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Political Economy of Regional
Inequality in Colombia**

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Resumen

Estudiamos la naturaleza de la desigualdad regional en Colombia en los últimos 200 años. El principal hecho empírico es que la desigualdad regional ha sido altamente persistente a pesar de las grandes transformaciones del país y de la modernización de la sociedad. Este artículo muestra que la desigualdad regional está fuertemente correlacionada con diferencias regionales en las instituciones económicas y políticas, las que también son altamente persistentes durante este periodo. Proponemos una teoría de economía política tentativa del por qué la distribución espacial de las instituciones y de los resultados económicos ha sido tan persistente en el tiempo.

Palabras claves: Desigualdad Regional, Instituciones Políticas; Instituciones Económica

The Long Shadow of the Past: Political Economy of Regional Inequality in Colombia*

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Abstract

We study the nature of regional inequality in Colombia over the past 200 years. The main empirical fact is that regional inequality has been highly persistent despite the large changes that have taken place and the modernization of the society. We show that regional inequality is highly correlated with significant within-country differences in economic and political institutions, which are themselves highly persistent over the same period. We propose a tentative political economy theory of why the spatial distribution of institutions and economic outcomes has been so persistent over time.

Keywords: Regional Inequality, Political Institutions, Economic Institutions.

JEL: D31, D72, D73, D78.

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1 Introduction

Colombia is a poor country and has been for a long time. In 1900 its GDP per-capita was around 17% of the US level (GRECO, 2002) and in 2013 its relative position had deteriorated to 10% of the US level. This relatively stable comparative position hides a large absolute divergence in levels of living standards compared to the US. In the 19th Century Colombia experienced the “Great Divergence” with living standards also falling compared to the United States. Camacho (1872), for example, calculated that GDP per-capita in Colombia was about 34% of the US level, though Meisel (2011) estimate for 1846 suggests a number which was only 23% of the US level implying that at least for the early years of the Liberal Republic, Colombia might have converged a little.

But though Colombia is poor on average, some of it is a lot poorer than other parts. Income per-capita in Bogota is in fact 15% of the US level while that in the Chocó, Colombia’s poorest department, is far lower and only 4% of the US level.¹ Interestingly, this pattern of relative regional prosperity in Colombia seems to be even more persistent than the relative national position. In the 1790s data on population density, often used as a proxy for development in pre-modern periods (Acemoglu, Johnson, & Robinson, 2002; see Meisel, 2014, for the Colombian case) suggests that the parts of Colombia which are relatively rich today were relatively rich then. Indeed, the population density of Cundinamarca was 10.9 times that of the Chocó (Tovar, Tovar, & Tovar, 1994). Data on literacy levels from the 1918 census shows that this pattern was prevalent then as well, and this is mirrored in the first departmental GDP data we have from 1950. This pattern is different from the US where Barro and Sala-i Martin (1992) showed that income per-capita of states has been converging since 1840.²

What can explain this very persistent pattern of regional inequality? Most existing approaches would emphasize the invariance of underlying economic fundamentals, such as geography or factor endowments (see Sánchez & Núñez, 2016 and Gallup, Gaviria, & Lora, 2003 for geography). But the Colombian economy changed dramatically over this period and what factor endowments were relevant and where they were located also changed dramatically. The late colonial economy had been dominated by gold (McFarlane, 2002).

¹Source: World Bank, *GDP per capita*, available at <http://databank.worldbank.org/data/home.aspx>, and DANE, *Departmental National Accounts*, available at <http://www.dane.gov.co/index.php/cuentas-economicas/cuentas-departamentales> (last accessed on October 19, 2015).

To make these numbers more comparable with the historical figures we do not use purchasing power parity adjustments. When we do, the contemporary figures look better, Colombia is 24% of US GDP per-capita, while Bogotá is 35% and El Chocó 10%.

²Though this pattern does hide significant historical legacies McLean and Mitchener (2003), and interesting dynamics connected to institutional change - e.g. the convergence of the South after the 1950s (see Besley, Persson, & Sturm, 2010; Wright, 2013).

When economic growth finally picked up after 1890 it was driven by the coffee economy, initially based in Santander, and then growing rapidly in Antioquia and frontier areas in Caldas and what are now Quindío and Risaralda (Parsons, 1968; Palacios, 1980). The coffee economy changed location, expanded, making up just 8.1% of exports in 1865-1870 (Ocampo, 2010), increasing to 49% in 1898 (Ocampo, 2010), and then contracting to 3.8% of exports in 2014,³ with little apparent sustained impact on regional inequalities. The location of other economies similarly changed. Tobacco started in Santander and then moved to Ambalema in the Magdalena valley. Industrialization took off in Medellín in the early 20th Century, a place which had been virtually uninhabited in the 1790s (see McGreevey, 1971).

Not only did the location of valuable factor endowments change, so did the cost of getting from one place to another. While in 1790 Bogotá was reached via the River Magdalena and mule track from Honda, later innovations brought railways (finally in 1910) and subsequently roads. The modernization of infrastructure, which one might have thought would have led to changes in regional comparative advantages, seems to similarly have had little impact.

Other aspects of modernization also appear to have been insignificant. While average adult literacy was 17% in 1912 (Helg, 2001) it is 90% today and (the gross) primary school enrollment went from 52% in 1952 (Ramírez & Téllez, 2007) to 111% in 2012.⁴ In 1938, 15% of the Colombian population was urbanized (living in cities of more than 10,000 inhabitants), while in 2012 this was 76% of the population.⁵

So why are these regional patterns of inequality so persistent? Rather than looking towards the geography or factor endowments, in this paper we examine whether differential patterns of prosperity within Colombia can plausibly be explained by different parts of Colombia having different economic and political institutions. Put simply, we argue that the poorer parts of Colombia have had worse economic institutions in the sense that they have created far fewer incentives and opportunities for Colombians in these areas to create prosperity. These adverse economic institutions prominently include inefficient, ill-defined and ill-enforced property rights. These regions have also suffered from inadequate public policy and have received far fewer public goods than the richer parts of Colombia.

³Source: Banco de la República, *External Sector*, available at <http://www.banrep.gov.co/es/balanza-comercial> (last accessed on October 19, 2015).

⁴Source: Ministry of Education, available at http://menweb.mineducacion.gov.co/seguimiento/estadisticas/principal_ind.php?consulta=ind_tsa_cobb&nivel=23 (last accessed on October 19, 2015). Gross enrollment rate is total enrollment relative to students within the typical primary school age range. Since younger and older students may be enrolled, the rate can exceed 100%.

