secularizing project of the nineteenth century (Lewis 2005).

Secretary Bassols also created the first official teachers union in 1932 which progressively absorbed the multiplicity of teacher organizations that had sprouted across the country. In the years around 1940, at the end of Cárdenas' presidency and the beginning of Ávila-Camacho's administration, the union helped SEP to force governors to accept the legislative changes that nationalize the education system and mobilize the public opinion in favor of centralized planning.

In the following years, the union became the glue that kept the national education system together. As with other aspects of the political system, the fusion of state and party (to which the union was affiliated) made the state apparatus work. Without a coherent state apparatus, the national legislation that regulated all public education was difficult to enforce. The union made central policy-making possible, as it controls the most important input of public education: all teachers, local and national. The monopolistic teachers' union functioned as a centripetal device against the centrifugal forces of Mexico's regionalism. The incorporation of the teachers to the

coalition made the state stronger and not (immediately) the rent-seeking trap that Waldner's (1999) account implies.<sup>28</sup>

Finally, among Bassols' centralizing reforms, the incursion of SEP in urban education also stands up. The most decisive step was offering temporary agreements to governors who struggled to pay their bureaucracy, in which SEP would take the administration of subnational schools. During this time, the SEP allied with local teachers and eventually mobilized them to force these governors to make the agreements permanent; that is, these *estados* lost their education systems to the national government. I explain more of this in chapter 4.

### **3.2 End of a Cycle: the Search for National Unity**

The radicalism of Cárdenas' reforms produced a reaction inside and outside the coalition. After the nationalization of foreign oil companies, there were rumors that soon a segment of the military would topple Cárdenas, supported by Western Great Powers. It was not only about the affected capitalist interests, but many regional veterans feared that Cárdenas' ambitions would endanger their patrimonial bastions.

Cárdenas reached a compromise and chose his Secretary of War, Gen. Manuel Ávila-Camacho as his successor, a man with a conservative reputation, who would later say in public that he was Catholic. Ávila-Camacho watered down the rhetoric of the government and deaccelerated Cárdenas' reforms.

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<sup>28</sup> Naturally, the significance of the union for SEP gave it a strong leverage. By the 1970s, the union was already an obstacle rather than an avenue for central planning (Arnaut Salgado 1998). The union was becoming an enabler of the rent-seeking behavior in Waldner's (1999) account. However, if the union became a corruption-enabling political machine in the latter days of the PRI rather than at its inception, there should not be a necessary connection between broad coalitions and rent-seeking, development-hindering state institutions. The rise of the all-might teachers union coincides with the disappearance of the revolutionary generation. In the life cycle of revolutionary one-party states, such generational change often marks the transition towards a stronger reliance on patronage to maintain the coalition together, as the leaders do not count anymore on the moral authority and the wartime bonding of their predecessors (Levitsky and Way 2012).

In the realm of education, President Ávila-Camacho appointed a disciple of José Vasconcelos, another public intellectual, Jaime Torres-Bodet, as Secretary of Public Education. As Obregón had done with Vasconcelos, appointing Torres-Bodet was about unity. Torres-Bodet formalized into law the education reforms achieved by Cárdenas regarding the centralization of the system, but at the same time stopped the process. The SEP would not move forward but neither would move back. In 1942, the National Congress passed legislation that for the first time defined the attributions of national and subnational authorities in public education; of course, in favor of the former. At the end of WW2, Secretary Torres-Bodet tapped the opportunity of the Allies' victory to find enough consensus in the revolutionary coalition to eliminate the term "socialist" to describe public education in the constitution. Instead, the constitution adopted non-controversial rhetoric of national unity.

Torres-Bodet also consolidated the national teachers union, the SNTE, which became the glue that kept the still regionally fragmented education system. In this way, the SNTE (as part of the Party) performed a role that the Party had with the state apparatus as a whole.

### **3.3 Conclusions**

In this chapter, I offered qualitative evidence supporting the theory-building exercise initiated in chapter 2. I showed that Mexico's public education system after the revolution transited from a highly decentralized structure established in the 1917 constitution to a notoriously centralized architecture by the end of President Cárdenas' administration and the onset of WW2.

The revolutionary leaders centralized the structure of primary education in three phases. First, the newly created *Secretaría de Educación Pública* devised a system of national coordination in which the federal government would offer financial and technical support to the schools managed and funded by *estados* and municipalities. Second, without any consent, the

SEP transformed its role of national coordinator to direct provider of education services in *estados*. In this phase, there were parallel education systems with the national government focusing on rural areas, where the vast majority of the population resided, and the *estados* and municipalities specializing in urban centers. During these two phases, the state governors and the federal government absorbed most municipal schools in both urban and rural areas.

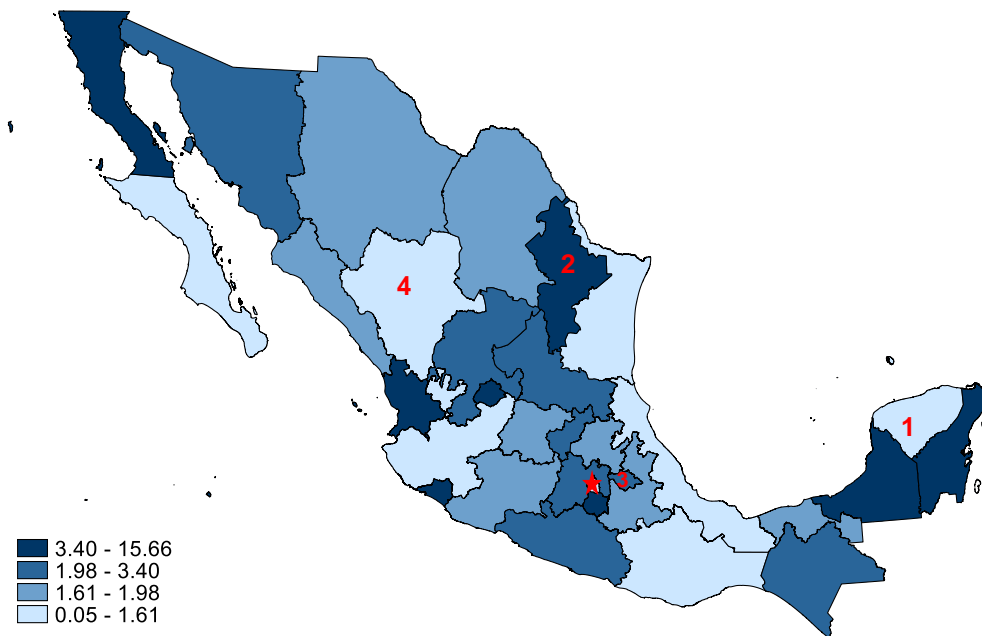
Finally, the SEP adopted a more aggressive centralization strategy via two main actions. On the one hand, the SEP absorbed the education systems of about a third of *estados* (concentrated in urban areas) who experienced financial difficulties after the Great Depression. On the other hand, the national Congress formalized the centralization of all educational authority, that is, as attribution of SEP. In this process, the national government relied on the alliance with unionized teachers to mobilize support for these changes.

In the next chapter, I move away from the motives to expand and centralize educational institutions and turn to the obstacles that the revolutionary leaders faced in the centralization process of primary education.

## Chapter 4: The Geography of State Capacity

In this chapter, I move away from the state leaders' motives to the obstacles that they faced in the provision of public education. The Dependent Variable of this chapter is the geographic variation of national school supply, as shown in Figure 5 below. The map shows specifically *rural* education in the period of parallel education systems in the 1920s (see chapter 3) when national schools entered *estados* for the very first time.

*Figure 5 Median number of national schools in rural areas per 10k inhabitants, 1923-1928*



Note: Mexico City is marked with a star. The rest of the cases of analysis are marked as follows: 1 = Yucatán, 2 = Nuevo León, 3 = Tlaxcala, 4 = Durango. Map crafted by the author with data from the Federal Yearbooks of Statistics (Instituto Nacional de Estadística y Geografía, INEGI).

The national government faced substantive resistance from subnational elites, who were determined to minimize the intervention of the center in local affairs. Subnational elites negotiated the number of teachers of the *Secretaría de Educación Pública* (SEP) and sabotaged the community-reach work of SEP through their local networks. However, not all subnational

elites could resist equally; some were politically stronger than others. The Independent Variable is the political strength of subnational elites relative to the national government, as a function of (a) whether the elites united in a common front against the center, and (b) whether they counted on social bases independent of the center.

I support my theory with two pieces of evidence: rural and urban education. First, rural education. As explained in chapter 3, the SEP initially advanced mostly in rural areas (in the 1920s) with the excuse of supplementing subnational education, which could only reach urban places. I identify four scenarios of subnational resistance, based on strength factors (a) and (b), and illustrate them with four subnational cases—Yucatán, Nuevo León, Tlaxcala, and Durango (for their geographic location see Figure 5). I also present a preliminary classification of all *estados* and show how meaningful these scenarios are in the short and long run.<sup>1</sup>

Second, urban education. In the 1930s, the SEP moved to displace subnational urban education by absorbing the entire schooling system of *estados*.<sup>2</sup> The political elites of most *estados* were united; so, only factor (b), whether they had independent social bases, varied and determined whether the SEP absorbed their urban schools. While the social bases that mattered in rural education were unions and leagues, the decisive social base in urban education were subnational teachers.

This chapter continues the critique of the authoritarian-advantage thesis (e.g., Huntington 1968; Waldner 1999). Contrary to that view, the greatest obstacle to the construction of a stronger and more cohesive state apparatus in early-industrial Mexico came from the resistance

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<sup>1</sup> The rationale to classify each *estado* is based on secondary sources: the historiography of each *estado* after the revolution.

<sup>2</sup> Subnational schools were mostly in places considered ‘urban’ at the time (i.e. they had more than 2,500 inhabitants). Two thirds of the population lived in rural villages (i.e. less than 2,500 people), but subnational schools barely reached them.



of subnational patrimonial bastions and not from the reformers' commitments to their lower-class allies. If anything, these alliances aided the process of state reform, as the primary education teachers helped the SEP to force governors to accept many of these changes.

In the rest of the chapter, in section 4.1, I first lay down my theory on the geography of state institutions and its implications for a number of literatures. In section 4.2, I deliver four subnational cases that represent different scenarios of subnational resistance; then I present an analysis of the short- and long-term effects of these initial scenarios of resistance on the evolution of rural schooling investment. Finally, in section 4.3, I analyze the national policy on urban education and its short- and long-term effects. Section 4.4 concludes.

#### **4.1 Theory: the Geography of State Capacity**

My framework explains the geographic variation in the provision of developmental public goods as a function of the political resources of subnational elites. Two resources are crucial:

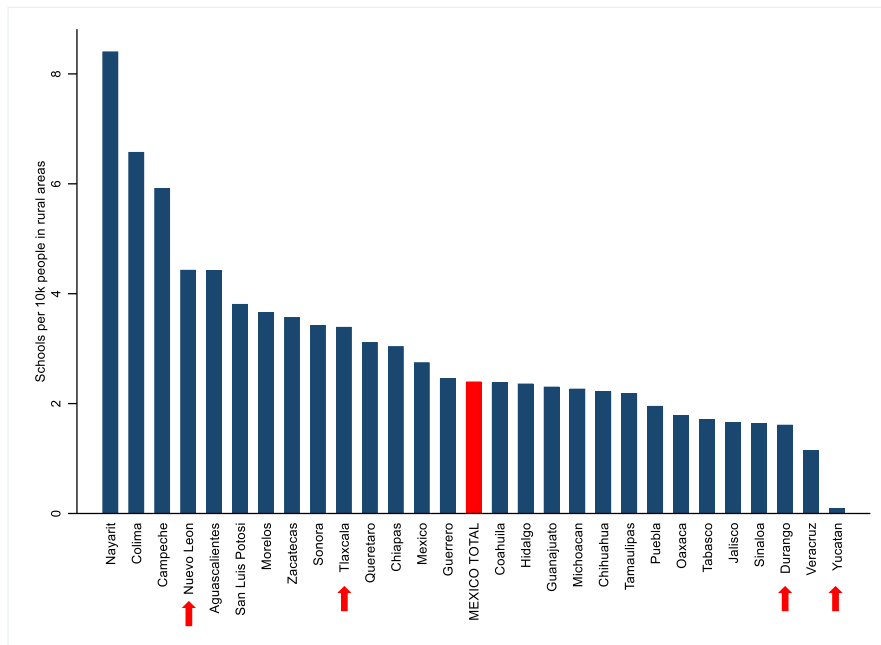
- (a) Whether the subnational elites unite in a common front against the national state, either around a local party or boss.
- (b) Whether the subnational elites count with bases of social support independent of the national government, particularly, popular groups.

Based on these resources, I identify the following scenarios of resistance and the 'speed' of advancement of the national bureaucracy (Table 3). These scenarios are exogenous to the advancement of the central state over the territory, as they were the result of the revolutionary wars of 1910-1920 (Meyer 1978; Buve 1990). In the table, I also identify and classify the illustrative cases that I use in this theory-building exercise: Yucatán, Nuevo León, Tlaxcala, and Durango. The histogram in Figure 6 below locates the four *estados* in their initial conditions in the decade of rural expansion, the 1920s.

Table 3. Scenarios of Resistance

Subnational elites are:	Backed by independent popular bases	NOT backed by independent popular bases
United	<b>(A) Stronger Resistance</b> Yucatán, 1920s	<b>(B) No Resistance</b> Tlaxcala Yucatán, 1930s Nuevo León, 1930s
Divided	<b>(C) Weaker Resistance</b> Nuevo León, 1920s	<b>(D) Chaotic Politics</b> Durango

Figure 6. Median number of rural schools, 1923-1928



Note: The four cases of study are marked with red arrows.  
Source: Federal Yearbooks of Statistics, INEGI

My theory is that places with the weakest subnational resistance (Scenarios B and C) are where the national education system grows faster. In contrast, the national government advances slower in places with strong resistance (Scenario A) or where local politics is chaotic (Scenario D) given the incapacity of subnational elites to establish order.

In Scenario B (weakest resistance), subnational elites may count on bases of popular support but they fail to unite in a common front against the national government. The regional

revolutionary veterans quarrel with each other; sometimes, the counterrevolutionary forces are strong enough so that they share power with the factious revolutionary veterans. The national government allies with and supports a faction to rule and establish order in the *estado*. In turn, this faction's permanence in office depends on the support of the center, as there are other factions with which the national government may ally.

In Scenario C (no resistance), subnational elites may be united, but lack bases of support independent of the national government. These elites dominate local politics but their survival depends on the support of the mass bases 'lent' by the national government. So, these elites have little leverage to negotiate the presence of national bureaucracy and resources to sabotage the SEP. From the point of view of the national leadership, this is the best scenario: subnational elites that dominate local politics and create order but depend on the center to survive.

Subnational elites resist the most when they are united and count on their own bases of support (Scenario A). The national government allies with these subnational elites but distrusts them as they don't depend on the center to remain in office. So, the subnational elites leverage their advantaged position to maintain as much as possible their political autonomy. The subnational elites ensure one way or the other a limited presence of national bureaucracy, impose their candidates for federal elective positions (congressmen and senators), and negotiate that a crony is appointed chief of military operations (as opposed to an outsider, a tactic used by the center to limit local influence).

When the subnational elites are both divided and lack bases of support, local politics is chaotic (Scenario D). No faction can impose order in the region and losing candidates in governor elections often form parallel governments. These regions are located in central and

northern Mexico, where the revolutionary wars took place. Given their weakness, subnational elites took longer than other places to pacify their region and banditry is prevalent.

In turn, the advancement of the national (civil) bureaucracy is slow given the instability and/or because scarce resources are allocated somewhere else where the national leadership needs to counteract the power of regional elites. Eventually, the SEP enters fully in these regions but they are not initially prioritized given the budgetary constraints of a state in which the military still absorbs most of the public budget.

Finally, my theory proposes a dynamic element. The national leadership's objective is to turn all regional elites into dependent bosses (*caciques*) that dominate politics but depend on the center to remain in office. As the national bureaucracy gains more local influence and national popular organizations displace local bases, most *estados* fall in Scenario C (no resistance).

However, some *estados* are more difficult to subdue than others, especially those in Scenario A (strongest resistance). The national leadership lures the elites of these *estados* into their close circle of power. The president co-opts regional leaders, for example, by including them in the federal cabinet, and sometimes they take advantage of a special situation of weakness like the bankruptcy of local public finances (as in Yucatán in the 1930s).

The co-optation process became increasingly as the national leadership consolidated a party-state system that monopolized the representation of workers, peasants, and bureaucrats across the country. The first step was the foundation of a national, comprehensive party in 1929, followed by the consolidation of local popular organizations into national corporatist institutions (1938) and the institutionalization of political life around the presidential will (1946).<sup>3</sup>

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<sup>3</sup> These are respectively the moments of foundation and re-foundations of the post-revolutionary party: the National Revolutionary Party (1929), which was a federation of regional leaders around Plutarco Elías-Calles; the Party of the Mexican Revolution (1938), which monopolized popular representation; and the Institutional Revolutionary Party (1946), the PRI, as the party is better known, which institutionalized all political life around the president.

In this article, I focus on the period before the first version of the party was created in 1929 when the struggle of the national leadership to consolidate their rule was more severe. To support the theory-building exercise, in the next section, I analyze four cases that illustrate each of the scenarios of resistance.

### **Implications and Contributions**

Why is it relevant to study the geographic variation of education supply at moments of state-building? As pointed out in the introductory chapter, most contemporary authors of political economy focus on institutions of access to power (autocracy vs democracy) to explain policy outcomes. Here, I hold constant power-access institutions and focus on the characteristics of the state apparatus. These characteristics appeared in the past and had path-dependency effects; thus, to understand state capacity, we must study the origin of state institutions.

To say that Mexico has a middle-of-the-road, semi-dysfunctional state is nothing new. My contribution is in unpacking the idea of ‘state weakness,’ specifically, focusing on an understudied dimension of under-achievement: the uneven geography of state institutions.<sup>4</sup> When we say that a state has ‘low capacity’ we must specify whether we mean the professionalization of the bureaucracy, the resources available to such bureaucracy (fiscal capacity), its geographical reach, or its penetration across social groups (Soifer 2008).<sup>5</sup>

To be sure, there is a robust literature on the institutional capacity of subnational authorities, an area that bloomed during the international wave of decentralized governance, roughly coinciding with the third wave of democratization and the end of the Cold War (Eaton 2011). However, the conversation emphasized contemporary explanatory factors (parties,

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<sup>4</sup> For an empirical assessment of geographic unevenness across non-European regions of the world, see Giraudy and Luna (2017); for an empirical study focused on Latin America, Giraudy and Pribble (2018).

<sup>5</sup> We can also be talking about military domination of the territory, the ability to tax and regulate the economy, the capacity of law enforcement, and/or the power over symbols (Centeno and Ferraro 2013).

elections, etc.) and left aside that many states in the developing world had a territorially uneven reach since their formation, which (in part) inspired the decentralization turn in the first place. At the outset of these reforms, national states were already unable to provide public goods in much of their peripheries, what O'Donnell (1993) called “brown areas” of institutional incapacity.

My framework shares with Diaz-Cayeros (2006) an acknowledgment of the uneven outcome of the centralization processes in Latin America. However, I disagree with this author's interpretation of the process, which hinges exclusively on *negotiation* and overlooks the *coercion* in outcomes of national-subnational balance. In this account, Mexico achieved a noticeably more centralized design than the other two large federations, Brazil and Argentina, due to the revolutionary party. The PRI allowed Mexican state-builders to credibly offer federal transfers and professional rewards to the governors in exchange for their support of the centralizing project.

In Diaz-Cayeros' account of fiscal centralization, the Mexican governors got a cozy deal in that they taxed little but received federal transfers to build their political reputations, and a credible channel to make a political career upward through the hegemonic party. My account agrees with the role of the PRI as a commitment device but paints a different picture of state centralization. Not only governors (and subnational elites more generally) were *coerced rather than persuaded* to give up their policy authority but the terms in which they were compensated amounted to a complete political dependency from the center, specifically to the president as head of state and leader of the party

My framework also departs from Soifer's (2015) emphasis on the resistance of traditional interests, which obscures the more general conflict on the balance of national-subnational authority and the strength of territorial interests (see section 2.5 of chapter 2). I also depart from

arguments that rely solely on the national point of view, namely the technical and material incapacity of the national government (Lee and Zhang 2017; D'Arcy and Nistotskaya 2017), partisan and ideological considerations (Sánchez Talanquer 2019), and responses to civil unrest (Paglayan 2017).<sup>6</sup> I discuss these arguments in chapter 5, on alternative explanations.

My framework focuses on short-term dynamics of conflict but complements and enriches existing theories of path dependency in state-building. I particularly look at the interwar period as a critical juncture for the creation of institutional capacity in Latin America (and beyond).<sup>7</sup> I study the outcome of the conflicts arising from transitions towards inward-looking industrialization. As the decrease in world commodity prices after WW1 deemed export-led development inviable, states reformed their economies for which they required more centralized state architecture. National reformers faced the resistance of the beneficiaries of the status quo, including subnational patrimonial enclaves, which impacted the final institutional balance between national and subnational authorities.

Theories of path dependency in state-building typically connect *static* initial conditions with long-term outcomes.<sup>8</sup> Instead, I introduce a *dynamic* understanding of state-building—as the center-periphery balance of power changed in the short run,<sup>9</sup> so did the national-subnational balance of power. At some point, the national-subnational balance ‘crystalized’ (i.e. the critical juncture ends with WW2 and the Cold War). The resulting balance mostly persisted until the end

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<sup>6</sup> To clarify, except for Sánchez Talanquer (2019), neither of these authors aim to explain subnational patterns of public goods provision. They either study cross-national patterns (Lee and Zhang 2017; Paglayan 2017) or the decision to centralize the state architecture without paying attention to uneven outcomes (Soifer 2015). I infer these alternative explanations as corollaries of their arguments.

