

EDUCATION OR INDOCTRINATION?  
THE VIOLENT ORIGINS OF PUBLIC SCHOOL SYSTEMS  
IN AN ERA OF STATE-BUILDING

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Why do modern states regulate and provide mass education? This article proposes a theory of education as a state-building tool that is deployed when mass violence threatens the state's viability. Experiencing mass violence can heighten national elites' anxiety about the masses' moral character and raise concerns about the efficacy of repression or concessions alone to maintain social order. In this context, a mass education system designed to teach obedience can become an attractive policy tool to prevent future rebellion and promote long-term order. Consistent with the theory, I detect a cross-national pattern of primary education expansion following civil wars in Europe and Latin America. In a complementary study of the 1859 Chilean civil war, I show that the central government responded by expanding primary schooling in rebel provinces not as a concession but to teach obedience and respect for authority. The theory helps explain why non-democracies often expanded mass education.

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Public primary education systems are a central feature of modern states. What is puzzling about these systems is that, contrary to popular belief, their emergence and most of their expansion usually took place under non-democratic regimes (Paglayan 2021). In Europe, most states began to assume control of primary schooling during the early nineteenth century, before the spread of democracy, with absolutist Prussia taking the lead (Ramirez and Boli 1987). In Latin America, too, national primary education systems were often created by oligarchic regimes (Newland 1994). In both regions, most children were already enrolled in primary school before democracy emerged (Paglayan 2021). What drove states to regulate and expand primary education for the masses even in the absence of electoral incentives to cater to the poor? Did states turn to mass schooling mostly to promote human capital, or rather as a means of social and political control?

This article develops a theory of mass education as a state-building tool that is deployed in response to internal conflict, and offers evidence for it from the development of public primary education systems in Europe and Latin America. I argue that, influenced by the frightening experience of internal conflict involving mass violence against the state, national elites expanded public primary schooling to indoctrinate future citizens to accept the status quo, hoping that this would help the state carry out its most essential function: to prevent social disorder and ensure political stability. This state-building argument has two parts. First, political elites must believe that primary schooling can instill moral values and behaviors of obedience, discipline, and respect for authority that will consequently reduce the future probability of mass rebellion against the established order. Second, this idea will gain political traction following episodes of acute internal conflict and social disorder, when increased fear of a redistribution of power from elites to the masses

helps forge a coalition of elite support for proposals to create and expand a mass education system.

Although the theory I propose builds on a long tradition emphasizing the nation-building goals of mass schooling, it differs from this body of work in two respects. First, nation-building theories of education emphasize schools' goal to teach a common language and national identity (Weber 1976; Gellner 1983; Scott 1989; Darden and Grzymala-Busse 2006). By contrast, my *state*-building argument emphasizes the goal of promoting social order by teaching uncritical acceptance of the state's authority and its laws. Second, nation-building theories identify two main factors underlying political elites' decision to expand mass education: industrialization (Weber 1976; Gellner 1983; Bourguignon and Verdier 2000; Galor, Moav, and Vollrath 2009) and interstate wars (Darden and Mylonas 2015; Aghion et al. 2019). I argue that internal conflict is also an important and understudied driver of educational expansion. Elites exposed to internal conflict turned to mass schooling to create compliant future citizens.

The prediction that national elites will respond to internal conflict and mass violence by reforming education systems to indoctrinate future citizens can apply to various types of internal conflict, like peasant revolts, food riots, social revolutions, rebellions by an ethnic minority, etc. In this article, I test the theory using quantitative and qualitative data to assess the consequences of one specific type of acute internal conflict: civil wars pitting the masses against the state. I view this empirical analysis as a springboard for new research on the relationship between internal conflict and education reform.

First, using an original panel dataset of primary school enrollment rates spanning 40 European and Latin American countries from 1828-2015, I document

an acceleration in primary school coverage following civil wars that is consistent with the theory and has been overlooked by the social sciences. Event study estimates suggest that in the long-term experiencing civil war increased primary school enrollment rates by 11.2 percentage points (p.p.). This large increase relative to the pre-war enrollment rate of 20% is not driven by wars bringing liberals to power.

To better assess the effect of civil wars and the mechanisms by which they lead to educational expansion, I study the 1859 Chilean civil war. Exploiting within-country geographic variation in war exposure, I find that, after the war, the central government centralized and expanded primary schooling, focusing its efforts on former rebel provinces. I then show that the expansion is not explained by a redistributive logic to appease rebels, industrialization goals, interstate wars, or war-induced increases in fiscal capacity. Tracing elites' arguments before and after the war, I show that the civil war helped convince elites that expanding primary education to improve the moral character of the masses was necessary to prevent future civil wars.

While the theory can help explain why non-democracies in Europe and Latin America expanded primary education, the scope conditions do not limit the theory to non-democracies or Western societies alone. I address these scope conditions in the Discussion section, where I point to several cases of conflict-driven education reform that suggest the theory's applicability under various types of political regimes. Refining these conditions and testing the theory in different settings remains an important path for future research.

The theory and findings presented in this article contribute not only to our understanding of education systems but also to existing debates about how wars

shape state capacity, what strategies autocrats deploy to survive mass threats, what drives public goods provision, and why increased access to schooling frequently fails to promote skills or economic development.

Research on the political economy of education and development often assumes that schools increase the human capital of the poor (e.g., Lindert 2004; Ansell 2010). Without denying they sometimes do, I show that primary education systems targeting the lower classes often emerged not to teach skills to improve their job prospects, but to convince underprivileged children to accept their lot. This suggests that one reason why schools frequently fail to reduce poverty and inequality (World Bank 2018) is because that is not what they were primarily designed to accomplish.

The findings also have implications for state capacity and state-building theories. A large literature stresses that interstate wars incentivize, but civil wars deter, investments in state capacity (Tilly 1990; Dincecco, Federico and Vindigni 2011; Collier et al. 2003; Besley and Persson 2008; Cardenas 2010). While this literature primarily focuses on *fiscal* capacity, I argue that primary education is also a crucial (but often-neglected) component of the portfolio of state-building investments, and that civil wars—and internal conflict more generally—encouraged it.

The article also refines our understanding of the strategies used by autocrats to survive mass contestation. Acemoglu and Robinson (2006) argue that autocrats facing social revolution can use either physical repression to deter further rebellion and/or provide services such as education to appease the masses through redistribution. I show that autocrats have also employed a third strategy: to provide primary education in an attempt to indoctrinate the masses to accept their

societal role, obey the law, and fear the consequences of challenging authority. This theory provides an underappreciated explanation for the puzzling fact that, historically, autocracies made significant efforts to school the masses.

## **EXISTING THEORIES OF WHY NON-DEMOCRACIES PROVIDE PRIMARY EDUCATION**

Establishing mass education systems was a costly endeavor that required constructing schools, training teachers, distributing textbooks, and deploying inspectors. What prompted non-democracies to incur these costs?

One possibility is that non-democracies expanded primary education as a progressive redistributive policy when the poor belonged to the regime's coalition of support. During the twentieth century, left-wing autocracies and autocracies that took power by mobilizing the poor often expanded mass education. Examples include communist regimes (USSR, China, Cuba), the socialist one-party regime of post-independence Ghana, and the populist dictatorship of Getulio Vargas in Brazil (Manzano 2017; Kosack 2013). However, left-wing autocracies were uncommon in nineteenth-century Europe and Latin America; there, it was often absolutist and oligarchic regimes that expanded mass primary education (Newland 1994; Melton 2002).

Another possibility is that non-democracies turned to primary schools not to promote upward mobility but to mold the preferences, values, beliefs, and behavior of the masses. Scholars have proposed three main factors that might incentivize states to educate the masses for this reason: diffusion of ideas, industrialization, and interstate military rivalry.