⁵Source: For 1938 see Rueda (1999), available at <http://www.banrepcultural.org/node/32860>. For 2012, DANE available at <http://www.dane.gov.co/index.php/poblacion-y-demografia/series-de-poblacion> (last accessed on October 19, 2015).

The evidence suggests that these factors have been very persistent, and correlated with the persistent development patterns. Thus the stability of the distribution of economic institutions and policies can account for the inertia of regional inequality.

To make this explanation credible however, we need to understand why economic institutions have been better in some parts of Colombia than in others and why public policy has systematically favored some regions at the expense of others. This is obviously a political choice. In other words, why have political institutions favored some parts of Colombia?

The most obvious correlate here is with the presence of the state. We show that the location of the Colombian state has been very persistent since the 1790s, and moreover that the state is more present precisely in the parts of Colombia which are more prosperous. Hence the first-order fact is that public policy, public good provision and economic institutions are persistently better in areas where the state tends to be present (Acemoglu, Garcia-Jimeno, & Robinson, 2015).

But the location of the state is also a choice and its persistence reflects a political equilibrium which has endured in Colombia for at least 200 years. As Acemoglu, Johnson, and Robinson (2005) and Acemoglu and Robinson (2008) observe however, there tends to be a great deal of persistence in any political equilibrium. At independence from Spain elites based in the more developed areas of Colombia which featured greater state presence, not just Bogotá and Cartagena, but also Popayán, Pasto, Santa Fe de Antioquia and Santa Marta inherited political power. We shall use the shorthand ‘core’ for these regions, as opposed to the periphery.⁶ Critically, the late colonial state was very decentralized in the sense that though most state functionaries were in Bogotá and Cartagena, local elites wielded an immense amount of power. The Bourbon Spanish were never able to impose their centralizing system of Intendants on New Grenada and when they tried they induced rebellion (Phelan, 1978). Local elites set up and reproduced a set of political institutions which empowered themselves and tended to satisfy their interests. That this was a common outcome in early Republican Latin America is well established in the history of Latin America (see Bushnell & Macaulay, 1994; McFarlane, 2014).

To explain regional inequality in this way however we must explain why this political system was so resilient to change and so inertial, particularly in a democratic context. Why was there no political pressure to expand the spread of the state or improve public policy or economic institutions in peripheral areas? Why did elites not develop a project

⁶Though it is useful for expository purposes to talk about a core and a periphery, in some senses Colombian inequality is like a fractal. There is not just a core and a periphery but at a lower scale many cores and many peripheries (see Robinson (2015) for this argument and Roldán (2002) for an example of the relationship between the core and the periphery within Antioquia).

which would have reversed this pattern?

In this essay we argue that this was because the status-quo political system created benefits for some, and difficulties for those who did not benefit to induce change. In terms of the benefits, political elites who inherited the decentralized colonial state were able to avoid the emergence of a powerful state which would have stripped away their powers or taxed and regulated them. Today, income tax revenues are 1% of GDP in Colombia and most taxes which could have threatened elite interests, such as land taxes, are ineffectually collected. Any revenues that were collected could also be kept in the core. The absence of the rule of law also greatly favors elites who are in a much better position to manipulate it (see [Robinson, 2015](#), on the recent Brigard y Urrutia scandal). This political equilibrium has also allowed elites to accumulate land and assets, often illegally (see [Robinson, 2015](#), for recent examples) and helped consolidate Colombia as Latin America's most unequal country.

This institutional equilibrium did not always look terribly advantageous for the elites because they faced collective action problems. Regional elites themselves were unable to agree on a national project of institution building, a problem particularly evident during the Liberal Republic between 1863 to 1885 when the national state was gutted financially ([M. Deas, 1982](#)) and stripped of the monopoly of violence ([Fergusson, Mejía, & Robinson, 2015](#)). Ironically, this collective action problem amongst elites further perpetuated the inherited distribution of power and presence of the state. Concentrating power and resources in the core of the country also induced constant conflicts over who would control them and a long series of civil wars which lasted until the 1950s. The way elites institutionalized the weak central state also had profound path dependent effects which kept the Colombian state weak throughout the 20th Century and helped to create violence and conflict which impacted elite interests, especially in the 1980s.

Not only was the state kept weak because regional elites wanted it that way, a perverse political equilibrium emerged whereby national state elites were disincentivized from launching real state-building projects. The backwardness and weakness of peripheral areas provided opportunities to extract political and economics rents.

The political institutions were perpetuated also because there was little effective popular pressure which could push them in a different direction. In the 19th Century, when democracy was highly imperfect, elites were able to dominate the executive. At the time of franchise extension, initially in the 1850s, the existing elites also built effective political machines, the Liberal and Conservative parties, which were able to integrate and control non-elite populations. This made it very difficult for peripheral Colombia to influence policy. The clientelistic nature of Colombian politics, focused on the exchange of private goods for support, mitigated against change, a prime example of a public good. The

concentration of the state in the core also created a very fragmented disconnected society in the peripheral areas which lacked a public sphere and was unable to coordinate to effectively oppose the status quo. Though some institutional changes certainly benefitted the periphery, such as the abolition of slavery in 1851, public policy continued to discriminate against the poorer regions. This was further accentuated in the 20th Century by the fact that even after 1928, large parts of peripheral Colombia were not departments but rather *intendencias* or *comisariías*. As such they did not have representation in the legislature but instead were governed from Bogotá. This changed only with the new constitution in 1991.

The paper proceeds as follows. In the next section we present evidence which shows the persistent pattern of regional inequality in Colombia since the late colonial period. In section 3 we present data on the regional distribution of economic institutions. Section 4 then moves to discuss political institutions, while section 5 discusses our political economy theory in more detail. Section 6 concludes.

2 Regional Inequality in Colombia in the Long-Run

We start by documenting some basic facts about regional inequality in Colombia since the late colonial period. We use a variety of variables and sources which we present as we discuss the data, and are also summarized in Appendix Table A-1.

The earliest picture of regional inequality comes from the late colonial censuses of the provinces of *Nueva Granada* tabulated by Tovar et al. (1994). These contain systematic data on the population at the end of the 18th Century (census years range from 1777 to 1793, depending on the province). As argued by Acemoglu et al. (2002), population density in the pre-modern period is a useful proxy for economic development. We present these data aggregated to the level of modern departments in Figure 1. The white departments are those for which we have no data, primarily the Eastern Llanos and Amazonas. For the rest of the country we divide the data into quintiles with the darkest representing the departments which have the highest density of population which goes from 2.1 people per square kilometer to 23.1 per square kilometer (throughout the paper darker shades refer to better development outcomes). The most densely populated areas are in the eastern *cordillera*, corresponding to the modern departments of Cundinamarca, Boyacá and the Santander. The departments to the east, like Meta and Casanare tend to be much less densely populated, as do the Caribbean departments (with the exceptions of Bolívar and Sucre), and the Pacific littoral (though Valle is relatively densely populated most people lived the Cauca Valley, not west of the western *cordillera*).