<sup>7</sup> For studies that theorize the interwar period as a critical juncture, for example, see Collier and Collier (1991), Waldner (1999), and Ibarra del Cueto (2018).

<sup>8</sup> See Giraudy and Luna (2017) for a more thorough discussion on how frameworks of short-term dynamics complement path-dependency theories. For recent studies that explain long-term institutional patterns in Latin America, for example, see Soifer (2015), Garfias (2018), and Ibarra del Cueto (2018).

<sup>9</sup> Here, I understand two *decades* to be the short term, in the context of the long-living revolutionary regime.

of the century. Although my dissertation does not explain the mechanisms the outcome of this period persisted in the long term, I do show evidence of these patterns' path-dependency effect.

To understand the resulting balance, we cannot only look at structural factors but also contingent ones. The balance at the end of the interwar period was influenced by the political strength of subnational elites at the end of the revolutionary wars, combined with how the tug-of-war with the national government went for each *estado*. For example, Yucatán and Nuevo León are among the *estados* in which the SEP created the most rural schools in 1920-1940, a pattern that persisted until at least the 1960s.<sup>10</sup> However, these two *estados* entered this path for different reasons. In Nuevo León, the subnational elites exerted weak resistance since the beginning, so the SEP had no problem intervening early on. In Yucatán, the SEP had to wait a decade until the subnational elites lost their unity to intervene with full force (See Figure 13 in chapter 5). Both *estados* ended the juncture in a scenario of no resistance, but they started in very different scenarios (see Table 3 above). *Same outcome, different causes.*<sup>11</sup>

## 4.2 Rural Education

In this section, I support the theory presented in 4.1 through the case of rural education. First, I analyze four paradigmatic cases of subnational resistance, representing the four scenarios described above. These cases are Yucatán, Nuevo León, Tlaxcala, and Durango.

Second, I classify all *estados* in the four scenarios, based on secondary sources, and show their persistent effect in patterns of rural schooling using official statistics.

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<sup>10</sup> After the sixties, there is no available data on rural schools only.

<sup>11</sup> This dynamic highlights that there is nothing teleological about state-building, meaning that the state's territorial reach can be reversed—as it happened during Mexico's democratization (Giraudy 2012).



## Subnational Cases

### (A) *Yucatán: Strong Resistance*

Yucatán was the most notorious case of resistance. Although Yucatán's revolutionary group was an ally to the federal government against the traditional oligarchy, it also had strong leverage to negotiate their relative autonomy from the center. As a result, the SEP had close to no presence until the early 1930s.

The veterans were united around a local party with independent and robust popular bases, the Socialist Party of the Southeast (*Partido Socialista del Sureste*, PSS), founded in 1916 through the leadership of General Salvador Alvarado, a military envoy of President Carranza. Alvarado found support among local progressive groups, especially with a Yucatec revolutionary veteran, Felipe Carrillo-Puerto. The PSS enacted strong progressive policies to support workers and redistributed land to his peasant base (Paoli and Montalvo 1977), which raised the suspicion of President Carranza (Wasserman 1990a).

Alvarado was called back by the President, but Felipe Carrillo-Puerto remained as the leader of PSS. He deepened the progressive policies of Alvarado, including the local education system, which embraced the pedagogy of a famous Spanish anarchist. Just as Alvarado, Carrillo was both a valuable ally of the center and an object of suspicion to the president.

On the one hand, the PSS created a cross-class coalition that dominated local politics, provided order to Yucatán, and ensured the tax revenue stream from henequen exports. On the other hand, Carrillo had more than enough leverage to oppose the will of the president and negotiate federal policies. Moreover, Carrillo competed in political influence with the president in the neighboring regions, the *estado* of Campeche, and the territory of Quintana Roo (May González 2010).

Carrillo was assassinated in 1923, but the PSS survive its leader and delayed the expansion of federal schools in Yucatán for another decade. A rising local figure, Bartolomé García-Correa, maintained the strength of the party despite the internal divisions after Carrillo's assassination and reconstructed its political machinery (Fallaw 2008). The center happily supported García-Correa as the new strongman of Yucatán, as he guaranteed the political hegemony of the revolutionary alliance against the powerful henequen planters. But, again, the PSS's independent and robust popular bases gave García-Correa enough leverage to keep a wide degree of autonomy from the center.

As late as 1933, the SEP inspectors complained that they were not receiving support from the Yucatec governor, which was necessary to mobilize local authorities and families. Moreover, SEP inspectors reported that the PSS's cadres often acted against federal teachers for fear of losing their political influence in their communities (Fallaw 2004).

García-Correa eventually fell from grace after his administrative mismanagement and the Great Depression bankrupted the local government. The federal treasury had to intervene with a politically humiliating bailout, which ended García-Correa's career and the leverage of the PSS vis-à-vis the center. After 1934, the presence of federal schools took off dramatically (see Figure 4 below). In the second half of the decade, President Lázaro Cárdenas enacted one of the most spectacular redistributions of land in the country and the SEP mobilized its personnel to incorporate the Yucatec peasantry into the president's party (Fallaw 1999). Eventually, the PSS disappeared and became the committee of the national party-state led by President Cárdenas (Fallaw 2001).

### ***(B) Nuevo León: Weak Resistance***

The revolutionary armies came from northern Mexico, and Nuevo León, in the frontier with Texas, was an open corridor for these military factions. A military envoy of President Carranza occupied Nuevo León circa 1915, displacing the army of Francisco Villa and controlling banditry. Despite the military control, local politics was unstable until the center finally imposed a loyal governor in 1927 (Cavazos Garza 1995).

Political power in Nuevo León was diluted. Not only the revolutionary veterans were factionous but they shared power with the industrialists of Monterrey (Meyer 1978).<sup>12</sup> The national leadership finally imposed a stable and loyal government in 1927, led by President Calles' son-in-law, General Aarón Sáenz. As governor, Sáenz displaced Calles' enemies among the veterans and established a pragmatic relationship with the industrial oligarchs.

Before Sáenz's administration, however, no revolutionary faction had amassed enough popular support beyond their political machines to dominate local politics. Moreover, the economic elite of Monterrey, Mexico's main industrial center, fiercely defended their interests against both the progressive policies of the national government and the grasping hand of corrupted local officials. The regional veterans maintained their political machines with the rents extracted from national and foreign companies, via high rates for telegraphic and railway services, extortion, and bribes.

The factions among veterans largely reflected the division in the national leadership, so that the governor in turn always depended on the president to remain in office. The first constitutional governors before 1920, General Nicéforo Zambrano and General Juan Santos were

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<sup>12</sup> In this classic volume, Meyer (1978) only makes a brief mention of Nuevo León's political configuration with the purpose of contrasting the situation of diluted power to places with elite unity, such as Veracruz. In Nuevo León, the center had to deal at the very least with the faction loyal to the chief of military operations, Juan Andreu Almazán, the faction loyal to General Aarón Sáenz, and the business elite of Monterrey.

loyal to President Carranza, who was deposed by his right hand in the military, General Álvaro Obregón (the Sonora group). So, after the fall of Carranza, Santos was deposed by one of Obregón's men, General Porfirio González.

González called for elections and General Juan García, also loyal to the Sonora group, became governor. However, García was more loyal to one of President Obregón's cronies, General Adolfo De la Huerta, than to Obregón himself. So, García was deposed by a local congress dominated by Obregón's supporters, and in the 1923 coup attempt by De la Huerta against Obregón, García joined the rebellion.

After the rebellion, Porfirio González was elected governor, but his luck lasted only a couple of years when President Calles was inaugurated in 1925. Taking advantage of González's political detachment from the center, the agents of the Monterrey industrialists, who were tired of González's corruption and rent extraction, successfully orchestrated an impeachment in the local congress (Saragoza 1988). With Governor Sáenz, Nuevo León finally experienced political stability, but the price was a regional submission to the center.

In this context, the SEP easily intervened in Nuevo León. The local veterans had voiced their opposition to the centralization of public education when President Obregón created the SEP in 1921 (Ramos Escobar 2006). However, their factionalism made each governor too dependent on the center to complain about the intromission of national officials. As Figure 2 shows, the SEP made a big entry in this *estado*.

### ***(C) Tlaxcala: No Resistance***

Venustiano Carranza delegated the pacification of Tlaxcala to General Máximo Rojas, native to this region. From that time until the early 1930s, Rojas and his closest cronies—Rafael Apango

and Ignacio Mendoza—alternated as governors and dominated local politics over other revolutionary factions.

Land expropriation was the hottest issue in the region, as Tlaxcala had a long tradition of peasant rebellion related to land dispossessions during the nineteenth-century export boom (Buve 1990). However, the Sonora group had opted for very modest land reform to set the stage for restarting the economy and avoiding an American invasion.<sup>13</sup> After the devastation of the revolution, investors required an environment of property rights protection, especially American companies. And the national government needed to continue paying the government's foreign debt to regain access to international credit (Krauze et al. 1977).

Thus, Rojas' clique provided to President Carranza and his successors the crucial service of controlling the energies of the masses. As governors, Rojas, Apango, and Mendoza ensured that the rebellious peasants put down their arms and, instead, requested the restitution of their lands through the (long) legal process established in the new constitution of 1917. They also administered and assuaged the growing unionization of labor in the textile industry (Buve 1990).

As mass *demobilizers*, Rojas and his cronies did not form a social base like in other places such as Yucatán, where Felipe Carrillo-Puerto mobilized the lower classes instead of containing them. To be sure, the Tlaxcalan veterans did organize workers and peasants into a party; particularly, Ignacio Mendoza was given the task by President Calles in 1926. However, Mendoza built Tlaxcala's first mass party, the Tlaxcalan Socialist Party (*Partido Socialista Tlaxcalteca*, PST), with social organizations 'borrowed' from the national government. The Party was especially aided by the Regional Confederation of Mexican Workers (*Confederación Regional Obrera Mexicana*, CROM), led by Calles' Secretary of Labor, Luis Morones (Buve

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<sup>13</sup> The American navy had temporarily occupied the Gulf port of Veracruz in 1914. Washington vehemently opposed the military government of Victoriano Huerta, who had deposed Francisco Madero (Mayer 1989).

1990). The PST also allied with influential landowners that helped to maintain the Party's cadres in the municipal bureaucracy in exchange for their share of representatives in the local congress (Buve 1980).

As a result, Tlaxcala's progressive party was never independent of the center and the subnational elites lacked much leverage to negotiate the presence of national bureaucracy. One indication is that the president continuously imposed his preferred candidates for federal legislative positions (congressmen and senators) and appointed an outsider as chief of the military to limit the governor's influence (Buve 1980).

Neither could the Tlaxcalan rulers stop the SEP, erasing their chances of creating institutionalized links to the population in the future. The SEP entered Tlaxcala with relative strength, building federal schools above the national trend (see Figure 2). Under these circumstances, the relationship between the *estado* and federal education bureaucracies was of general cooperation (Rockwell 2007). Tlaxcala's governors cooperated with SEP and welcomed federal teachers as the ambassadors of the revolution.

#### ***(D) Durango: Chaotic Politics***

Durango was one of the epicenters of the revolutionary wars, which mostly happened in the northern side of Mexico. Military personnel and civilians from the old regime joined the movement of Francisco Madero to overthrow the dictator Porfirio Díaz and later joined the Constitutionalist Army of Venustiano Carranza. Francisco Villa, a native of Durango, also recruited in this *estado* many followers, who remain active and created havoc even after Villa was assassinated in 1923 (Avitia Hernández 2018).

After Carranza's faction dominated the country around 1915, Durango's economy and society had been devastated. The region did not see either anything resembling peace before

1924 when a couple of revolutionary veterans became prominent political figures, Generals Jesús Castro and Enrique Nájera (Morris 2015). But soon after they consolidated as the main political force, in 1926, Durango was entangled in the Cristero rebellion, which was suffocated until the early 1930s (Collins 2015).<sup>14</sup>

Durango only saw political stability and social peace around 1940, after President Lázaro Cárdenas implemented one of the most spectacular redistributions of land in the country, along with labor and educational reform. Only after that was Durango well incorporated into the orbit of the party-state and its political machinery (Pacheco Rojas 2001).

When federal public schools expanded in the country in the early 1920s, Durango's politics were chaotic, as no faction of revolutionary veterans dominated local politics. In 1920, Governor Domingo Arrieta was deposed by the faction of the aforementioned pair, Castro and Nájera, in the context of Obregón's coup against Carranza. Once deposed, General Arrieta sustained an insurgency movement until he was arrested in 1924.

Castro and Nájera took the reins of Durango; the former was 'elected' governor in 1920 and the latter in 1924. However, they could not truly dominate politics and continued quarreling with other factions. Differently to Nuevo León, no faction had social bases with enough clout to keep guns out of politics.

As governor, Castro dealt with the insurgency of Arrieta, the rebellion of many veterans that joined the attempted coup against President Obregón in 1923, the followers of Villa that also joined the coup attempt after their leader was killed by Obregón, and the banditry ensuing the

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<sup>14</sup> The Cristero rebellion was a grassroots guerrilla movement (not initiated nor sanctioned by the Catholic hierarchy) to resist the anti-clerical policies of the national government, including the ban of public displays of religiosity, church closings, and prohibition of religious education in private schools. The rebellion had its epicenter in the Western Pacific region (Michoacán, Guanajuato, and Jalisco) but reverberated in other *estados*. The rebellion and subsequent military repression happened in 1926-1929, but sparked briefly again in the early 1930s. Meyer (1974) provides a detailed account of these episodes.

chaos of the revolutionary wars. After suffocating the rebellion against Obregón, the gubernatorial elections of 1924 were supposed to be peaceful (pitting the Castro-Nájera's faction against another revolutionary group), but the losing faction declared a fraud, rebelled, and formed a parallel government that eventually was repressed. Amidst the chaos, Nájera was only installed as governor with the firm support of the president, consolidating his dependency on the center (Avitia Hernández 2018).

Why did the veterans lack robust social bases? The economic devastation of the revolutionary wars discouraged them from redistributing much land or advocating for labor rights so that mining and agricultural companies—the main sources of tax revenue—could restart production. To be sure, the faction in power, Castro and Nájera, had progressive leanings and strong links to the national-level agrarian movement. But the revenue imperative led the veterans to restrain their revolutionary impulses, which in turn prevented the consolidation of a robust social base.

While Durango had a lively land reform movement, it was completely grassroots and detached from the revolutionary veterans, who responded with the distribution of idle public lands instead of expropriating agricultural estates. An illustrative example is one of the earliest large petitions for land in 1921 when communities requested lands from a foreign-owned company, the Tlahualillo Colonizer Company Lt., located in one of the main agricultural zones of the country. Instead of catering to the communities, the governor negotiated with the Company the creation of a new population center to colonize publicly owned lands elsewhere. By 1930, a very small proportion of arable land had been redistributed in Durango, which deepened the dependency of Durango's veterans on the support of the center (Avitia Hernández 2018).



Durango's veterans also alienated the population with their harsh anti-clerical policies. In 1916, Governor Gabriel Gavira destroyed many of the capital's religious monuments. In the mid-1920s, Governor Nájera supported President Calles' prohibition of public displays of religiosity and the state-mandated caps on the number of priests (Pacheco Rojas 2011). In other places, these policies did not generate as strong a backlash, but Durango was a deeply religious region, neighboring the epicenter of the Cristero rebellion in the Western Pacific area (Collins 2015).

All these circumstances meant that the subnational political forces lacked the leverage and resources to resist the progress of national education. However, the SEP did not prioritize this *estado*. In a context of resource scarcity, the SEP allocated its personnel where the federal government had the strongest need to create direct links with communities to re-balance power in favor of the center. In Durango, governors were too dependent on the center to pose a threat.

In 1926, Governor Nájera complained in a letter to the Secretary of Public Education that Durango was not receiving as many federal teachers as neighboring states like Nayarit and Jalisco. Nájera was especially worried that, given his inability to build robust popular bases and institutional links to the population, his faction would eventually lose control of the *estado* (Morris 2015).

### **Short- and Long-Term Effects**

Now, in Table 4 below, I present a preliminary classification of the twenty-eight *estados*, using diverse sources from the historiography of each *estado*. The classification is the very initial situation circa 1920. As explained above, most *estados* gradually transited to Scenario C, No Resistance. As the bureaucracy and popular organizations of the national government expanded throughout the two decades of study, most subnational elites lost their sources of political strength.

However, the *initial* scenario in which they started had a meaningful impact on how fast the SEP advanced. For example, see Figure 7, which shows the evolution of the median number of schools per capita in the period of analysis. SEP continued to advance the slowest in the group of Stronger Resistance, despite having most of these *estados* transit to No Resistance. That is, although schooling investment eventually took off, their point of departure kept them behind.

Table 4. All *estados*

Subnational elites are:	Backed by independent popular bases	NOT backed by independent popular bases
<b>United</b>	<b>(A) Stronger Resistance</b>	<b>(C) No Resistance</b>
	Yucatán Oaxaca	Tlaxcala
	Tabasco Guanajuato	México
	Veracruz Jalisco	Zacatecas
	Tamaulipas San Luis Potosí	Sonora
	Michoacán	Campeche
<b>Divided</b>	<b>(B) Weaker Resistance</b>	<b>(D) Chaotic Politics</b>
	Nuevo León Aguascalientes	Chihuahua
	Colima Coahuila	Durango
	Morelos Guerrero	Sinaloa
	Nayarit Hidalgo	Puebla
	Chiapas Querétaro	

The pattern continued for at least two more decades (as far as the available data on rural schools goes). In Figure 8, a longer series shows that the *estados* in the initial scenario of Strong Resistance continued to lag behind the rest. Some of them started receiving heavy SEP activity as their sources of resistance eroded; for example, Yucatán and Tabasco. However, other *estados* like Jalisco, Guanajuato, Michoacán, and Oaxaca, which started with strong subnational elites, continued with a pattern of low investment in the long term.

The *estados* in the scenario of Weak Resistance continued to lead in rural schooling investment, as well as the cases of No Resistance. But an interesting pattern is that the group of Chaotic Politics quickly took off after Cárdenas' presidency. Although there is more than one

possible explanation, the pattern is consistent with the conceptualization of that scenario—these *estados* were not prioritized because of the difficulties and dangers that the national bureaucracy found. As soon as national politics stabilized through Cárdenas’ national corporatist institutions (i.e. the revolutionary party became a true mass party), SEP could enter properly into these *estados*.

Figure 7. Rural education in each scenario of subnational resistance (interwar period)

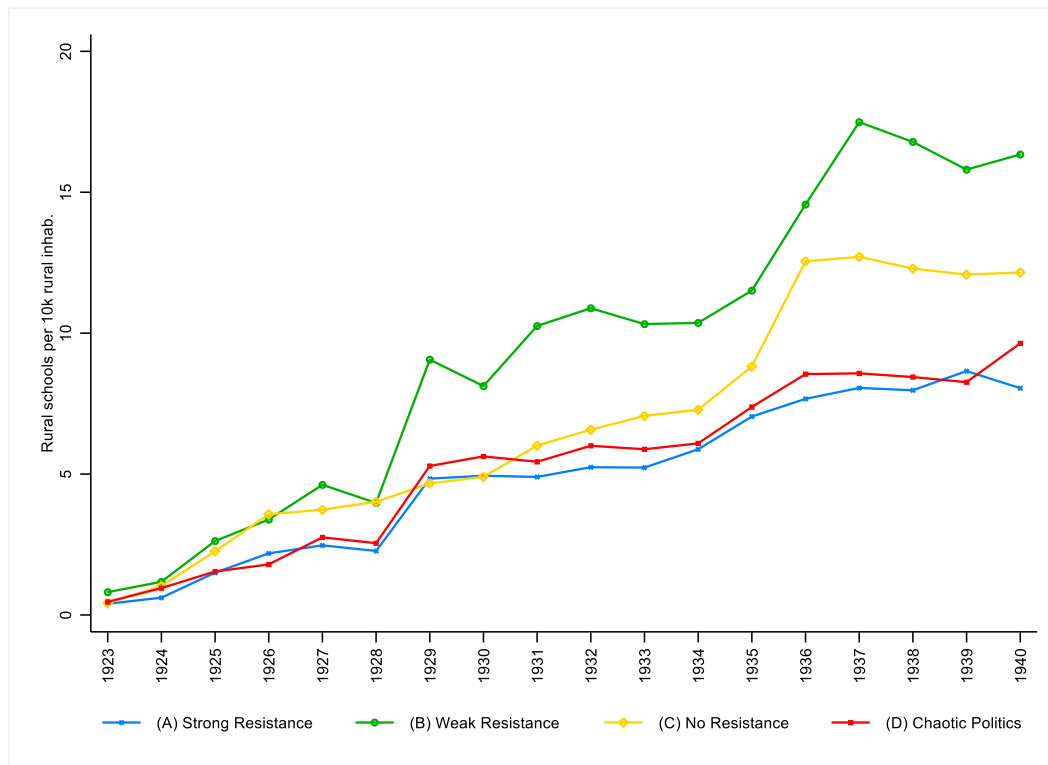


Figure 8. Rural education in each scenario of subnational resistance (1923-1961)



### 4.3 Urban Education

The conflict over the management of urban education offers additional evidence of the effect of subnational resistance on the state's territorial reach. As in rural education, the key factor explaining the partial centralization of urban education is the relative strength of subnational elites. But in urban education elite unity was no longer relevant; elite strength was a function of a particular social ally: the local teachers union. When SEP achieved an alliance with local teachers, these new allies pressured the governor to accept the nationalization of the *estados'* school system.