Diffusion theory stresses the role of global ideas about the importance of education for nation-building. Beginning in nineteenth-century Europe, led by

Prussia, a model for successful nation-building emerged which included a national primary education system designed to promote a common language and identity (Ramirez and Boli 1987). As this model spread, non-European countries also developed education systems to stay in vogue with international trends (Boli, Ramirez and Meyer 1985). Diffusion theory holds that this international force—this model—drove primary schooling expansions from the nineteenth century on, while domestic factors like industrialization or internal disorder played a “small and insignificant” role or none at all (Meyer et al. 1977, 250; Meyer, Ramirez and Soysal 1992, 144; Boli, Ramirez and Meyer 1985, 155).

Undoubtedly, the spread of ideas about the benefits of a national primary education system during the nineteenth century was a necessary condition for their expansion. However, diffusion theory does not explain why countries simultaneously exposed to these ideas differed considerably in the timing of efforts to expand education, why central governments expanding education sometimes prioritized certain regions, or why within a country the rate of expansion fluctuated over time.

The industrialization and military rivalry theories acknowledge that ideas about the nation-building role of education mattered in driving the expansion of primary education, but depart from diffusion theory by acknowledging country-specific conditions that gave these ideas greater political traction. Industrialization theory holds that industrialization and the rise of a class of industrialists who demanded workers capable of communicating in a common language led to the expansion of mass schooling (Gellner 1983; Bourguignon and Verdier 2000; Galor, Moav and Vollrath 2009). The military rivalry theory holds that interstate wars incentivized states to expand primary education to prepare soldiers and inculcate patriotic

values against neighboring countries (Darden and Mylonas 2015; Aghion et al. 2019).

Both theories find empirical support but leave important patterns unexplained. Industrialization theory finds most support in the twentieth century in contexts where primary education increased to support state-led industrialization plans, such as 1930s USSR and 1950s East Asia, but has lost influence in eighteenth- and nineteenth-century Europe. Central governments in Prussia, Austria, and elsewhere began to expand primary education under preindustrial societies, while England, leader of the Industrial Revolution, trailed the rest of Europe in primary education (Brockliss and Sheldon 2012; Green 1990; Ramirez and Boli 1987).<sup>1</sup> The military rivalry theory does find support in nineteenth-century Europe, including recent quantitative evidence that interstate wars predict mass education reforms (Aghion et al. 2019). Still, some of Europe's first national education laws, including France's 1833 Guizot Law, were introduced during periods of interstate peace. Prussia is considered a classic example of the military rivalry theory because the 1763 *Generallandschulreglement*, which made primary education compulsory in rural areas, coincided with the end of the Seven Years War. However, James Melton's (2002) historical investigation provides an important correction, noting that Frederick II had already approved similar education plans in 1754, *before* the war broke out. According to Melton, the peasant rebellions of the 1740s-1750s, not military rivalry, fueled the king's interest in primary education. Military rivalry is

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<sup>1</sup> Economic historians tend to agree that the First Industrial Revolution did not require a skilled workforce (Squicciarini and Voigtländer 2015).

also unlikely to explain the rise of mass education systems in nineteenth-century Latin America, where interstate wars account for only one-fourth of wars in 1810-1900 (Centeno 1997).

I propose a new theory that highlights the role of internal conflict and social disorder in catalyzing elites' support for proposals to expand mass education as a state-building tool. As I discuss in the next section, the theory builds on diffusion theory's insight about the importance of educational ideas, but departs from diffusion theory by acknowledging that domestic conditions did shape when and why these ideas gained political traction. I argue that, in addition to industrialization and military rivalry, the occurrence of violent episodes of internal conflict pitting the masses against elites was a key domestic driver of the expansion of primary education in Europe and Latin America.

My argument contrasts sharply with existing theories of how internal conflict and social disorder affect education provision. Diffusion theory proponents argue that elites "facing problems of disorder ... relied on straightforward repression ... Expanding the educational opportunities of the disorderly or potentially disorderly classes was unthinkable ... when maintaining order was seen as most problematic" (Boli, Ramirez and Meyer 1985, 154-5). Other studies argue that civil wars, a type of internal conflict, *reduce* educational access during the war (Shemyakina 2011; Chamarbagwala and Moran 2011; Swee 2009; Leon 2012). While civil wars can indeed temporarily reduce access, I show that in the long-term they can incentivize the expansion of mass schooling beyond the level expected had civil war not occurred.

## **A THEORY OF INTERNAL CONFLICT AND PRIMARY EDUCATION**

The argument can be summarized as follows. Starting in the late eighteenth but especially during the nineteenth century, European and Latin American states began regulating, funding, and expanding primary education for the masses. The effort to create and expand a state-regulated primary education system was an important component of a state-building agenda designed to promote social order. Elites who were early advocates of such systems argued that primary schools would promote order by shaping the preferences, beliefs, moral character, and behavior of the masses. Teaching children to respect the state's authority, they claimed, was a worthwhile investment in long-term political stability because children were more malleable than adults. Other elites countered that the state lacked the funds to support primary schooling and/or that moral education was best provided by individual families, local communities, and the Church. How did elites overcome this disagreement?

A key factor that helped forge consensus among national elites was the occurrence of violent episodes of internal conflict pitting the masses against the state. When acute enough to threaten the state's authority, these episodes made national elites update their assessment of the costs and benefits of providing primary education, strengthening their belief that education was necessary to prevent future mass rebellion against the state.

This section develops this theory and outlines three observable implications that guide the empirical analysis.

### **Primary education as a state-building tool: The role of ideas**

As historians have extensively documented,<sup>2</sup> advocates of the expansion of state-regulated primary education argued that the state had a stake in how children were raised—what moral values, manners, habits, and aspirations they developed—because this influenced the state’s stability. By shaping children’s moral character, primary schools could instill respect for the state and its laws, preventing violence, crime, and dissident behavior, and promoting long-term political stability. The circulation of ideas about the state-building role of mass education is a scope condition of my argument. In this respect, I build on diffusion theory.

Primary schools, proponents argued, would foster long-term order through three main mechanisms. First, schools could convince the masses from a young age to be content with what they had. Teaching values of moderation and self-sacrifice, and inculcating the belief that happiness resulted from accepting one’s lot, were common goals of primary schools throughout the nineteenth century. Second, schools could shape behavior by instilling fear of punishment for misbehavior, or conversely, by promoting rewards for proper behavior. Stealing, vandalism, quarreling, cheating, lying, and cursing, were typically punished, as were questioning the teacher, speaking out of turn, or disobeying school rules or teachers’ instructions. Sitting quietly and completing tasks as instructed were praised publicly. School punishments and rewards sought to teach children that their behavior had consequences, and that obedience, compliance, and respect for

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<sup>2</sup> This sub-section builds on a vast historical literature on the development of national primary education systems. For recent edited volumes covering Europe and Latin America, see Brockliss and Sheldon (2012) and Westberg et al. (2019).

existing rules and authorities were in their own best interest. Third, proponents argued that schools could cultivate unconscious habits of compliance and deference simply through repetition. The mere act of attending school every day and following schedules, routines, and rituals like marching in silence from classroom to breakroom, would make individuals internalize from a young age what constituted good manners and civil behavior.<sup>3</sup>

Importantly, primary education was usually considered a terminal degree for the masses, not a platform to further education. During most of the history of public schooling, secondary schools and universities were reserved for the upper classes.<sup>4</sup>

Targeting *children* to maintain social order was primarily a long-term investment; while schools could keep children from the streets in the short term, their main function was to shape the values and behavior of *future* citizens. This strategy was influenced by a long tradition in political philosophy arguing that children are more “malleable”<sup>5</sup> than adults—a *tabula rasa* according to Locke. Plato argued that a child is “prone to excess” and “therefore needs restraint,”<sup>6</sup> and “guiding children towards correct reason, as defined by law”<sup>7</sup> can “tame” children and

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<sup>3</sup> First-hand descriptions of school routines’ expected effect on children’s behavior include, e.g., Sarmiento (1849), Alexander (1919), and Kandel (1933).