Our next window on regional inequalities in Colombia comes from the 1918 census.

Figure 2 plots both population density in 1918 (right panel) and the adult literacy rate (left panel) at the municipal level using the modern boundaries for municipalities. This generates a lot of missing data (in white) since in 1918 there were fewer and larger municipalities. Nevertheless, the picture is quite clear. Consider population density. The map shows the distribution of density (people per squared kilometer) in sextiles with each bin containing 1/6 of the total number of municipalities for which we have data. Again, darker bins have higher population density, reaching 58 to 527 people per square kilometer in the top sextile, from at most 9 people per square kilometer in the lowest. Population density is still concentrated in the eastern *cordillera*, the Caribbean coast around Cartagena and in the Cauca River Valley. The difference with the end of 18th Century is that the population density of Antioquia has increased along with municipalities to the south of it in Caldas and the central *cordillera* as a consequence of the frontier expansion associated with the growth of the coffee economy. Linkages from this process also triggered the first stirrings of industrialization in Colombia (Brew, 1977). Nevertheless, it is not clear that this represents a dramatic change in relative prosperity. Though in the 1790s population density in Antioquia was low, it was a relatively prosperous region due to the large gold mining industry (Twinam, 1982). The pattern for literacy rates mirrors that of population density, reinforcing the notion that the latter is actually a useful proxy for development outcomes. Again we divide literacy in six bins by sextiles. In the darkest bin literacy rates go from 39.7% of the population to 73.5% in the municipality of Tuta (Boyacá). In the lowest bin literacy rates go from almost zero, 0.6%, in San Andres de Sotavento (Córdoba), to 15.6%. One sees that literacy was highest in the eastern *cordillera*, the Cauca Valley, in Antioquia and in the urban areas on the Caribbean coast, Cartagena and Santa Marta.

Figure 3 brings the picture right up to date showing the dynamics of GDP per-capita per-department since 1950 when modern data collection starts. In 1950 La Guajira on the Caribbean coast bordering Venezuela was the poorest department, but by 1960 it had overtaken El Chocó on the Pacific Coast which has stayed the poorest department ever since. The general picture shows a broad distribution of outcomes which has narrowed only modestly, staying remarkably constant. Bear in mind also that the figure depicts the logarithm of income per capita, so while differences have remained approximately constant proportionally, this implies widening gaps in absolute terms. The most prosperous places are the city of Bogotá, departments like Cundinamarca and Santander in the eastern *cordillera*, Antioquia, and Valle with its developed agricultural economy in the Cauca Valley. The greater volatility here is due to natural resource wealth, for example in Meta.

Nevertheless, income generated by natural resources does not necessarily convert into other forms of development. This can be seen in Figure 4 where we plot the distribution

of multidimensional poverty rates in Colombia.⁷ Now dark colors represent lower poverty rates with each shade representing 1/6 of Colombian municipalities as before. Poverty rates are very high across the entire country, with even the lowest incidence implying that one out of every seven inhabitants is poor (14% in Envigado, Antioquia – part of Medellín’s broad metropolitan area). Indeed, the first sextile ranges from 14 to 54%, so that in the remaining 5 sextiles, or 83% of the municipalities with data, more than 54% of the citizens are poor. The figures would be less dire if weighted by population, as poverty is far less prevalent in the more populous city centers than in rural municipalities, another mark of Colombia’s persistent inequality. Regional inequality is also very clear in this map. Poverty is more prevalent on the Caribbean and Pacific Coasts and on the eastern plains and the Amazonas. It tends to be lower in the eastern and central *cordilleras* and in the Cauca Valley. Though a part of northwestern Meta has relatively low poverty, poverty rates in the department are generally very high.

Though there is variation, taken together these maps suggest that there has been a great deal of persistence in the pattern of regional inequality in Colombia (first pointed out by Meisel, 2014, using population density).⁸ The places which were relatively most prosperous in the late colonial period are still so today. The question is why?

3 Economic Institutions and Policies

In the previous section we showed that the regional distribution of prosperity in Colombia has been remarkably stable for over 200 years. What can explain this? We now show there are strong correlations between some economic institutions and public policy outcomes and the development outcomes we documented.

Historical information on economic institutions is even more scarce than that on development outcomes. But Figure 5 taken from Acemoglu, García-Jimeno, and Robinson (2012), shows the distribution of slavery from the 1843 census. In particular, it depicts quintiles⁹ of slaves per 100,000 inhabitants on current municipal boundaries, with the darker bins representing a lower incidence of slavery (as before, we follow the convention that darker bins are for better outcomes, in this case better economic institutions). Acemoglu, García-Jimeno, and Robinson (2012) show that this is causally associated with poverty and under-development in Colombia today. Slavery was absent from large parts

⁷The picture would be very similar if we looked at other development outcomes available at the municipal level, for example education.

⁸Available data suggest other economic outcomes, such as wealth inequality, are also very persistent over time (see Acemoglu, Bautista, Querubin, & Robinson, 2008 on land distribution).

⁹Since many municipalities have no slaves, quintiles were defined after excluding municipalities without slavery. The set of municipalities without slaves were then combined with the lowest quintile.

of Colombia (indeed, the first quintile has no slaves and the second at most 5 slaves per 100,000 inhabitants). Slavery was therefore also absent in parts that are relatively poor today, such as the eastern planes. But what is clear from the Figure is that it was concentrated in the Pacific littoral and the Caribbean coast, both of which are relatively poor suggesting that at least part of the story of why these places were poor is because they had very “extractive” economic institutions (Acemoglu & Robinson, 2012).¹⁰

The first time we can look at public good provision in a systematic way is in the 1918 census, which provides data on vaccination rates by municipality. We plot this in Figure 6. This shows the usual pattern. The municipalities which tend to have higher rates of vaccination are in the eastern and central *cordillera*, the Cauca Valley and in urban areas on the Caribbean coast. In the darkest bins with higher vaccination rates, numbers reach 95.1% (with the top figure attained in Gambita, Santander). In the other end, there were municipalities with a zero vaccination rate.