How did it happen? In the 1930s, Secretary Narciso Bassols took a more aggressive approach to centralize public education (see chapter 3). Before this time, the informal arrangement was that urban areas concerned subnational authorities and rural areas were SEP's turf. SEP's intentions were more ambitious, as governors often complained that SEP established

schools in urban areas where *estados* or municipalities were absent. Moreover, SEP was incorporating subnational schools one by one by allowing local teachers to request the incorporation of their schools to SEP in exchange for better salaries.

However, most local teachers still refused to incorporate to SEP; they were as suspicious as the governors of the center's intentions. When Secretary Bassols created the first national teachers' unions, most local teachers' unions rejected the invitation to join, fearing the top-down control that an all-encompassing corporatist institution would grant SEP.

The Great Depression changed the situation. The economic recession affected the already poor capacity of *estados* to pay their teachers' salaries. SEP offered governors a deal: the Secretariat would cover the cost of subnational education in exchange for temporarily absorbing the management of education. This way, the SEP was able to offer the local teachers of some *estados* a 'free trial' of better working conditions and eventually persuaded them to join Bassol's national teachers' union.

The first *estado* to make the deal was Chihuahua and about a third followed during the decade. The deal always had an expiration date, typically a year, but the slow economic recovery and the teachers' pressure led governors to renew the agreement multiple times. After Cárdenas' administration, in the 1940s, President Ávila-Camacho consolidated the national teachers union, which changed the balance of power in favor of the center. The *estados* that renewed their yearly agreement up to that point were pressured to keep things that way, while the rest maintained their urban schools.<sup>15</sup> These *estados* lost the *management* of their schools, but they were still responsible for funding them.

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<sup>15</sup> In the long-run, keeping urban education was favorable to these *estados*—the process of industrialization incentivized a massive migration to cities, which allowed *estados* to serve more people.

## Short- and Long-Term Effects

The right-side column in Table 5 indicates which *estados* lost the direction of their urban schools circa 1940. The *estados* marked with dark blue color are those that for sure lost their education system; the *estados* marked with light blue are very likely to have lost it, although the sources are not as clear as in the other cases.<sup>16</sup>

*Estados* in Table 5 are in descendent order by the percent of elementary schools managed by the national government (a proxy for centralized administration) just before the 1992 decentralization reforms.<sup>17</sup> The *estados* that lost their education systems circa 1940 tend to be the most centralized systems fifty years later. Some of them, notably Chihuahua, are not among the most centralized, meaning that some negotiations between national and subnational leaders occurred during the PRI regime.

Table 5. Status of subnational education circa 1940 and % of national schools in 1990

<i>Estado</i>	% National of elementary schools (1990)
Federal District (Mexico City)*	100
Oaxaca	98.4
Hidalgo	97.4
Tamaulipas	95.1
Campeche	94.8
Baja California-South*	93.6
Querétaro	92.2
Quintana Roo*	87.9
Aguascalientes	87.1
Michoacán	86.7
Morelos	85.8
Colima	85.6

<sup>16</sup> Neither the historiography nor the annual reports of the SEP are hundred-percent clear on which subnational systems were ‘nationalized;’ I made an assessment based on primary and secondary sources: the annual reports of the *Secretaría* (SEP 1934; 1939), a pamphlet signed by the head of the official teachers union (Arroyo de la Parra 1939), and the research by Loyo (1998) and Marak (2009).

<sup>17</sup> The data on percent of national elementary schools in 1990 comes from Fierro Evans et al. (2009). Latapi Sarre and Ulloa Hernandez (2000) have an alternative measure—the ratio of federal to *estado* expenditure on elementary education—which yields a similar ranking, although with some differences.

Continuation of Table 5. Status of subnational education circa 1940 and % of national schools in 1990

<i>Estado</i>	% National of elementary schools (1990)
Tabasco	80.8
Guerrero	79.8
Nayarit	79.7
Coahuila	79
Yucatán	77.6
Chiapas	77.1
Sinaloa	76.8
San Luis Potosí	76.5
Guanajuato	75.1
Puebla	72.5
Zacatecas	71
Sonora	70.7
Tlaxcala	70.6
Chihuahua	69.8
Veracruz	69.8
Durango	68.9
Jalisco	67.5
Nuevo León	55.8
Baja California-North*	53.2
México	42.8

Note: The colors mark which *estados* lost their urban schools in the 1940s. In dark blue, those that for sure lost their schools; in light blue, those that very likely but less clearly got the SEP deal. Marked with an asterisk (\*): areas of exclusive national jurisdiction (i.e. non-autonomous ‘provinces’) during the period of analysis (after 1974, only the Federal District was a non-autonomous area of exclusive national jurisdiction).

Table 5 also includes the four areas of federal jurisdiction: the Federal District (Mexico City), Quintana Roo, and the North and South parts of the Baja California Peninsula. I included them because they also reveal the fingerprints of subnational resistance. While the governor of these places was appointed by the president, the 1917 constitution established municipal schools. However, the municipal schools were absorbed by the governor in the 1920s, except in Baja

California-North.<sup>18</sup> The table shows that Baja-North is at the bottom of the centralization ranking, while the rest are at the very top.

The northern territory of the Baja California peninsula had a strongly organized group of political elites located in the city of Tijuana. They used their domination over local politics (i.e. their effectiveness as allies of the president) as leverage to keep their local schools and to gain the status of federative state before the other federal territories, in 1952. Baja California-South and Quintana Roo became federative states in 1974. Mexico City regained the election of its authorities in 1997 and their boroughs recovered their municipal autonomy in 2018 with the first constitution of the City.<sup>19</sup>

#### **4.4 Conclusions**

In chapter 4, I have offered a theoretical framework to understand the geography of public education in revolutionary Mexico. More generally, my framework contributes to understanding the uneven geography of state capacity in developing countries, with an explanation that departs from recent research on the geography of state institutions. I argue that the geography of state capacity is a function of the political resources of subnational elites to resist the advancement of the center.

To support my theory-building exercise, I studied four cases representing different scenarios of resistance to national education in rural areas during the 1920s—Yucatán, Nuevo León, Tlaxcala, and Durango. These cases represent scenarios that vary on two factors: whether the subnational elites are united in a common front against the center, and whether these elites count on social bases of support independent of the center. When subnational elites are united

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<sup>18</sup> The municipalities of the Federal District disappeared completely in 1928; that is, they became boroughs without any autonomy. Non-coincidentally, the Catholic organizations opposed to the revolutionary secularist reforms had their most strength in the country's capital.

<sup>19</sup> In the 1920s, the governor of Mexico City was appointed by the president but the municipalities had elections.



and have independent bases of support, they exerted the strongest resistance to the presence of the national bureaucracy in general and SEP in particular.

I also studied the case of urban education. After the Great Depression, the SEP offered a bailout to *estados* that were struggling to pay the salaries of their teachers, in exchange for temporarily taking over their school systems. Then, SEP allied with the local teachers to force the governors of these *estados* to make the deal permanent. The case of urban education is another instance in which the SEP advanced when did not count with bases of support—which in this instance were the local teachers.

Finally, I showed suggestive evidence that the patterns of schooling provision in both rural and urban areas persisted in the long term.

## **Chapter 5: Quantitative Analysis**

In this chapter, I test my theory against alternative explanations. In section 5.1, I address different approaches individually, using a mix of qualitative and quantitative data. In section 5.2, I present a multi-variable analysis using quantitative data at the level of federative state (*estado*). Section 5.3 concludes.

Of these alternative explanations, three are about leaders' incentives or producing conditions, and two of them are about obstacles or permissive conditions. On the incentives side, we must account for the possibility that central leaders allocated schooling investment in a 'selective' way using some political criteria. Here I consider three possible criteria: electoral-partisan strategy, compensation for subnational incapacity, and targeting regions of previous rural unrest (i.e. those that 'originated' the civil war).

On the obstacles side, I consider two possibilities: the constraints stemming from the fiscal and technical flaws of the central state, and the resistance from traditional interests (e.g. landlords and priests). Overall, I show that these producing and permissive explanations are at best a small part of the story in Mexico's post-revolutionary reconstruction.

### **5.1 Alternative Explanations**

#### ***Elections and Partisanship***

The role of public expenditure in the political hegemony of the PRI is well known. PRI elites sustained a regime of poorly accountable authority in part by winning elections before Election Day through patronage and clientelism (Magaloni 2006). The conventional wisdom on autocracies based on patronage is that they would privilege 'particularistic' over 'public goods'

(Diaz-Cayeros, Estevez, and Magaloni 2016). This notion is not too different from Waldner's (1999) view that cross-class alliances lead to rent-seeking state institutions.<sup>1</sup>

While this literature predicts that one-party autocracies (competitive or single-party) would use clientelistic expenditure to rig elections (rather than more salutary goods), it is possible to make the case that education expenditures would be used to buy off loyal communities and punish dissenting ones, as in Magaloni's (2006) 'punishment regime.' Educational expenditures, after all, do have redistributive effects as subsidies (Harding and Stasavage 2014).

Under this logic, schooling investments would be concentrated in electoral years similarly to land redistribution (Albertus et al. 2016). This prediction would align with Miller's (2015) observation that dictatorships that hold elections spend more on basic education than any other kind of autocracy.

However, a simple observation of the schools per capita created in the years of post-revolutionary expansion shows that it was not the case. In Figure 9, years of presidential elections have a red bar and the years with a mid-term congressional election are indicated with an "M." The bars represent the schools opened in that year by the national government in rural areas.<sup>2</sup> In the period of analysis, schooling investment is not concentrated in electoral years.

The same histogram shows that the first year after the presidential election is an unusual year of high spending (except for 1931). We can test whether the ruling coalition was already

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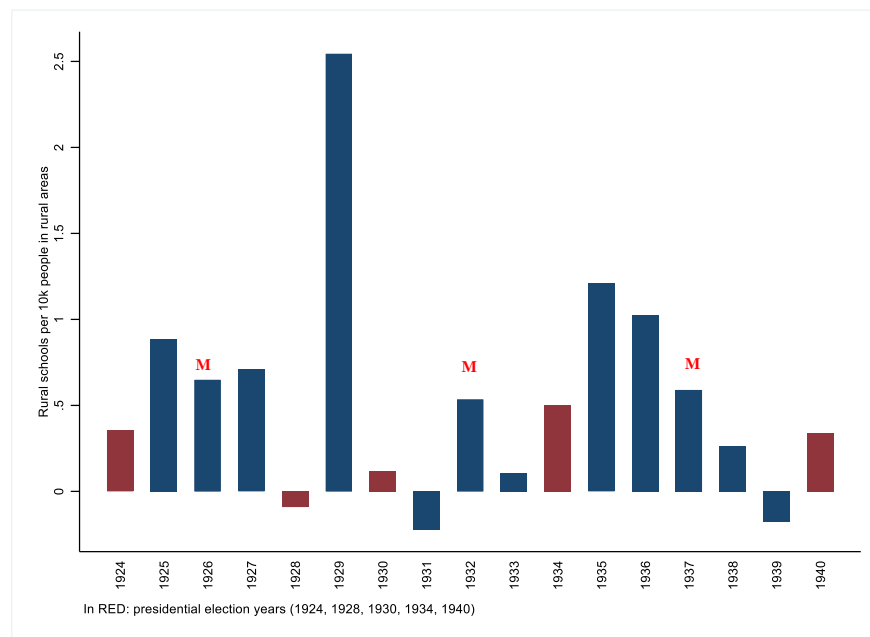
<sup>1</sup> However, Waldner (1999) at the most classic period of corporatist institutions, in which the social commitments of the state were expressed in class-based redistribution (e.g. social security for formal workers). For Diaz-Cayeros et al. (2016) these social policies are universal, that is, are more public than particularistic goods. The latter authors saw them that way because they were looking at the last decades of the PRI when the regime sustained the popular coalition with clientelistic programs; they saw the institutions of social security as a universal-aspiring legacy of the early post-revolution. They were probably correct—like other revolutionary regimes (Levitsky and Way 2012), the PRI transited to a patronage-based party-state as the generation of the revolution died, taking with it the moral authority of the struggle.

<sup>2</sup> Approximated by the change in the number of rural schools.

exerting a ‘punishment regime,’ in the sense of rewarding loyalty and punishing disloyalty.

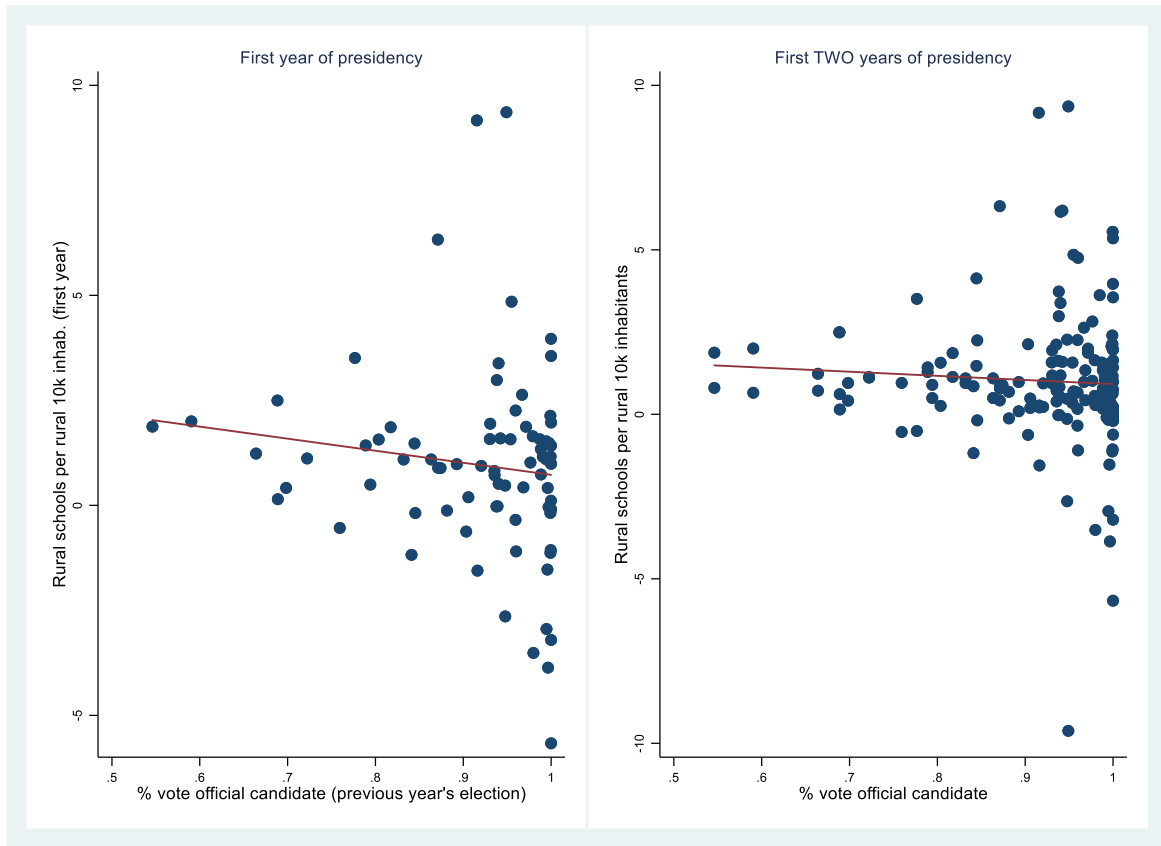
Figure 10 shows the relationship between the vote percentage of the official candidate in the previous election and the change in rural schools in two short windows: the first year and the first two years of the presidency.<sup>3</sup> Under a punishment regime, there should be a positive relationship but the fitted line shows a (tenuous) negative slope in both cases.

*Figure 9. Change in rural schools per 10k inhabitants*



<sup>3</sup> The year 1929 was excluded because there was only one candidate in the 1928 election (Álvaro Obregón).

*Figure 10. Support for the official candidate vs schooling supply*



Finally, another theme related to elections is partisan conflict, which characterized the state formation path of countries like Mexico, Colombia, and Uruguay (Mazzuca 2021). Indeed, in Colombia, the liberal-conservative divide substantially affected the allocation of schools in the interwar period (Sánchez Talanquer 2019).

In Mexico, while liberals defeated conservatives in the nineteenth century, conservatism had a chance to regroup during Díaz's dictatorship, which culminated in the creation of the National Catholic Party in 1911, during the brief democratic opening after Díaz's resignation and exile (Meyer 1974). The 1917 constitution banned all parties with religious affiliations, but

conservative politicians with links to the landed oligarchy competed in local politics with secular parties disguising their pro-clerical leanings.<sup>4</sup>

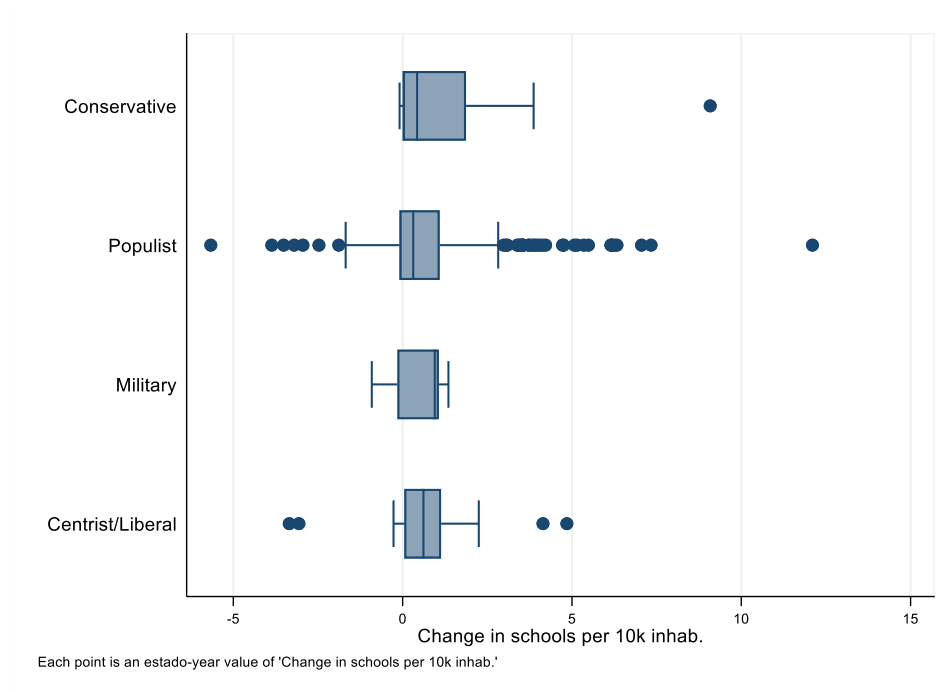
Thus, the dynamics of public education investment may be related to the ideological-partisan affiliation of the governor. The relationship may be positive if the SEP allocated teachers to *estados* with conservative governors to strengthen the position of the national bureaucracy as a local political actor. Or the relationship may be negative if the SEP followed a logic of punishment in the allocation of public services.

However, neither the political context nor the data support this hypothesis. On the one hand, the governors were revolutionary populists most of the time in 1920-1940, as pointed out in chapter 2 (Figure 3). On the other hand, the patterns of allocation do not match the hypothesis. Figure 11 below shows the distribution of rural schools by ideology/partisanship of each governor (each point is a value of the change in rural schools per capita in an *estado*-year). Contrary to the expectations, the average value of the variable is not much different among groups. Moreover, the group of revolutionary-populist governors shows the most variance, which implies that there is a more consequential factor behind the dynamics of schooling expansion.

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<sup>4</sup> Although they rarely succeeded, as we learned from the data in Figure 3.

*Figure 11. Change in rural schools per 10k pop. in estado-years, per ideology-partisanship of governor*



### ***Fiscal and technical capacity***

States in the Global South often cannot guarantee universal access to public services, such as basic education, especially in early industrial times. I agree that fiscal and technical capacities are significant constraints, but this kind of obstacle is not the main concern for state-builders, at least after a certain threshold.

There are two empirical implications for Latin America's generalized institutional weakness. On the one hand, the institutional capacity becomes thinner as we move from their territorial core to the peripheries (O'Donnell 1993). On the other hand, states must create enough institutional capacities *before* providing public goods, especially legibility capacities (Lee and Zhang 2017), and not at the same time.

First, the proximity hypothesis. We should expect that the national bureaucracy is weaker and the provision of public education lower, the farthest from Mexico City. A test of this logic is in the map of Figure 1, which does not show a clear pattern of concentration around the capital. The rural areas of Mexico City (which was not the metropolis that it is today) were lightly covered, and there were areas of the peripheries that received heavy schooling investments.<sup>5</sup>

Second, the sequencing hypothesis. During the 1920s, the SEP counted only on a rough idea about the number of children in schooling age living in a given place. The national government still had substantial legibility constraints, as the census methodologies had not improved since the nineteenth century. Moreover, after the collapse of the pre-revolutionary state, the National Directorate of Statistics had to rely on poorly trained personnel and the intermediation of uncooperative subnational authorities. The obstructive attitude of governors was a major challenge; for example, ten governors refused to aggregate the data on their *estado*, as requested by the federal authorities, which delayed the publication of data (Figuerola 1928).

During the reconstruction decades, the national government improved its fiscal and technical capacities *at the same time* that public education expanded on a mass scale. For instance, the national government centralized tax collection to an unprecedented level (Díaz-Cayeros 2006) and the 1930 census incorporated for the first time the minimal international standards (Zamudio Sánchez et al. 2015).

