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Expropriation of Church wealth and political conflict in 19th century Colombia☆

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ABSTRACT

The redefinition of Catholic Church property rights was common in Europe and the Americas during late eighteenth- and nineteenth-centuries. Given the Church's power and the level of political violence after independence, these reforms were influential in Latin America. This paper focuses on Colombia after 1850 and measures the impact of the expropriation of Church's assets on political violence. With yearly data on the number of battles per municipality, archival information on the reform, and difference-in-differences, the paper documents a reduction of political violence in places where the Church's assets were expropriated. The paper contests the traditional idea of the expropriation of Church's real estate as a source of political violence. It highlights changes in political competition after the alliance between Conservative factions and the Church was weakened. Specifically, it shows the reduction in political violence was concentrated in municipalities with high political competition and where the Conservative Party was relatively weak.

1. Introduction

Political instability and violence are one of the main causes of Latin America's poor relative economic performance during the nineteenth century. Multiple factions fought constantly over privileges, rights, and resources that became available after independence. Institutional changes shifted the balance between powerful groups that frequently contested established authority (Centeno, 1997; Coatsworth, 2008; North et al., 2000). Among these powerful groups there was the Catholic Church. Politically influential, it also benefited from economic rents defined by the land tenure system established by the Spanish Crown, known as mortmain. Under this system the Church's real estate was inalienable, free of taxes, and owned in perpetuity. In this article, I explore the evolution of political violence after an institutional reform that radically changed the Catholic Church's property rights: the disentailment of mortmain

I focus on the case of Colombia, which abolished the mortmain institution in 1861 and redistributed the Church's real estate after 1862. Given the Church's influence and wealth, it is possible that the disentailment reform fueled political instability and violence by generating grievances between Conservative factions allied with the Church and Liberal factions who wanted to reduce the Church's role in society. However, the disentailment reform may have led to less conflict if it helped consolidate "secular" elites or if it generated better economic outcomes. How the expropriation of the Church's real estate in Colombia affected political violence in the second half of the nineteenth century is therefore an empirical question and the main goal of this article.

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I estimate the impact of the disentailment reform on political violence using archival records from the reform and a difference-in-differences estimation strategy. Specifically, I compare municipalities (counties) where the government expropriated at least one of the Church's real estate properties with municipalities where the Church did not own real estate under the mortmain land tenure. Before 1862, political violence evolved similarly in both types of municipalities but in places where the Catholic Church's real estate was expropriated the level of political violence decreased after the disentailment reform. The effect is sizable: political violence in the municipalities where Church land was expropriated falls by about 29%. This effect is robust to different specifications, sample restrictions, controls for the dynamics of political conflict, and to various standard error adjustments. Moreover, the disentailment reform had a negative effect on political violence even when focusing exclusively on municipalities where the government expropriated the Church's real estate.

A limitation of my approach is that there are only records of auctions of expropriated properties but no estimates at the local level of the Church's wealth before 1861. One concern is that the government could have targeted the Church's assets only in certain areas in order to gain political advantage. I use data on the 1856 presidential elections to measure support for the Conservative Party and electoral competition at the municipality level before the disentailment reform. I find no correlation between political forces and the probability or extent of expropriation. Moreover, the average impact of the disentailment reform on political violence hides interesting heterogeneity. First, the disentailment reform had a smaller, but still negative, effect on places where the Conservative Party had widespread support compared to the Liberal party. Second, the reform was more powerful in reducing violence in electorally contested municipalities. Given the dynamics of political competition at the time, these results point to a political explanation of why the redistribution of the Church's real estate had a pacifying effect during the second half of the nineteenth century. Simply, Conservative factions lost most of the appeal to support the Catholic Church's preferred policies, which was the item that led them to compete with Liberal factions the most. In every other dimension, especially in economic policy, there was not much disagreement between the factions. After the Church's real estate was redistributed to other rich members of society, the benefits of having the Church's support diminished, which led to less competition. The decrease in competition did not have much effect in municipalities which were already Conservative strongholds or where elections were not very contested before the 1860s.

There might be other reasons why political violence decreased after the Church's real estate was redistributed. Importantly, the disentailment reform not only auctioned the Church's assets off, but also changed the land tenure system established in the Colonial period to a more modern one. Recent empirical literature has shown that the expropriation of the Church's wealth in Europe had economic consequences in the sixteenth century. The dissolution of monasteries in England (Heldring et al., 2015) and the Holy Roman Empire (Cantoni et al., 2017) affected the long-run allocation of physical and human capital, leading to structural transformation and industrialization. Later on, during the French Revolution, the redefinition of the Catholic Church's property rights also had a positive impact on agricultural productivity and economic performance (Finley et al., 2017). It is plausible that the disentailment reform in Colombia had an effect on political violence through productivity increases. While I do not have data on productivity at the local level, I explore the economic hypothesis by estimating the relationship between political violence and the share of a municipality's area that was expropriated from the Church and changed land tenure system. I do not find empirical support for this relationship. Even though the reform might have had effects on productivity in the long run, the short run effect on political violence does not seem to be driven by changes in the land tenure system.

The redefinition of the Church's property rights was common in Europe and the Americas during late eighteenth- and nineteenth-century. Motivated by the French Revolution and Spain's disentailment reform, most of the countries in Latin America carried out similar reforms in the decades after 1820 (Bazant, 2008). Chile's reform in the 1820s, Mexico's in 1856, and Colombia's in 1861 stand out as important examples because of the central role the Church played in the politics of these countries. However, most studies of the economic effects of the expropriation of Church wealth in Latin America focus on the revenue collected by governments because that was the most cited motivation for such reforms (Bazant, 2008; Jaramillo and Meisel, 2009). This paper studies the consequences of the disentailment reform beyond fiscal dimensions.

The effect of land redistribution on violence has been studied both theoretically and empirically, especially for cases where reforms aim at solving the problem of unequal land distribution (e.g., Domenech and Herreros, 2017; Grossman, 1994). However, the Colombian disentailment reform did little to improve access to land due to both its focus on revenue collection and the way the auction process took place. Even though there was discussion at the time about using the Church's land to reduce inequality, the reform ended up only redistributing land within elites (Fazio and Sánchez, 2010).

Precisely for that reason, the Colombian disentailment reform has traditionally been viewed as a catalyst of conflict. Shortly after the disentailment decree went into effect, an American diplomat in Colombia wrote: "the war has virtually become one of religion, the Liberals against the Church, and the most intense fanaticism against anything that may be proposed by them." He added, "when I commenced preparing the accompanying papers for the Department [of State], it would have appeared almost certain that the controversies to which they relate would soon involve the unfortunate country in another Civil War" (Shaw, 1941). That notion has been carried on to Colombia's historiography. For instance, Jaramillo and Meisel (2009) claim that the antagonism between the Church and the Liberal party reached its peak after the 1860s. However, the relationship between the disentailment reform and political violence has not been rigorously explored.

I offer empirical support for a different interpretation: by reducing the economic power of the Church and reallocating its real estate properties, the reform changed the incentive of powerful groups to engage in conflict and helped lessen political violence. In particular, factions organized in the Conservative Party lost rewards from supporting the clergy because the Church was considerably impoverished. Secular elites who purchased the Church's land and increased their landholdings had less incentive to promote and engage in political violence after the reform. Conflict typically increased wages, crowded out production inputs, and made expropriation and pillage more likely (Safford and Palacios, 2002). In other words, the consolidation of landholdings by secular elites may

have reduced their interest in violence as a profitable political strategy. This idea is related to the view of how elites allocate rents and privileges to solve the problem of violence (North et al., 2009) and more closely to Bazant's (2008) depiction of Spanish disentailment reform, in which landowners were sympathetic to the Church's causes until they bought its expropriated properties.

2. Historical background

After achieving independence in 1819, Colombia experienced a century of political chaos and instability. Several factions competed for legitimate rule through the electoral process. Between 1830 and 1930, 25 of the 27 presidential elections were highly competitive, constitutional changes were frequent, and violence was embedded in the political process (Deas, 1996; Posada-Carbó, 1995). "The record includes nine national civil wars, local revolts, mutinies and pronunciamientos, material destruction equivalent to several years of economic output, and at least 250,000 deaths due to political violence" (Mazzuca and Robinson, 2009). Political factions used violence as a tool to compete for the rents of power (Fergusson and Vargas, 2013).

Several factors contributed to the country's violent political competition. First, the executive had a considerable discretion to exclude factions from the political arena. It appointed ministers and provincial governors, controlled the military, and could allocate monopoly rights. Second, the country's geography made it very hard for the State to establish effective control over the territory it claimed. Additionally, the brief experience with dictatorship in the 1820s led to a reduction in the size of the military. Third, it was easy for political factions to raise bands of civilians due to the country's relative poverty.[1] These guerrilla forces were often larger than the national army (Hartlyn, 1988).

Despite their fierce competition, political factions were relatively similar and homogenous in their socio-economic composition. Hartlyn (1988) defines the parties as "loose confederations of large landowners and merchants who possessed considerable autonomy in their region rather than tightly knit organizations." Safford and Palacios (2002) describe the political elite as, "men who were born into the upper class and/or whose social position was confirmed by marriage, through achievement in education and at the bar, in economic enterprise, or by rising through the ranks of the military or the clergy. Most were university-educated professionals or had military careers; in either case, they were also likely to own land and quite possibly also engage in commerce." Political factions organized in the 1850s at the national level in the Conservative and Liberal parties. However, the conventional notion of conservatives as landowners and members of the military, and liberals as merchants and lawyers is not useful when describing Colombian political and economic elites.

The similarity between the two parties made it relatively easy to reach agreements over economic policy. Most of the liberal reforms pushed from 1845, such as eliminating state monopolies, instituting civil marriage and universal male suffrage, or shifting tax revenues to regional governments, did not find organized opposition from the Conservative Party. Even the abolition of slavery, which took almost 30 years to complete, was peacefully resolved by compensating slave owners (Tovar, 2007). The relatively peaceful way of undertaking economic reforms led Bushnell (1993) to conclude that "economic policy was not an area of clear-cut differences between the parties." Political violence frequently took place, not because of the policies that elites took while in power, but because of the winner-takes-all feature of the political process.