Though measuring other dimensions of public good provision in the 19th Century is challenging, we can approach it through the lens of violence and conflict. Colombia had a long series of civil wars and good data exist on where battles took place (Fergusson & Vargas, 2013).¹¹ We use this data in Figure 7 in a comparison that helps demonstrate that there is a great deal of persistence in the location of violence in Colombia. To do this we use contemporary data on forced displacement between 1997 and 2009 and data on violent events perpetrated by guerilla or paramilitary groups (both averaged over the period 1996 to 2012). We control econometrically for municipal population and department fixed effects and plot the residual levels of displacement and violence broken down into two sets of municipalities - those that had above median levels of 19th Century battles and those that had below median (where we also control for population and departmental fixed effects). We present the data with and without departmental capitals. Partialing out municipal population is desirable because it might simply be the case that battles and violence happen in low population density areas, making any correlation between them spurious, and departmental fixed effects also control for potential unobservables which could confound the relationship. What Figure 7 shows is that places which experienced battles in the 19th Century tend to have systematically more violence today, in terms of any of our three measures.

Where are these places? Figure 8 speaks to this. We plot the data for the average amount of contemporary guerilla or paramilitary violence at the municipality level nor-

¹⁰The broader evidence, see Nunn (2008) and Nunn and Wantchekon (2011), is very consistent with slavery having very bad long-term economic effects.

¹¹Another interesting measure of 19th Century conflict is that developed by Fazio, López, and Sánchez (2010) who constructed a dataset of land disputes from LeGrand (1986). This shows a very similar regional pattern.

malized by population. Again we control econometrically for population and departmental fixed effects. Though the pattern is complex, if one considers paramilitary violence we see that this is systematically lower in the eastern *cordillera* and the Cauca Valley and higher in the Caribbean coast and Pacific littoral and parts of the eastern planes (though it is also very high in Antioquia). When examining the guerillas, there is a relatively widespread influence of them in the country, but looking closer one can appreciate the fractal nature of violence akin to the one discussed in footnote 6: within different areas of the country the periphery seems more affected with violence than the center. This is especially clear when observing the darker colors in Bogotá and its surrounding areas relative to the rest of Cundinamarca, as well as Medellín relative to the rest of Antioquia. Security seems to be one of the key public goods that the Colombian state has never been able to deliver uniformly in its territory.

Focusing now on the contemporary period more squarely we can measure some key economic institutions. One of the most basic ideas in the literature on institutions and economic development is that there are strong reasons to believe that the nature and security of property rights should have large causal effects on development (see Acemoglu, Johnson, & Robinson, 2012; Acemoglu, Gallego, and Robinson (2014) for evidence). Figure 9 takes a first pass at this with data on the proportion of people who hold land without a formal title. The data, from the national cadastral institute, excludes Antioquia because that department has its own institute from which we were not able to get the data. Darker shades indicate that a greater proportion of land is titled. Large parts of the eastern planes and Amazonas are dark because they have indigenous resguardos which were titled by the government. Similarly, dark areas on the Pacific Coast represent the fruits of the 1991 constitution which allow Afro-Colombians to claim collective title to their lands. Nevertheless, the same sort of regional patterns we have been identifying so far emerge in Figure 9. The darker areas tend to be in the eastern and central *cordilleras*, and though we lack Antioquia, the region south of it in Caldas is noticeably dark. Peripheral Colombia has much less well defined property rights. In fact in the group with greatest informality of property rights, we find up to 100% of land plots without a proper title, as in Lloró, Juradó and Bojayá (Chocó). Though informality is extremely prevalent throughout the country, some municipalities have markedly lower figures. In the sextile with lowest incidence of informality, ranging from zero to four percent of land plots without title or registration, we find most of the municipalities of the *Sabana de Bogotá* bordering the capital, as well as cities of the *eje cafetero* and Santander, all exhibiting a Multidimensional Poverty Index under 35.¹²

¹²Girardot (0.8%), Tocancipá (1.1%), Sopó (1.2%), Chía (1.3%), Cajicá (1.4%), Gachancipá (1.4%), El Rosal (2.3%), Madrid (2.6%), Tenjo (2.8%) and Zipaquirá (3.3%) in Cundinamarca; San Gil (0.8%)

Peripheral Colombia has less secure property, and more important, human rights. We measure this in Figure 10 by using data on violent displacement averaged between 1997 and 2009 from the Unidad para la Atención y Reparación Integral de Víctimas (UARIV).¹³ According to the United Nations, until it was recently overtaken by Syria, Colombia was the country in the world with the highest number of internally displaced people. In 2015 it came second with 6,044,200 displaced people while Syria had over 7 million. Nevertheless, Colombia has more displaced people than Iraq and the Democratic Republic of the Congo put together.¹⁴ As Figure 10 shows this displacement is concentrated in the parts of Colombia with greater poverty and more violence. We again see that there is less displacement in the eastern and central *cordilleras*. The case study evidence is conclusive that such displacement is associated with mass expropriation of land so this is a useful proxy for the insecurity of property rights in Colombia as well (see Reyes, 2009; Grupo de Memoria Histórica, 2016). The figures are quite striking. In core Colombia (the darkest areas in the lowest bin corresponding to the first sextile of the displacement distribution), municipalities like Gachancipá (0.69), Cota (1.11) and Tenjo (1.65) in Cundinamarca near Bogotá and Envigado (1.94) in Antioquia near Medellín, had less than 2 people displaced on average for each 100,000 inhabitants per year. In peripheral Colombia, however, we observe up to 33,000 people per 100,000 (a third of the population!) displaced on average per year. Some examples are San Miguel (32,980) in Santander, Nariño (23,470) in Cundinamarca, Florencia (23,007) in Cauca and Carmen del Darién (15,290) and Bojayá in Chocó (15,288), all of them with more than 15,000 displaced on average for each 100,000 inhabitants and per year.

Until now we have been using simple visual techniques to illustrate the correlation between economic institutions and relative poverty and development in Colombia. Figure 11 turns to another important measure of institutions, the efficiency of the judicial system, and to confirm that there is indeed a significant correlation between this and poverty rates we present this data in a scatter plot. The data on judicial efficiency come from García and Espinosa (2013) and is based on the proportion of murder cases that actually lead to a sentence and the number of judges per population and area. When a greater proportion of cases which are investigated lead to a conviction, and when there are more judges per person and per square kilometer, then we argue that the judicial system is more present and efficient. This data is plotted at the municipal level against the multidimensional

and Floridablanca (1.8%) in Santander; Manizales (1%) in Caldas; Armenia (2.3%) in Quindío; Pereira (1.5%) and Dos Quedradas (1.5%) in Risaralda.

¹³Data from the *Registro Único de Víctimas*, available at <http://www.unidadvictimas.gov.co> (last accessed on October 16, 2015).

¹⁴See the “Global Overview 2015” from the *Internal Displacement Monitoring Centre*, available at <http://www.internal-displacement.org/global-overview> (last accessed on October 16, 2015).

poverty rate that we plotted in Figure 4. There is a very strong negative correlation between these variables. Municipalities which have more efficient judicial systems have much lower rates of poverty. Just as it has more violence and displacement and less well defined property rights, peripheral Colombia also has a much less efficient judicial system.