<sup>4</sup> Brockliss and Sheldon (2012, 91-92).

<sup>5</sup> Plato, *Republic* 377a-b, 52.

<sup>6</sup> Plato, *Laws* 808d-e, 270.

<sup>7</sup> Plato, *Laws* 659d, 77.

prevent them from becoming a “savage creature.”<sup>8</sup> Rousseau reinforced these ideas, writing that “to form citizens is not the business of a single day, and to have them be citizens when they are men, they have to be taught when they are children.”<sup>9</sup>

Because these ideas about primary schools’ role differ markedly from present-day arguments that education promotes personal autonomy and empowerment, considering the kinds of ideas that shaped the design of primary education systems from the late-eighteenth to the early-twentieth centuries is helpful. For example, in Prussia, an early global leader in primary education provision,<sup>10</sup> historians agree that the state conceived compulsory schooling “as a mechanism of social control to indoctrinate children,” not of social mobility (Barkin 1983, 32). Advisers to Frederick II emphasized that primary schools must inculcate “loyalty, obedience and devotion to the king,” and teach children that “to resist authority is to rebel against the divine order,” punishable with “eternal damnation.”<sup>11</sup> Frederick II himself told his Minister of Education that “teachers in the countryside [must] instruct the young in religion and morals ... and educate them far enough that they neither steal nor murder,” and contended that primary education must *not* promote social mobility or rural-urban migration. Concerned that if children

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<sup>8</sup> Plato, *Laws* 766a, 218.

<sup>9</sup> Rousseau, *Discourse...*, 20.

<sup>10</sup> Prussia adopted comprehensive school regulations in 1754 and 1763 under Frederick II (Melton 2002).

<sup>11</sup> Melton (2002, 186).

learned “too much, they rush off to the cities and want to become secretaries or clerks,” the king maintained that children “must be taught in such a way that they will not run away from the villages but remain there contentedly.” Prussian education reformers like Johann Hecker and Johann Felbiger, who authored key reforms in the late eighteenth century, advised Frederick II that targeting children was an effective means to instill lifelong obedience to authority, more so than repression:

“Human beings are by nature moved by kindness and reason rather than force. Despotic methods will not induce pupils to obey. They must be convinced that it is useful and correct to follow the schoolmaster’s wishes. Only then will they learn to obey even in situations where force is absent. In this way, the schoolmaster accomplishes his most important task: his pupils will observe their duties not only in school, but throughout their lives.”<sup>12</sup>

The Prussian education model emphasizing discipline, acceptance of one’s lot, and respect for authority, is significant because it heavily influenced the design of primary education systems worldwide (Ramirez and Boli 1987). Dozens of government officials from Europe and the Americas traveled to Prussia to observe its primary schools; back home, they shared what they learned about designing a public primary education system. Victor Cousin in France, Horace Mann in the United States, and Domingo Sarmiento in Argentina are among the many politicians who, after traveling to Prussia, disseminated the view that “moral education is precisely the goal of primary instruction,”<sup>13</sup> and that primary education

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<sup>12</sup> Felbiger, cited in Melton (2002, 187).

<sup>13</sup> Cousin (1833, 4).

should focus on eradicating “the great body of vices and crimes which sadden and torment the community,”<sup>14</sup> “soften the habits” of the “savage” and “barbarian” masses, and engender among them “disgust toward violence and the shedding of blood.”<sup>15</sup>

Educational ideas were necessary but often insufficient; they circulated among elites well before central governments decided to promote primary education. What prompted national elites to implement these ideas? In contrast to diffusion theory, which argues that a country’s domestic characteristics, and specifically internal disorder, played an insignificant role in the expansion of primary schooling (Meyer et al. 1977; Boli, Ramirez, and Meyer 1985; Meyer et al. 1992), I argue that internal disorder crises that threatened the central government often catalyzed elites’ support for a state-building project that included mass education.

### **The catalyzing role of internal conflict**

Experiencing internal conflict helped convince national elites that expanding primary education was a worthwhile investment to prevent future threats against the central government. The starting point of this argument is the assumption that national elites want to maintain power and promote social order. To accomplish this, they can choose from a set of policy tools: physical repression, redistribution to buy off potential or former rebels, and mass indoctrination (including primary education). The decision to expand primary education depends on expected costs and benefits. Episodes of internal disorder, particularly those involving mass

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<sup>14</sup> Mann (1847, 48).

<sup>15</sup> Sarmiento (1849, 48, 50, 55).

violence and perceived by national elites as destabilizing, can lead elites to recalculate the costs and benefits of mass indoctrination, resulting in increased elite support for educational expansion.

During times of internal peace, it is natural to focus on the large costs of expanding education (e.g., school construction, teacher training, etc.). Although education reformers may insist that the long-term benefits of expanding education will offset these costs, many elites will likely remain unconvinced. The observed internal peace suggests to them that the existing policy mix used to secure order is adequate, rendering the costly expansion of education unnecessary. However, when internal conflict tangibly upsets the central government's authority, national elites previously content with existing policies can become more convinced that they need new policies to promote order, including mass education. Elites who experience destabilizing internal conflict may conclude that providing primary education will be more beneficial than they thought before conflict occurred.

Exposure to internal conflict can lead elites to update their perceptions of the costs and benefits of mass education through at least two informational channels. First, although elites care about the possibility of mass rebellion even in peaceful times, they have imperfect information about the magnitude of this threat. The occurrence of violent mass internal conflict can lead elites to update their perceptions and conclude that the masses are more dangerous and prone to rebellion than they previously thought. Second, internal conflict can reveal limitations in the state's repressive apparatus. For instance, unexpected difficulties in accessing rebellious regions, or police forces' joining the rebels they were supposed to repress, can suggest that repression may fail to quash rebellion, and

that indoctrinating the masses to prevent conflict from emerging in the first place may be worthwhile.<sup>16</sup>

The theory does *not* imply that national elites will respond to internal conflict *only* with educational expansion; primary education is only one of several tools used to promote order. Repression and redistribution may help restore order in the short term by quashing rebellion and addressing rebel grievances. By contrast, mass education is mostly used to promote long-term social order by convincing future citizens to accept the status quo and respect the state's authority.

### **Minimizing the risks of educating the masses through institutional design**

Although elites believed that certain kinds of education could lead the masses to develop aspirations that threatened the established order, they also believed they could design primary education institutions to prevent these aspirations from emerging. Moreover, the frightening experience of internal conflict increased the number of elites who saw even greater risks in *not* educating the masses.

To prevent education from empowering the masses, central governments introduced comprehensive education laws and regulations that, for example, imposed a national curriculum to control educational content, specified what textbooks to use, gave the state extensive powers to train teachers, established procedures to assess aspiring teachers' moral qualifications to act as agents of the

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<sup>16</sup> In addition to rational recalculation of expected benefits, psychologists argue that personal experience of catastrophes activates primitive brain regions, generating exaggerated responses due to fear (Weber 2006). Disentangling emotional and rational mechanisms could be a fruitful path for future research.

state, and created a centralized school inspection system. National curriculum content varied across countries depending on prevailing religious or secular views of morality (Guevara, Paglayan, and Pérez-Navarro 2018). Frequently but not always, a common language was imposed, and different curriculums were stipulated for rural vs. urban areas, and girls vs. boys. These various forms of centralized education intervention sought to ensure that, regardless of who ran the daily operations of schools (e.g., the state, local governments, the church), primary education served the state's goals to maintain power and promote order.

### **Motivations vs. Consequences**

The theory does not imply that primary education succeeded in promoting order. My argument concerns the motivations behind central governments' support for primary education, not whether education accomplished the intended goals. It is possible that, despite national elites' intentions, primary schooling contributed to social mobility, economic modernization, and political instability. Education policies frequently fail to produce reformers' intended outcomes. This can happen, for instance, if students and families react in unforeseen ways that defy these goals (Fouka 2020), or if the state fails to ensure teachers' accurate implementation of education policies (Abbott et al. 2017). The consequences of primary education are an important but separate issue that I leave for future research.