An issue that divided political factions was their attitudes toward the Catholic Church. Even though both members of the Liberal and Conservative parties were practicing Catholics, the latter defended the central role the Church had in preserving social order. Conservative elites viewed the Church as a powerful ally to their causes. The support the Church could bring to the political process was not only ideological but also material, which made Church related political and ideological differences "sharp and strident" after 1850 (Safford and Palacios, 2002, p. 156).

2.1. The Catholic Church and political violence

During the conquest and colonial periods, especially in the seventeenth century, the Catholic Church received numerous land grants and donations due to its relationship with the Spanish Crown (Coatsworth, 2006). The Church also received pious donations and inherited estates. By the end of the colonial period, it was the largest landowner in the country (Fazio and Sánchez, 2010). Such property was held in mortmain. It was inalienable, not subject to taxes, and owned in perpetuity (Jaramillo and Meisel, 2009). It also held a monopoly on education, controlled tithes, and was so embedded in the bureaucratic structure that becoming a priest was sometimes a young man's only available option to climb the social ladder. As a consequence, the Catholic Church had an immense influence on Colombian society that persisted after independence.

That influence materialized in different ways. First, local priests were very influential figures in the countryside, able to mobilize the masses against their enemies. Second, assets held in mortmain allowed the Church to generate revenue and maintain a patron-client network. Third, the Church acted as a monopolist on the market for mortgage loans, which it allocated to "wealthy notables with good political connections" (Coatsworth, 1988). Finally, it was also common for the main political families to have representation in the Catholic Church hierarchy. One of the most striking examples is the Mosquera family. Manuel Jose Mosquera was Bogotá's Archbishop, while his older brother Tomás Cipriano de Mosquera served as president four times.[2] The Catholic Church also had representation in the legislative body. In 1834, for instance, one-third of the Senate and one-fourth of the House of Representatives members were priests.

[1] In 1850, Colombia's per capita GDP was around 20% of that of the US, while Argentina's was only 63% and Chile's 35% of U.S. GDP (Coatsworth, 2008; Kalmanovitz, 2011).

[2] Banco de la Republica: http://www.banrepcultural.org/blaavirtual/biografias/mosqtoma.htm .

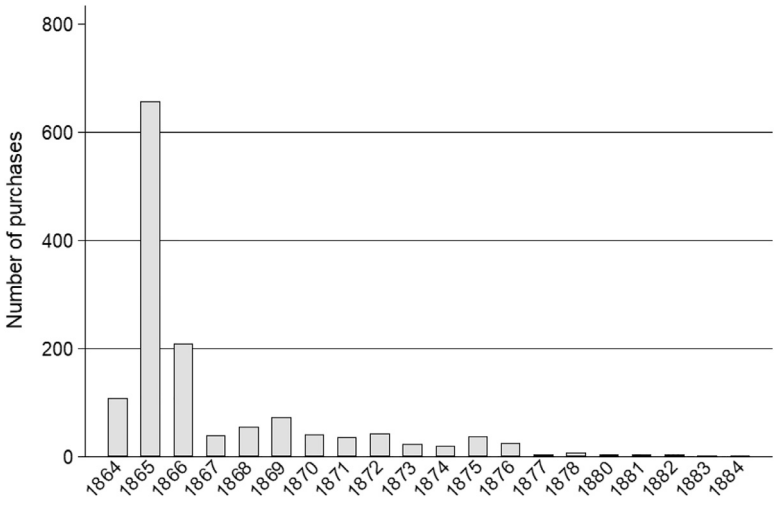

Fig. 1. Number of purchases per year. Note: The figure shows the number of purchases of disentailed property by year, from 1864 to 1884. Source: Fazio and Sánchez (2010).

Not only was the Church involved in politics, but it also agitated the masses to violent uprisings even when its direct interests were not threatened. During the 1839–1842 civil war, which was instrumental in the formation of political parties, James Semple, an American diplomat placed in Bogotá, described how:

"The Archbishop issued a proclamation calling on all the faithful, from the highest to the lowest, to turn out and defend the city of the Holy Faith [Bogotá]. A solemn procession was formed, and an oration delivered by one of the most eloquent of the clergy, closing with a prayer to the Virgin Mary to protect the Holy City. This operation had a great effect, many men of all classes went to the barracks and took arms" (Semple to Forthsyt, November 21, 1840, as quoted by Shaw, 1941)

The Church also participated directly in violent confrontations. President Mosquera complained to Pope Pius IX about how several priests joined the revolution, incited the masses to rebel against the constitutional government, provided funds for weapons, and died in combat while heading guerrilla groups.[3] Ortiz (2010) also documents that "parish priests participated in different war activities in almost every region of the country's interior. Bogotá's guerrillas recruited 35 priests, while in Antioquia most of the 150 priests preached, helped recruit soldiers, provided support both in kind and in cash to the Conservative troops, and put together relief funds for women and children affected by violence."[4]

2.2. Disentailment reform

General Tomás Cipriano de Mosquera became president after taking over Bogotá in 1861. He was once a conservative figure and had changed political sides several times.[5] Shortly after taking over the presidency, Mosquera decreed the disentailment of the mortmain. Four sources of motivation were behind the disentailment reform.

First was the pressing fiscal situation due to the accumulation of debt from wars dating back to 1810 (Díaz, 1977). Both Safford and Palacios (2002) and Jaramillo and Meisel (2009) highlight the fiscal motive as being the most important. The latter document how profitable the disentailment reform was for the government despite popular belief at the time. Second, Mosquera's government wanted retaliation against the Catholic Church for aligning with the Conservative Party during the war. Third, the government aimed at stimulating local economies by changing the institutional framework under which those properties were owned. Finally, there was the issue of land redistribution. The Secretary of Finance, Rafael Nuñez wrote: "this is about solving with disentailment to the greatest extent possible, the arduous and immense problem of the egalitarian distribution of property."[6]

The 1861 decree created the Disentailment Agency, which had offices in the different states, and oversaw the operation of public auctions. The decree allowed for payments in bonds, but a minimum of 10% of the property's value had to be paid in cash. It also tried to divide larger estates into smaller parcels (Fazio and Sánchez, 2010). Finally, to prevent the Catholic Church from hiding its properties, the Disentailment Agency offered 10% of the property's value to informants that denounced hidden estates.

Despite the Church's natural resistance and logistical problems, the disentailment reform progressed quickly. Fig. 1 shows the pace of reform. By 1876, the government estimated it was still missing several properties valued in $247,000 pesos. However, it

[3] Credencial Historica Magazine, ed. 153.

[4] The translation is mine.

[5] Allan Burton, a U.S. diplomat in Colombia, commented about President Mosquera: "He was once the idol and worshipper of the very men, or class of men he now pursues, until he saw more inviting fields of ambition among his ancient adversaries."

[6] Quoted by Fazio and Sánchez (2010).

had already auctioned off properties for roughly $7 million pesos (Jaramillo and Meisel, 2009). Most of the auctions took place between 1862 and 1868. Seventy-eight percent of the value disentailed from 1862 to 1881 had been auctioned off by 1868. After 1871, disentailment reform stalled because the remaining estates had low value and the Disentailment Agency was moved to the Secretary of the Treasury, which had different priorities. Some unsold properties were given to the state governments and the rest was returned to the Church in 1887 after the Concordato deal between the Pope and the Colombian government had been signed. However, the reform was not reversed during the period of Conservative rule (1885–1898). Jaramillo and Meisel (2009) estimate that the government made over $8 million pesos from disentailment reform after accounting for the annuity agreed upon with the Holy See.

The pressing fiscal situation was alleviated with the reform, as was the change in property rights and the increase of land circulating in the market. However, the resulting distribution of land was far from democratic. Fazio and Sánchez (2010) show the disentailed real estate had a higher gini coefficient than the lots traded in 1857 in Bogotá. They argue that the auctioned land went to the hands of already powerful elites that consolidated their estates or acquired new ones in different places.

The lower estimates for the value of the reform are around 16% of Colombia's 1860 GDP. As a reference, the Mexican reform undertaken from 1856 to 1875 accounted for 23% of Mexico's GDP. However, Colombia's reform value was thirteen times as large as the central government's revenue, while in Mexico it was only six times as large as federal government expenditures. The Church was stronger and richer in Mexico than in Colombia, but the Colombian government was weaker than Mexico's government (Jaramillo and Meisel, 2009).

3. Estimating the effect of the disentailment reform on political violence

3.1. Data

To estimate the effect of the disentailment land reform on conflict and violence in Colombia I rely on four main data sources. First and foremost, data from the disentailment reform from the Colombian National Archives (Archivo General de la Nacion) (Fazio and Sánchez, 2010). These archives contain information on all the properties that were sold at public auction, including size, value appraised by surveyors, total price paid, buyer's name, and year of purchase. With this source, I build the main independent variable: a dummy that equals one for those municipalities in which land was expropriated from the Church and sold at public auction. I also calculate the extent of the reform by measuring, at the municipality level, the total acreage sold, total revenue collected, as well as the original value appraised by the Disentailment Agency officials. Finally, I calculate the share of the municipality's area that was expropriated from the Church. I use, however, a twentieth century measure of total municipality area, which will lead to measurement error since some municipalities split and transformed their boundaries. To alleviate these concerns, whenever I use the share of total area measure, I will drop out of the sample municipalities with shares higher than the 95th percentile, equivalent to 19.7% of municipality area. In this manner, I omit municipalities where it looks like the Church lost by expropriation more than 100% of the area in the twentieth century.

Second, I code the information from Riascos Grueso (1950) book "Colombia's War Geography" to create a yearly panel with the number of battles on each municipality from the late 18th century to 1902. This is the main dependent variable. Notice it is only a measure of political violence, not of the general level of insecurity. Even though Riascos Grueso's book is the most comprehensive measure of political violence in the nineteenth century, it has not been widely used in the literature.[7] As a robustness check, and to deal with plausible measurement error, I also use a dummy variable that equals one for each municipality that had a positive number of violent confrontations in a given year. My main sample uses observations from the period between the 1853 and 1886 Constitutions (1854 to 1885), but the results do not change for a sample centered at 1862, or when using all the years from 1850 to 1900.

Third, I use the data from Bushnell (1970) on the 1856 presidential elections to measure political support. Using data from this election is useful for three reasons: (1) it was the first direct presidential election in Colombia; (2) the 1853 Constitution eliminated property and literacy restrictions to vote, extending the franchise to all men older than 21 years old or younger and married; and (3) the turnout for the election was around 41%.