Though the data of this section are at best suggestive, they do show that there are strong correlations between measures of key economic institutions and public policy and development outcomes in Colombia. The parts of the country which are less developed and have higher poverty rates have more extractive economic institutions and worse public policy.

From one perspective the pattern of regional inequality in Colombia could be explained simply by the location of colonial extractive institutions and their legacy (as in Engerman & Sokoloff, 1997; Dell, 2010; Bruhn & Gallego, 2012) and to some extent this is what Acemoglu, García-Jimeno, and Robinson (2012) show. It is also likely, as Fergusson (2013) points out that there are types of ‘public goods traps’ where a state unable and unwilling to provide public goods induces people, particular elites with the resources, to provide them themselves, which then weakens the demand for public goods. Yet there is more to it than this. In the introduction we argued that this is likely due to the political equilibrium in Colombia. Peripheral areas have worse economic institutions and are discriminated against in terms of public good provision because they have less power than central regions and have been unable or unwilling to change the distribution of institutions or resources.¹⁵ To make such claims credible we now turn to the measurement of political institutions.

4 Political Institutions

In the last two sections we showed that the pattern of regional inequality in Colombia has been stable for at least 200 years. Moreover, we argued that some, certainly incomplete, evidence, suggests that this pattern of prosperity reflects the distribution of economic institutions and economic policies. Overtly extractive economic institutions like slavery were more intense in the poor parts of Colombia, and lasted until 1851. There was also more conflict and fighting in the poor parts of Colombia in the 19th Century, suggesting that public good provision was lower there and this is certainly true for the 20th Century when we begin to get better data.

In the introduction we argued that a first-order underlying cause of the variation in economic institutions and public policy was the location and functioning of the Colombian

¹⁵ Dell (2010) proposes exactly this sort of causal chain to explain why colonial extractive labor institutions have left a development legacy in Perú.

state. In fact, the Colombian state has been focused for the past 200 years in that part of the country where public good provision and economic institutions are better and hence where there is greater prosperity. The immense persistence of the location of the Colombian state is illustrated by Figure 12. Here, following Acemoglu et al. (2015), we use the late colonial survey of the state bureaucracy by Duran y Diaz (1794) to construct a measure of historical state presence in each modern municipality. We then use Acemoglu et al. (2015) measure of contemporary state capacity (in 1995). Duran y Diaz (1794) reports the total number of government functionaries in every location which they were posted and we matched that to contemporary municipalities. Acemoglu et al. (2015) similarly use simple measures of the physical presence of the state, either total number of state employees or, what we use here, the total number of state agencies. The Figure, which again partials out population (using Tovar et al. 1994, for the population relevant to the data in Duran y Diaz, 1794) and departmental fixed effects, shows that municipalities which had more state presence in 1794 have significantly more state presence in 1995 than their population or department would predict. Similarly, municipalities which did not have state presence in 1794, have less state presence today than their population and department would predict.

Figure 13 shows the persistence in the location of the state for the 20th century during the period of economic growth, modernization and structural changes such as urbanization and the rise and fall of the coffee economy. It shows the strong correlation between a simple measure of state presence from the 1918 census, the number of public officials in a municipality, with state presence in 1995 measured as in Figure 13 (again conditional on population and departmental fixed effects).

Figure 14 looks at this remarkable persistence in the location of the Colombian state in a different way. Here instead of using Duran y Diaz (1794) data on public officials, we use his data on the location of various public entities such as ‘estancos’ which administered the colonial monopolies of tobacco, gunpowder, playing cards and aguardiente (liquor). We separate modern municipalities into those which did or did not contain one of these estancos and compare for these categories the amount of contemporary state presence from Acemoglu et al. (2015), where we partial out population and departmental fixed effects. The figure shows that municipalities which historically had state entities in 1794 tend to have more state presence today than their population or departmental characteristics would predict. At the same time municipalities which had no presence of any of these estancos have less presence of the state than one would expect based on their population or department. The location of the colonial state has cast a long path-dependent shadow over Colombian political institutions over the past 200 years.

That this matters greatly for development outcomes and regional inequality is apparent

in the next three figures. They all use the measure of contemporary state capacity used in Figures 12 and 13 and plot it against three contemporary development outcomes, a life quality index from the 2005 census (Figure 15), the share of the population not in poverty from the 2005 census (Figure 16),¹⁶ and the secondary school enrollment rate averaged over the period 1992-2002 (Figure 17). All of these figures again partial out population and departmental fixed effects. They all show there are very strong correlations between the presence of the state and development outcomes. As Acemoglu et al. (2015) empirical results show, the presence of the state today is causally related to public good provision and development outcomes. Indeed, they find that if one moved all the municipalities below the median level of state capacity to the median, then the median coverage rate of public utilities increases by 10 percentage points, the median fraction of the population in poverty falls by 11 percentage points, and median secondary school enrollment rates increase by over 26 percentage points, all very large effects.

Figures 15-17 show the ‘reduced form’ relationship between political institutions and development outcome. If we looked at the ‘structural equations’ we would find the intermediate link: where the state is present economic institutions are better (property rights are better defined and more stable and there is far greater provision of public goods).

Hence a starting point for understanding the existence and persistence of regional inequality in Colombia is the fact that the presence of the state has also varied regionally and the state is more present in the places which are more prosperous. Moreover, where the state is present, public good provision is higher and poverty is lower. These findings hold even though we are not able to measure the ‘total factor productivity’ of the state but its mere physical presence. Since an overwhelming amount of case study evidence suggests that state is not just relatively absent but far less functional in peripheral Colombia, these numbers likely under-estimate the true effects of the location of the state on development outcomes.¹⁷

The data we have presented shows that the presence of the Colombian state has been very inertial over time. Though there are obviously costs involved with moving a state once it is located in a particular place, ultimately it is a political decision where to put the state and most importantly whether or not to extend the reach of the state to the rest of the country. Thus lying behind the persistent location of the state, and the consequent regional inequalities, is politics. The political equilibrium must have two key features to explain the data: first, the politics of the country must not have generated any inducement

¹⁶This is a different measure of poverty than the multi-dimensional poverty index used before, but its regional distribution is very similar.

¹⁷See Acemoglu, Fergusson, Robinson, Romero, and Vargas (2016) for econometric evidence on one aspect of the dysfunctionality of the Colombian state.

for those who held power in the core to expand the state; second, those in the periphery must have been unable to force this to happen.