The SEP also created innovative practices to overcome its informational constraints. For example, the federal teachers did important exploratory work to distribute schools, as they were required to send back to the headquarters a ‘mini census’ of children of schooling age in a given community to justify settling in a location. Federal teachers themselves were critical for

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<sup>5</sup> By the end of the post-revolutionary reconstruction cycle, in 1940, the peripheries of the country had received *more* investment in rural schools than the central area of the country surrounding Mexico City. Data not shown.



improving the ‘legibility’ capacity of the state. For instance, as the most widespread branch of the federal bureaucracy, teachers assisted in the implementation of the 1930 census (Dirección General de Estadística 1947; INEGI 2009).

Theoretically, the sequential argument implicitly assumes that territorial patterns are apolitical, which is not necessarily the case. An observer cannot readily infer that material and technical incapacity is the cause of state absence, as there is at least one observationally equivalent cause: trying but failing. My explanation precisely provides a criterion to identify this alternative explanation by looking at the subnational political configuration.

### ***Compensatory expansion***

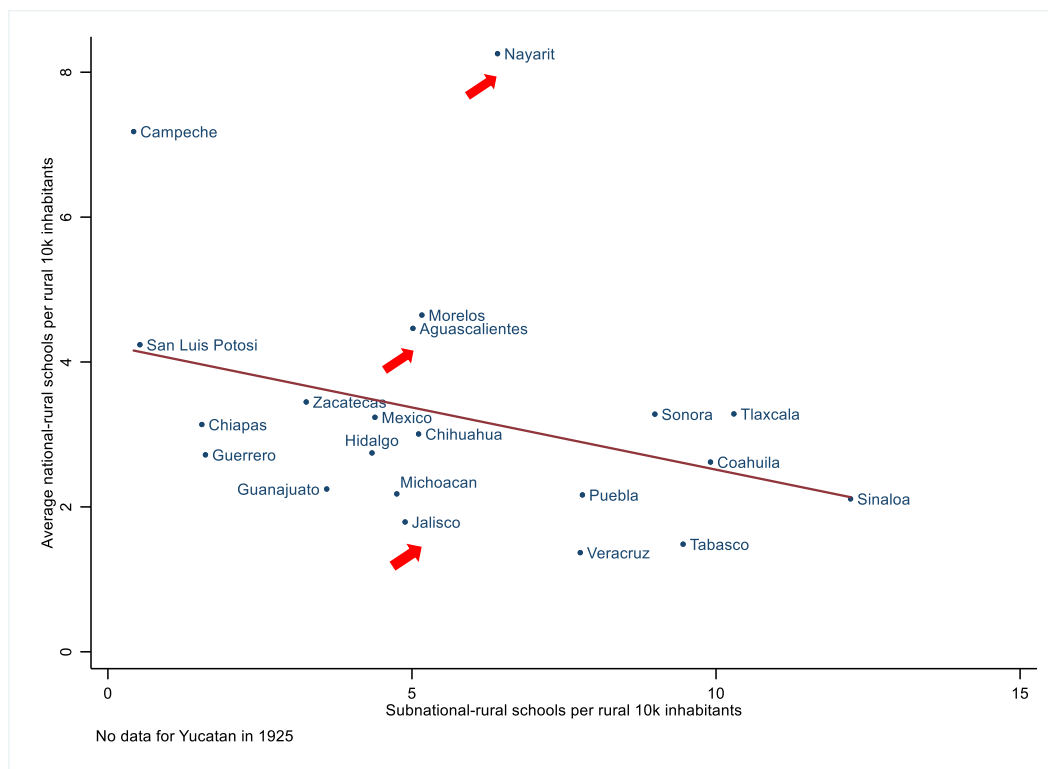
If national schools were not concentrated around Mexico City, were they allocated to supplement subnational education? I devised this alternative as a corollary to Ziblatt’s (2004) argument that state-builders prefer centralized over decentralized state designs when the subnational units are infrastructurally weak. In the Mexican case, compensation should certainly be part of the story as it was President Calles’ justification for creating a parallel education system.

However, the compensatory hypothesis cannot explain why the centralizing effort became more aggressive with time, as the national government went from compensating to *replacing* subnational governments against their resistance. Most importantly, this argument cannot explain the actual geography of schooling supply. If the compensatory *effects* of national schooling are an indication of the government’s sole purpose, SEP would not have opened schools where subnational authorities are already doing a good job. The chart in Figure 3 indicates that compensation is in part true but not the full story.

Figure 12 compares rural schools funded by the *subnational* levels of government in the first year of Calles’ presidency (1925) against the investment in rural schools funded by the

national government in this presidential period (1925-1928). Consistent with the compensatory hypothesis, the slope of the fitted line is negative, but the slope is too gentle and the correlation coefficient too low (-0.34) to fully explain the distribution.<sup>6</sup> The compensatory approach would not be able to explain, for example, why there was so little national intervention in Jalisco but so much in the neighboring *estados* of Nayarit and Aguascalientes (marked with arrows in the chart), which had similar levels of subnational school supply.

*Figure 12. Rural schools: subnational (1925) vs national (average of 1925-1928)*



***Resistance from traditional interests***

Soifer (2015) argues that agents with local roots cannot be trusted to implement projects that expand state institutions. Local agents, “including indigenous community leaders but most often

<sup>6</sup> The coefficient is lower when using the median instead of the average number of national schools over the period, or when considering a broader period (1923-1928). The coefficient is also lower when using the number of subnational schools in urban areas to proxy for the established capacity the *estados*' bureaucracy. Data not shown.

large landowners” for various reasons have a questionable “commitment to state development” (62). This is certainly the case of Mexico and the reason why the national leadership had been trying to centralize public administration since the nineteenth century.

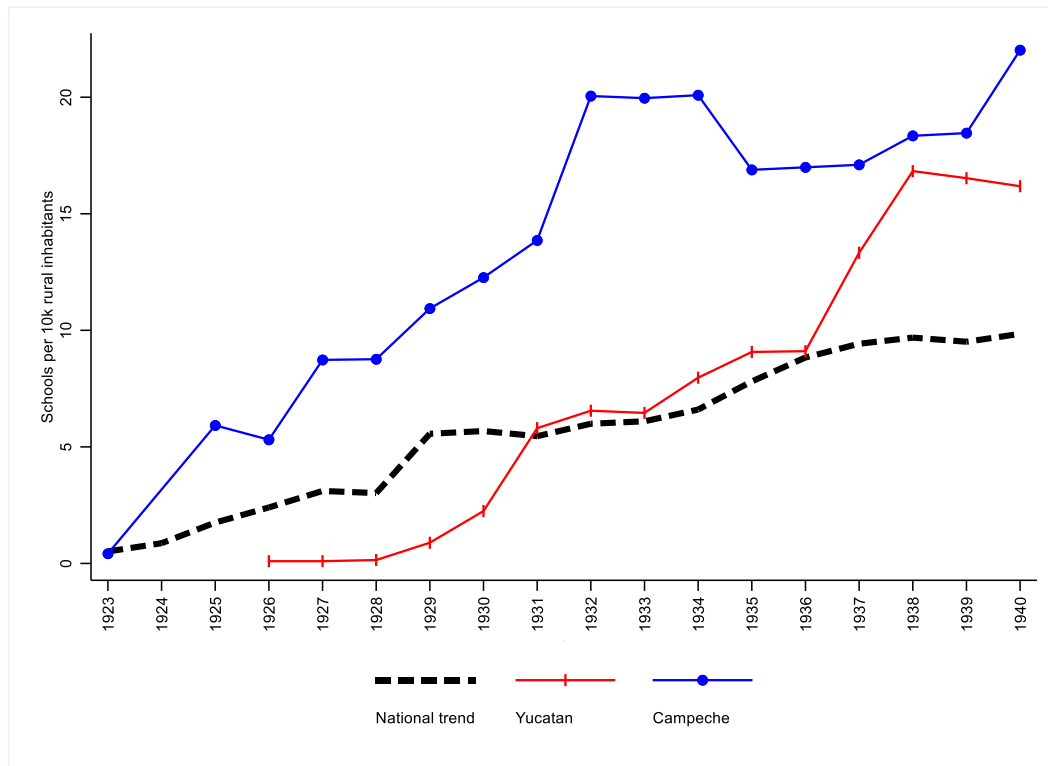
A corollary of this argument is that the national government would intervene prioritizing places ruled by conservative governors. The first problem with this corollary is that conservative governors were a rarity. After the Mexican revolution, virtually all governorships had been taken by revolutionary veterans. Conservative interests retained power in some places but were represented in the local congress or through non-governmental organizations. Given that practically all governors during the period were ideologically compatible with the national leadership, the centralizing effort should not be as uneven as in Figure 2.

To be sure, the president and the regionally-based veterans did have disagreements. But their disputes were more about how much reform rather than on social reforms themselves. Their greater disagreement, though, was about the fate of the federal system of government, as the regional veterans wanted to be the protagonists of modernization in their regions and to have the upper hand in their areas of influence. As a result, the president routinely conspired to depose governors that dared to oppose the mandates of the center, either through local impeachments, the suppression of local authorities by the national Senate, or by intervening in gubernatorial elections (Wasserman 1990a).

An exclusive focus on disagreements over the overall project of modernization, without taking into account the conflict over the federal system itself, would not be able to explain either the geography or the *timing* of school supply. Take, for example, the case of Yucatán, which had the strongest subnational elites. Yucatán initially had low levels of national schooling, but SEP’s efforts took off after the national government bailed out the administration of Governor García-

Correa in the early 1930s (see the corresponding case study). After that, Yucatán went to the forefront of national education (Figure 13), in contrast to the neighboring Campeche, where a weak coalition of veterans had to ‘welcome’ the SEP since the early 1920s.

*Figure 13. National school supply in rural areas, Yucatán and Campeche*



### ***Response to civil unrest***

Finally, Paglayan (2017) provides evidence that states which emerged from a civil war invest more in education and that they target the regions of origin of the rebellion. Their objective is to keep the youth off the streets to prevent more rebellion in the short run and to disseminate ideas of order in the long run. My framework fits with this cross-national pattern, but I provide an alternative mechanism through which civil wars are connected with educational investment.

Theoretically, I focus on the elite level rather than on the masses. Empirically, the data in Figure 1 and Figure 5 (below) show that the civil-conflict argument is not enough to explain Mexico’s geographic variation. On the one hand, given that the rebels were concentrated in the

northern and central *estados*, national education should be distributed in the same way. Figure 1 does show some concentration in these regions, but the civil unrest argument would not be able to explain the relatively high presence of SEP in the southern Campeche, Chiapas, and Guerrero (see Figure 2). In these three places, there were no massive rebellions against the regime of Porfirio Díaz nor the first post-revolutionary governments of Francisco Madero (1911-1913), Victoriano Huerta (1913-1915), and Venustiano Carranza (1916-1919). Moreover, the argument would not be able to explain why, not long after Calles' presidency, the school supply took off in the southern *estado* of Yucatán (Figure 4), which is not a unique case.

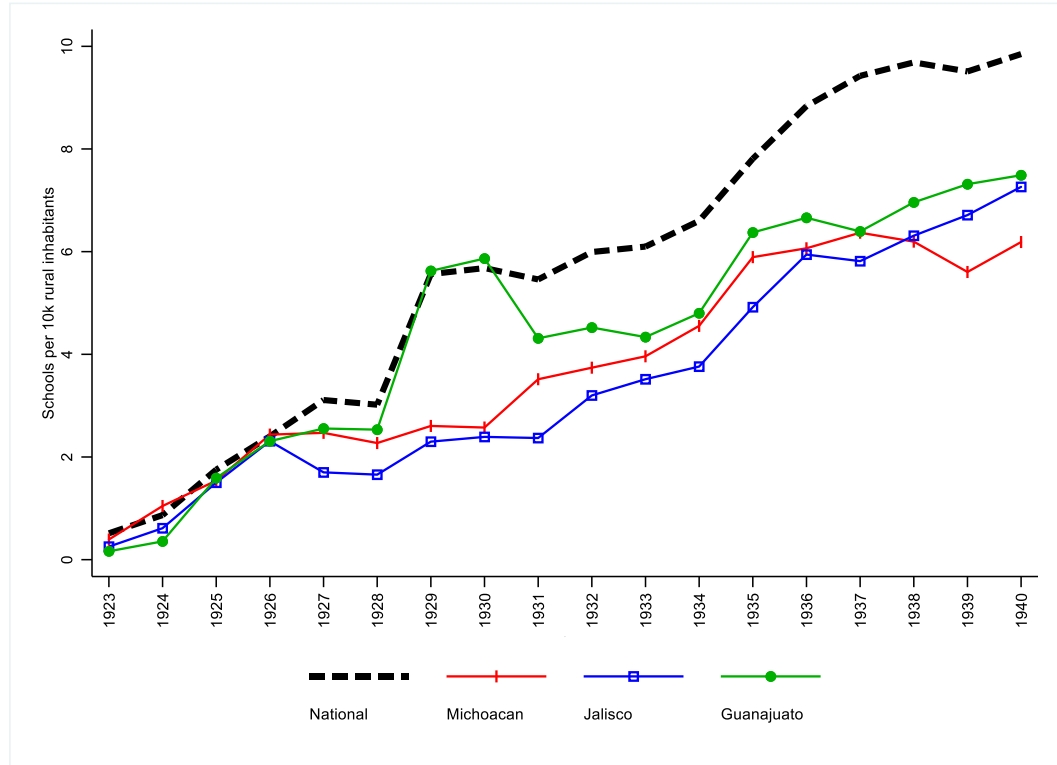
On the other hand, the same can be said about the period *after* the Cristero rebellion (1926-1929). If an event should motivate a state to target a region with educational institutions, it should be this one, which involved Catholic guerrillas with strong ideological grievances against the revolutionary government. The epicenter of the rebellion were the Pacific-side *estados* of Michoacán, Jalisco, and Guanajuato (Meyer 1974). However, the trends in Figure 14 show that, if anything, the national supply of schools *decreased* after the rebellion ended in 1929.

To be sure, my argument is not that state leaders would not be interested in targeting rebellious regions at all. My position is that they would not always be able to do so, depending on the balance of power between national and subnational forces. In interwar Mexico, that relationship was uneven across the territory, and these three *estados* happened to have subnational configurations with unity and social support.<sup>7</sup>

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<sup>7</sup> Meyer, Krauze, and Reyes (1977) identify mass-based parties in Guanajuato and Jalisco. Benjamin (1990) identifies Michoacán among the regions with a strong group of veterans, who mobilized the masses imitating the veterans of Yucatán and Veracruz (on the Gulf of Mexico side).

Figure 14. National school supply in rural areas, in the main Cristero regions



## 5.2 Regression Analysis

In this section, I test two empirical implications of my theory through a multivariate regression using a longitudinal dataset of the twenty-eight federative states in the years 1923-1940.<sup>8</sup> Given that the hypotheses concern the relationship of the national government with federative states, the correct level of data aggregation is precisely the federative state. I use the subsample of the autonomous federative states where there is an elected governor.<sup>9</sup>

The dependent variable is the *change* in the number of national rural schools per ten thousand rural inhabitants existing in a given year. I use only rural schools given that the national

<sup>8</sup> The data on schools were collected from diverse volumes of the Statistic Yearbooks (*Anuarios Estadísticos*) of the Mexican Federal Government, from 1921 to 1942. The demographic data were collected from the Yearbooks and the censuses of 1921, 1930, and 1940. Copies of the original documents are available in PDF format on the online library of INEGI: <http://en.www.inegi.org.mx/app/publicaciones/>

<sup>9</sup> That is, I exclude the federal district (Mexico City) and the three federal territories (Baja California-North, Baja California-South, and Quintana Roo), where the authorities were appointed by the president.

state expanded mainly outside urban areas.<sup>10</sup> I use the change, as opposed to the level, because I am interested in the schools opened in a given year and not the accumulated sum.<sup>11</sup>

The two theoretical pieces developed in chapters 2 and 4 have the following empirical implications about the timing and the geography of educational expansion:

*Hypothesis 1 (Timing): The SEP accelerates the creation of schools in the aftermath of coalitional conflicts.*

*Hypothesis 2 (Geography): The SEP advances slower in estados where the subnational elites were stronger or where politics is chaotic (see Table 3 and Table 4 in chapter 4).*

***Hypothesis 1 (Timing)***

I operationalize coalitional conflict as a binary indicator for the first two years of the presidential administration, given that coalitional conflicts happened just before or the same year as the presidential election.<sup>12</sup> The national education system should expand in the aftermath of coalitional conflicts. These conflicts happened around presidential elections: the year before the election and on the electoral year. In Table 6, I explain the events of each coalitional conflict.

I used two years after the election, instead of one, to allow enough time for the SEP to work in estados.<sup>13</sup> Given that the presidential period before 1935 was of four years instead of six, the second year overlaps with mid-term (legislative) elections in some cases; thus, I control for the years of mid-term elections.

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<sup>10</sup> I also run the tests using the *total* number of national schools (i.e. rural plus urban) and the results are essentially the same, only changing the magnitude of the coefficients of some variables.

<sup>11</sup> The change is a proxy of *newly* created schools. The only data available is the accumulated sum in each year.

<sup>12</sup> There is one administration with only one year in between elections: 1929, an interim presidency that ended the same year as the extraordinary elections of 1930. The administrations had different lengths: there are three of 4 years, one of only 1 year (interim), and one of 6 years (the last one, as the *sexenio* was instituted before the 1934 election). The coalitional splits typically happened the year before or the year of the presidential election, except the presidential election of 1934, when the split happened in the first year of the administration (summer of 1935).

<sup>13</sup> The results are *not* the same when using *one* year, which I discuss below.

*Table 6. Events of each coalitional conflict*

<b>Succession Crisis</b>	<b>Conflict in the Ruling Coalition</b>
1920 presidential election	President Venustiano Carranza picks a civilian as successor. Carranza's right-hand, Gen. Alvaro Obregon, organizes a successful military coup in 1920.
1924 presidential election	President Alvaro Obregon picks close ally Gen. Plutarco Elias-Calles as his successor. Obregon's other close ally, Gen. Adolfo de la Huerta organizes a coup in 1923 along with a third of the army but fails.
1928 presidential election	President Elias-Calles amends the constitution to allow Gen. Obregon to run again for president, despite the principle of no-reelection being the fundamental flag of the revolution. There was an anti-reelection movement among revolutionary veterans across the country. In 1927, two close military allies of Gen. Obregon, Arnulfo Gomez and Francisco Serrano rebelled with regional backing but were repressed.
1930 extraordinary presidential election	President-Elect Alvaro Obregon is murdered by a Catholic fanatic. Gen. Elias-Calles picks the interim president. The supporters of the late Obregon show signs of discontent, fearing that Gen. Elias-Calles would perpetuate in power. To prevent a major coalitional split, Calles founds the first version of the party-state in 1929, aimed to institutionalize the influence of subnational elites in their regions but making Calles the undisputed leader of the revolutionary coalition. Still, Gen. José Gonzalo Escobar organized a regionally-backed coup that same year but fails. Gen. Elias-Calles imposes his man as the candidate of the official party and becomes the power behind the presidency.
1934 presidential election	Gen. Elias-Calles picks Gen. Lazaro Cardenas as the official party's presidential candidate to prevent a major coalitional split with the party's left-wing. Six months into Cardenas presidency, Calles discovered that he had only stalled the coalitional breakdown. In a swift move, President Cardenas purges the cabinet and the army of Calles' supporters, goes after Calles' subnational allies, and exiles the General.

I use a number of time-variant controls for the alternative explanations discussed above.<sup>14</sup>

I control for the yearly expansion of the subnational school system (subnational schools per ten thousand inhabitants), to test for the possibility that the national school system expanded with a

<sup>14</sup> Additionally, all specifications include an indicator for the state-years involving a territorial change in 1932-1934, when the Federal Territory of Quintana Roo was temporarily absorbed in parts by Campeche and Yucatán.



compensatory logic. That is, to *supplement* the subnational system rather than to *displace* it.<sup>15</sup>

Since subnational schooling investment may correlate with governor electoral years, I repeated the test using specifications with one of the variables and without the other (models 2 and 3 in Table 7).

To test for the civil unrest hypothesis, I include an indicator for the *estados* from where the Cristero rebels were recruited. The indicator takes a value of one after the 1929 armistice in the eleven *estados* of origin of most of the rebels.<sup>16</sup> I also include indicators for years of governor election in each *estado*, as these events could also attract schooling investment.<sup>17</sup> I did not include the ideology/partisanship of the governor given the little variation (see Figure 3 in chapter 2). Finally, I include an indicator for the year 1929, the year of creation of the first version of the hegemonic party (*Partido Nacional Revolucionario, PNR*), as this year had an unusual increase in schooling creation (see Figure 9 at the beginning of this chapter).

The results are summarized in the tables below. All models include *estado*-level fixed effects and a linear time trend, accounting for a likely decrease in yearly intensity with time.<sup>18</sup> The models in Table 7 test Hypothesis 1, that schooling investments are more intense after coalitional conflicts. The coefficient of the 2-year window at the beginning of each presidency is significant and robust to different specifications (models 1-4).

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<sup>15</sup> There are no systematized subnational data before 1925, which means that years 1923 and 1924 are dropped from the sample whenever this control is used.