### **Testable implications and scope conditions**

Three key predictions stem from this theory: (1) internal conflicts involving mass violence and perceived by national elites as destabilizing will tend to lead to an increase in state-regulated primary education; (2) this expansion will be greater in areas where repression was less effective in containing the conflict; and (3) ideas

about the role of primary education to maintain social order will become more salient among political elites who experience acute internal conflict.

These predictions (1) apply to contexts where the conceptualization of education as indoctrination is common; (2) refer to internal conflicts that are perceived by national elites as threatening to the state's authority and involve mass participation (although not necessarily led by the masses); (3) require a minimum threshold of fiscal capacity to support educational expansion; and (4) assume that political elites have a sufficiently long time horizon to reap the expected benefits of educating children.

The next section tests the first theoretical implication with cross-national data. The following section tests the other two implications using subnational variation and qualitative data from Chile. I then discuss what the scope conditions outlined above imply for the theory's generalizability across different types of political regimes.

## CROSS-NATIONAL EVIDENCE: CIVIL WARS AND THE EXPANSION OF PRIMARY EDUCATION

This section provides evidence of a systematic relationship between primary education provision and one type of internal conflict that, according to the theory, will incentivize elites to expand primary education: civil wars between a state and a group within its borders. To assess whether civil wars lead to educational expansion, I use an original longitudinal dataset of primary school enrollment rates for 40 European and Latin American countries, and data on the timing of civil wars from the Correlates of War Project (CoW).

Although my theory is not exclusively about civil wars, there are three reasons for focusing the empirical analysis on this type of conflict. First, civil wars involving the state are likely to be perceived as threatening to the state's authority, a key scope condition of the theory. Second, other theories suggest civil wars should reduce or not affect, but not increase, education provision. Therefore, civil wars constitute a hard test. Third, civil war occurrence, unlike other types of internal conflict that could also be perceived as threatening by elites, has been coded by others. This prevents unconscious coding of conflict in a way that biases the findings in my theory's favor.

### **Historical Data**

*Original data on primary school enrollment rates (SERs) in Europe and Latin America, 1828-2015.* I use an original country-level dataset containing annual primary SERs as a proportion of the population ages 5-14 for 40 European and Latin American countries from 1828-2015, though each country's start date depends on when state-controlled primary education emerged and when states began collecting enrollment statistics. SERs are not a perfect measure of schooling

supply but are the most common measure of education provision in quantitative historical research because, unlike number of schools or education expenditures, they are consistently available across many countries since the nineteenth century.

Online Appendix B explains how I constructed the dataset.<sup>17</sup> I began with annual student enrollment data compiled by Brian Mitchell and published by Palgrave Macmillan (2010). After determining the reliability of Mitchell's annual data by contrasting it with decennial data from Benavot and Riddle (1988) for 1870-1940, I extended the series backwards using country-specific primary and secondary sources, multiple volumes of the U.S. Bureau of Education's annual *Reports of the Commissioner of Education* (1872-1915), and Flora (1983).

To the best of my knowledge, my dataset provides a longer coverage on primary SERs for Europe and Latin America than any other cross-national dataset. In particular, while the earliest data coincides with Mitchell for 18 countries, I extended the series backwards by on average 26 years for 22 countries.<sup>18</sup>

*Civil war.* I use the Correlates of War Project (CoW) to identify civil wars from 1830-2015 that involved the state as an actor. This includes wars fought for central control and wars fought over local issues but where the state was an actor.<sup>19</sup> Of the 40 countries with enrollment data, 23 experienced at least one such war since 1830 and have pre-treatment primary SER data. In each country, I focus on the

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<sup>17</sup> A detailed explanation and the original dataset are available on APSR Dataverse:

<https://doi.org/10.7910/DVN/3TSTEH>.

<sup>18</sup> Figure A1 shows primary SER time trends by region.

<sup>19</sup> Intrastate wars between or among nonstate actors are excluded.

earliest civil war with pre- and post-treatment data both because of the concern that subsequent wars might be endogenous to the provision of education triggered by previous wars, and because of the article's theoretical interest in the early stages of public education.<sup>20</sup> Among the 23 civil wars identified, 15 begin and end within one year; 6 last two to six years, and 2 last more than six years. Twelve wars occurred during non-democratic regimes (i.e., there was a non-democratic regime before, during, and after the war), and 11 wars overlapped with regime change.

***Regime type.*** Following Boix, Miller and Rosato (2013), I code countries as democratic when there are open and competitive elections and a majority of adult males can vote, and as non-democratic otherwise.

### **Impact of Civil Wars**

I begin by providing evidence of a previously undetected pattern of acceleration in primary school coverage following civil wars that is consistent with my theory and at odds with the argument that civil wars hinder state capacity investments. Figure 1 shows, in black, the average primary SER among countries that experienced civil war, during the 10 years before the war's outbreak and the 20 years after the war's end.<sup>21</sup> Panel A includes the 23 countries that experienced at least one civil war from 1830-2015; Panel B focuses on the 12 countries where a civil war occurred under non-democracy, given the article's interest in the puzzling expansion of primary schooling under non-democracies. The grey line shows primary SERs in countries that did not experience civil war, a useful comparison group to assess if

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<sup>20</sup> Table A1 provides details by country.

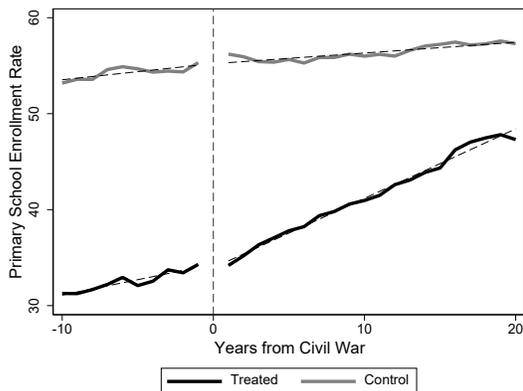
<sup>21</sup>  $t = 0$ , excluded from Figure 1, encompasses all the years that a civil war lasted.

the patterns observed among war-afflicted countries are unique to them or reflect secular trends affecting all countries irrespective of experiencing civil war.

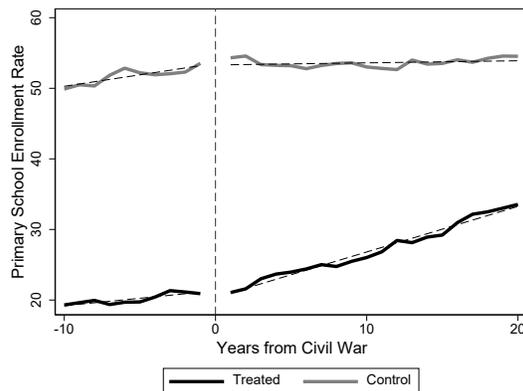
Both panels show, on average, a marked post-war acceleration in primary SERs among countries that experienced civil war but no acceleration among comparison countries. In non-democracies (Panel B), primary SERs expanded mildly before civil wars, reaching an average of 20%; after civil wars ended, primary SERs accelerated, reaching 32% within 20 years. This acceleration does not appear to be driven by common shocks affecting all countries: there is no acceleration in countries that did not experience civil war.

**Figure 1. Average Primary School Enrollment Rate 10 Years Before the Outbreak and 20 Years After the End of Civil War, Europe and Latin America 1828-2015**

Panel A: All civil wars



Panel B: Civil wars that occurred under non-democratic regimes



*Note:* Average primary SER trend of countries that experienced civil war in black. **Panel A** includes all civil wars. **Panel B** focuses on civil wars that occurred during non-democratic regimes. For each country where civil war began in year  $t=T$ , I compute the trend of a control group, which in any given year  $t$  is composed of countries that did not have a civil in that year or previous years, weighted equally. I then compute the average trend across all control groups, depicted by the grey lines.