Why the first would be true is not obvious. If it were true that political power were concentrated in part of the country, such interests ought to have incentives to expand the state, which they controlled, to the rest of the country to take advantage of the economic resources there. Why the second would be true is not obvious either. For example, though Colombian democracy has been very imperfect, there have been moments of very active participation even in the 19th Century (e.g. Bushnell, 1971, the essays in M. D. Deas & Michelsen, 1993; Posada-Carbó, 1997; Posada, 2005; Fergusson & Vargas, 2013). Why have the voters in the periphery not been able to force the state to expand and provide services and public goods outside of the core of the country?

Before considering these questions it is good to confirm that in both *de facto* and *de jure* senses peripheral, relatively poor Colombia, has been disempowered politically. One way of doing this, following Meisel (2012), is to examine the departmental origins of cabinet ministers. Meisel did this for the 20th Century and we extended his data to the 19th Century. Figure 18 presents a measure of political representation at the department level during the 19th Century (left panel) and the 20th Century (right panel). The measure takes the ratio of the number of cabinet ministers from the relevant period (weighted by tenure in office) from a particular department relative to its population and divides it by the ratio of the total number of all cabinet ministers to the national population. This is expressed as a percent, so if a department has an index above 100 then it is over-represented relative to its population. For the 19th Century the most over-represented department was Bolívar on the Caribbean coast, which had such famous politicians as Rafael Núñez. Also over-represented however were Cundinamarca and Norte de Santander in the eastern *cordillera*, and Cauca. Very under-represented places are all in the periphery or had yet to really be colonized, such as Caldas, Risaralda and Quindío. In the 20th Century the pattern is even clearer with the departments in the eastern and central *cordilleras*, Caldas, Santander, Boyacá, Cundinamarca, Antioquia, Tolima, all being over-represented, while departments in the periphery are without exception under-represented.

This data suggests that part of the reason behind the persistence of the location of the Colombian state has been that it generated a bias in the allocation of political power, here captured with the regional distribution of ministerial positions. The state was run by people from the core, where the state was, and they naturally had more interest in providing public goods and good economic institutions in places where they themselves lived or had investments. The dominance of core Colombia in national politics is well illustrated by the 2014 Presidential election race which saw representatives from Santos,

the López and Lleras families, all Bogotano political dynasties which had former presidents in their ranks. Even the competition came from the core, Óscar Iván Zuluaga came from Caldas in the central *cordillera* and was backed by former President Álvaro Uribe, from Antioquia.

Figure 19 provides some *de jure* evidence on this. As we noted in the introduction, for much of the 20th century large portions of the most under-developed parts of Colombia did not have political equality with departments and instead were *intendencias* or *comisarías* run by administrators from Bogotá. Under the 1886 Constitution, Colombia's territory was organized in *departamentos*, *intendencias* and *comisarías*, in turn divided into municipalities. While the general political and administrative organization was highly centralized, *departamentos* enjoyed comparably more political and administrative autonomy than the relatively less populated and more distant *intendencias* and *comisarías*. These were controlled from Bogotá by the National Ministry of the Interior up to 1975. In 1975, the *Departamento Nacional de Intendencias y Comisarías* (DAINCO) was created to “promote their economic, social and cultural development”¹⁸. The DAINCO set policies for these territories and moreover could approve, reprove or modify the decisions made by the local authorities of the *intendencia* or *comisaría* (Article 2g). Moreover, *intendencias* and *comisarías* did not elect Senators or Congressmen, and after 1930 their territories were annexed for electoral purposes to the electoral districts of neighboring *departamentos*. Though there were some attempts for the *intendencias* to constitute electoral districts to elect congressmen, these efforts were ultimately unfruitful (see Jara, 2007, for a discussion of the case of Meta).

In Figure 19 we compare current municipal outcomes depending on whether a given municipality lies in a territory that was, by 1928, part of a fully constituted *departamento* or not. If it does, we label the territory “autonomous” in 1928, and not otherwise. The reason we use 1928 is that, by then, Colombia's territory was more or less fully consolidated, since following the 1886 Constitution several changes were introduced in just a few decades as the country set not just its internal but its external boundaries. One consequence of this arrangement seems to have been even more severe neglect and under-provision of public goods. This is evident from the data we present in Figure 19. Here we take a number of the development and institutional indicators we have used in the paper and organize them in three columns. Where appropriate we partial out population on the grounds that an absolute dearth of public goods in the former *intendencias* or *comisarías* could plausibly reflect that they have been and are very sparsely populated.

The results are striking. The first column looks at the presence of the state, with

¹⁸Decreto 1925 de 1975, Diario Oficial No. 34570 del 11 de junio de 1976, <ftp://ftp.camara.gov.co/camara/basedoc/decreto/1975/decreto.1925.1975.html> (last accessed in October 16, 2015)

capacity in 1995 measured with state agencies in the first row and an index of open government in the second. In the same vein, the third row looks at the physical presence of judges while the fourth at how efficiently they operate. The key message is that the state is both more present and works better in places that were not historically treated as *intendencias* or *comisarías*. We break all of these variables into two bins and present the average for municipalities which were *intendencias* or *comisarías* between 1928 and 1991, and those that were not and were therefore part of departments. The second column then presents four measures of development: from a general development and life quality index to the incidence of poverty. The former *intendencias* or *comisarías* do worse on every single development and institutional outcome. Finally, the third column shows that internal conflict and violence is more present in these areas. It appears that manipulating the political status and representation of underdeveloped Colombia had the consequence of keeping it underdeveloped. This is obviously part of the reason why peripheral Colombia has been unable to force the central state to pay more attention to it.¹⁹

Over time, some of the *intendencias* and *comisarías* were transformed into *departamentos* (which required a large enough population and sufficient tax revenues, among other requisites). But only the 1991 Constitution eliminated them altogether, dropping the distinction and organizing the territory only in *departamentos* comprised of municipalities. But even then, it is interesting that these territories were not granted full rights right away. In particular, articles 7 and 8 of Decree 2274 of 1991²⁰ set elections for governor in the former *intendencias* for that same year. Instead, former *comisarías* would only elect their governors in 1997. The government opposed introducing elections immediately because it feared the strong influence of drug lords and guerillas, which could “distort” the electoral process.²¹ Of course this is particularly revealing of the extent of state weakness in these areas, but it is also revealing of the hypocrisy of national elites who systematically discriminated against these areas for most of the century. Before 1997 then, the decree established that the governors of these departments would be “agents of the president”, to be appointed or removed at his discretion.