<sup>16</sup> According to Meyer (1974, 108), the main contributors of recruits were by far Michoacán and Jalisco, followed by Guanajuato, Querétaro, Zacatecas, Nayarit, Sinaloa, Colima, Durango, Guerrero and Oaxaca, in that order. I excluded the *estados* that contributed with less than a thousand recruits: México, Morelos, Federal District, Puebla, Tlaxcala, and Veracruz. I also excluded *estados* that only had temporary and feeble guerrillas: Coahuila, San Luis Potosí, Chihuahua, and Tabasco.

<sup>17</sup> The governor election dates were collected from an array of secondary literature on each *estado*. The dataset is available by request to the author. There was no coordination with the national electoral calendar and many subnational elections were irregular (there were continuous gubernatorial resignations and impeachments). I counted both regular and irregular elections.

<sup>18</sup> The results in Table 7 and Table 8 are robust to the use of a quadratic time term.

Neither of the controls has significant coefficients in models 1 to 4 (except for the year of the Party's creation), which is consistent with the exploratory analysis of the data presented in the first part of the chapter. Moreover, they have different signs than would be expected: presidential election years receive less schooling investment, as well as the Cristero regions after the armistice. Subnational schools do not have a significant effect, which rules out the logic of compensation.

The coefficient of the indicator of the Party's creation (the year 1929) has a much larger coefficient than the main independent variable. The effect is not inconsistent with my theory for two reasons. First, the previous year had a difficult coalitional conflict, as President-Elect Obregón was assassinated. Second, at the same time, many subnational elites adhered their social bases to Calles' *Partido Nacional Revolucionario* and, hence, had fewer means to resist the intrusion of the national bureaucracy.

Table 7. Base models

DV: $\Delta$ rural schools per capita	(1)	(2)	(3)	(4)	(5)
Aftermath of coalitional conflict	0.909*** (0.146)	0.619** (0.170)	0.617*** (0.162)	0.642*** (0.166)	
Presidential election year		-0.232 (0.174)	-0.186 (0.178)	-0.220 (0.178)	-0.616*** (0.149)
Mid-term legislative election year		0.241 (0.151)	0.248 (0.152)	0.242 (0.152)	0.319* (0.145)
Cristero region after after armistice		-0.328 (0.311)	-0.312 (0.295)	-0.343 (0.311)	-0.219 (0.308)
(ln) Subnational schools per capita		0.0711 (0.0835)		0.0686 (0.0813)	0.0851 (0.0871)
Year of official party foundation (1929)		2.214*** (0.575)	2.188*** (0.555)	2.205*** (0.569)	2.474*** (0.573)
Governor electoral year			-0.111 (0.194)	-0.131 (0.199)	-0.0467 (0.205)
N	466	441	466	441	441
Adjusted R-squared	0.083	0.176	0.174	0.175	0.154

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

All models include state-fixed effects, a linear time trend, a SE clustered by estado in parenthesis

All models control for a territorial change in three estados in 1932-1934

Subsample of only estados; excludes Federal District and Federal Territories

The effect of the aftermath of a coalitional conflict is *not* robust when defining the indicator as only the first year of the presidency (as opposed to the first two years). The effect disappears (results not shown here). However, the tests in Table 7 should be interpreted in the light of the qualitative evidence and the individual analysis of alternative explanations at the beginning of the chapter. Importantly, the effect of the recurrent coalitional conflicts is most visible in the increasingly aggressive centralization of the state apparatus; that is, in (qualitative) institutional outcomes.

The greatest added value of the regression analysis in Table 7 is comparing alternative explanations in the same test. Model 5 presents the results without the main Independent Variable (the aftermath of a coalitional conflict). The coefficients of the alternative explanations are quite consistent; moreover, the coefficient of the presidential election year is significant and negative. The coefficient of the mid-term election is positive as in models 1 to 4, but this time is significant. However, there is little reason to believe that the SEP would allocate schools on mid-term electoral years but not in presidential elections. Thus, the coefficient is likely significant because mid-terms happened in the second year of most presidential terms; that is within the window of investment after a coalitional conflict, as defined in models 1 to 4.<sup>19</sup>

### ***Hypothesis 2 (Geography)***

The second hypothesis concerns the geography of educational expansion and the Independent Variable of interest is the political strength of subnational elites. In chapter 4, I identified four scenarios of resistance as a function of the political strength of subnational elites (Table 3 and Table 4), which I operationalize here as group indicator variables. As stated in Hypothesis 2, the expectation is that educational expansion is slower in Groups A (Stronger Resistance) and D (Chaotic Politics).

Table 8 below summarizes the results of the same tests as before, but now including indicators for the different groups of *estados*. Models 6 to 9 use Group-Fixed Effects, that is, includes indicators of the groups of *estados* but do not include *Estado*-Fixed Effects (indicators of *estados*). The comparison group is Group C (Weaker Resistance), where I would expect the

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<sup>19</sup> The exception is the 1935-1940 presidency. Before the 1934 election, the Party modified the constitution so that the administration lasted six years (a *sexenio*) and the President implemented a five-year plan, echoing the planning cycles of Soviet Union (another symbolic concession of the *Jefe Máximo* Calles to the left wing of the Party).

*highest* levels of schooling investment; so the coefficient of the main IV, Aftermath of coalitional conflict, is the average effect of Group C (Weaker Resistance).

*Table 8. Models with Group effects*

<b>DV: Δ rural schools per capita</b>	<b>(6)</b>	<b>(7)</b>	<b>(8)</b>	<b>(9)</b>	<b>(10)</b>	<b>(11)</b>
Aftermath of coalitional conflict	0.946*** (0.146)	0.674*** (0.174)	1.292*** (0.310)	1.044** (0.353)	1.283*** (0.308)	1.066** (0.353)
Group: Strong Resistance	-0.320 † (0.183)	-0.326 † (0.178)	-0.0544 (0.205)	-0.00471 (0.215)		
Group: Chaotic Politics	-0.319* (0.159)	-0.375 † (0.198)	-0.00554 (0.191)	-0.0439 (0.227)		
Group: No Resistance	-0.156 (0.160)	-0.213 (0.186)	-0.00322 (0.225)	-0.0427 (0.244)		
Group: Strong Resistance * Aftermath of coalitional conflict			-0.647 † (0.339)	-0.723 † (0.374)	-0.624 † (0.337)	-0.711 † (0.364)
Group: Chaotic Politics * Aftermath of coalitional conflict			-0.756* (0.346)	-0.753* (0.370)	-0.752* (0.343)	-0.728 † (0.362)
Group: No Resistance * Aftermath of coalitional conflict			-0.367 (0.455)	-0.377 (0.493)	-0.364 (0.453)	-0.366 (0.478)
Presidential election year		-0.155 (0.207)		-0.154 (0.208)		-0.140 (0.210)
Mid-term legislative election year		0.292 † (0.166)		0.295 † (0.166)		0.296 † (0.165)
Cristero region after after armistice		-0.317 † (0.177)		-0.320 † (0.176)		-0.590 † (0.322)
(ln) Subnational schools per capita		0.0645 (0.0648)		0.0462 (0.0666)		0.0492 (0.0874)
Year of official party foundation (1929)		2.554*** (0.680)		2.554*** (0.685)		2.486** (0.656)
Governor electoral year		-0.167 (0.216)		-0.182 (0.218)		-0.206 (0.219)
<i>Constant</i>	0.640*** (0.184)	0.207 (0.203)	0.491*** (0.138)	0.0538 (0.186)	0.501* (0.188)	-0.000895 (0.290)
Group-FE	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	No	No
Estado-FE	No	No	No	No	<b>Yes</b>	<b>Yes</b>
N	367	348	367	348	367	348
Adjusted R-squared	0.096	0.221	0.104	0.23	0.084	0.204

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

All models include a linear time trend and SE clustered by state in parenthesis

All models control for a territorial change in three estados in 1932-1934

Subsample of only estados; excludes Federal District and Federal Territories

Comparison Group: Weak Resistance

In models 6 and 7, the groups of Stronger Resistance (A) and Chaotic Politics (D) have negative coefficients, that is, lowest overall investment; although the coefficients are only significant at  $p < 0.1$ . Models 8 and 9 add interactions with the indicator of Aftermath of Coalitional Conflict (i.e. first two years of the presidency); while the group indicators of groups A and D keep their sign, they no longer have the same significance level. Instead, their interactions carry the effects we saw in models 6 and 7 (i.e. have a lower schooling investment). In other words, although the SEP increases the creation of schools in the first two years of the presidency, the subnational elites are still able to resist (Group A, Stronger Resistance) or the internal conditions of the *estado* still dissuade the Secretariat (Group D, Chaotic Politics).

Finally, models 10 and 11 introduce *Estado*-Fixed Effects (as in models 1 to 5) for which there are no longer indicators of groups (due to their lack of time variation). However, I do introduce interactions to test the group effects in the aftermath of conflicts. The interaction coefficients of the Group A: Stronger Resistance and Group D: No Resistance groups are still negative, which is consistent with the expectations.

### **5.3 Conclusions**

In this chapter, I tested my hypotheses on the incentives and obstacles of state leaders to provide access to primary education against an array of alternative explanations. Overall, these alternative explanations are at best a small part of the story. Although the evidence in favor of my hypothesis is less robust than the evidence against the alternatives, the results should be interpreted in light of the qualitative evidence offered in the rest of the dissertation.

How can these quantitative tests be improved in future iterations? On the side of incentives, I plan to move in at least two directions. First, I plan to test additional empirical implications of the incentives related the intra-coalitional conflicts. An important motive to

invest in schooling was making sure that national teachers were present where and when peasants received land. To build a broad social base and the mechanisms to control such base, the state leaders ‘conscripted’ the population into the party-state institutions—labor unions, peasant leagues, schools, etc.—that eliminated the need for political mediators (e.g. the regionally-based revolutionary veterans). However, the relationship of land grants to schooling investment is complicated; initially, teachers were deployed after land grants are allocated, but gradually, in the 1930s, the relationship reverses as teachers mobilized the population to request land. Thus, this research direction requires a creative empirical strategy to address the endogeneity problem in the relationship of land redistribution and schooling investment.

Second, to further study the incentives of state leaders, we can compare the relationship of the first years of the administration to schooling investment in different periods. The relationship should disappear after the threat of coalitional breakdowns subsided; that is, after the social bases of the party were institutionalized circa 1940. We can also compare the relationship of electoral years to schooling investment after the ‘revolutionary period’ (i.e. the time when the revolutionary veterans are alive) with the later years of the PRI, when the survival of the Party depended exclusively on patronage, especially the 1990s. If Levitsky and Way (2012) are correct, the yearly schooling investments should gradually concentrate in electoral years or just before elections.

On the side of obstacles, the most pressing task is strengthening the evidence for classifying *estados* in the categories of Table 4. Moreover, I must perform the statistical analysis using alternative classifications as a robustness check—specifically, re-classifying *estados* that could plausibly be in more than one category. The preliminary evidence and rationale for my classification are in the tables of Appendix 3.

## Chapter 6: Teachers and Land Reform in Chiapas

In chapters 2 to 4, I mostly focused on the initial expansion of national education in the 1920s decade. In this chapter, I turned to the 1930s decade, when public education became entangled with land reform, as the national leadership changed their political strategy: from competing with their regionally-based allies to displacing them. I look specifically at the case of Chiapas, Mexico's southernmost *estado*, where peasants had not participated in the revolution and were mobilized by the state in almost a complete top-down way.

By 1930, the regional veterans of Chiapas had already mobilized a small segment of the peasantry but did not dominate local politics (as the veterans of Yucatán did, for example). In this decade, the national government mobilized communities beyond the small pockets of organization achieved by the regional veterans. Because of the thin existing organization, the national bureaucracy, particularly the SEP, played a key role in agitating the masses.

I critique the autocratic-advantage thesis, problematizing the notion that inclusive, broad, cross-class coalitions at early stages of development are necessarily a handicap for pro-development leaders, as Huntington (1968) and Waldner (1999) imply.<sup>1</sup> In such a view, the side payments necessary to maintain a broad coalition ("private goods") would crowd out efforts to build institutions to provide public goods. My position, instead, picks up an assumption from the democratic-advantage thesis that broad coalitions are related to public goods. While I disagree with versions of the democratic-advantage thesis assuming that inclusive coalitions necessarily

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<sup>1</sup> I am problematizing the autocratic-advantage thesis under the assumption that the incorporation of the masses into the political system is a 'moment of openness' or a 'democratic moment' when it happens under autocracy. In other words, a regime becomes 'more democratic' when the political elites bring the lower classes (or subaltern groups) into party alliances, even if the outcome of the process is *not* a full liberal democracy. It is not for at least two reasons. On the one hand, the terms of the mass alliance may clog the channels of vertical accountability; on the other hand, these mass alliances do not affect the lack of horizontal accountability (the 'liberal' part of a liberal democracy).



lead to public goods provision,<sup>2</sup> I see this as a possibility. That is, some side payments have salutary effects as they are jointly produced with public goods (and the institutional capacity that they require), as in the case of education.<sup>3</sup>

My contribution in this chapter is to specify how exactly private and public goods may go together. I argue that joint production may happen for at least two reasons. First, the infrastructure to satisfy particularistic demands cannot be taken for granted. Leaders that distribute at a mass scale will very likely need to create institutions that render the state more effective. I illustrate this mechanism with an account of the role of Mexico's teachers in land redistribution. In this way, my argument supplements Albertus' (2015) account of land reform under autocracy, which left out the institution-building effects of large-scale redistribution.

Second, the presence of state institutions creates new constituencies for public services. As the expansion of capitalist institutions created urban centers where basic literacy became a valuable skill, and then, a public service demanded by the population,<sup>4</sup> the incursion of state bureaucracies into the countryside had analogous effects. For example, literacy was a prerequisite for a career in the public sector (Weber 1976). Similar to the communities of the French Third Republic in *Peasants into Frenchmen*, the communities that received land after the Mexican Revolution understood that access further benefits from the state, they had to adapt to

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<sup>2</sup> Acemoglu and Robinson (2012) and Bueno de Mesquita et al. (2003) provide institutionalist versions of the democratic-advantage thesis: when the rules of power force leaders to build large coalitions, the state will provide development-enhancing policies because it is in the objective interest of the majorities.

<sup>3</sup> I owe this insight to Doner, Ritchie, and Slater (2015), who point out that Waldner "unnecessarily precludes the possibility that ruling elites might deliver side payments with more salutary effects" than policies that only foment rent-seeking. State leader may also deliver "broad benefits to popular sectors, such as education and rural infrastructure, that can encourage productivity rather than profligacy" (338).

<sup>4</sup> For the case of Mexico, see Martínez Jiménez (1973).

the new order. For the agrarian communities of Chiapas, such new order was brought by teachers, with their written culture and patriotic rituals (Lewis 2005).<sup>5</sup>

In my dissertation, I only study the first mechanism.<sup>6</sup> In the rest of this chapter, I first explain the political context of the second decade of reconstruction after the Mexican Revolution, the 1930s (section 6.1). Then, I analyze the role of teachers as brokers of land in Chiapas, using secondary sources as well as quantitative microdata collected from the historical archive of SEP (section 6.2). Section 6.3 concludes.

### **6.1 The SEP in Chiapas**

Chiapas is a good scenario to study the political activism of teachers, given its distance from the epicenter of the revolutionary wars, the absence of grassroots agrarian mobilization, and the relatively strong incursion of SEP in the 1920s.

Chiapas is in the geographic periphery of the Mexican nation-state and has always been in the political periphery too. In the nineteenth century, Chiapas' elites were strongly regionalist; their aspirations of autonomy were fed by their history, as Chiapas had chosen the Mexican Republic over Guatemala, in contrast to the rest of the *estados* which were part of New Spain at the moment of independence. In the early twentieth century, the revolution had simply not happened there.

Mexico's south had generally not participated in the revolutionary wars, but Venustiano Carranza had sent his generals in 1915 to occupy the southern *estados* and take away the old oligarchy's sources of power. Carranza succeeded in places like Yucatán, Campeche, and Tabasco, on the Gulf side, but failed in Chiapas and Oaxaca, on the Pacific side. Carranza's

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<sup>5</sup> The second mechanism is limited to developmental effects in the short- to medium-term. In the long run, the redistribution of agricultural property can have detrimental effects on literacy if this policy is not accompanied by policies that offset the increased use of child labor in farming (Albertus, Espinoza & Fort 2020).

<sup>6</sup> I analyze the second mechanism (i.e. the effect of land redistribution on literacy rates) in a side project.

emissaries, notably Gen. Jesus Agustin Castro could not impose a new political elite in the Pacific *estados*, in contrast to Gen. Salvador Alvarado in Yucatán (see chapter 3).

When the revolution radicalized in the 1930s, there was not only an absence of grassroots agrarian mobilization in Chiapas but peasant communities were generally distrustful of the national government in the best of cases and allied with agricultural estate (*hacienda*) owners in other instances.<sup>7</sup> Moreover, whatever progressive mobilization there was in Chiapas, it was headed by the Communist Party rather than by the revolutionary populists. Thus, Chiapas required top-down mobilization if the progressive reforms of Cárdenas were ever to materialize.

In 1936, President Cárdenas deployed bureaucratic resources to ‘produce’ support for the progressive labor and agrarian reforms. Cárdenas relied on the activism and political agitation of SEP’s teachers to encourage rural communities and agricultural workers to demand better working conditions and land redistribution.

Two factors facilitated the activism of SEP in Chiapas. On the one hand, SEP had already built a relatively strong presence in Chiapas, taking advantage of the lack of a dominant political group in local politics.<sup>8</sup> On the other hand, Secretary Bassols nationalized the *hacienda* schools. The federal legislation mandated owners of agricultural estates to provide schools for their workers, but as in the nineteenth century, it only applied to the capital and federal territories; it was optional for *estados*. Bassols got the national Congress to mandate *haciendas* in all the territory to pay for their worker’s schools, including the salary of a teacher appointed by SEP.

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<sup>7</sup> The life of the vast majority of the population of Chiapas revolved around agricultural estates, especially as supplier of seasonal agricultural labor (Núñez Rodríguez 2004). Agricultural workers allied with the ‘devil they knew,’ the estate owners, against the progressive forces (especially, revolutionary veterans) that threatened their livelihoods with their lofty ideas of social transformation. Before 1934, only rural communities (not agricultural workers) had the right to petition land, so that the only certainty for these workers was the loss of their livelihood in the event of expropriation.

<sup>8</sup> This *estado* was on scenario B, Weak Resistance (see chapter 4).

The new mandate rapidly sparked legal contention as *hacienda* owners knew (correctly) that SEP teachers would be the arm of the national progressive forces in their estate.

Figure 15 below shows that SEP invested in Chiapas mostly over (or on) the national trend during the period of analysis. After 1936, SEP's activity in Chiapas stagnates relative to the national trend; the number of schools relative to population stays roughly the same. Two factors explain the stagnation. On the one hand, relatively little land was finally distributed because most petitions arrived at the president's desk when Cárdenas left office (after 1940). In contrast, the national trend takes off after 1936 because a lot more land was distributed elsewhere, which spurred the demand for schools.

On the other hand, when the land was granted in Chiapas, after 1940, the expansion of SEP stopped and retreated, also because Cárdenas had left office. By that time, the expansion of national education went hand in hand with the social reforms of the revolution. The cycle of progressive reforms ended with Cárdenas' presidency; the 1940s was a time to institutionalize the reforms through national legislation and party-building. Similar to Calles before him, Cárdenas chose a successor with a different reputation than himself to maintain the coalition together. Cárdenas' reforms had sparked strong opposition inside and outside the coalition, so the president chose Gen. Manuel Ávila-Camacho as his successor, a relatively conservative man (who nonetheless was Cárdenas' Secretary of War). By 1946, the end of Ávila-Camacho's presidency, the Cold War had started and Mexico became an ally with the US against the 'Communist threat.'

Figure 15. Evolution of national schools per 10k inhabitants in rural areas, Chiapas vs National

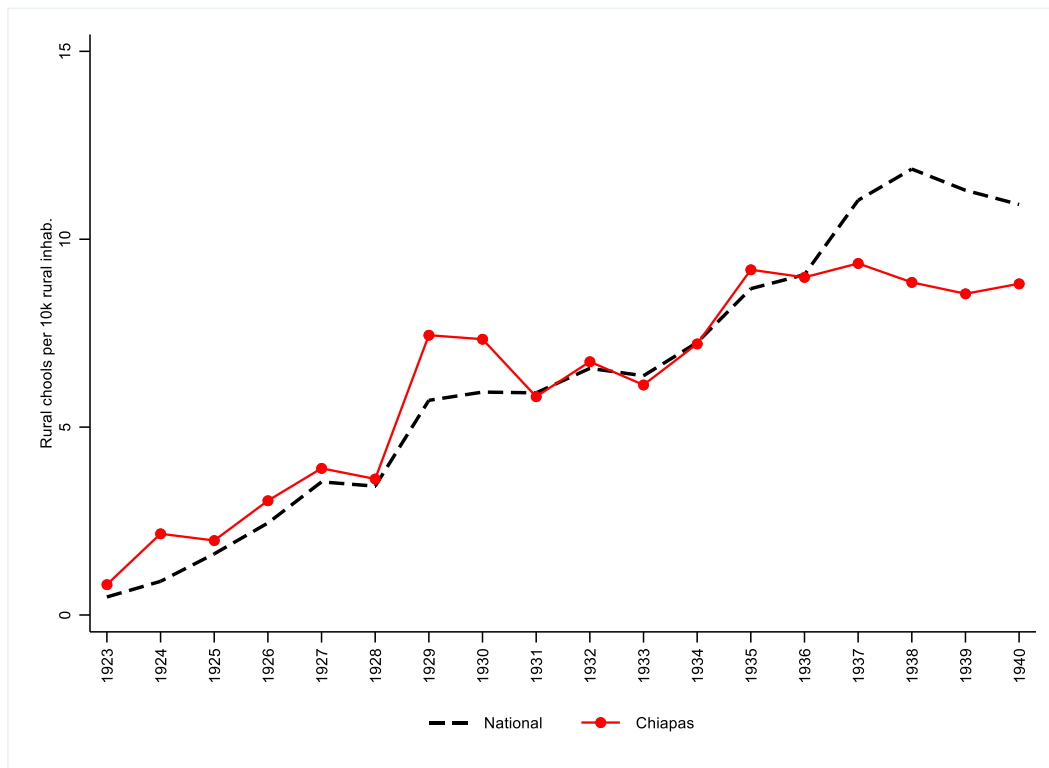


Figure 16 below illustrates SEP's activism and the disappointing land reform in Chiapas.