*Source:* Author for primary SERs; CoW for timing of civil wars.

To further assess the role of civil wars, I estimate an event study model that uses information from countries without a civil war to estimate the counterfactual trend of countries that did experience civil war:<sup>22</sup>

$$(1) \quad Y_{i,t} = \gamma_i + \phi_t + \sum_{\substack{n=-10 \\ n \neq -1}}^{20} \beta_n I_{i,t}^n + \epsilon_{i,t}$$

<sup>22</sup> For treated country  $i$  in year  $t$ , the control group consists of all countries that had not yet experienced civil war in year  $t$ ; this includes both countries that never experienced civil war and those that experienced civil war later on.

Here,  $\gamma_i$  accounts for permanent observable and unobservable country characteristics that influence the probability of civil war and the level of education provision;  $\phi_t$  accounts for any common time shocks that affect countries with and without civil war; and the dummies  $I_{i,t}^n$  indicate whether country  $i$  in year  $t$  is  $n$  years away from a civil war. In the results below,  $n = 0$  represents the year when civil war begins. The results are similar if we instead define the treatment as the year when civil war ends (Figure A2).

This model has two advantages over a linear difference-in-differences model: it estimates the effect of civil war at different points in time and allows us to examine the plausibility of the identifying parallel trends assumption. Under the identifying assumption that the post-war SER trend of countries that experienced a civil war would have been parallel to the trend of countries that did not, the  $\beta_n$  parameters for  $n > 0$  can be interpreted as the effect of civil war  $n$  years after the civil war relative to the year before civil war onset.<sup>23</sup> For  $n < 0$ ,  $\beta_n = 0$  would indicate the presence of parallel pre-treatment trends between treated and control units, which would increase the plausibility of the identifying assumption in the post-treatment period.

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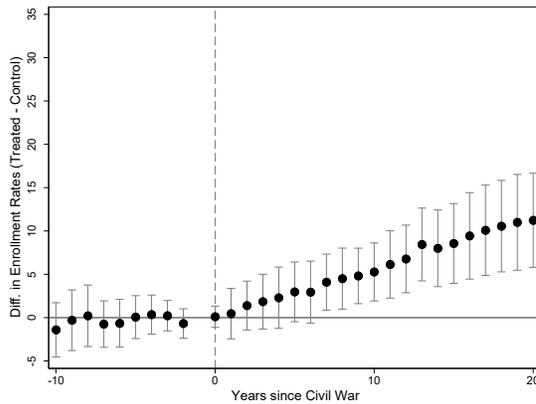
<sup>23</sup> Note that if countries in the control group experienced a civil war before the period of analysis and this led to an acceleration of primary SERs, or anticipated civil war and responded by expanding primary education, the results below underestimate the effect of civil war on primary SERs.

The results, shown in Figure 2, are consistent with the theory: civil wars were followed by an expansion of primary SERs beyond the expansion observed in countries not afflicted by war. Panel A shows the average estimated effect of civil war for all 23 countries that experienced a civil war regardless of political regime, and 95% confidence intervals from standard errors clustered at the country level. Panel B shows the average estimated effect of civil war for the 12 countries whose civil war occurred under a non-democratic regime. The y-axis scale was chosen to facilitate comparison of the point estimates with the average primary SER reached right before the outbreak of civil war: 34% for wars in Panel A and 20% for those in Panel B.

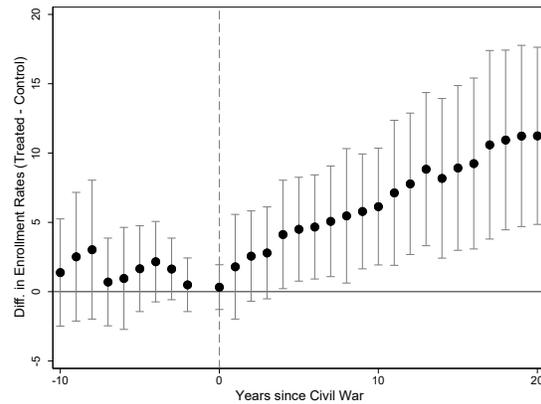
Three main findings emerge. First, the estimated coefficients for  $n < 0$  are close to zero and not statistically different from zero, lending credibility to the identifying assumption. Second, the estimated coefficients for  $n > 0$  suggest that war-afflicted countries saw a gradual and sustained increase in primary SERs after the war that exceeded the contemporaneous increase in countries that did not experience civil war. Third, the estimated long-term effect of civil wars on primary SERs is large: in non-democratic regimes (Panel B), civil wars increased primary SERs by 11.2 p.p. within 20 years of the war, which represents a 56% increase from the pre-war average SER of 20%.

**Figure 2. Event Study Estimate of the Effect of Civil War on Primary School Enrollment Rates**

Panel A: All civil wars



Panel B: Civil wars that occurred under non-democratic regimes



*Note.* Point estimates and 95% confidence intervals for the effect of civil war on primary SERs, based on an event study model (Equation 1) estimated for the 10 years before and the 20 years after civil war onset. Standards errors clustered at the country level. **Panel A** includes all civil wars. **Panel B** estimates the effect of civil wars that occurred during non-democratic regimes. Full regression results are available on APSR Dataverse.

*Source.* Author for primary SERs; CoW for timing of civil wars.

In additional analyses reported in Online Appendix A, I find that these results are not driven by civil wars that brought liberals to power (Table A2). The results are also unlikely to capture a general catalyzing effect of crises broadly understood; while civil wars, which are crises of *internal order*, increase primary SERs, banking crises—another well-studied type of crisis—do not (Figure A3). The results are not driven by outliers; they reflect a common phenomenon across a majority of countries that experienced civil war (Figures A4-A6). Lastly, the results remain unchanged when implementing Goodman-Bacon (2021) and Baker et al.’s (2021) proposed solution to the potential problem of bias in difference-in-differences (Table A3).

Together, these results provide support for the argument that destabilizing internal conflict, particularly civil war, was an important driver of the expansion of primary education systems in Europe and Latin America over the last 200 years. Four limitations are noteworthy. First, we do not know whether civil wars drove educational expansion in other regions or before the nineteenth century. Second, it is difficult to ascertain if the estimates reflect a causal impact of wars. Making a causal claim requires us to assume there were no temporal shocks (besides civil war) that differentially affected war-afflicted countries in the post-war period. This is a strong assumption; in addition to experiencing civil wars at different times, countries often underwent major economic and political processes at different times. Measuring these cross-country differences reliably is especially difficult in historical contexts. Third, while SERs are a common measure of education provision, they reflect both supply- and demand-side decisions. Because the theory seeks to explain supply-side decisions, a better test would rely on the number of schools—ideally, schools constructed, funded, or regulated by the central government. Unfortunately, this measure is not consistently available across countries. Fourth, even if we believe that the results provide evidence of a causal effect of civil wars on primary education provision, the results do not clarify what mechanisms explain that relationship. The next section addresses these limitations through a study of the 1859 Chilean civil war.

### **PRIMARY EDUCATION AFTER THE 1859 CHILEAN CIVIL WAR**

The cross-national analysis documents a pattern of educational expansion following civil wars in Europe and Latin America, consistent with the theory's first prediction. This section tests the two other theoretical predictions through a case

study of the consequences of the 1859 Chilean civil war.<sup>24</sup> Following the civil war, the national government centralized the regulation and provision of primary education. Exploiting subnational variation in exposure to the war, I find that the government expanded primary education especially in former rebel provinces where repression was least effective. I assess alternative explanations for this pattern and provide qualitative evidence that the civil war changed national elites' beliefs about the importance of expanding primary education to prevent social disorder.