¹⁹A fact suggesting the importance of this distinction is that in 1945, of the 18,500 km of roads which the government had built, only 613 km of them, none of which were paved, were located in the *intendencias* and *comisarías* which together composed 3/4 of the country’s land area (Pachón & Ramírez, 2006, pag. 57)

²⁰Decreto 2274 de 1991, Diario Oficial No 40.078, del 4 de octubre de 1991, available at <ftp://ftp.camara.gov.co/camara/basedoc/decreto/1991/decreto.2274-1991.html> (last accessed in October 16, 2015))

²¹See El Tiempo, “A partir de hoy, no más Intendencias ni Comisarías”, October 5 1991, <http://www.eltiempo.com/archivo/documento/MAM-166769> (last accessed in October 16, 2015)

5 The Political Economy of Persistent Regional Inequality

The last section established a few facts about the persistence of political institutions, particularly the location of the state in Colombia, and showed that this mattered for regional inequality. We also presented both *de facto* and *de jure* evidence that part of the explanation for this is that political power was historically concentrated in the core and this power was used to keep the core stronger politically than the rest of the country.

But the political dominance of the core cannot be the whole story about regional inequality. For one thing this has not allowed, or incentivized, elites like the Santos, the López and Lleras families to build a modern effective state. The Colombian state has always been very weak, fiscally, bureaucratically and been unable to fulfill basic tasks such as building infrastructure or establishing a monopoly of violence. If the state had been dominated so completely by elites located in the colonial center, why have they not used their power to build institutions and dominate the rest of the country?

There are a number of reasons for this. Some are related to the interests of these post-colonial elites. Building a modern state may be advantageous from a social point of view, but it might not serve the interests of those in power. Indeed, though Colombia is not a rich country by world standards, it is Latin America's most unequal society and elites enjoy first world standards of living. The weak Colombian state has allowed them to go untaxed and unregulated, has allowed them to manipulate the legal system to their advantage and acquire monopolies and large amounts of land and other assets. It has also facilitated a large illegal economy from which elites have greatly benefitted. Thus elite interests have helped to keep the Colombian state weak and fixated in parts of the country.

There is more to it than this however. To understand the persistence of the location of the state and regional inequality one has to understand the 19th Century struggle in Colombia over the construction of a national state. There were colonial elites in Cartagena, Santa Marta, Popayán, Pasto and Santa Fé de Antioquia as well as in Bogotá. This contest over the state was definitively decided after the 1863 Constitution in favor of institutionalizing a very weak national state (Fergusson et al., 2015). The reason for this is that regional elites were worried about potential state building projects being launched by elites in Cundinamarca or potential dictators such as the military commander Tomás Cipriano de Mosquera. The equilibrium that was reached was a hyper federal one with a national state that was so weak that Law 20 of 1867 forbid the national state to intervene in armed conflicts in its constituent states, thus legislating away the monopoly of violence. But more profoundly the equilibrium was enforced by making armed rebellion against the

state a practically legal and legitimate activity (Fergusson et al., 2015). As recently as 1980 the Colombian Penal Code had the following clause:

“Title II Crimes Against the Constitutional Regime,
Chapter I Of rebellion, sedition and riot
Article 125. Rebellion. Those who by use of arms to overthrow the National Government, or who delete or modify the legal or constitutional regime by force, incur imprisonment of from three to six years.”²²

The very weak state created a *status quo* bias in the distribution of institutions in Colombia. Change, after all, is a public good.

This equilibrium did not end up being hugely advantageous for elites in the regions because they suffered due to the lack of an effective national state. Though regional elites might have been powerful enough to create a set of institutions which stopped Bogotá creating a hegemony over the country, they were not powerful enough to manipulate the national institutions in their interest and this is manifested in our data on ministerial appointments. While regional elites had an interest in public goods being provided locally, they could not set up their own police service, education ministry, or judicial service. Thus while politically autonomous in many ways and embedded in a system that guaranteed such autonomy, regional elites were nevertheless unable to manipulate state institutions based in Bogotá freely and those institutions naturally focused more on the core than the periphery.

The weak Colombian state had many other effects which have helped to make regional inequality persistent. One is that it was embedded in and facilitated a very clientelistic form of politics focused on the distribution of private goods for support, not public goods (see Robinson, 2007, on the private good - public good nexus in Colombian politics and Fergusson, Molina, & Robinson, 2017, on the vicious cycle between clientelism and state capacity). The evidence suggests that politics in the periphery was more clientelistic than at the core. We can illustrate this empirically using the *Encuesta Longitudinal Colombiana (Elca)* and in particular the politics module of this large survey of Colombian households. One way to measure clientelism is via the question on vote buying which asks: “As you know, some politicians offer money in exchange for votes. Do you think that someone like you, from your neighborhood or community would accept \$X pesos for its vote?” Following the *contingent valuation method* technique, the amount \$X is randomized across respondents and we can estimate an average price at which voters would be willing to

²²Decreto - Ley 100 de 1980 (Código Penal), Diario Oficial No. 35.461 de 20 de febrero de 1980, Available at ftp://ftp.camara.gov.co/camara/basedoc/codigo/codigo_penal_1980.html (last accessed on October 16, 2015)

sell the votes. The larger this amount the less clientelistic political exchange is, as it signals that voters are reluctant to sell their votes (see [Fergusson & Riaño, 2014](#)). In Figure [20](#) we plot these prices for groups of communities with different levels of state presence, as captured by the information gathered in a community questionnaire in the same survey. The picture is clear: where the state is more present in terms of institutions like schools, police stations, or where it provides more public goods in the form of paved roads, or where there are formal local political institutions like the *Juntas de Acción Comunal*, people are more reluctant to sell their votes. Instead, if they have suffered more from conflict (lower panel), they easily sell their votes and political exchange is more clientelistic. It is difficult in such a political system to focus attention on institution building or change. The nature of the state also created a very fragmented society focused on parochial issues, not public goods and institutional change. These are yet other reasons why even if there was democracy of sorts in Colombia, it did not force national politicians to initiate a state building project to change the pattern of institutions (see [Robinson, 2013, 2015](#), for other mechanisms).

It is also true that state building did not happen just because regional elites opposed it but also because once the political equilibrium in Colombia was institutionalized in the 1860s it created other incentives which mitigated against state building. One was that the weak state developed a form of bargaining with elites and the periphery which was attractive for them in many ways and which state building would have disrupted (see [Acemoglu, Robinson, & Santos, 2013](#)). Moreover, state building is risky and can potentially trigger conflicts. [De Tocqueville \(1856\)](#) for example, attributed the French Revolution to the state building policies of 18th century French monarchs, and [Pincus \(2007\)](#) makes a general argument along these lines. A potential application of these ideas in the Colombian case would be the connections between the ‘Revolution on the March’ of the Liberal government between 1934 and 1938, typically portrayed as a state building project by President Alfonso López Pumarejo (though the regime re-affirmed the *de jure* absence of the state’s monopoly of violence) and the subsequent violence of *La Violencia* starting in the 1940s.