In 1856, the race was decided among three candidates: Mariano Ospina, for the Conservative Party; Manuel Murillo Toro, for the Liberal party; and Tomás C. de Mosquera, as an independent candidate representing his own National Party. The election was won by the Conservative Party, and represented a relatively peaceful transition of power from Liberal rule. Ospina won the election with 47% of total votes. Murillo came in second place with 37.3% and Mosquera received 14.5%.[8]

I also calculated the level of political competition using an index ranging from 0, where one candidate gets all the votes, to 1, where the two first candidates split the votes evenly (Fergusson and Vargas, 2013). Let v_i^1, v_i^2 be respectively the vote shares of the winning candidate and the runner up in municipality i. The political competition index is given by:

$$PoliticalCompetition_i = 1 - \left(\frac{v_i^1 - v_i^2}{v_i^1 + v_i^2} \right)$$

[7] To my knowledge, only Fergusson and Vargas (2013) use the same source to study the effect of increasing the size of the franchise in political violence.

[8] The remaining votes (1.2%) were cast for "other candidates."

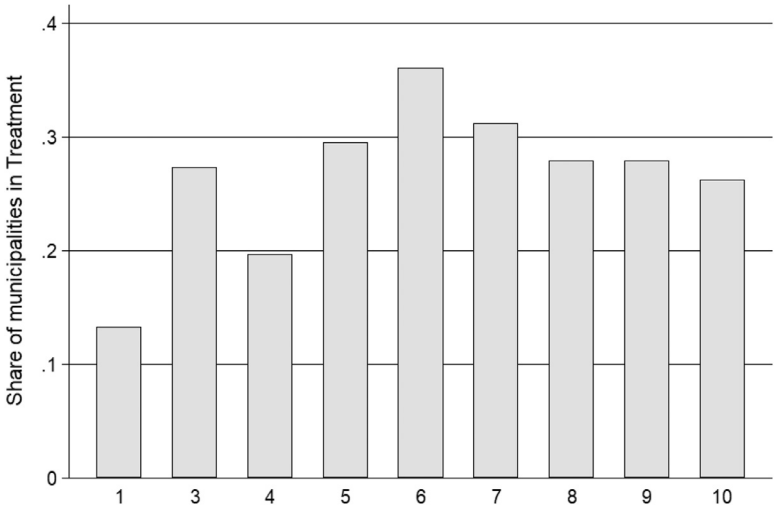

Fig. 2. Share of municipalities with disentailed property by decile of Conservative party vote share. Note: the figure plots the share of municipalities, in each decile of Conservative vote share in 1856, which belong to the *treatment* group, i.e. municipalities where the Church's real estate was expropriated. The Conservative party registered more than 99% of the votes in the 10th decile and 0% of the votes in the first decile.

Notice it does not provide information on which party was relatively stronger. It only measures how competitive the elections were, with 1 being the most competitive.

Finally, I collected geographic and historical information for each municipality from the Municipalities Panel dataset from Universidad de los Andes' Center for Economic Development Studies (CEDE). In particular, I collected measures of altitude, soil quality, distance to the department's capital, distance to the main food market, and distance to Bogotá, as well as indicators for indigenous population after 1535, and for Spanish settlements from 1510 to 1561. I use these as control variables.

3.2. Measuring the disentailment reform

The Colombian National Archives hold a rich section on the disentailment reform. The General Office for Disentailed Estates had agents in the largest cities, and their records contain useful information on the process of the reform. However, there were not preliminary estimates of the total amount of the Church land at the municipality level (there were some at the state level), so the main measure of disentailment is based only on the outcome of the reform, aggregating at the municipality level the total value and area disentailed.

The Church had accumulated properties over the years, and it was willing to defend its property rights (Coatsworth, 2006; Díaz, 1977). Therefore, the reform's outcome, measured either by total area or value, is not only a function of land the Church had, but also of the capacity it had to hide or deter the government from knowing exactly what it did own. In other words, there is non-random measurement error in the continuous assessments of the reform (area or value). It is not random because it is correlated with the capacity of the Church to hide its estates, which at the same time can be conceived as influencing the level of political violence.

To alleviate measurement error in this sense, I focus on a discrete measure of the reform: a dummy variable that equals one if at least one of the Church's properties had been expropriated in a given municipality. In other words, even though the total value of the mortmain disentailed per municipality may be systematically biased by the Church's relative power, I assume the Church did not own land in mortmain in any municipality with no records of the disentailment reform.

The assumption is plausible for two reasons: one, the incentives the government offered to informants (Jaramillo and Meisel, 2009); and two, the government's ability to expropriate Church property in each municipality should increase according to the amount of land owned by the Church. To put it differently, the systematic measurement error may exist in the intensive margin of the reform, but not on the extensive margin.

Table 1 compares municipalities with reform to those without the reform on several dimensions. First, notice they differ in the expected ways. Property held in mortmain was a legacy of the Spanish empire. Therefore, the Catholic Church held land in places that were founded earlier and where it was more likely to find indigenous groups, which is in the temperate areas, high in the Andes mountains, and closer to Bogotá (Acemoglu and Robinson, 2012).

However, the two groups do not differ in other geographical variables, such as the distance to the department's capital or the soil quality index. Using data from the 1856 elections, I find that the Conservative Party had a higher vote share where the Church had estates, but the average level of political competition was not different between the two groups of municipalities.

Fig. 2 presents additional evidence that the geographical variation of reform obeys factors other than political competition. It divides municipalities in deciles according to the Conservative Party 1856 vote share, and shows that the share of "treated" municipalities does not increase systematically with Conservative Party support. For instance, municipalities in the third decile of

Table 1
Comparison of municipalities without and with disentailment reform.

Variable	Control		Treatment		Control-Treatment
	N	Mean SE	*N*	Mean SE	*t*-statistic
Dependent variable					
Battles per year (1854–1885)	14,624	0.021 0.152	4,896	0.043 0.237	
Municipality characteristics					
Foundation year	448	1833.634 100.740	149	1759.698 115.844	7.467
Altitude (mts over sea level)	448	1219.337 931.986	149	1796.718 2096.082	−4.621
Distance to Bogota (km)	448	338.366 188.670	149	195.817 131.057	8.559
Indigenous population (1535–1540) [dummy]	448	0.482 0.500	149	0.584 0.495	−2.157
Spanish occupation (1510–1560) [dummy]	448	0.438 0.497	149	0.624 0.486	−3.995
Distance to Department Capital (km)	448	71.983 48.306	149	71.293 45.416	0.153
Distance to main market (km)	448	111.825 73.228	149	99.611 49.387	1.897
Soil erosion index (2005)	448	1.990 1.070	149	2.060 1.098	−0.689
Long run outcomes					
Land owned by religious groups (2005, hm2)	384	22.642 108.965	146	21.346 61.630	0.136
Public land (2005, hm2)	384	7658.755 58672.713	146	5294.451 33109.284	0.460
Land inequality (2005)	428	0.713 0.091	147	0.707 0.095	0.750
La Violencia (fights between 1948–1953) [dummy]	448	0.116 0.321	149	0.134 0.342	−0.589
Land disputes (1901–1931) [dummy]	448	0.121 0.326	149	0.087 0.283	1.114
Land disputes (1901–1917) [dummy]	448	0.167 0.374	149	0.121 0.327	1.359
Vote share 1856 elections					
Conservative (Mariano Ospina)	448	0.434 0.399	149	0.531 0.374	−2.616
Liberal (Manuel Murillo)	448	0.355 0.361	149	0.390 0.353	−1.043
Independent (Tomas C. Mosquera)	448	0.211 0.340	149	0.078 0.182	4.546
Political competition	448	0.326 0.316	149	0.363 0.333	−1.221

Note: Control: No records of disentailed property. Treatment: Records of disentailed property.

conservative vote share were as likely to be treated as municipalities where 100% of the votes went to the conservative candidate (tenth decile). A similar conclusion can be drawn from Fig. 3 for the case of political competition.

In order to explore more rigorously the correlates of disentailment reform, Table 2 shows the results for regressions on both the intensive (columns 1 and 2) and extensive (column 3) margins of reform. When I include all relevant covariates to try to explain what type of municipalities experienced the disentailment reform, I find a robust correlation among the following factors: foundation year (older municipalities, with greater exposure to the colonial economy); distance to Bogotá (municipalities closer to the colonial center, where Spanish first settled in large numbers); and amount and value of more land expropriated and the probability of being treated. These relationships hold even when I focus only on treated municipalities in columns 4 and 5.

Interestingly, there is not a robust relationship between political indicators before the reform and the extent of the disentailment reform. As further evidence of this finding, consider Figs. 4 and 5. They show the intensive margin of reform, amount of area expropriated, only for treated municipalities. There does not exist a relationship between political support for the Conservative Party before the 1860s and the location or severity of the expropriation of the Church's real estate.

3.3. Empirical strategy

To estimate the effect of the disentailment reform on political conflict I exploit the geographic variation of the reform and its timing in a difference-in-differences setting. I compare the change in political violence, before and after 1862, in municipalities

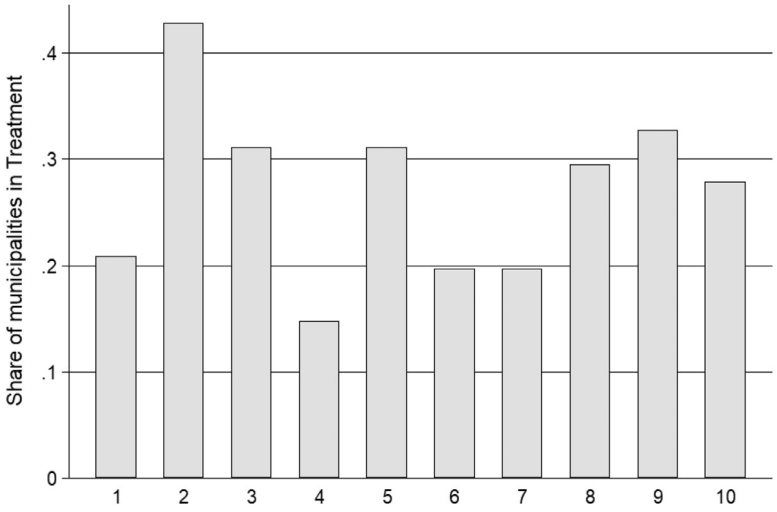

Fig. 3. Share of municipalities with disentailed property by decile of political competition. Note: the figure plots the share of municipalities, in each decile of the measure of political competition, which belong to the *treatment* group, i.e. municipalities where the Church's real estate was expropriated. Elections in municipalities in the 10th decile were the most competitive.