### **The 1859 Civil War**

Chile is a well-known example of early successful state-building in Latin America (Soifer 2015). After prevailing over liberals in the 1829-30 civil war, conservative elites consolidated their political hegemony, aided by the 1833 Constitution, which concentrated presidential power, established a close state-Church relationship, and limited the franchise to wealthy, literate men. A twenty-five-year period of political stability followed. In 1851, a dispute among conservative elites over the successor of conservative President Bulnes escalated into civil war, but the conflict lacked mass participation (Collier 2003, 98-102) and did not threaten the established order (Ortega and Rubio 2006).

When civil war emerged again in 1859, during the conservative presidency of Manuel Montt, it involved mass participation and threatened the state's stability, a key scope condition (Fernández 2016, 213-223; Edwards 1932, 258-60; Collier

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<sup>24</sup> Chile also had civil wars in 1829-30, 1851, and 1891, but the 1859 civil war was the first to meet all scope conditions and the first with adequate subnational data to assess the second theoretical prediction.

2003, 223-8; Zeitlin 1984, 67-8). In January, radical liberal elites in Atacama, a northern mining province, mobilized the local population to confront the central government. Rebels demanded lower taxes on copper and silver exports and a new Constitution with reduced central government and presidential powers and no intromission of the Church in state matters (Fernández 2016). Initially, rebels outnumbered government forces 4-to-1, but Montt's recruitment efforts, the support he received from traditional liberals who also feared the constitutional reform demanded by radical rebels, and a tactical mistake on the rebels' side, all precipitated their defeat in May (Edwards and Frei 1949; Ortega and Rubio 2006). Because of the scope of rebels' demands and the central government's difficulty defeating them, this war was "the most acute conflict that the ruling oligarchy faced since the consolidation of its political project in the 1830s" (Ortega and Rubio 2006, 13). The war brought together liberal and conservative elites in Santiago, who even after the war ended remained united against the new Radical Party formed by former rebels (Edwards and Frei 1949).

### **Education Ideas, Centralization, and Expansion**

The 1833 Constitution gave the state the mandate to promote public education generally but left the management and funding of *primary* education to municipalities, reflecting national elites' greater concern about promoting secondary and university education to train bureaucrats (Jaksić and Serrano 1990). However, in the 1840s ideas about the political importance of primary education began to spread among national elites. Essential was the work of D.F. Sarmiento, an exiled Argentine politician who, upon arriving in Chile in 1840, became a prolific writer (Campobassi 1975). Sarmiento argued that primary education was necessary

to extirpate the masses' violent predispositions and thus promote social order in newly independent Latin American countries (Sarmiento 1845). His emphasis on the moralizing and civilizing function of mass education was shared by other Chilean intellectuals, including the liberal Amunátegui brothers (Amunátegui 1856). The Chilean government gave Sarmiento space to implement some of his ideas. In 1842, he founded the first state-controlled institution to train primary school teachers. In 1845, after publishing a controversial book that damaged relations with Argentina, the Chilean government sent Sarmiento on an official mission to learn about primary education in Europe and the United States (Campobassi 1975). Those trips resulted in the publication of *Educación Popular* in 1849, where he continued advocating for a national primary education system and detailed how to design it.

Despite the circulation of these ideas among national elites, during the 1840s and 1850s primary schooling expanded largely through municipal and private initiatives. The central government sometimes subsidized municipal schools, but subsidies were allocated “haphazardly” in response to demands articulated by local elites, lacking any central planning (Serrano, Ponce de León, and Rengifo 2012, 156-8). In 1843 and 1849, bills organizing primary education under a national framework lacked congressional support (Egaña 2000).

This changed after the 1859 civil war. In 1860 Congress passed the *General Law of Primary Education*, the first comprehensive national law regulating primary education, considered “a political and legislative landmark” (Serrano, Ponce de León, and Rengifo 2012, 159). This law replaced the decentralized educational expansion with a system featuring the central government as the main provider,

funder, regulator, and supervisor of primary education. The law prohibited public school tuition, imposed a national curriculum emphasizing moral and religious education, required teacher training in state-controlled institutions, and created a centralized inspectorate<sup>25</sup> (Egaña 2000; Serrano, Ponce de León, and Rengifo 2012).

Implementation of the law began with the 1863 *Reglamento General de Instrucción Primaria*, overseen by an ultra-conservative Minister of Justice, Worship, and Public Instruction (Edwards 1932; Egaña 2000). The following decade saw primary school enrollment increase from 12.3% to 19%, outpacing the expansion seen the previous decade (Figure A7). In addition to reorganizing the supply of schools, the government distributed textbooks that emphasized “the strengthening of feelings of compassion, love, respect and obedience ... to God and the fatherland” and taught children that “if you are a subject, you must obey and behave well” (Serrano, Ponce de León, and Rengifo 2012, 310-312).

### **Educational Expansion across Provinces**

If my theory helps explain the central government’s primary education efforts after the civil war, we should observe more expansion in provinces where the government faced greater challenges from rebels. I examine this prediction using annual provincial-level data from multiple years of the *Anuario Estadístico de la República de Chile* for two measures of provision: number of primary schools maintained by the central government and student enrollment in primary schools, both adjusted by provincial population size. I use Ortega and Rubio’s (2006) account of the civil

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<sup>25</sup> <http://www.archivonacional.cl/616/w3-article-28319.html>

war to classify provinces by their level of threat to the central government. The greatest challenge came from Atacama, the instigator and hotbed of rebellion. In Aconcagua, Coquimbo,<sup>26</sup> Colchagua, and Talca, local rebellion was quickly contained through repression. Several provinces saw no rebellions.

In line with the theory's prediction, Figure 3 shows that while the number of primary schools and students increased rapidly in Chile following the 1863 *Reglamento* (Panel A), the central government's efforts in Atacama mainly drove the expansion (Panel B). In complementary analyses using synthetic control methods, I estimate that the number of primary schools in Atacama after the 1863 *Reglamento* would have been 26% lower had Atacama *not* challenged the central government (see Figure A8).

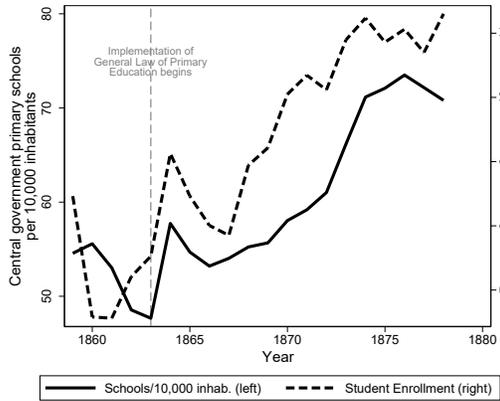
Figure 4 disaggregates the analysis further, showing that, as predicted, the central government's effort was greatest in Atacama, whose rebels presented the greatest challenge to central authority. By contrast, in provinces that joined Atacama but were easily defeated, the government barely expanded education. In these provinces, the central government's effort to expand primary education resembled its effort in provinces that did not rebel.

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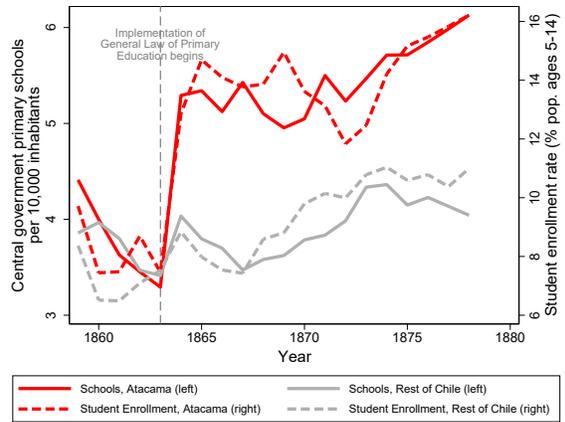
<sup>26</sup> Although two important battles, Los Loros and Cerro Grande, were fought in Coquimbo, the rebel troops were recruited primarily from Atacama's civil population, used weapons produced in Atacama, and were led by Atacama rebel leaders (Fernández 2016).