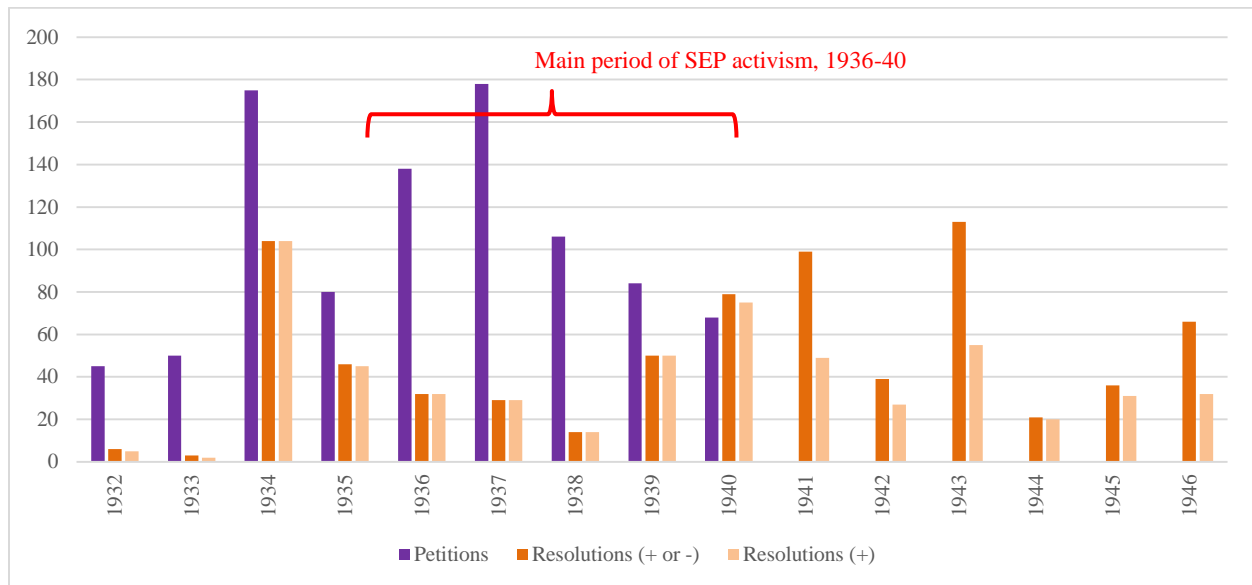
The data is incomplete and only suggestive, but it is consistent with the historiography. The histogram compares my yearly data on petitions with Sanderson's (1984) data on presidential resolutions. I collected the yearly data on petitions from the official publication of Chiapas' government (*Periódico Oficial de Chiapas*) in 1932-1940; these are the petitions that had already gone through the filter of the governor's office.<sup>9</sup> After 1936, the governor was imposed by Cárdenas, so I would expect them to be a good representation of the demand for land.

Sanderson's (1984) data are presidential resolutions to petitions; that is, resolutions that had

<sup>9</sup> Petitions of land had to be written with a legal argument and identification of where the land was to be taken from. The first step was sending them to the local Agrarian Commission, which would then send them to the governor's office if approved. If approved, the governor would publish them in the *Periódico Oficial*. The governor sent them to the National Agrarian Commission; if approved, the petition was sent to the president's desk for a final positive or negative resolution.

already gone through the governor's desk and the National Agrarian Commission. Petitions could have a negative or positive resolution (indicated in the histogram).

*Figure 16. Land in Chiapas: petitions to the governor and presidential resolutions*



In the histogram, petitions first increase in the period of main SEP activism in Chiapas (1936-1940) and then go down. The data stops in 1940, but there should be not many petitions; the trend suggests that it is the case. Of course, the presidential resolutions are lagged from the petitions; they start going up in 1938. Notice that, after 1940, the proportion of *positive* resolutions lowers (compare the two bars).<sup>10</sup>

There is a spike in petitions before the main period of SEP activism, in 1934. Such an increase may be due to the presence of activist inspectors and teachers in the coffee sub-region of Chiapas. According to Lewis (2005), before Cárdenas' administration, the SEP officials reported that the inspectors of the coffee zone were agitating agricultural workers on their own initiative. It should not be surprising, as many of SEP's personnel radicalized during the 1920s when they

<sup>10</sup> This is consistent with the moderation (and at times reversion) of the revolutionary reforms at the end of Cárdenas' administration, which were of course visible in Chiapas, both in land reform (Reyes Ramos 1992; Núñez Rodríguez 2004) and in education (Lewis 2005).

were on the ground looking at the existing economic structure (Vaughan 1982). Secretary Bassols simply institutionalized the activism that was happening intermittently on the ground without official sanction.

How did SEP contribute to land reform? First, teachers were instrumental in disseminating the rights of communities and agricultural workers to petition land; most importantly, teachers brought the message that the national government was on their side and would defend them against the oligarchs' retaliation (firings and/or repression by local police). Again, given Chiapas' history of political isolation, rural communities were highly distrustful of the national government.

Second, the process of requesting land was complicated, requiring to write a legal argument addressed to a local agrarian commission that, if approved, turned it to the governor's office. If the governor approved the petition, it was sent to the National Agrarian Commission that, if approved, sent the petition to the president for a final resolution. At a time when most peasants could not read or write and had a delicate relationship with the old oligarchy, teachers were welcomed as scribes and social leaders. It is telling that most petitions were very similar to each other in their legal argumentation and writing tone.<sup>11</sup>

## **6.2 Data Analysis**

Here, I provide suggestive evidence on the role of national teachers as land brokers. The historiography of the period has documented the activism of teachers through the testimonies of inspectors and other SEP officials,<sup>12</sup> but these testimonies have not been compared to statistics on petitions and schools. The main reason is that such statistics did not exist. The Statistic

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<sup>11</sup> According to my own assessment during the data collection.

<sup>12</sup> See, for example, Raby (1974), Yankelevich (1985), Valdés Silva (1990), Loyo (1991), Vaughan (1997), or Lewis (2005). For a broad view of the significance of the teaching profession to the agrarian reform, see Raby (1968), or Córdova (1974).

Yearbooks of the Mexican government only display data on schools at the *estado* level and, to the best of my knowledge, no other author has collected data on land petitions at the municipality level.<sup>13</sup> The best data on land at the municipality level (Sanderson 1984)<sup>14</sup> records the presidential resolutions on land petitions, which leaves out all the petitions filtered out at the *estado* level by the governors.

The data on the number of schools at the municipality level was collected from the historical archive of the SEP, located in the *Archivo General de la Nación* in Mexico City. In the archive, every school existing from the 1920s to about the 1970s has an individual folder with a number of documents, often including letters in which the Federal Directorate of Education (the SEP's offices in each *estado*) authorizes the opening and closing of each school. Using these documents, I estimated the years in which each individual school was open in the period of analysis. The dataset, codebook, and data collection procedures are available by request to the author.

The data on land petitions were collected from electronic copies of the official newspaper of Chiapas' government (*Periódico Oficial de Chiapas*), available in the online historical newspaper library of the *Universidad Nacional Autónoma de México* (UNAM).<sup>15</sup> The dataset, codebook, and collection procedures are also available by request to the author.

For the analysis, I used only petitions of land grants (*ejidos*) by rural communities and left out restitutions of land, requests of land expansions, and petitions to access water sources for agricultural purposes. I left out restitutions because these likely imply that the community was

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<sup>13</sup> Land petitions are typically displayed by *estado* and by governor administration. For example, in the case of Chiapas, a commonly use source is Waibel (1946).

<sup>14</sup> Available online in the ICPSR data repository: <https://www.icpsr.umich.edu/web/pages/ICPSR/index.html>

<sup>15</sup> UNAM's newspaper archive can be consulted online: <http://www.hndm.unam.mx/index.php/es/>



self-mobilized (as opposed to being mobilized by teachers). Requests of land expansion and access to water were left out to avoid double counting petitions of agricultural land.

Figure 17 shows the positive correlation between land petitions and schools at the municipality level (as a proxy of the presence of teachers) in 1932-1940, in 104 municipalities of Chiapas.<sup>16</sup> The variables are the sum of land petitions and the median number of schools in the period, both divided by the rural population in the municipality. They have a relatively low Pearson correlation (0.38),<sup>17</sup> which should not be surprising given that the first level of disaggregation is the locality, not the municipality. The maps in Figure 18 use the same variables and further illustrate the relationship.

Of course, a positive correlation is necessary but not sufficient to infer causation, as other factors may have caused both the allocation of schools and land petitions, and there are likely ‘spillovers’ in contiguous municipalities. The data should be interpreted in the context of the qualitative evidence extracted by historians; especially, the testimonies of SEP inspectors.

An additional piece of evidence is that schools are *not* as clearly related to the actual land *grants* distributed in 1939-1946, the last years of President Cárdenas and the presidency of Ávila-Camacho (see Figure 19 below). The Pearson correlation of schools to *grants* is half (0.2) of the correlation with petitions and is *not* significant. I used such a long period for land grants, given that most petitions were allocated then (see Figure 16 above). This is consistent with the expectations based on the historiography—teachers helped to mobilize communities to request

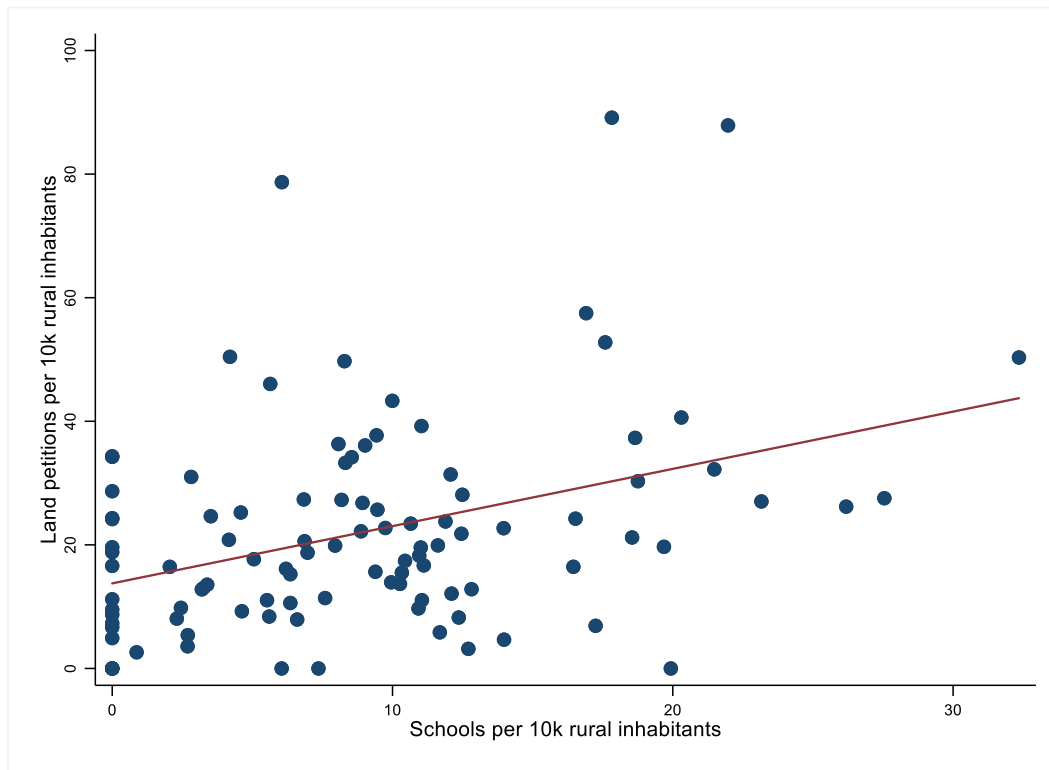
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<sup>16</sup> I used the census of 1930 as basis to define the municipalities. The number of municipalities changes slightly from 1930 to the subsequent censuses of 1940 and 1950, as some municipalities absorbed other municipalities and some were partitioned in two.

<sup>17</sup> Statistically significant at 99 percent of confidence. The correlation is lower (0.29) when using natural logarithms to correct for skewness, but equally significant.

land, but the actual grants were more related to the success of the landowners' legal challenges (Reyes Ramos 1992; Lewis 2005).

*Figure 17. Relationship of schools and land petitions*



*Figure 18. Maps of schools and land petitions*

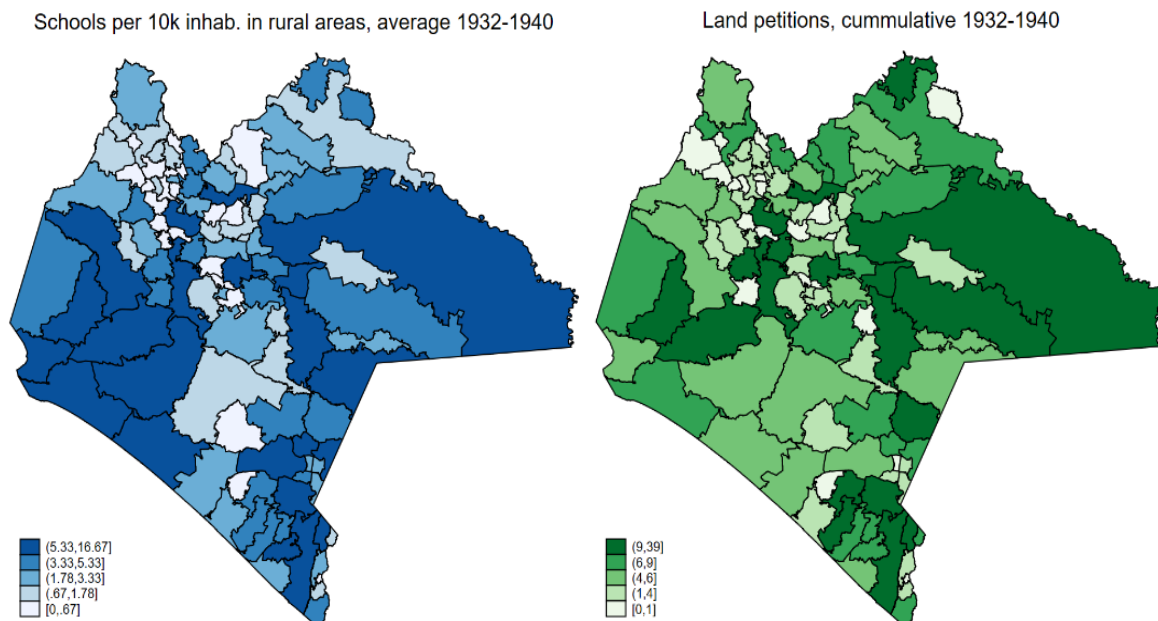
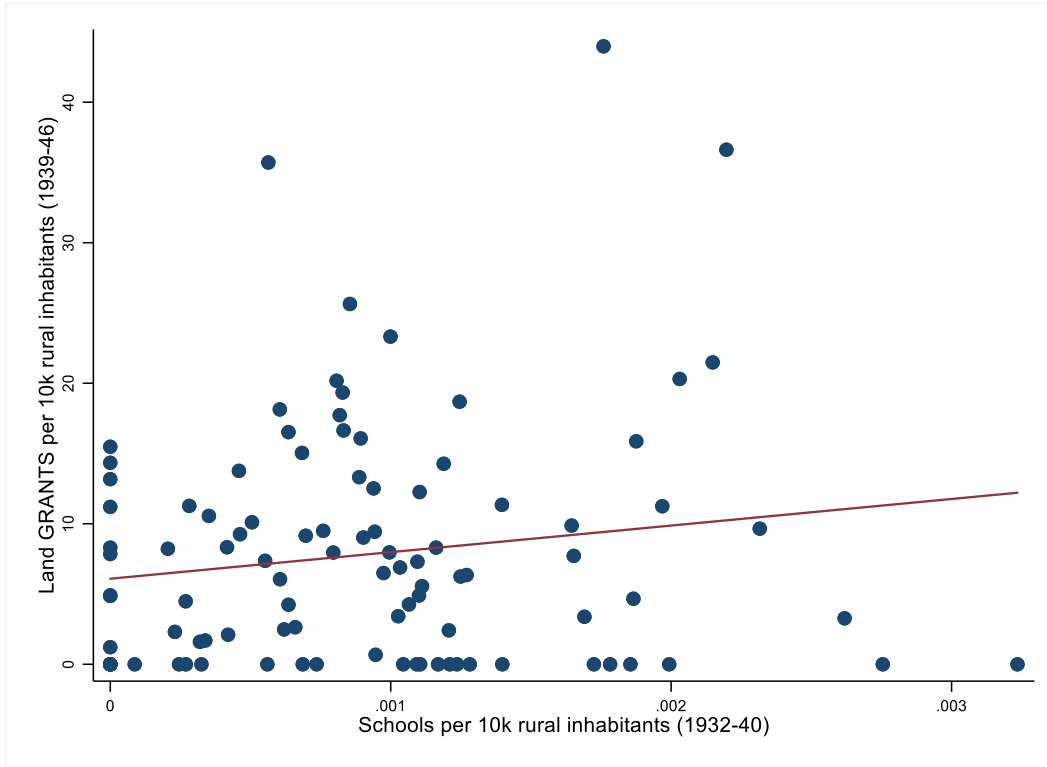


Figure 19. Relationship of schools and land grants



In Table 9, I present the coefficients of a cross-sectional regression of municipalities, using three different estimation methods. The DV is the sum of petitions in 1932-1940, while the main IV is the average of schools in each municipality during the same period (both divided by ten thousand rural inhabitants). I control for *initial conditions* in each municipality (i.e. 1930 census) that should be correlated to land petitions. I control for the number of agricultural estates in the municipality, as a proxy of available land in the municipality.<sup>18</sup> Because the size of the estates is not available, I include the proportion of the population working in agriculture. I also use population density to approximate the demographic pressure on land, and the distance to Chiapas' capital (Tuxtla Gutiérrez) as a proxy of the difficulty to reach certain communities.

<sup>18</sup> Unfortunately, the size of the arable land is not available at the municipal level.

Table 9. Cross-section regression models, 1932-1940

DV: Petitions per 10k rural pop.	OLS		Tobit		Negative Binomial	
	(1)	(2)	(3)	(4)	(5)	(6)
Average Schools per 10k rural pop.	0.996*** (0.238)	0.696* (0.341)	0.996*** (0.226)	0.696** (0.260)	0.0415*** (0.00948)	0.0278* (0.0111)
Agricultural Estates per 10k rural pop.		-0.00298 (0.00964)		-0.00298 (0.0110)		-0.000278 (0.000479)
ln(Rural Population Density)		-5.908** (2.043)		-5.908*** (1.628)		-0.268*** (0.0689)
Percent Population in Agriculture		3.509 (37.88)		3.509 (43.38)		-0.177 (1.579)
Distance to Chiapas' Capital		-0.0103 (0.0235)		-0.0103 (0.0208)		-0.000733 (0.000789)
Robust standard errors	Yes	Yes	--	--	Yes	Yes
N	106	100	106	100	106	100
Adjusted R-squared	0.147	0.207	--	--	--	--
* p<0.05, ** p<0.01, *** p<0.001						

The coefficient of Average Schools has a positive and significant effect on Land Petitions, consistent across different regression techniques and using the controls of initial conditions in the municipality. I further test the relationship with longitudinal data, shown in Table 10. The Dependent Variable is the number of land petitions per rural population in a given year. The controls are the initial conditions of the cross-sectional regression, interacted with a time trend to reflect their changing importance. The values of the control variables were estimated with the geometric progression ratio between the 1930 and 1940 censuses.<sup>19</sup>

In the panel regression, I used fixed effects of *sub-regions* rather than municipalities, given the low variation in the number of schools in a given municipality through time. The values are the accumulated sum or stock of schools in a given year, as the concept of interest is the *total* presence of teachers. I used the economic sub-regions defined by the government of

<sup>19</sup> That is, values between 1930 and 1940 were estimated with the compound annual growth rate.

Chiapas, assuming that they must share relevant characteristics.<sup>20</sup> As expected, the coefficient of schools is positive and statistically significant.

*Table 10. Panel regression models, 1932-1940*

<b>DV: Petitions per 10k rural pop.</b>	<b>(7)</b>	<b>(8)</b>
Schools per 10k rural pop.	0.106*** (0.0283)	0.0734* (0.0361)
(Agricultural Estates per 10k rural pop.) * Time-Fixed Effects	No	Yes
ln(Rural Population Density) * Time-Fixed Effects	No	Yes
(Percent Population in Agriculture) * Time-Fixed Effects	No	Yes
N	954	900
R-squared	0.087	0.141
* p<0.05, ** p<0.01, *** p<0.001		
Sub-region Fixed Effects		
Time Fixed Effects		
SE clustered by municipality		

### 6.3 Conclusions

This chapter has reviewed the role of teachers in land reform, which further illustrates why the subnational elites worried about the presence of national bureaucracy in their *estados*. In Chiapas, teachers mobilized the rural communities to request land grants and contributed to incorporate the land-receiving population into the agrarian leagues of the official Party. In turn, these new institutionalized relationships between the national government and communities

<sup>20</sup> I used the division used before 2011 because the number of sub-regions is closer to the number used back in the revolutionary years (see Lewis 2015). Before 2011, there were nine sub-regions; after that year, the government uses fifteen. See: <https://bit.ly/3j53Gz1>

subtracted political resources from the regional veterans, reducing the latter's leverage to negotiate their autonomy vis-à-vis the center.