Table 2
Correlates of the disentailment reform .

	(1)	(2)	(3)	(4)	(5)
Dependent variable:	Area exprop.	Appraisal	Treatment=1	Area	Appraisal
Sample:	All			Treated (Disentailment=1)	
Cons. vote share	−0.1325	−0.2132	−0.0354	−0.1402	0.3238
	(0.253)	(0.352)	(0.046)	(0.618)	(0.450)
Political comp. index	0.0781	0.2711	0.0443	−0.5035	−0.0392
	(0.283)	(0.395)	(0.051)	(0.623)	(0.454)
Foundation year	−0.0036***	−0.0063***	−0.0007***	−0.0014	−0.0037***
	(0.001)	(0.001)	(0.000)	(0.002)	(0.001)
Area	−0.0073	0.0075	0.0001	−0.1818	−0.0801
	(0.094)	(0.132)	(0.017)	(0.245)	(0.178)
Altitude	−0.0279	0.0315	0.0056	−0.3483*	0.1546
	(0.066)	(0.091)	(0.012)	(0.201)	(0.147)
Distance to Dept. Capital	−0.0785	−0.1311	−0.0098	−0.0620	−0.1702
	(0.091)	(0.127)	(0.017)	(0.176)	(0.128)
Distance to Bogota	−0.8806***	−1.3468***	−0.1659***	−0.3479	−0.3467*
	(0.137)	(0.191)	(0.025)	(0.253)	(0.184)
Spanish ocup. 1560 = 1	0.4025**	0.6180**	0.0711**	0.5131	0.3576
	(0.198)	(0.276)	(0.036)	(0.456)	(0.332)
Indigenous pop. 1534 = 1	0.0930	0.1094	0.0185	−0.0321	−0.1028
	(0.190)	(0.264)	(0.034)	(0.429)	(0.312)
R2	0.1532	0.2030	0.1781	0.0432	0.1532
Municipalities	610	610	610	153	153

This table shows some correlates of the extent of disentailment reform. The dependent variables are: Area expropriated (in log) (columns 1 and 4), total value as appraised by the Disentailment Agency (in log) (columns 2 and 5), and a dummy equal to 1 for municipalities where the Church's real estate was expropriated (column 3). Columns 1, 2, 3 consider the full sample, imputing a value of zero on the dependent variable for control municipalities. Columns 4 and 5 focus only on treated municipalities. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

where the Church's real estate was expropriated with that of municipalities where the Church did not own land in mortmain. The main specification is given by:

$$B_{it} = \gamma(d_t^{1863} * DR_i) + \sum_{j=1}^{K} \beta_j(x_i^j * d^{1863}) + \delta_i + \delta_t + \epsilon_{it} \quad (1)$$

where B_{it} is the number of battles in year t in municipality i; DR_i is an indicator equal to one if there was a record of the disentailment reform in municipality i, d_t^{1863} is a dummy variable equal to one from the year of the first recorded purchase onwards,

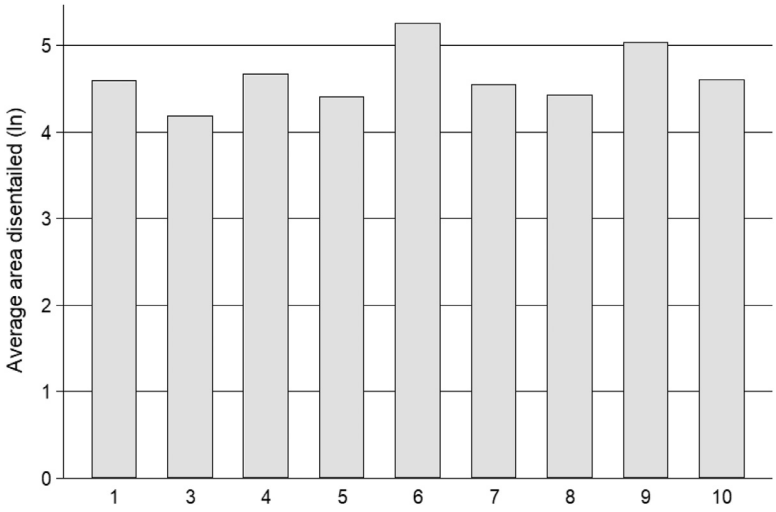

Fig. 4. Average area disentailed in *treated* municipalities by decile of Conservative vote share. Note: the figure plots the average area disentailed in treated municipalities in each decile of Conservative vote share in 1856. The Conservative party registered more than 99% of the votes in the 10th decile and 0% of the votes in the first decile.

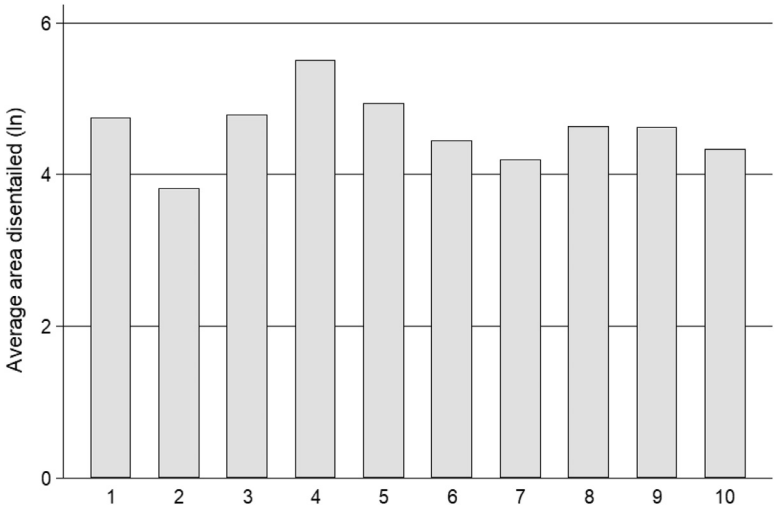

Fig. 5. Average area disentailed in *treated* municipalities by decile of political competition. Note: the figure plots the average area disentailed in treated municipalities in each decile of the measure of political competition. Elections in municipalities in the 10th decile were the most competitive.

$X_i = [x_i^1, \ldots, x_i^K]$ is a set of controls, δ_t is a full set of year fixed effects, and δ_i is a set of municipality fixed effects[9], to control for both national trends in conflict and common factors at the municipality level, respectively. The coefficient of interest is γ.

X_i include municipalities characteristics, in particular: distance to Bogotá and the State's capital, altitude, soil quality index, an indicator for the location of indigenous groups around 1540, and an indicator of early Spanish settlements (1510 to 1560). To control for the level of political partisanship that may drive political violence I also include the Conservative party vote share in the 1856 presidential election.

Given the time invariant differences between places that received the reform and those which did not, I include a set of interactions between the control variables in X_i and the dummy for the post period of the reform. In this fashion, I flexibly control for the concern that the underlying (observable) characteristics in X_i may be driving the results and not the treatment indicator. In particular, I control for the 1856 election results, to account for underlying ideology and relative power of both parties.

[9] The results are the same when I used a full set of province fixed effects.

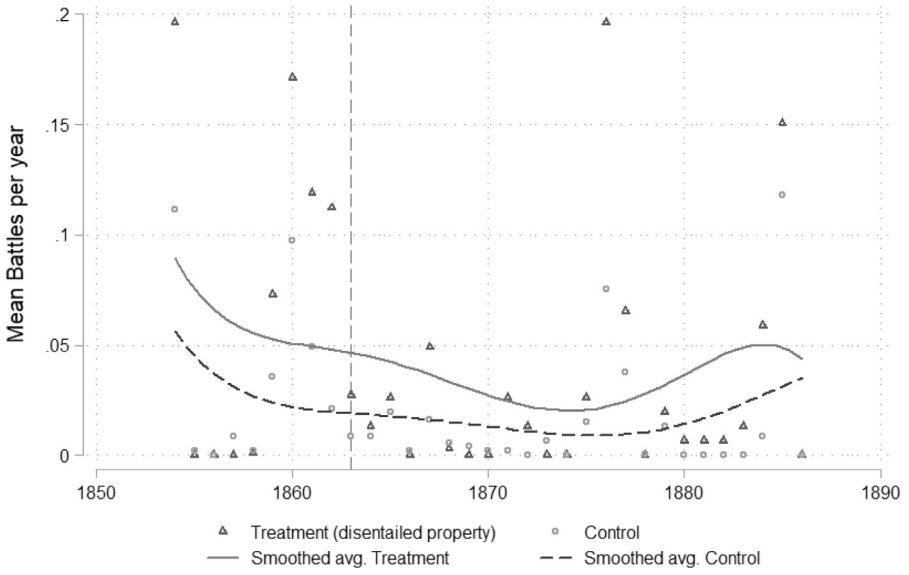

Fig. 6. Average battles per year by disentailment reform status. Note: The figure plots the average number of battles per year by disentailment status. The triangles represent municipalities where the Church's real estate was expropriated (*treated*), while the circles represent the *control* group. Similarly, the lines show a fifth degree local polynomial smoothing. The dashed line belongs to the *control* group.

I also estimate Eq. (1) changing the dummy variable DR_i for various continuous measures of the success of the reform: total amount of land, total value of the land, and share of the municipality's area that was disentailed. This last "intensive margin" measure has to be taken with a grain of salt. I use as a denominator the municipality's area in 1980, which is the earliest measure of total area I have. Therefore, the measure would be inaccurate for the youngest municipalities, whose boundaries were not well defined in the 1860s. This is the best I can do, given data availability.

Finally, as the level of violence is serially correlated for each municipality, unless otherwise noted, I estimate standard errors clustered at the municipality level.

4. Disentailment reform contributed to reduce political violence

The basic logic of the empirical strategy is to compare the change in the level of violence before and after the disentailment reform between municipalities where the Church's real estate was expropriated and municipalities where the Church did not own properties in mortmain. Fig. 6 shows the raw data for comparison, where indeed it appears that after the disentailment reform, the level of violence fell by a greater amount in the municipalities where properties were taken away from the Catholic Church and sold at public auction. Fig. 7 shows the residual level of violence after controlling for municipality characteristics and municipality and year fixed effects. Here it is even clearer that municipalities where the Church's real estate was expropriated became more peaceful after 1863 when compared to control municipalities.