**Figure 3. Public Primary Schools and Enrollment in Chile, 1859-1878**

Panel A: All Provinces

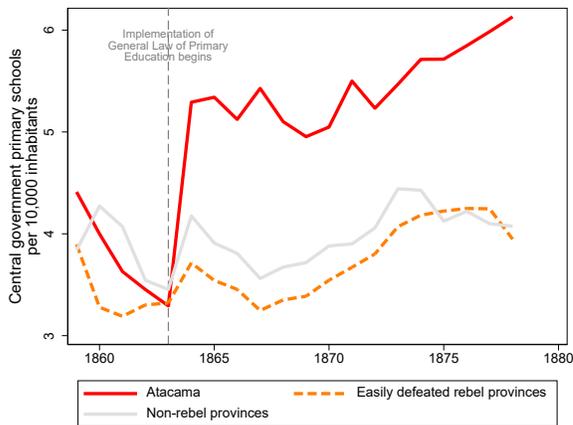


Panel B: Atacama vs. Rest of Chile



Source: Author based on *Anuario Estadístico de la República de Chile* (multiple years).

**Figure 4. Public Primary Schools by Level of Participation in the 1859 Chilean Civil War, 1859-1878**



Note: Easily defeated provinces include Aconcagua, Colchagua, Coquimbo, and Talca. Classification of provinces based on Ortega and Rubio (2006).

Source: Author based on *Anuario Estadístico de la República de Chile* (multiple years).

## **Alternative Explanations**

The patterns shown in Figures 3B and 4, while consistent with my argument, could have alternative explanations. One question is whether the central government expanded primary education in Atacama to appease rebels through redistribution. The content of primary education offers clues about this argument's plausibility. Recall that Atacama rebels opposed Church intromission in state matters. If the government sought to appease rebels, it would have promoted secular education. However, it promoted heavily Catholic schools. The 1860 General Law of Primary Education established a national curriculum that mandated teaching "Christian doctrine and morality." Textbooks distributed by the central government to teach reading and writing featured considerable religious content (Serrano, Ponce de León, and Rengifo 2012). Montt's presidential successor, Pérez Mascayano, appointed a fervent supporter of the Catholic Church to oversee implementation of the law through the Ministry of Justice, Worship, and Public Instruction (Edwards 1932). This is the opposite of what Atacama rebels would have demanded.

Further, were the central government responding to unmet demand for education, we should find considerable evidence that national elites during the 1860s believed there was such unmet demand. However, the historical literature suggests that elites generally believed that parents were "indifferent" or "resistant" to primary schooling due to "ignorance" and "selfish" reliance on children's labor (Chile 1860; Egaña 2000; Archivo Nacional de Chile). Their assessment need not be correct, but elites formed their beliefs using school inspectors' reports, which frequently claimed that "parents' general indifference toward their children's

education continues to be the most powerful obstacle we face when it comes to disseminating primary instruction” (Egaña 2000). If unmet demand existed, most members of Congress appear to have ignored it (Ponce de León 2010).

Another possibility is that Atacama’s educational expansion was driven by the central government’s interest in fostering the mining economy. If this were true, we should observe a similar expansion in Coquimbo. These neighboring provinces comprised the *Norte Chico*, which was home to Chile’s copper and silver deposits and accounted for most of Chile’s mineral exports (Pederson 1965). If instead educational expansion responded to the civil war, we should observe greater expansion in Atacama than Coquimbo, since Coquimbo rebels were easily defeated by the central government (Ortega and Rubio 2006). We observe the latter, as shown in Figure A9.

A third possibility is that interstate wars drove Atacama’s educational expansion. This explanation would require an active war or imminent threat just before the large expansion observed in Atacama in 1864. However, Chile fought wars against neighbor states in 1836-39 and 1879-84 and against Spain in 1865-66. While the expansion of primary education in the late 1860s could be partly a response to the war against Spain, it is unclear why the government would have targeted Atacama specifically. Moreover, the sharpest expansion of Atacama’s primary education occurred in 1864, when international peace prevailed.

The graphs above depict the number of schools controlled by the central government, implying that differences in local capacity are unlikely to explain Atacama’s educational expansion. Nonetheless, perhaps the central government had wanted to expand primary education in Atacama before the civil war, but the

war induced improvements in fiscal capacity that enabled the central government to carry out that expansion. If this were true, we should observe growth in national fiscal revenues after the 1859 war and preceding primary education expansion in Atacama. In fact, Atacama saw a large increase in the number of primary schools in 1864, despite *declining* national fiscal revenues between 1859 and 1864 (see Figure A10), which suggests that Atacama’s educational expansion was not driven by war-induced increases in fiscal capacity.<sup>27</sup>

Finally, I consider whether diffusion theory can explain the patterns shown in Figures 3B and 4. Diffusion theory predicts educational expansion resulting from the circulation of international ideas about the state-building role of primary education, and an insignificant effect of domestic factors—including the 1859 civil war—on patterns of educational expansion. In Chile, as discussed earlier, these ideas circulated widely since the 1840s and contributed to national efforts to promote primary education in the 1840s and 1850s, including founding a teacher training institution and subsidizing municipal schools. However, diffusion theory does not explain why proposals for a comprehensive national primary education law failed in 1843 and 1849—when ideas already circulated—but succeeded in 1860. Additionally, diffusion theory, by minimizing the role of domestic factors, does not explain why the civil war of 1859 led the central government to expand primary education in Atacama.

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<sup>27</sup> Greater population growth in Atacama than the rest of Chile does not explain the patterns shown because the number of schools and students are adjusted by total provincial population.

Below I present evidence that the war changed the salience of ideas about the state-building role of education.

### **Civil War as a Catalyzer of Mass Indoctrination**

If my theory explains the central government's education efforts after the 1859 civil war, we should observe that the war changed national elites' beliefs about the importance of expanding primary education. To assess whether this prediction finds empirical support, I examine the content of conservative president Manuel Montt's speeches during the inauguration of congressional sessions preceding and immediately following the 1859 war. I focus on presidential speeches because rebel demands directly threatened the president's power and because, owing to the 1833 Chilean Constitution, the president had extensive agenda-setting and policymaking powers.

The 1857, 1858, and 1859 presidential speeches suggest the importance of the civil war in strengthening ideas about the state-building role of primary education. Both in 1857 and 1858, before the war, Montt began his speech noting the peacefulness of the previous year, and mentioned primary education only briefly, expressing satisfaction with its rate of expansion.

By contrast, Montt's speech to Congress in 1859, delivered one month after the end of the civil war, began: "The Republic's fundamental institutions and the order that rests on them have just suffered a difficult test," in reference to the war. Montt linked the "anarchy and disorder" of 1859 to rebel leaders' ability to mobilize the masses, whom he claimed had "evil passions" and poor moral values:

"[The rebels] looked for support ... in the evil passions and ignorance of the masses, which unfortunately abound. That way they ... introduced

anarchy... a state of disorder... The crisis... deteriorated the moral values of the masses and weakened their respect for authority..."

In addition to telling congressmen that "it is essential" for the central government "to ensure tranquility and domestic order more efficaciously," Montt urged them to pass a national primary education law to address the moral roots of disorder. Departing from pre-war speeches in his assessment of the state of primary education, in 1859 Montt argued that "Primary schooling... does not satisfy our needs:"

"A large part of the evils that affect the public order ... are rooted in ignorance. Extirpating it through a system of common schools that enlightens the masses by correcting their bad habits and teaching them proper behavior is the most urgent task you can devote yourselves to."

In sum, the Chilean civil war of 1859 threatened the state's authority. In response, the central government took over primary education and expanded its provision in former rebel areas. The president's speeches show that crucial to the central government's postwar educational efforts was the belief that indoctrinating the masses would help prevent future civil wars.