In this chapter, I offered preliminary evidence of these assertions. An empirical implication is that the location of schools is related to petitions of land. I run a series of quantitative tests using original microdata on the number of national schools at the municipality level and the number of land petitions. Overall, the evidence supports what historians have said for many years: teachers performed the role of activists and agitators for social reform on behalf of the national government.

I envision this chapter to become a stand-alone article and see a number of avenues of improvement. First, the qualitative evidence on Chiapas should be polished, especially with concrete examples of how teachers helped rural communities to request land, citing the testimonies of inspectors and teachers themselves. Second, the statistical tests require a stronger strategy to infer causality. While an exogenous source of schooling allocation does not seem in sight, an article version could include additional tests to challenge the relationship of schools to land. For example, testing the relationship of non-schooling bureaucracy to land requests, and the relationship of schools to actual grants of land.

Finally, because Chiapas is a case of *failed* land reform, the observed relationship between schools and land petitions begs the question of why and how land grants failed to materialize. A number of questions arise. Were petitions denied due to the ideological change at the President's level? That is, from the leftist Lázaro Cárdenas to the moderate Manuel Ávila-Camacho. Did land petitions fail to reach Cárdenas' desk because of impersonal bureaucratic delays? Were these delays related to the legal challenges of landowners? Did Cárdenas himself tabled the decision over Chiapas's land petitions leaving it to Ávila-Camacho? These questions

are perhaps the object of a future project, but they do have stakes for my dissertation. They are about another extra-institutional obstacle for dictators: the political clout of economic elites.

## Chapter 7: Final Remarks

My research advocates redirecting the debate on regimes and development to the characteristics of the state organization of which political leaders are the head, and to the historical origins and evolution of state institutions.

In this dissertation, I explained the incentives of state leaders to provide developmental public goods, as a function of elite conflict in the ruling coalition. I also studied how the political strength of subnational elites relates to the geographic variation in public goods provision. Using a blend of qualitative and quantitative data, I provided evidence on these two pieces of theory based on the case of primary education after the Mexican Revolution.

In this final part, in section 7.1, I delineate the road ahead in terms of the subsequent steps in this line of research. Part of these subsequent steps is developing additional implications for the study of authoritarian regimes, a literature that I only touched briefly in the body of the dissertation. I discuss these implications in section 7.2. In section 7.3, I conclude.

### 7.1 Long-Term Effects

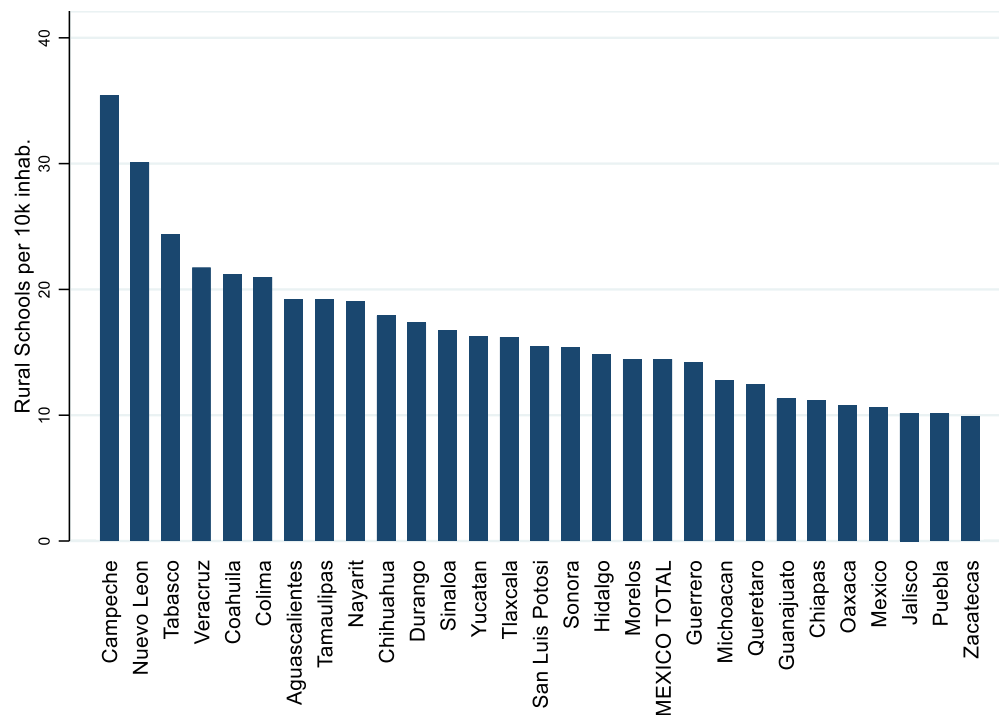
As the data in chapter 5 suggests, the state-building cycle of the revolution had long-term consequences. An important next step is theorizing the mechanisms through which the subnational outcomes in public education persisted in the twentieth century. First, in rural education, some *estados* had low rural schooling in 1940 and then maintained the same pattern for decades. Figure 20 shows data on rural schooling investment in the last year available in the series, 1961, where the pattern is apparent.

The three *estados* where most of the Cristero War happened had a persistent pattern of low investment: Jalisco, Guanajuato, and Michoacán. The pattern could have remained for more than one reason. There is the possibility that a legacy of the Cristero War is a distrust of public



education; in this case, private schools could have filled the void in the countryside. However, Fallaw (2013) documented that the revolutionary veterans of Guanajuato maintained their dominance of local politics vis-à-vis the national government through an accommodative alliance with religious leaders. Thus, the persistence of low investment could be caused by sheer social distrust or by the successful sabotage of the SEP by the revolutionary generation of these *estados*.

Figure 20. Rural schools per capita in 1961



The same histogram shows other interesting patterns. Besides the usual suspects—Guerrero, Oaxaca, and Chiapas, the *estados* with the lowest levels of development—the states of México, Puebla, Querétaro, and Zacatecas also have isolated indigenous communities. Part of the explanation of why there is low schooling in rural areas may be that the national government failed to create institutionalized links with non-Spanish speaking communities, in contrast to Campeche, Tabasco, Veracruz, and Yucatán (the Gulf *estados*), which had strong party machines

in their indigenous areas. However, the state of México seems to be a special case, as it is the only *estado* where a local teachers union maintained its independence from the official national union (the SNTE). There could be a special explanation related to this phenomenon.

Second, in urban education, it is striking that the *estados* that lost their subnational education systems remained almost completely nationalized fifty years later (Table 5, chapter 4). The question arises of how exactly the other *estados* retain their school systems and why the other ones could not save them. There are cases of *estados* that did recover them; for instance, Chihuahua was the first *estado* to lose its schools in the 1930s but appears to have among the largest proportion of subnational schools in 1990. The answer could be related to the growth of metropolitan areas in this region located on the US border. However, the exact mechanism of persistence is an empirical question.

## **7.2 Additional Implications: Autocratic Coalitions**

In these final lines, I elaborate on some implications and future areas of theory development in the literature on authoritarianism. I build over Albertus, Fenner, and Slater's (2018) critique of contemporary models of political economy and autocratic politics. These models tend to overlook the potentially coercive nature of development-fostering policies and conceptualize the large-scale distribution of goods and services as simply 'side payments' for co-opting or pacifying the masses. Starting with this premise, my theoretical framework has at least three additional implications for these models.

**First.** These models often make a problematic assumption that dictators necessarily have narrower ruling coalitions than democracies, playing down how meaningful cross-class alliances are for autocratic survival. There are different versions of this assumption, for instance, when models equate autocracies with economic oligarchies (Acemoglu and Robinson 2006; Boix

2003) or when they assume that the masses lack meaningful influence on policy-making in autocratic coalitions compared to democratic alliances (Bueno de Mesquita et al. 2003).

However, recent work has reminded us that dictators do form broad, cross-class alliances (Albertus 2015). The ‘side payments’ and the institutionalized, large-scale distribution of goods necessary to maintain these alliances are a testimony of the impact of the masses in autocratic coalitions.

At its core, this confusion stems from a misconception of political regimes, which are better differentiated by the formal and informal rules to access power and not by the size of the ruling coalition. Democracies are not inimical to the concentration of decisions on a political elite, which is implicit in the debate between elitist and pluralist views on American democracy. Robert Dahl’s pluralism did not deny the possibility of closed circles of power under democracy, the ‘elitists’ (mostly, sociologists) contended, but argued that the door is always open to challenge these elites. In other words, under (the minimal version of) democracy, the masses do not necessarily have active participation in decision-making, but their elected officials (whoever makes decisions) can easily be challenged through open-access rules.<sup>1</sup>

In contrast, under autocracy, it is more difficult to challenge decision-makers from inside or outside the ruling coalition, as dictators (and aspiring dictators) commit to suppress social plurality by manipulating political institutions (Fenner and Slater 2017). To stay in power, autocrats sometimes make alliances with the masses but the *terms of the coalition* are more restrictive than under a democracy. In democratic coalitions, the masses or the subordinates of the alliance can easily challenge their leaders if they do not keep their promises. Under

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<sup>1</sup> Dahl was actually optimistic about the open-access regime of elite rule in contemporary liberal democracies (Piano 2019). For a synthesis (and a critique) of the pluralist position in the study of power in American urban politics, see Stone (1993); for a synthesis of Dahl’s views in particular, across his multiple publications, see Piano (2019).

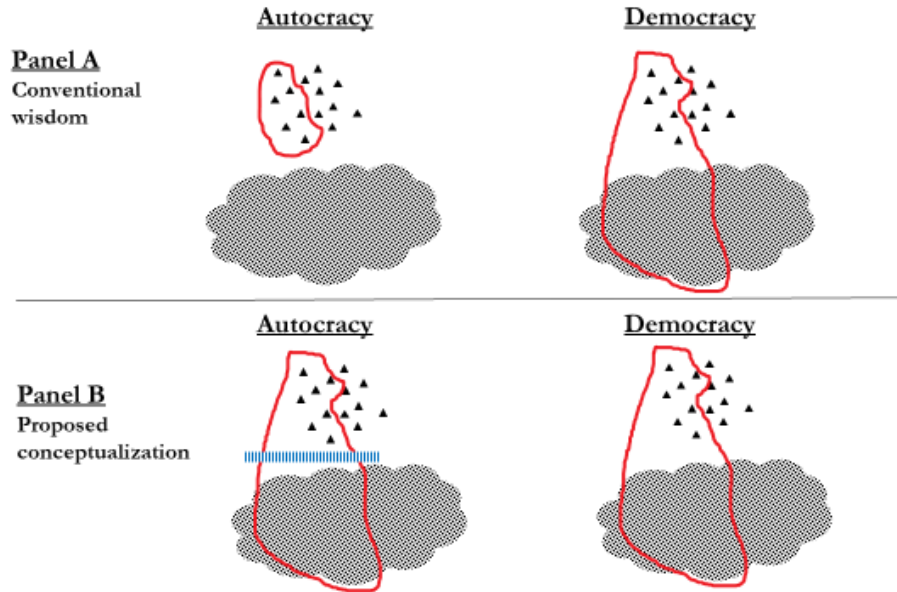
autocracy, the coalitional subordinates do have an impact but have a harder time keeping their leaders accountable.

**Second.** This discussion leads to the second implication of my framework, namely the convenience of re-conceptualizing autocratic coalitions. Contemporary models of autocracy tend to equate the ruling coalition with the closed circle of power or the small group of cronies that run the state. Such conceptualization has proved useful for analyzing succession problems and their institutional solutions but falls short to understand outcomes in terms of public policy and state institutions.

I propose to conceptualize ruling coalitions as composed of leaders and subordinates. In Figure 21, I describe the conventional wisdom on ruling coalitions and compared it to my proposal. In panel A, the conventional wisdom, autocratic coalitions are formed solely by elites, while democratic coalitions are formed through an elite-mass alliance. In this depiction, elites can be an actor in possession of power resources: political reputation, military rank, wealth, religious symbols, etc. The masses are everyone else in society.

Contrast the latter depiction with panel B, where autocratic and democratic coalitions look very similar. However, the autocratic coalition displays a barrier between elites and masses, which symbolizes the difficulty of challenging the leaders of the coalition. This is the key distinction between autocracy and democracy, as I did not make any assumption about the size of the coalitions (at the level of elites or masses) in either regime. Of course, the depiction of an autocratic coalition describes a hegemonic-party or one-party regime better than a military junta or a monarchy.

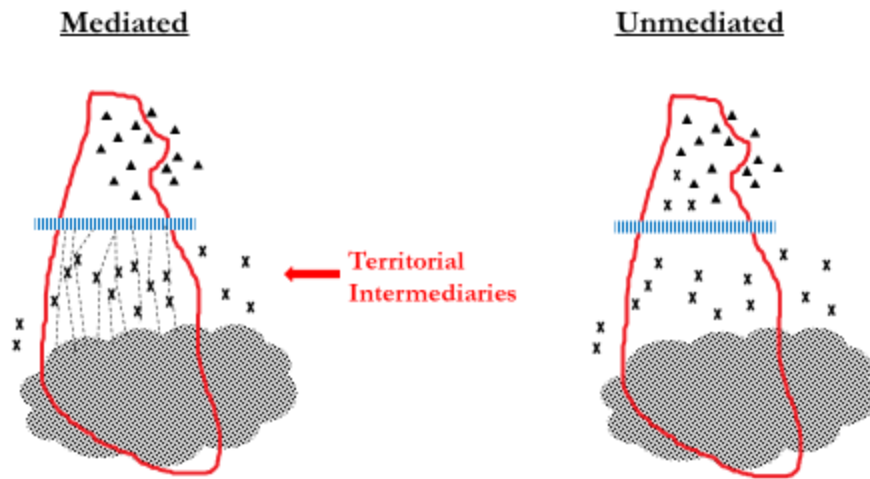
Figure 21. Ruling coalitions, autocracy vs democracy



In Figure 22 below, I look closer at autocratic coalitions. As heads of a state organization, the dictator's capacity to make alliances with social groups is as limited as the reach of the state. Nation-states govern territory in a more or less direct/unmediated way, which in turn affects the capacity of the coalitional leader to reach out to mass groups. A state that rules indirectly has mediated relationships with society, which implies that a dictator heading a mediated state must include *territorial intermediaries* to expand the ruling coalition.

In the left-hand coalition, the elites' relationship with the masses is mediated by territorial or regionally-based actors. In the right-hand coalition, the elites have a direct relationship with the masses. The elites typically achieve an unmediated relationship with their social allies by displacing territorial intermediaries or by co-opting them into their coalition; so, we can see some of them in the elite side of the coalition in the right-hand diagram.

Figure 22. Autocratic coalitions



Both the pre- and the (early) post-revolutionary regimes had a mediated structure, as the presence of national bureaucracy in communities beyond urban centers was limited at best and there were no political parties with national reach before 1929. But even after the foundation of the first version of the party-state in 1929, the party leader and the president still reached communities and local mass organizations through the regionally-based veterans of the revolution. That year marked the process of absorbing and displacing regionally-based leaders, parties, and mass organizations that culminated in 1946, when the party was renamed *Partido Revolucionario Institucional*, PRI.

Comparing the post-revolutionary state before and after the creation of the party in 1929 allows seeing why Diaz-Cayeros' (2006) argument is incomplete. The national leadership was indeed able to offer rewards to governors more credibly. However, the national leadership did not displace the more resilient revolutionary veterans from their regional bastions until Lázaro Cárdenas and Manuel Ávila-Camacho (presidents in 1934-1946) consolidated the mass components of the party—the monopolistic unions of workers, peasants, bureaucrats, and urban

groups. In other words, until national, corporatist organizations of the PRI absorbed regional mass organizations to *force* veterans to accept the centralization project, which was finally crystallized into law in the 1940s.

The regionally-based veterans were compensated with budgetary transfers and the possibility of a career in the federal bureaucracy or the foreign service after reaching the highest elected positions in their *estados*, but they were typically excluded from the highest echelons of power. It was a controlled, hierarchical process. After 1946, no president had a social base of his own or had links to the military—both because the party’s popular groups were centrally managed and because governors were routinely excluded from the succession.

From 1958 to 2000, no president of the PRI had been governor. Every president had made a career in the federal bureaucracy and had served as minister (*Secretario*) in the presidential cabinet just before becoming a presidential candidate.<sup>2</sup> The first presidential candidate that had held a governorship since 1958 was nominated for the 2000 election and the subsequent two candidates were also former governors. The reason is that the PRI instituted presidential primaries in 1999 after losing control of the Chamber of Deputies for the first time in the previous intermediate election—the turning point of democratization.

Concomitantly, the face of the national congress changed drastically. In the post-revolutionary reconstruction, the president dealt with parties representing the interests of governors and revolutionary veterans. When the PRI consolidated, congress representatives became (co-opted) labor and agrarian leaders, bureaucratic union bosses, suffragettes, etc.

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<sup>2</sup> Adolfo Ruiz-Cortínez, president in 1946-1958, had been governor of Veracruz. The incumbent president in 1946, Miguel Alemán-Valdés, picked Ruiz-Cortínez as successor (both to the governorship of Veracruz and the presidency) precisely because he was no social leader and had a rather technocratic profile.

**Third.** Finally, there is a payoff from distinguishing between revolutions from below and from above, such as Mexico and Peru under General Velasco, respectively. My framework fits well the conventional wisdom about dictators' early years (when they are most vulnerable) and tends to face challenges from their ranks (Svolik 2012). We know that dictators do several things to address elite challenges in these years, including expropriations (Albertus and Menaldo 2012). And, among dictators, those facing the most severe elite-level conflicts pursue revolutionary, radical transformations (Pincus 2007). However, while it is clear that they will address these challenges somehow, it is less clear what they will not or cannot do.

I argue that we must pay attention to the antecedents under which dictators address the challenges of their vulnerable early years. Even amongst dictators facing severe elite conflicts (what in retrospect we know as revolutionary regimes), some of them reform their states after the *collapse* of the political system. This is the difference between revolutions from above and revolutions from below. The former will achieve deeper transformations, not so much because they can (other factors could constrain them, such as the international context) but because *they must* for surviving.

For example, consider the difference in educational reform in post-revolutionary Mexico and Velasco's Peru. In both cases, the national leaders had the intention of centralizing educational policy-making, introducing a completely new pedagogy oriented towards a nationalist and popular image of the nation, and universalizing literacy. In both cases, the national leadership faced resistance from the existing bureaucratic structures, especially from underpaid teachers, and in the case of Mexico, from regional strongholds. However, only in one case did national leaders take the bold steps necessary to achieve their goals. The collapse of the Porfirian system in Mexico unleashed a (geographically-clustered) conflict between



revolutionaries, on top of the antagonism with economic oligarchs, that set Mexico's education reform on a more radical path than Velasco's achievements.

### **7.3 Conclusions**

In this final chapter, I delineated a couple of future avenues of research in addition to those already identified in the concluding sections of each chapter. The areas identified here are related to the long-term effects of the revolutionary cycle of state-building on later outcomes of public education and questions from the contemporary literature on authoritarian politics.

The way I envision my research agenda, I will continue investigating the long-term evolution of the education system for a book project based on the dissertation. I envision a book project that investigates the within-country patterns of education investment in Mexico and their persistence during the long-lasting regime of the *Partido Revolucionario Institucional* (PRI).

In turn, I see the discussion on autocratic coalitions as part of a stand-alone article. While my book project on the revolutionary education system will have implications for the contemporary literature on autocracies, I judge that an ad-hoc article would better address the conversation on how dictatorships work.

In general, I believe that public education can be an object of inquiry from very different angles. In other words, the study of educational politics can contribute to more than one research agenda in political sciences; besides the politics of autocracy, public education has much to say on comparative state formation and the political economy of development. Finally, in recent years, a growing community of scholars has formed with the firm belief that education politics is an area that political scientists should take seriously for its own sake.<sup>3</sup> I hope that my dissertation has contributed to this purpose.

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<sup>3</sup> For recent articles making the case for education politics as important area of inquiry *within political science*, for example, see Moe and Wiborg (2017), Gift & Wibbels (2014), and Busemeyer & Trampusch (2011).

## Appendices

### Appendix 1: Ideology of Governors

*Table 11. Ideological classification of governors*

<b>Ideological classification</b>	<b>Coding explanation</b>
Laborist/Agrarianist	The governor clearly showed a political agenda in favor of land reform and/or labor rights. Had ties with popular organizations (e.g., labor unions, agrarian movements, urban popular organizations).
Centrist/Liberal	The governor acted moderately in favor of land reform and/or labor rights; often did it reluctantly. Had a conciliatory posture, trying to compromise with landlords and/or employers. Enacted pro-business policies, such as tax cuts.
Conservative	The governor clearly showed opposition to land reform. Acted to demobilize and even repress peasants and unions. Had ties with landlords and businessmen. Enacted pro-business policies, such as tax cuts.
Militar	The governor showed no clear ideological leaning or specific political agenda. The governor's clearest ties were with the military institutions and the most notorious events in the administration were military actions and the suppression of revolts.
NA	Missing values. No information was found in relation to these governors. Often, they served as interim for a few months.