The difference in the level of conflict can only be interpreted as being generated by the disentailment reform under the assumption that, absent the reform, political violence in treated municipalities would have followed a similar path than in control municipalities (Angrist and Pischke, 2008). While this is impossible to prove definitively, the figures also show that the trends in political conflict between municipalities in which the reform took place and those in which it did not were relatively similar before 1863.

The raw data for Figs. 6 and 7 provide a first pass test on the parallel trends assumption. However, I test it more formally following Autor (2003). In particular, I estimate:

$$B_{it} = \delta_m + \delta_t + \sum_{t=0}^{m} \gamma_{-t} DR_i + \sum_{t=0}^{q} \gamma_{+t} DR_i + \sum_{j=1}^{K} \beta_j (x_i^j * d^{1863}) + \epsilon_{it} \quad (2)$$

If the trends on political violence before the reform are not different between the treatment and control group, the coefficients for the years leading to the reform should not be statistically different, but the coefficients on the years after the reform should be.[10] It is a validation of the interpretation of the main results as coming from the disentailment reform and not from chance or mean regression.

The negative effect of the disentailment reform is sizable: it represents a decrease of 29% of the average number of battles per year in the municipalities that received the reform. It is also robust to the inclusion of controls. Table 3 presents the main results. I

[10] A graphic representation of this test is presented in Appendix B.

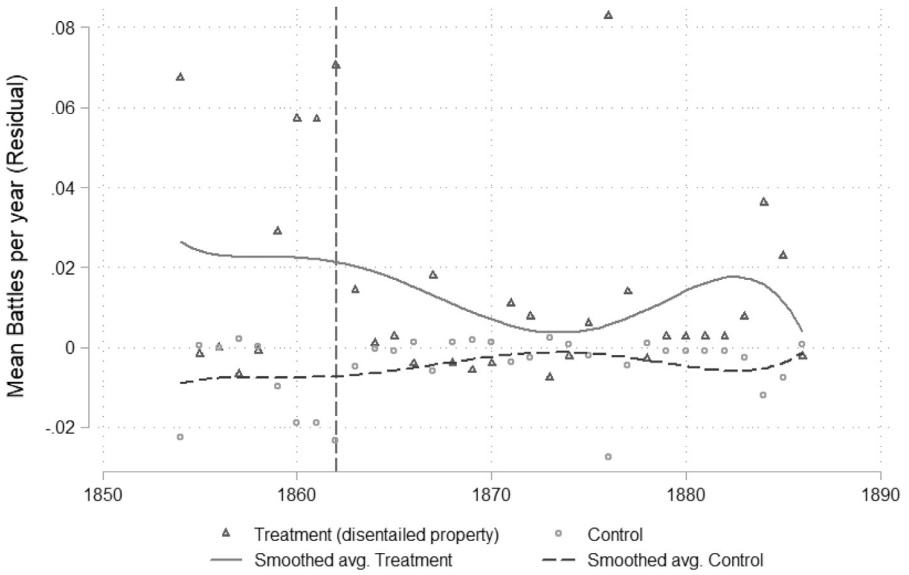

Fig. 7. Residual average battles per year by disentailment reform status. Note: The figure plots the average of the residuals after regressing the number of battles per year on year fixed effects and a vector of controls interacted with a dummy equal to one after 1962. Controls include: area, altitude, distance to Bogotá, distance to the department capital, a dummy for indigenous population in 1550, a dummy for Spanish occupation in 1550, and a soil quality index. The triangles represent the average residual for municipalities where the Church's real estate was expropriated (*treated*), while the circles represent the average for the *control* group. Similarly, the lines show a fifth degree local polynomial smoothing. The dashed line belongs to the *control* group.

estimate Eq. (1) adding controls step by step. In every column, standard errors are clustered at the municipality level. The coefficient of interest, γ, is the interaction between a dummy variable equal to one for treated municipalities and a dummy variable equal to one for the period after 1862. It is negative and significant at the 95% level in all the specifications, including column 5 where several controls for differential trends after the reform were included. Another way to understand the results is to recognize that results in column 5 are the numbers underlying Fig. 6.

To corroborate these results, I performed a placebo test where I estimated the equation in column 5 from Table 3 as if the reform had taken place in different years. If there were differential changes in political violence between municipalities that experienced disentailment reform and those that did not during years when the reform did not take place, that would cast serious doubt on the conclusion that the reduction in violence was due to the disentailment reform and not to other factors. Fig. 8 plots the coefficient point estimate and the clustered standard error for the placebo regressions. The coefficient is only statistically significant for the year the reform took place and two or three years later (depending on the significance level used).

So far I have only used the extensive margin definition of the reform. This analysis lumps into one category municipalities where the Church owned little real estate and others where it had large landholdings. If disentailment reform had an impact on political violence because it weakened the Church's status, we should see a more pronounced effect on municipalities where the Church was hit the hardest. Table 4 reproduces the estimation of Eq. (1), replacing the dummy variable of the reform for a continuous measure of the extent of the disentailment reform. Columns 1 and 4 use the natural log of the total area disentailed, columns 2 and 5 use the natural log of the total appraisal of the properties disentailed, and columns 3 and 6 use the share of land expropriated from the municipality. While columns 1, 2, and 3 use the whole sample of municipalities, assigning the value of zero to those that did not have records of the reform, columns 4, 5, and 6 restrict the sample to those which had records of the reform.

The results for the area and value expropriated accord with those in Table 3. The take-away is in the same direction: where the reform had a stronger impact on the Church's estates, political violence decreased faster. This is true even when considering only "treated" municipalities. However, I do not find a significant effect using as an intensive measure of the reform the share of the municipality's area expropriated. Moreover, when I consider only treated municipalities, the coefficient changes its sign, from negative in column 3 to positive in column 6.

Results in Table 4 help to alleviate concerns about measurement error for the treatment variable expressed in Section 3.2. However, the dependent variable, political violence, may suffer from measurement error since it was coded using historical accounts of political violence in the nineteenth century. In Table 5, I compare the results when measuring political violence using the number of battles (column 1) or simply an indicator variable equal to one for years when there was a positive number of battles (column 2). Results in column 2 show that after 1863 the probability of an event of political violence dropped considerably for municipalities where the Church's real estate was expropriated compared to municipalities were the disentailment reform had no impact.

I selected the main period of analysis based on Colombian political history, however, I could have chosen the time frame in many different ways. In columns 3 and 4 of Table 5, I show the results are robust to changes in the sample years. Column 1 shows the main

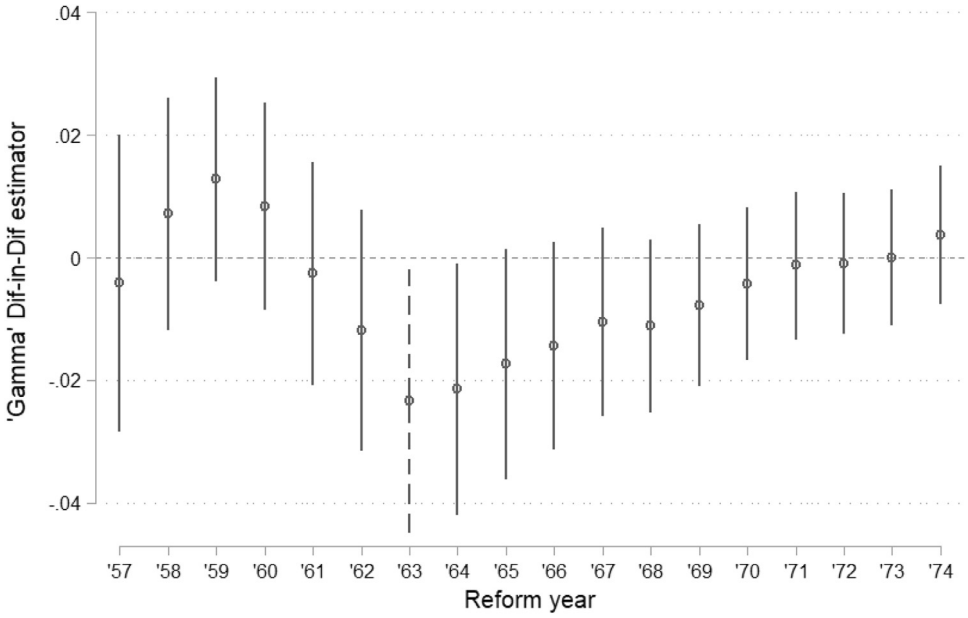

Fig. 8. Placebo test: diff-in-diffs estimator (γ in Eq. (1)) by cut-off year. Note: the figure plots the coefficient of interest in Eq. (1), γ, and its confidence interval when varying the year t from 1857 to 1874. The coefficient of interest comes from the interaction between a dummy variable equal to 1 for the *treatment* group and a dummy variable equal to 1 from year t onwards. Each point in the figure represents a different regression. The dashed line highlights the "true" year of the reform (the period after 1862), it is equivalent to the coefficient in column (6) from Table 3.

Table 3
Difference-in-differences estimator: effect of the disentailment reform on political violence.

	(1)	(2)	(3)	(4)	(5)
Dependent variable:	*# Battles per year*				
Sample years:	*1854–1885*				
d^{1863}	−0.0149***		−0.0149***		
	(0.003)		(0.003)		
Disentailment	0.0356***	0.0356***			
	(0.011)	(0.011)			
$d^{1863} \times$ Disentailment	−0.0221**	−0.0221**	−0.0221**	−0.0221**	−0.0214**
	(0.009)	(0.009)	(0.009)	(0.009)	(0.011)
$d^{1863} \times$ Cons. vote share					0.0172**
					(0.008)
$d^{1863} \times$ Control					X
Municipality FE			X	X	X
Year FE		X		X	X
R2	0.0061	0.0505	0.0861	0.1305	0.1385
N	22,048	22,048	22,048	22,048	19,104
Municipalities	689	689	689	689	597

Standard errors clustered at the municipality level in parentheses. The dependent variable is the *number of battles per year*, built from Riascos Grueso (1950). *Disentailment* is a dummy variable equal to 1 for municipalities where the Church's real estate was expropriated. d^t is a dummy equal to 1 for years $\geq t$. *Conservative vote share (1856)* is the share of total votes won by Mariano Ospina, the Conservative party candidate in the 1856 presidential election. Control variables are defined at the municipality level and include: altitude, total area of the municipality, distance to the State's capital (log), distance to Bogota (log), distance to the closest main market (log), a dummy indicating early indigenous settlements (by 1534), a dummy indicating early Spanish settlements (by 1560), and soil quality index. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 4
Continuous measures of the disentailment reform.