## DISCUSSION

I have argued that violent internal conflict pitting the masses against the state creates incentives to indoctrinate future citizens and helps explain why non-democracies in Europe and Latin America expanded primary education. An important question for future research is whether this theory travels across different political regimes, types of internal conflict, regions, and periods.

Although the empirical analysis has focused on civil wars in non-democracies in Europe and Latin America, the scope conditions do not limit the theory to non-

democracies, Western societies, or civil wars alone. Many types of violent internal conflict involving mass participation can feel threatening to national elites. For threatening conflicts to move elites to expand mass education, elites must have a sufficiently long time horizon to reap the expected long-term political benefits of educating children. This condition can hold in various types of non-democracies (e.g., absolutist and constitutional monarchies, oligarchies, hegemonic-party and personalist dictatorships), and sometimes also in democracies.

Historians have identified examples of conflict-driven mass education reform in many different contexts. An example is absolutist Prussia, where according to Melton (2002, 145-99), Frederick II's introduction of compulsory primary schooling in rural areas to teach obedience and respect for authority was conceived as a long-term solution to the problem of social disorder revealed by peasant rebellions in the 1740s-1750s. Oligarchic Argentina in the 1880s, according to Tedesco (1986, 64), is another example of centrally-led primary education expansion to moralize the masses and accomplish "internal political stability by ... eliminating pockets of resistance to the central government that remained especially in the interior of the country." More recently and outside the West, 1970s Indonesia under Suharto offers a case of large-scale post-conflict primary education expansion to inculcate "adherence to unquestioned authority" and restore political stability in a hybrid military-party-personalist dictatorship (Leigh 1999, 51).

Another example of state promotion of primary education in response to mass violence comes from France during the July Monarchy (1830-48), a constitutional monarchy with a limited franchise but active parliament. After supporting the July Monarchy's ascension, workers and peasants quickly turned against the new regime

when the economy worsened (Pilbeam 1976). As “popular unrest reached alarming proportions” between 1830 and 1832 (Pilbeam 1976, 278), the central government’s concern about the “barbaric,” “turbulent,” and “anarchic” predisposition of the popular classes intensified (Guizot 1860, 119, 124, 207). When National Guard members joined the masses in rebellion, the limitations of relying on repression became apparent (Pilbeam 1976, 287). As concerns about the moral roots of mass violence grew (Guerry 1833), several royal ordinances were introduced between 1830-32 to increase the state’s control over primary education, and in June 1833 education minister François Guizot obtained parliamentary support for a comprehensive primary education law (Gontard 1959). The belief guiding these state efforts was that loyal teachers would “teach ordinary people obedience, respect for the law, [and] love of order” and thus “affirm social stability and the security of the Monarchy” (Gontard 1959, 493). Guizot himself argued that “when men have learned from childhood to respect the sovereign and its laws,” this becomes “a guarantee of rest and order” (Guizot 1860, 86).

The 1833 Guizot Law, considered the “most far-reaching primary education law in French history” (Toloudis 2012, 41), increased the state’s power to regulate and promote primary education. It required towns to maintain a primary school, authorized the central government to impose new taxes on towns that did not

actively raise education funds,<sup>28</sup> and imposed a national school curriculum that emphasized moral and religious instruction, reflecting the importance most elites assigned to religion as a moralizing agent. It also required *départments* to establish teacher training institutions and increased the state's power over teacher certification and school oversight, a move furthered in 1835 with the creation of a centralized inspectorate (Gontard 1959; Toloudis 2012).

The early 1830s saw an unprecedented expansion in the number of primary schools (Figure A11) and public education expenditures (Figure A12); enrollment rates grew from 32% in 1832 to 71% by the end of the July Monarchy. While part of the expansion corresponded to private and religious schools, most appears to have been driven by public schools (Figure A14), which were predominantly non-religious (Grew and Harrigan 1991, 280, 292). An exploratory statistical analysis suggests that primary education after the 1833 Guizot Law expanded more in departments that experienced more violence during 1830-32, and that the central government contributed to educational expansion in these areas by forcing otherwise reluctant local governments to fund primary schools.<sup>29</sup>

Finally, the United States may offer an example of conflict-driven education reform in a more democratic context. According to Kaestle (1983, 4-10), during the Early Republic, when a majority of white men could vote, the Founding Fathers'

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<sup>28</sup> This provision gave the law teeth to enforce educational expansion (Prost 1968, 92). Local and departmental funding for primary education increased sharply thereafter; national funding also increased to subsidize new schools (Figure A13).

<sup>29</sup> Results available upon request.

concern about promoting social order intensified following Shays' Rebellion (1786-87) and the Whiskey Rebellion (1791-94). To prevent future rebellions, Early Republic leaders proposed educating white people to teach them to express discontent through elections instead of anarchy. These ideas, argues Kaestle, shaped the first state laws encouraging elementary education in the 1780s-90s. More recently, the Black Lives Matter protests of 2020 triggered many efforts to introduce state legislation promoting "patriotic education" and prohibiting public schools from teaching "divisive concepts" such as institutional racism.<sup>30</sup>

These examples, though not meant as a test of the theory, do suggest the argument's plausibility in various political regimes, periods, and regions. Future research should rigorously test the generalizability of the theory I have articulated and refine the conditions under which we observe post-conflict education reform with indoctrination goals in mind.

## CONCLUSION

Mass violence played an important role in driving the expansion of primary schooling in Europe and Latin America. Influenced by the frightening experience of internal conflict involving mass participation, national elites expanded schooling to indoctrinate the masses into accepting the status quo and thus promote long-term social order and political stability. Consistent with this argument, I provide cross-national evidence of a pattern of primary school expansion following civil wars in Europe and Latin America that is not observed in countries without civil

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<sup>30</sup> <https://www.edweek.org/policy-politics/8-states-debate-bills-to-restrict-how-teachers-discuss-racism-sexism/2021/04>

war and is not explained by wars bringing liberals to power. I also examine the consequences of the 1859 Chilean civil war and show that, in line with the theory I propose, the war led the central government to expand primary schooling in provinces that had challenged it not as a concession to rebels but because experiencing civil war increased national elites' interest in teaching obedience and respect for authority to future citizens.

Three main questions for future research emerge from this study. First, does the theory of conflict-driven education reform I have articulated find support in contexts that differ from the ones studied here, such as democracies, non-Western societies, recurring conflicts lacking a clear end, or recent periods in which education is conceptualized as a form of redistribution? Examining the impact of internal conflict under different contexts is important to refine the scope conditions and generalizability of the argument. Second, under what conditions did education succeed in promoting social order and autocrats' survival? To understand this, future studies could examine the consequences of different national curriculums, teachers' compliance with state directives, and how students and families responded to the state's indoctrination goals. Third, what are the long-term repercussions of the state-building roots of public primary education systems? Ansell and Lindvall (2013) write that "modern primary education systems ... remain shrouded in the shadows of the nineteenth century." If these systems expanded less as a form of pro-poor redistribution and more as a form of indoctrination to promote social order, do we still see remnants of those early days in the present? Future research should explore the possibility that a key reason why education systems today often

fail to reduce poverty and inequality is because that is not what they primarily emerged to accomplish.

A broader insight that emerges from this study is that paying close attention to the specific features of a public good or service can help us understand why politicians might want to provide it. While a common tendency in the social sciences is to propose general theories of what drives the provision of public goods, the reality is that different goods can do different things for elites. Schools can help inculcate values of respect for authority; fixing potholes cannot.

#### **SUPPLEMENTARY MATERIALS**

To view supplementary material for this article, please visit [\[DOI\]](#).

#### **DATA AVAILABILITY STATEMENT**

Research documentation and data that support the findings of this study are openly available in the APSR Dataverse at <https://doi.org/10.7910/DVN/3TSTEH>.

#### **HUMAN SUBJECTS**

The author affirms this research did not involve human subjects.

#### **ETHICS AND CONFLICT OF INTEREST**

The author declares no ethical issues or conflicts of interest in this research.

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