## Appendix 2: Phases of Centralization

Table 12. Phases of Centralization of the Public Education System

POLICY AREA	PHASE 1 (1920-1924) Decentralization with National Coordinator	PHASE 2 (1925-1930) Centralization through Parallel Systems	PHASE 3 (1931-1940) Centralization through Displacement
<b>Role of national authority (SEP)</b>	<ul style="list-style-type: none"> <li>• Fund and manage schools in the capital and federal territories</li> <li>• Subsidize subnational schools at the governor's request</li> <li>• Informally, subsidies in exchange for the estado absorbing schools from municipalities</li> <li>• Subnational exclusivity</li> <li>• SEP with permission of estado</li> </ul>	<ul style="list-style-type: none"> <li>• Fund and manage schools in rural areas inside estados</li> <li>• Receiving requests from subnational schools (one by one) to incorporate into the national system in exchange for better salaries</li> </ul>	<ul style="list-style-type: none"> <li>• Fund and manage national schools anywhere</li> <li>• Managing subnational schools in estados that fail to pay their teachers</li> <li>• Regulate all public and private education in all the country</li> </ul>
<b>Rural education in estados</b>	<ul style="list-style-type: none"> <li>• SEP with permission of estado</li> </ul>	<ul style="list-style-type: none"> <li>• Parallel systems</li> <li>• Absorbing subnational schools by request of the teacher</li> </ul>	<ul style="list-style-type: none"> <li>• SEP exclusivity</li> </ul>
<b>Urban education in estados</b>	<ul style="list-style-type: none"> <li>• Subnational exclusivity</li> </ul>	<ul style="list-style-type: none"> <li>• Subnational exclusivity</li> <li>• Absorbing subnational schools by request of the teacher</li> </ul>	<ul style="list-style-type: none"> <li>• Parallel systems, and</li> <li>• 'Temporary' agreements: SEP takes over a troubled estado's schools in exchange for a bailout</li> </ul>
<b>Schools paid by agr. estates</b>	<ul style="list-style-type: none"> <li>• Enforced by estados</li> </ul>	<ul style="list-style-type: none"> <li>• Enforced by estados</li> </ul>	<ul style="list-style-type: none"> <li>• Enforced by SEP</li> <li>• Teacher appointed by SEP</li> </ul>
<b>Pedagogy</b>	<ul style="list-style-type: none"> <li>• Estados establish their pedagogy</li> <li>• SEP uses same pedagogy as pre-revolutionary Ministry of Instruction</li> <li>• Liberty of instruction</li> </ul>	<ul style="list-style-type: none"> <li>• Estados establish their pedagogy</li> <li>• Explicit presidential effort to have governors establish strict secularism in subnational schools</li> <li>• SEP adopts Dewey's Action Pedagogy to form modern citizens and workers</li> <li>• SEP requires parent committee and agricultural cooperative in each school/community</li> <li>• SEP organizes cultural projects, such as 'defanatization' and anti-alcohol campaigns</li> <li>• SEP start investing in teacher colleges (<i>Escuela Normal</i>) in rural areas</li> <li>• Multiple local unions of national and subnational teachers appear spontaneously</li> </ul>	<ul style="list-style-type: none"> <li>• SEP establishes all pedagogy in public schools</li> <li>• "Socialist education" emphasizing class conflict and anti-clericalism (abandoned in the 1940s for 'national unity')</li> </ul>
<b>Teaching profession</b>	<ul style="list-style-type: none"> <li>• SEP's Cultural Missions: itinerary bureaucracy trains locals</li> </ul>	<ul style="list-style-type: none"> <li>• SEP start investing in teacher colleges (<i>Escuela Normal</i>) in rural areas</li> <li>• Multiple local unions of national and subnational teachers appear spontaneously</li> </ul>	<ul style="list-style-type: none"> <li>• Official, national teachers union (1932) that gradually absorbs multiple local unions</li> </ul>
<b>SEP's internal organization</b>	<ul style="list-style-type: none"> <li>• Deconcentrated action of bureaucracy in estados</li> </ul>	<ul style="list-style-type: none"> <li>• Concentration of management in Mexico City headquarters</li> <li>• Private schools must register with SEP to legally function</li> <li>• Religious education banned; priests and nuns cannot be teachers</li> </ul>	<ul style="list-style-type: none"> <li>• Concentration of management in Mexico City headquarters</li> <li>• Registration continues (until today)</li> </ul>
<b>Private education</b>	<ul style="list-style-type: none"> <li>• Encouraged by SEP, religious or secular</li> </ul>		<ul style="list-style-type: none"> <li>• Inspection system (until today)</li> <li>• SEP regulates all pedagogy (until today)</li> <li>• By 1946: ban on religious education remains in law but is loosely/selectively enforced; priests and nuns can be school teachers</li> </ul>

### Appendix 3: Classification of *Estados*

Table 13. Group A: Strong Resistance

Estado	Rationale for classification	Sources
Guanajuato	There was a strong regional party, specifically, a confederation of revolutionary parties: <i>Confederación de Partidos Revolucionarios Guanajuatenses</i> had an urban popular base. The initial strongmen of the party were the governors Enrique Colunga and Agustín Arroyo Ch.	Meyer et al. (1977); Blanco et al. (2000)
Jalisco	The progressive forces were organized around José Guadalupe Zuno, who created different organizations as a governor. Zuno remained as the strongman of Jalisco over these organizations. These organizations were the <i>Confederación de Partidos Liberales de Jalisco</i> , through which Zuno was elected governor in 1922; the <i>Confederación de Agrupaciones Obreras Libertarias de Jalisco</i> , a labor union; and an agrarian organization, the <i>Liga de Comunidades Agrarias de Jalisco</i> .	Meyer et al. (1977); Muriá (1994); Fernández Aceves (2009)
Michoacán	Francisco Múgica imitated the radical party of Adalberto Tejeda of Veracruz during his period as governor (1920-1922). Múgica resigns due to the confrontation with conservative interests, but in the interim (1923-1924), his influence is consolidated with the foundation of a powerful agrarian league: <i>Liga de Comunidades y Sindicatos Agraristas de Michoacán</i> . In 1924, there is another progressive governor, Enrique Ramírez, who implements the anti-clerical policies mandated by the center (and which spurred the Cristero rebellion). In 1928, governor General Lázaro Cárdenas implements land reform and progressive education.	Raby (1973); Benjamin (1990)
Oaxaca	After a period of disunity, Governor Genaro V. Vázquez (1925-1928) creates the <i>Confederación de Partidos Socialistas de Oaxaca</i> with urban and rural social bases.	Romero Frizzi et al. (2010); Ramírez (2016)
San Luis Potosí	General Saturnino Cedillo becomes the strongman of San Luis in the 1920s, after Aurelio Manrique was impeached by the local congress. Cedillo and Manrique had become strongmen of San Luis during the Agua Prieta revolt (1920). Cedillo had rural bases of armed peasants. General Cedillo belonged to the closest circle of the Sonora Group and led the army repression against the Cristero guerillas, which led him to be outside the estado for the second half of the 1920s.	Brandenburg (1964); Meyer (1978); Monroy Castillo and Calvillo Unna (1997)
Tabasco	General Tomás Garrido-Canabal built a rural and urban base, organized in the <i>Partido Socialista Radical Tabasqueño</i> , inspired in Yucatan's socialist party founded by General Salvador Alvarado and Felipe Carrillo-Puerto. Garrido was also very close to Calles.	Martínez Assad (1979); Wasserman (1990a)

Continuation of Table 13. Group A: Strong Resistance

Estado	Rationale for classification	Sources
Tamaulipas	Before 1924, the revolutionary groups of Tamaulipas were divided. Emilio Portes Gil returned to Tamaulipas and united all the factions around his persona and a regional party, the <i>Partido Socialista Fronterizo</i> . Portes Gil was from Tamaulipas but his political clout was based on his closeness to the Sonora Group. Before returning to become governor in the 1924 election, Portes Gil had been a key broker of President Obregon in the national congress and had participated in the revolt that made Obregon president and against the revolt against Obregon in 1923.	Benjamin (1990); Alvarado Mendoza (1992)
Veracruz	Veracruz was one of the places with the strongest top-down agrarian and labor agitation. The mobilization of workers and peasants started with the governorship of Colonel Adalberto Tejeda in 1920. Tejeda organized one of the strongest and most influential agrarian organizations, the Liga de Comunidades Agrarias del Estado de Veracruz. Not only was did the Liga provide a solid political base, but also sustained a paramilitary base of peasant guerrillas that grew in power as they provided key support to the national governments in times of military rebellions and coup attempts. Despite a conflict between Tejeda and his successor, Heriberto Jara, they found a modus vivendi that only increased the influence of the Liga and Tejeda's agrarian bases. In 1928, Tejeda was reelected as governor and his persona grew in local and national influence. Tejeda was so influential that Calles appointed another leftist, Lázaro Cárdenas, as presidential candidate in 1934. Cárdenas had enacted policies that did not align with Calles' vision of the country but at least had been loyal to the <i>Jefe Máximo</i> . For these reasons, Tejeda and Veracruz's political class counted on substantial autonomy from the center.	Meyer (1978)
Yucatán	General Salvador Alvarado arrived to Yucatán sent by Carranza and founded one of the first mass-based parties of the revolution, the <i>Partido Socialista del Sureste</i> (a subsequent name by which is better known). In alliance with a veteran original from Yucatán, Felipe Carrillo Puerto, they built a robust network of peasants and workers through the enactment of progressive policies. The party was more than a vehicle for the ambitions of their creators and it survived the departure of General Alvarado and the assassination of Carrillo Puerto in 1923, while in office as governor. A local politician, Bartolomé García Correa led the Party to resist the hegemony of the center for many more years, until García's career fell in disgrace when the center bailed out Yucatán's government in 1931.	Paoli and Montalvo (1977); Fallaw (1999; 2001; 2004)

Table 14. Group B: Weaker Resistance

Estado	Rationale for classification	Sources
Aguascalientes	The old oligarchy was strong in local politics and shared power with the new revolutionary class. Rafael Arellano Valle, an old <i>hacendado</i> , was governor in 1920-24. The revolutionary veterans were divided in national parties and local parties.	Reyes Rodríguez (2009); Gómez Serrano & Delgado Aguilar (2010)
Chiapas	The old oligarchy survived the occupation of Carranza's generals after the Constitutionalist army triumphed circa 1915. The <i>mapaches</i> (racoons), as the oligarchy was called, shared power with the revolutionary veterans (e.g. governor Carlos A. Vidal) and the local communists. Before the 1934 Agrarian Code allowed hacienda workers to request land, most agricultural workers sided with the oligarchs on whom their livelihoods depended.	Zebadúa (2011)
Coahuila	The old oligarchy was still influential and allied with the strongmen of the region, Manuel Pérez Treviño. Thus, while there was a degree of unity among the revolutionary groups (around a strongman), they shared power with the old oligarchy.	Hernández Chávez (1979); Valdés Silva (1990)
Colima	The veterans of the revolution were highly factious, following the changes at the national level. Juan José Ríos was governor in 1915-17 until a new constitutional order was established; then Felipe Valle was elected to govern until 1919. Ríos and Valle implemented progressive policies which, although not massive, inaugurated the alliance of veterans with peasants and workers. The governor elected for the 1919-1923, Miguel Álvarez García, supported President Carranza in the successful coup led by General Obregón. Obregón's rebellion divided the political class. Álvarez García survived by changing sides, but the elections and subsequent administration showed how divided the political class was. Gerardo Hurtado became governor after contested election for the period 1923-27. Hurtado was deposed by other veterans during the rebellion of General de la Huerta against President Obregón. Hurtado finally was reinstated but the local congress was now sharply divided between his cronies and the former governor Álvarez García's cronies, specifically, by the cronies of the latter's brother, Higinio Álvarez García. In 1925, Higinio Álvarez's faction impeached Hurtado and President Calles backed the political move.	Romero (1994)
Guerrero	The progressive forces had their own social bases but they were factious. The national army occupied and governed this estado for a period; not because there was chaos in the countryside but because the political elites deposed each other from the governorship.	Illades (2000)

*Continuation of Table 14. Group B: Weaker Resistance*

Estado	Rationale for classification	Sources
Hidalgo	Similarly to Guerrero, the revolutionary forces were factious and fought among themselves for power with the occasional intervention of the national army to establish order. The chaos was the result of elite-level factionalism.	Menes Llaguno (2006)
Morelos	The revolutionary forces, heirs of Emiliano Zapata's army, had their own rural social bases. However, after Zapata's assassination, their factionalism prevented them creating a front against the advancement of the national bureaucracy.	Salinas (2014)
Nayarit	Nayarit was one of the most unstable <i>estado</i> . In 1918-34, there were sixteen governors or an average of two per year. There were many interim and substitute governors that sometimes lasted days or weeks. The first governor to finish their formal period after the revolution was Francisco Parra (1934-37). Nayarit's political class was factious; some veterans allied with the landed class and some with labor and agrarian movements. Their struggles were often violent, involving military confrontations; but amidst the unrest, some factions did form real bases of popular support. For example, there was a local progressive party, the <i>Partido Reformador y Obrero Unido</i> , and a peasant organization, the <i>Liga de Comunidades Agrarias</i> .	Meyer (1997)
Nuevo León	The revolutionary forces had social bases, especially among workers, but were also factious. The revolutionary forces also shared power with the powerful industrialists of Monterrey, who had allied representatives in the local congress.	Meyer (1978); Saragoza (1988); Cavazos Garza (1995)
Querétaro	The revolutionary forces had social bases, especially in the countryside. A strongman, General Saturnino Osornio, mobilized a peasant guerrilla to defend President Obregon in the 1923 election. But Osornio was not able to unite the revolutionary factions around his persona. In the 1920s, there were roughly two factions: Osornio's faction, allied with Obregon, and Constantino Llaca's faction, allied with Calles (who supported Llaca to offset Obregon's influence).	García Ugarte (1999)

Table 15. Group C: No Resistance

Estado	Rationale for classification	Sources
Campeche	The revolutionary forces were united around a local party, the <i>Partido Socialista Agrario de Campeche</i> , founded in 1920. However, their rural bases were always depended on a 'foreign' patron: first, Felipe Carrillo-Puerto and his <i>Partido Socialista del Sureste</i> from Yucatán, and later from the center.	May González (1990); Fallaw (2013)
México	<p>The local political class was united around General Abundio Gómez, an ally of Obregón who had taken the <i>estado</i> in the Agua Prieta rebellion. Gómez served as interim governor in 1920 and then was elected for the 1921-1925 period. His successor, Carlos Riva Palacio, was elected with a candidacy sponsored by a local revolutionary party, <i>Partido Socialista del Trabajo</i>, organized by Abundio Gómez brother. The party was the institutional expression of Gómez's leadership.</p> <p>Despite its name, the Gomista party and Governor Riva Palacio did not enact substantial progressive reforms; neither did Abundio Gómez before them. The local political class faced an economic disaster and the corresponding scarcity of public funds. Gómez stalled land reform, sided with employers in labor strikes, and enacted policies for the benefit of wealth bearers with the hope of improving local economic conditions. The Gomistas received the help of national popular organizations (especially, Luis Morones' CROM) to control the labor movement. The Gomistas were so estranged from the popular classes that part of the rural uprisings of the Cristero rebellion were in fact led by old allies of Emiliano Zapata who resented the unfulfilled promises of agrarian reform.</p>	Jarquín & Herrejón Peredo (1995)
Sonora	Sonora is the home state of Obregón and Calles. After defeating the Villistas, Calles was military governor of Sonora and then constitutional governor, leaving in 1919 for a Secretariat in Carranza's cabinet. General Adolfo de la Huerta, the third Sonorense, who rebelled in 1923 against Obregon and Calles, succeeded Calles as governor of Sonora. Both Calles and de la Huerta were often away from Sonora and they left their men in charge, including Calles' cousin Francisco Elías. Their successors during the 1920s were from the same clique. Calles' son was governor in 1931. During these years, the clique led by Obregon and Calles experimented in Sonora with anti-clericalism but also with top-down popular mobilization through progressive labor rights and moderate land reform. While their model of progressivism was moderate, aimed at 'harmonizing' social classes rather than spurring social conflict, they amassed a popular base. The governors of Sonora enjoyed the support of this social base but it was always linked to the national popular organizations, such as CROM, meaning that these governors were dependent of the center.	Vaughan (1997); Almada (2000)



*Continuation of Table 15. Group C: No Resistance*

<b>Estado</b>	<b>Rational for classification</b>	<b>Sources</b>
Tlaxcala	The revolutionary forces were united around a group that alternated in the governorship: Máximo Rojas, Rafael Apango, and Ignacio Mendoza. General Rojas had been sent to occupy his native Tlaxcala by Carranza. Rojas eventually and his cronies sided with the Sonora Group. Part of the 'service' they provided to the center was containing and moderating the existing labor organizations and peasant mobilization (related to nineteenth-century land dispossession). In the mid-1920s, Mendoza, as governor, organized workers and peasants into a local party but did it through the national popular organizations loyal to President Calles. One way or the other, the survival of these revolutionary veterans always depended on the favor of the center.	Buve (1980; 1990); Rockwell (2007)
Zacatecas	The veterans that dominated politics count on popular bases, especially labor, but the national labor union allied with the Sonora Group (CROM) dominates the organization of workers. As a result, the political class of Zacatecas is dependent on the center.	Flores Olague et al. (1996); Vela Cordero (2006)

*Table 16. Group D: Chaotic Politics*

<b>Estado</b>	<b>Rationale for classification</b>	<b>Sources</b>
Chihuahua	Until the assassination of Pancho Villa in 1923, political disorder reigned in Chihuahua. Chihuahua also experienced chronic economic downturns in agriculture and mining which contributed to the poverty of the local government. And because of a series of events, no local strongman dominated local politics nor built a social base. General Enriquez was governor in 1920-24 with the support of Obregon and then left the political scene. After Enriquez, Jesús Almeida governed with the support of the center but was a de-mobilizer, allied with wealth interests. Marcelo Caraveo, who overthrew Almedia and later became governor, started building a local party with popular bases but joined the failed military revolt of 1929 against Calles' national party project. No other figure could unite the local forces and the center eventually dominated politics in the 1930s.	Meyer (1978); Wasserman (1990b); Marak (2009)
Durango	Similarly to Chihuahua, rural Durango was in a constant state of political disorder due to the presence of revolutionary bands disloyal to Carranza, including bands loyal to Pancho Villa, and due to economic devastation. In the 1920s, Generals Jesús Castro and Enrique Nájera became prominent leaders but they could never unite the local factions. Castro and Nájera had arisen to power by deposing Governor Arrieta in the context of Obregon's coup against Carranza. General Arrieta maintained an active military rebellion until the mid-1920s. Rural Durango also suffered of stubborn banditry, which worsened when the southern subregion of the estado experienced the rise of Cristero guerrillas. As a result, the national bureaucracy was never especially interested in intervening in rural Durango.	Pacheco Rojas (2001); Collins (2015); Morris (2015); Avitia Hernández (2018)
Puebla	Puebla experienced a combination of violent struggles among the local political elites and rural unrest due the confrontation between the Constitutionalists (Carranza) and the Convention (Zapata and Villa's faction), and later due to the Cristero rebellion. In the 1920s, the political class remained factious: in 1920-29, there were eighteen governors. In 1923, a large segment of the political class of Puebla supported the presidential candidacy of General de la Huerta against President Obregón's appointee, General Calles. After the military revolt of de la Huerta was defeated and Calles became president, the political class was divided and at odds with the center. Eventually, Claudio Tirado was imposed by President Calles as governor, but was eventually impeached by the hostile local congress. An expression of the elite factionalism was that, during Tirado's two years, there was a parallel congress formed by elites that did not recognize Tirado as governor. The local congress appoints General Manuel Montes, who was not loyal to President Calles, as substitute governor. The rural unrest of the Cristero rebellion became unmanageable and Calles took advantage of the situation to depose Montes through the national Senate, which abolished the local authorities of the estado. The national Senate appoints a substitute governor, General Donato Bravo, a Callista, who governed until 1928. In the elections, a unit candidacy is formed around Leonides Andreu Almazán.	Vaughan (1997); Lomelí Venegas (2001)

*Continuation of Table 16. Group D: Chaotic Politics*

<b>Estado</b>	<b>Rationale for classification</b>	<b>Sources</b>
Sinaloa	<p>The revolutionary veterans of Sinaloa were factious. After the publication of the 1917 constitution, the rivalry between the factions of two revolutionary generals, Ramón F. Iturbe and Ángel Flores, almost led chaos. General Obregón, the military right-hand of President Carranza, had to intervene so that General Flores accept the victory of General Iturbe. Iturbe's governorship was interrupted by Obregón's rebellion, as the former stayed loyal to President Carranza. General Flores, who supported Obregón's rebellion, was elected governor in 1920. Flores resigned in 1924 to launch his presidential candidacy against Obregón's chosen successor, General Calles. Then, Alejandro R. Vega, a conservative, was elected governor in 1924. Vega was deposed by a hostile local congress, as was his replacement. An interim appointed by the local congress finished the governor period. Thus, during the 1920s, local power was shared among factious revolutionary veterans and the conservatives or former elites of the pre-revolutionary period.</p> <p>Because the veterans favored the agro-exporter and agro-industrial class, and became themselves part of that class through personal businesses, they did not count on popular bases. Whatever labor mobilization there was (in agriculture and industry) was absorbed by the national labor union of Obregón and Calles: the CROM. As popular mobilization increased in the 1930s, the national popular organizations became more present, so that the local politicians depended more and more on the favor the center to remain in power.</p>	Cueva Tazzer (1996)

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