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable:	*# Battles per year*					
Sample years:	*1854–1885*					
Sample:	All			Disentailment = 1		
Cons. vote share $\times d^{1863}$	0.018**	0.017**	0.018**	0.021	0.026	0.023
	(0.008)	(0.008)	(0.009)	(0.024)	(0.023)	(0.025)
$d_{1863} \times$ ln(Area Disent.)	−0.004***			−0.003		
	(0.002)			(0.004)		
$d_{1863} \times$ ln(Appraisal)		−0.003***			−0.011*	
		(0.001)			(0.006)	
$d_{1863} \times$ Share of Mun. Area			−0.033			0.037
			(0.092)			(0.127)
$d^{1863} \times$ Control	X	X	X	X	X	X
Municipality FE	X	X	X	X	X	X
Year FE	X	X	X	X	X	X
R2	0.139	0.139	0.135	0.169	0.171	0.166
N	19,104	19,104	18,880	4768	4768	4544
Municipalities	597	597	590	149	149	142

Standard errors clustered at the municipality level in parentheses. The dependent variable is the *number of battles per year*, built from Riascos Grueso (1950). *Disentailment* is a dummy equal to 1 for municipalities where the Church's real estate was expropriated. *Area Disent.* and *Appraisal* are, respectively, the natural log of one plus the total size in hectares and total value in pesos of the properties expropriated from the Church in the disentailment reform. *Share Mun. Area* is the total area disentailed divided by the municipality's area (note: the denominator is the area measured in 2005, not in the 1860s. Therefore, I drop out of the sample municipalities with a share higher than the 95 percentile of the distribution of share, as explained in Section 3.2). *Conservative vote share (1856)* is the share of total votes won by Mariano Ospina, the Conservative party candidate in the 1856 presidential election. Control variables are defined at the municipality level and include: altitude, total area of the municipality, distance to the State's capital (log), distance to Bogota (log), distance to the closest main market (log), a dummy indicating early indigenous settlements (by 1534), a dummy indicating early Spanish settlements (by 1560), and soil quality index. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 5
Robustness checks.

	(1)	(2)	(3)	(4)	(5)
Dependent variable	*# Battles*	1(*Battles* > 0)	*# Battles*	*# Battles*	*# Battles*
Sample years	*1854–1885*	*1854–1885*	*1850–1898*	*1850–1875*	*1854–1885*
Sample municipalities	All	All	All	All	No capitals
$d^{1863} \times$ Disentailment	−0.0214**	−0.0208**	−0.0167**	−0.0221**	−0.0219**
	(0.011)	(0.009)	(0.007)	(0.009)	(0.009)
$d^{1863} \times$ Cons. vote share	0.0172**	0.0054	0.0120**	0.0185**	0.0174**
	(0.008)	(0.008)	(0.006)	(0.007)	(0.008)
$d^{1863} \times$ Control	X	X	X	X	X
Municipality FE	X	X	X	X	X
Year FE	X	X	X	X	X
r2	0.1385	0.1420	0.1162	0.1302	0.1338
N	19,104	19,104	28,656	15,522	18,848
Municipalities	597	597	597	597	589

Standard errors clustered at the municipality level in parentheses, at the province level in brackets. The dependent variable is either the number of battles or a dummy equal to 1 for years with a positive number of battles (1(*Battles* > 0)), built from Riascos Grueso (1950). *Disentailment* is a dummy variable equal to 1 for municipalities where the Church's real estate was expropriated. d^t is a dummy equal to 1 for years $\geq t$. *Conservative vote share (1856)* is the share of total votes won by Mariano Ospina, the Conservative party candidate in the 1856 presidential election. Control variables are defined at the municipality level and include: altitude, total area of the municipality, distance to the State's capital (log), distance to Bogota (log), distance to the closest main market (log), a dummy indicating early indigenous settlements (by 1534), a dummy indicating early Spanish settlements (by 1560), and soil quality index. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Table 6
Robustness checks: dynamics.

	(1)	(2)	(3)	(4)
Dependent variable:	*# Battles per year*			
Sample years:	*1854–1885*			
# Battles ($t-1$)		0.012		
		(0.018)		
# Battles ($t-2$)		−0.056***		
		(0.012)		
# Battles ($t-3$)		−0.042**		
		(0.017)		
d^{1860} × Disentailment			−0.000	
			(0.047)	
d^{1861} × Disentailment			0.018	
			(0.041)	
d^{1862} × Disentailment			−0.075*	
			(0.042)	
d^{1863} × Disentailment	−0.021**	−0.022**	−0.013	−0.032**
	(0.011)	(0.011)	(0.017)	(0.015)
d^{1864} × Disentailment			0.002	0.002
			(0.019)	(0.019)
d^{1865} × Disentailment			−0.009	−0.009
			(0.016)	(0.016)
d^{1866} × Disentailment			0.029	0.029
			(0.021)	(0.021)
R2	0.139	0.142	0.140	0.139
N	19,104	19,104	19,104	19,104
Municipalities	597	597	597	597

Standard errors clustered at the municipality level in parentheses. The dependent variable is the *number of battles per year*. *Disentailment* is a dummy equal to 1 for municipalities where the Church's real estate was expropriated. d^t is a dummy equal 1 for years $\geq t$. All results include: interaction between controls and d^{1863}, and municipality and year fixed effects. Control variables are defined at the municipality level and include: 1856 presidential elections Conservative vote share, altitude, total area of the municipality, distance to the State's capital (log), distance to Bogota (log), distance to the closest main market (log), a dummy indicating early indigenous settlements (by 1534), a dummy indicating early Spanish settlements (by 1560), and soil quality index. * $p<0.1$, ** $p<0.05$, *** $p<0.01$.

results for comparison. Column 3 extends the period to cover the second half of the nineteenth century, but leaves out the period from 1899 to 1902, where the longest civil war took place. Results in column 4 use a 25 year sample period centered at 1863. The effect of disentailment reform on political violence remains negative and significant. Finally, capital cities from the nine states may be different in many regards to the typical municipality, from population density to political activity. Therefore, I estimate the main results removing them from the sample in column 5 and find capital cities do not drive the main results.

Given the yearly nature of the data and the nature of political conflict, I extend the main results to account for the dynamics of conflict in Table 6. Column 1 reproduces the main results for comparison. In column 2 I control for lagged violence and show that political conflict is not serially correlated once I control for year fixed effects, as can be seen from the coefficient on the first lag. In columns 3 and 4, I flexibly control for interactions of the treatment variable (Disentailment) with different years around (column 3) and after (column 4) disentailment reform took place (Mora and Reggio, 2012). The coefficient remains negative and statistically significant in column 4, but is not significant in column 3, although the interaction with the previous year dummy is now significant.

Showing that serial correlation of political violence is not strong is important since Bertrand et al. (2004) raise concerns about the calculation of standard errors in difference in differences settings when the dependent variable is serially correlated. Even though this is not the case for the number of battles, I perform two of their suggested corrections for calculating standard errors more accurately.

First, I collapse the data in two periods, before (1854 to 1862) and after (1863 to 1885) disentailment reform, and replicate the analysis from Table 3. Table 7 shows the results for two different measures of violence: the average of the number of battles per year (columns 1, 2, and 3) and the share of years with at least one battle (column 4). The coefficient remains negative, statistically significant, and shows the same magnitude.[11]

[11] As a final check, Appendix C compares the standard errors under three different clustering methods: (1) by municipality, (2) two-way year x municipality, and (3) by province using wild-bootstrap.

Table 7
Only one pre and post period .

	(1)	(2)	(3)	(4)
Dependent variable:	*Average # of battles per year*			*% of years with at least one battle*
Sample years:	*Pre= 1854–1862; Post= 1863–1885*			
Post = 1	−0.015***	−0.015***	0.084	0.098**
	(0.004)	(0.003)	(0.057)	(0.040)
Disentailment	0.036***			
	(0.006)			
Post × Disentailment	−0.022**	−0.022**	−0.024**	−0.023***
	(0.009)	(0.009)	(0.010)	(0.008)
Constant	0.031***			
	(0.003)			
Post × Control			X	X
Municipality FE		X	X	X
R2	0.046	0.717	0.731	0.782
N	1378	1378	1350	1350
Municipalities	689	689	597	597

Standard errors clustered at the municipality level in parentheses. The dependent variable for columns (1), (2), and (3) is the *average number of battles per year*. The dependent variable for column (4) is the *percentage of years with at least one battle*. Both are built from Riascos Grueso (1950). There are two periods for each municipality, the pre-period goes from 1854 to 1862 and the post-period is from 1863 to 1885. *Post* is a dummy variable equal to 1 for the post-period. *Disentailment* is a dummy variable equal to 1 for municipalities where the Church's real estate was expropriated. d^t is a dummy equal to 1 for years $\geq t$. Control variables are defined at the municipality level and include: altitude, total area of the municipality, distance to the State's capital (log), distance to Bogota (log), distance to the closest main market (log), a dummy indicating early indigenous settlements (by 1534), a dummy indicating early Spanish settlements (by 1560), and soil quality index. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Second, I simulate the empirical distribution of γ by randomizing both the year of the reform and the municipalities that were treated. Then I estimate $\hat{\gamma}$ from Eq. (1). Fig. 9 shows the empirical distribution when I randomize year and treatment 5000 times. The empirical p-value is 0.0013. In Fig. 10, I show the empirical distribution when I only randomize treatment, but not the reform year (N=800). The empirical p-value is smaller than 3%. The vertical line in both graphs shows where $\hat{\gamma}$ lies in the distribution.

4.1. Political competition as an explanation for the negative effect of disentailment reform in political violence

Political violence in Colombia decreased in places where the Church had properties, compared to places where it did not after the government expropriated them and auctioned them off. Even focusing only on places where Church holdings were expropriated, the disentailment reform had a more negative effect in violence where the Church held more land. It is important to analyze why that was the case.

First, the historical evidence for the Church's direct participation in violence (Ortiz, 2010; Ortiz and Javier, 1840) points to one potential explanation: when the clergy lost economic power, it reduced its direct participation in political violence. Second, the disentailment reform also changed the property rights regime to which Church estates had obeyed. These changes might have shaped the incentive structure, increasing productivity and economic performance. This channel would be consistent with evidence from Europe presented by Heldring et al. (2015) and Finley et al. (2017). While the "economic performance" channel is plausible, Figs. 6 and 7 show an immediate negative effect of disentailment reform. One could argue that it might take some time for productivity to increase and for the people to enjoy a higher standard of living that would lead to lower levels of political violence.

In order to explore the economic performance mechanism, columns 3 and 6 of Table 4 introduce a continuous measure of the reform: the share of the municipality's area that was expropriated from the Church. If the economic channel were very important, the disentailment reform would have had more impact on places where a higher share of their land changed land tenure systems. Results in Table 4 do not support this hypothesis. When I consider the whole sample, the coefficient of the interaction between the extent of the reform and the post-period (column 3) is negative and larger than when I measure the reform using total area (column 1), but the standard errors increase even more, making it not statistically significant. Interestingly, when I focus only on "treated" municipalities (column 6), the coefficient has the opposite sign and is not statistically significant. If there is an economic performance effect, it might not be the main explanation to the rapid decrease in violence in places where the Church lost most of its economic power.

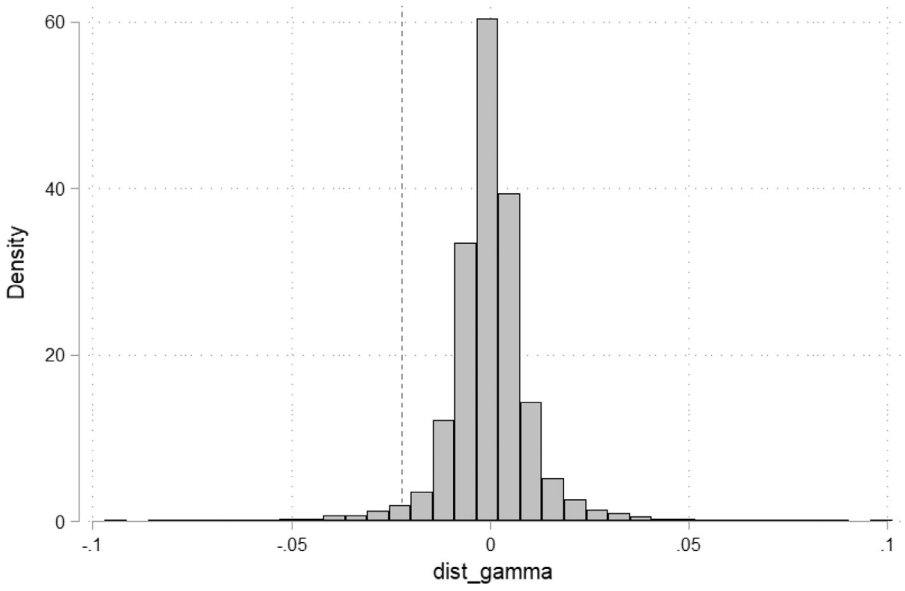

Fig. 9. Empirical distribution of γ in Eq. (1) when randomizing treatment units and year. Note: the figure is based on regressions of the number of battles per year on an interaction between an indicator of treatment and an indicator for the period after the reform as indicated in Eq. (1). I jointly randomized both of these indicators within my sample. That is, I randomly chose a group of 149 municipalities as treated and one year as the reform year, and I estimated $\hat{\gamma}$. I repeated these steps 5000 times. The figure plots the distribution of the estimates, and the vertical line shows the value of the coefficient when using the actual treatment group and year. 2.98% of the estimated coefficients are smaller than the "true" coefficient.

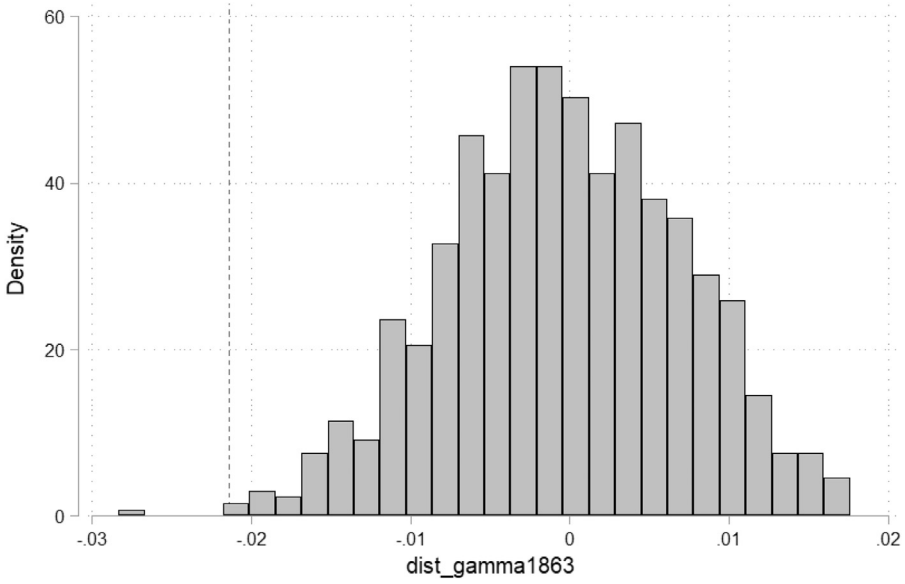

Fig. 10. Empirical distribution of γ in Eq. (1) when randomizing treatment units Note: the figure is based on regressions of the number of battles per year on an interaction between an indicator of treatment and an indicator equal to 1 from 1863 onwards, as indicated in Eq. (1). I randomly chose a group of 149 municipalities as treated, and estimated $\hat{\gamma}$. I repeated these steps 5000 times. The figure plots the distribution of the estimates, and the vertical line shows the value of the coefficient when using the actual treatment group. 0.13% of the estimated coefficients are smaller than the "true" coefficient.

Given the historical context presented in Section 2, another potential explanation comes from the patterns of political competition between elite groups, specifically, the political parties. Given their similar economic composition (Safford and Palacios, 2002), the Liberal and Conservative parties disagreed the most with respect to the Church's role in society. It is plausible that, as soon as the Church lost its economic power, the Conservative Party lost some of its incentive to support the causes that made them compete with the Liberal Party the most.

Table 8
Mechanisms.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent variable:	*# Battles per year, 1854–1885*						
				Political Comp.		Vote in 1856	
Sample	All			High	Low	Conservative	Liberal
d_{1863} × Disentailment	−0.021**	−0.030*	−0.001	−0.035**	−0.000	−0.002	−0.038**
	(0.010)	(0.017)	(0.011)	(0.015)	(0.012)	(0.009)	(0.019)
d^{1863} × Cons. vote share	0.017**	0.013	0.015*	0.005	0.021**	0.044**	−0.048
	(0.008)	(0.009)	(0.008)	(0.018)	(0.010)	(0.019)	(0.046)
d^{1863} × Cons. vote share × Disent.		0.017					
		(0.022)					
d^{1863} × Pol. Comp.			−0.004				
			(0.010)				
d^{1863} × Pol. Comp. × Disent.			−0.055**				
			(0.025)				
d^{1863} × Control	X	X	X	X	X	X	X
Municipality FE	X	X	X	X	X	X	X
Year FE	X	X	X	X	X	X	X
R2	0.139	0.139	0.139	0.161	0.110	0.128	0.153
N	19,104	19,104	19,104	9536	9568	9600	9504
Municipalities	597	597	597	298	299	300	297

Standard errors clustered at the municipality level in parentheses. The dependent variable is the *number of battles per year*, built from Riascos Grueso (1950). *Political Competition* is measured using an index distributed between 0 and 1, where 0 means one candidate got all the votes and 1 means the candidates split the votes perfectly. Columns (4) and (5) use, respectively, municipalities where Political Competition was higher and lower than the median. Columns (6) and (7) use, respectively municipalities where the Conservative candidate's vote share was higher and lower than the median. *Disentailment* is a dummy variable equal to 1 for municipalities where the Church's real estate was expropriated. d^t is a dummy equal to 1 for years $\geq t$. *Conservative vote share (1856)* is the share of total votes won by Mariano Ospina, the Conservative party candidate in the 1856 presidential election. Control variables are defined at the municipality level and include: altitude, total area of the municipality, distance to the State's capital (log), distance to Bogota (log), distance to the closest main market (log), a dummy indicating early indigenous settlements (by 1534), a dummy indicating early Spanish settlements (by 1560), and soil quality index. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

In the main results from column 5 of Table (1), there is an evident difference of the effect of the reform between very conservative and very liberal places. Overall, consider two municipalities, one where the Conservatives won all the votes in 1856 and the other where the Conservative Party got zero votes. If both municipalities were treated, the reform had a negative effect on the former one that is only 19.6% of the reform's effect on the latter one. In places where the Conservative Party had great support, the fact that the Church's real estate was expropriated did not significantly change the dynamics of violent political competition. However, where the Conservative Party did not enjoy great support, once the Church becomes weaker, violence diminishes sharply.

In Table 8, I present evidence that argues for more in-depth study of the relationship between political competition and the effects of disentailment reform. Column 1 shows the main results for comparison. Column 2 uses the triple interaction between Conservative support, post period, and the indicator for the disentailment. These results corroborate the idea that the reform's effect on the Conservative Party's strongholds was very mild. A simpler way to show this is to split the sample in two according to Conservative support. Column 6 only considers municipalities where the Conservative Party got more than 43% of the votes (the median vote share). For that group the reform did not impact political violence. Column 7 considers the other 297 municipalities. The Liberal Party was stronger there, and the reform had a strong negative impact on political violence. It is important to remember that these results are not coming from a differential incidence of the reform according to political support (see Figs. 2 and 4 and Table 2). The Church was as likely to have estates that were expropriated in Conservative as in Liberal municipalities.

Not only was the negative effect concentrated in more Liberal places, it was also concentrated in politically contested municipalities, that is, in municipalities where the Liberal and Conservative parties split the votes relatively evenly. Column 3 shows the result from adding a triple interaction between political competition and the dummies for the post-period and treatment groups. Columns 4 and 5 indicates the same results in a simpler way. The negative effect of the disentailment reform is only present in places with a political competition index above the median (column 3). Again, Figs. 3 and 5 and Table 2 show that politically contested municipalities were as likely to be part of the "treatment group" as non-contested places.

Interestingly, the effect of disentailment reform on municipalities where political competition was low can be seen as indirect evidence favoring political rather than economic mechanisms. In other words, in places with low political competition, the land tenure system also changed. If the economic mechanism was the main driver, there should also be an effect in those places.

The disentailment reform weakened the Catholic Church considerably. I argue that it led to a change in the dynamics of political competition in Colombia, where Conservative factions did not have a strong incentive to keep backing the Church politically since the Church had less to offer them in terms of economic support. As a consequence, the level of political violence decreased in places

where the Church was weakened. I showed that this effect was weaker for Conservative strongholds and for municipalities with very low political competition.

5. Conclusion

Not only in Colombia was violence endemic to the system. Countries throughout Latin America "virtually collapsed under the weight of what historians refer to as 'state building'" during the nineteenth century (North et al., 2000). In order to solve the problem of violence, elites had to develop ways to distribute rents to generate a more peaceful equilibrium. Political rules, tax systems, trade policies, labor contracts, and land property rights, which were changing constantly at the time, are examples of how contentious issues could either enhance stability or promote violence. This paper illustrates how institutional changes like disentailment reform can be used as natural experiments to study civil war and the process of state building in Latin America.

In this paper, I explore one particular reform that was common in the region, the disentailment of mortmain land, using data from Colombia. Contrary to some traditional interpretations of the disentailment reform, I show political violence decreased after the government expropriated the Church's assets and distributed them among other powerful members of the society. The negative effect of the reform was stronger in municipalities with high political competition or low support for the Conservative Party. These results do not imply that the Church ceased to be involved in the political process. Rather, they point out that the relationship between Conservative factions and the Church was weakened, leading to less political violence.

Other countries in the region experienced similar reforms. As the Colombian experience shows, these reforms might have led to consolidate secular elites and reduce the direct involvement of the Catholic Church in political conflicts. As long as expropriating the Church's properties or other institutional reforms had an impact on the formation political coalitions, they could contribute to reduce violence and conflict. Given that civil wars and instability hurt long run economic growth (Blattman and Miguel, 2010), this is an important research agenda for understanding Latin American development during the nineteenth century and afterwards.

Appendix A

Fig. A.1

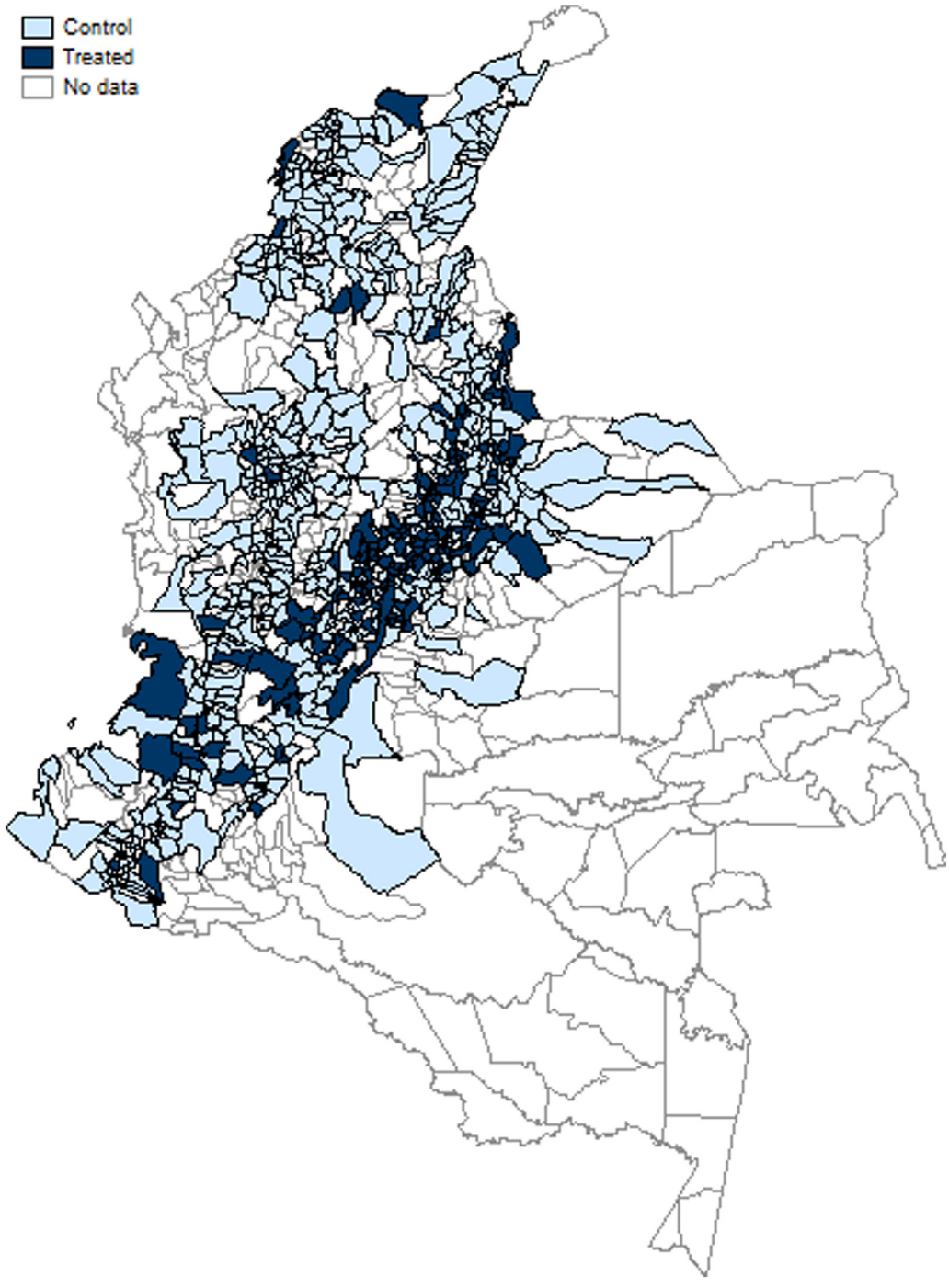

Fig. A.1. Map of the main sample. Note: the map shows the geographical distribution of the main sample using current municipality boundaries. Lighter municipalities belong to the control group, darker, to the treatment group, and blank municipalities are not on my sample, that comes from Bushnell (1970) 1856 elections data.

Appendix B

Fig. B.1

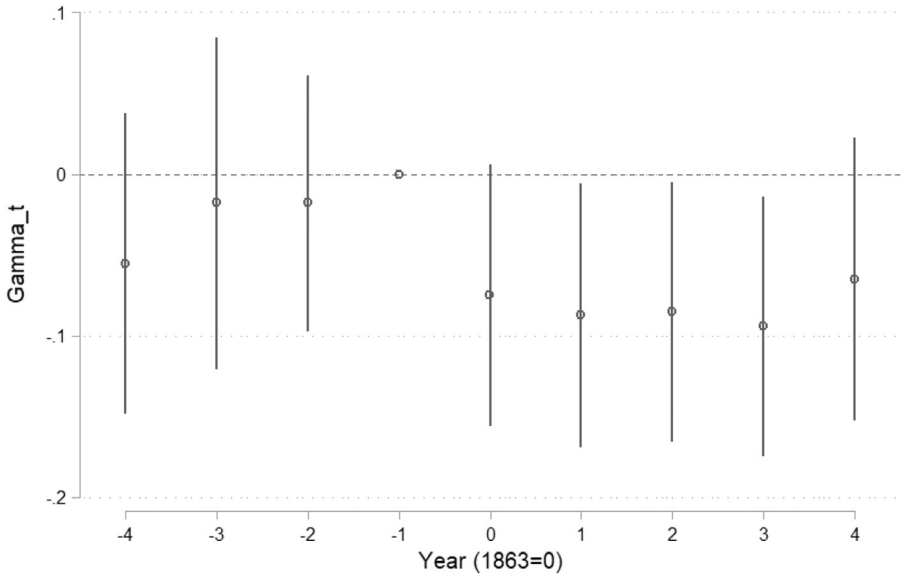

Fig. B.1. Parallel trends assumption test. Note: the figure is based on a regression of the number of battles per year on the interaction between a dummy equal to 1 for the *treatment* group and dummies equal to 1 for each year *t* from 1854 to 1885, as noted in Eq. (2). The figure shows the interactions' coefficients and their standard error. Year 0 is 1863, where the period after the reform started.

Appendix C

Fig. C.1

Table C.1
Standard errors: different clustering methods.

Dependent variable:	(1)	(2)	(3)	(4)
	# Battles per year (1854–1885)			
	Coefficient	Standard errors clustered at		
		Municipality	Year*Municipality	Province
$d^{1863} \times$ Disentailment	−0.021	(0.0104)	(0.0141)	[0.0103]
$d^{1863} \times$ Cons. vote share	0.017	(0.0083)	(0.0113)	[0.078]
Number of Clusters		597	32 x 597	22
$d^{1863} \times$ Control	X			
Municipality FE	X			
Year FE	X			
R2	0.139			
N	19,104			
Municipalities	597			

Columns (2) and (3) report, in brackets, standard errors clustered at municipality level and two-way year*municipality, respectively. Column (4) reports, in square brackets, the p-value corresponding to the F-statistic estimated using wild bootstrap. The dependent variable is the *number of battles per year*, built from Riascos Grueso (1950). *Disentailment* is a dummy variable equal to 1 for municipalities where the Church's real estate. d^t is a dummy equal to 1 for years $\geq t$. *Conservative vote share (1856)* is the share of total votes won by Mariano Ospina, the Conservative party candidate in the 1856 presidential election. Control variables are defined at the municipality level and include: foundation year, altitude, total area of the municipality, distance to the State's capital (log), distance to Bogota (log), distance to the closest main market (log), a dummy indicating early indigenous settlements (by 1534), a dummy indicating early Spanish settlements (by 1560), and soil quality index.

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