6 Conclusion

In this paper we have studied the determinants of regional inequality in Colombia. The main fact we emphasized is that the pattern of regional inequality seems to have been remarkably stable over time. Moreover, it seems to be robustly and causally related to economic institutions, which have been more extractive in the poorer parts of Colombia. Poverty in Colombia is associated with poorly defined and more insecure property rights,

more violence, a less efficient judiciary and less public good provision. This variation, like the variation in development outcomes, has been very persistent. We showed that lying behind this variation in economic institutions and public policy is systematic variation in political institutions. Most significantly, the state is much less present in the parts of Colombia with more extractive institutions, less development and more poverty.

We then proposed a political economy theory which can help to explain these facts. The location of the state was determined by the location of the colonial state and we argued that this set in motion a number of path dependent processes. Most simply, colonial elites perpetuated their power *de facto* and *de jure*, leading the places where they themselves were invested to benefit differentially from public goods and better economic institutions. This inertia was kept in place by a variety of other forces however. Post-independence elites were never able to agree on the creation of an effective national state which could have transformed economic institutions and policies (so neither of these were actually so good even in the core, the major reason why Colombia on average is not a rich country) and this created persistence. Citizens in the periphery who have suffered were not able to demand change because Colombian democracy has been very low quality and clientelistic and so not focused on the provision of public goods, like change. Moreover, the weak state created a fragmented society in the poor areas of the country focused on parochial issues and lacking a public sphere that could have led to more unity about the need to reconfigure institutions. As a result no political movement emerged which could demand change. The traditional Colombian political parties also created numerous barriers to entry in the political system that made the emergence of new political forces difficult. We also discussed other political mechanisms which have disincentivized elites from launching a state building project.

Colombia has suffered from long-standing and persistent regional inequalities because of the spatial distribution of economic institutions and policies and ultimately this has political roots. It is the political economy of Colombia, particularly of the state, which has created regional inequality and allowed it to persist.

References

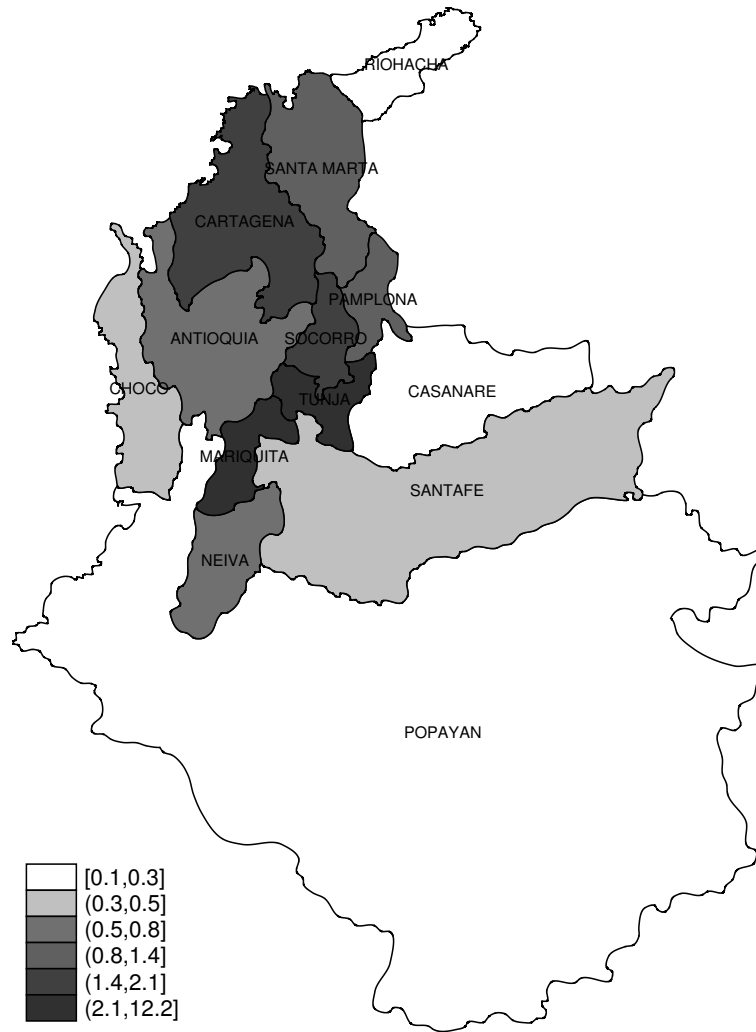
- Acemoglu, D., Bautista, M., Querubin, P., & Robinson, J. (2008). Economic and political inequality in development: the case of Cundinamarca, Colombia. In E. Helpman (Ed.), *Institutions and economic performance*. Cambridge: Harvard University Press.
- Acemoglu, D., Fergusson, L., Robinson, J., Romero, D., & Vargas, J. (2016). The perils of top-down state building: evidence from Colombia's false positives. *NBER Working Paper No. 22617*.
- Acemoglu, D., Gallego, F., & Robinson, J. (2014). Institutions, human capital, and development. *Annual Reviews of Economics*, 6(1), 875-912.
- Acemoglu, D., García-Jimeno, C., & Robinson, J. (2012). Finding Eldorado: slavery and long-run development in Colombia. *Journal of Comparative Economics*, 40(4), 534-564.
- Acemoglu, D., Garcia-Jimeno, C., & Robinson, J. (2015). State capacity and economic development: a network approach. *The American Economic Review*, 105(8), 2364-2409.
- Acemoglu, D., Johnson, S., & Robinson, J. (2002). Reversal of fortune: geography and institutions in the making of the modern world income distribution. *Quarterly journal of Economics*, 117(4), 1231-1294.
- Acemoglu, D., Johnson, S., & Robinson, J. (2005). Institutions as a fundamental cause of long-run growth. *Handbook of economic growth*, 1(A), 385-472.
- Acemoglu, D., Johnson, S., & Robinson, J. (2012). The colonial origins of comparative development: an empirical investigation. *The American Economic Review*, 102(6), 3077-3110.
- Acemoglu, D., & Robinson, J. (2008). Persistence of power, elites, and institutions. *The American Economic Review*, 98(1), 267-293.
- Acemoglu, D., & Robinson, J. (2012). *Why nations fail*. New York: Crown Business.
- Acemoglu, D., Robinson, J., & Santos, R. (2013). The monopoly of violence: evidence from Colombia. *Journal of the European Economic Association*, 11(s1), 5-44.
- Barro, R., & Sala-i Martin, X. (1992). Convergence. *Journal of political Economy*, 100(2), 223-251.
- Besley, T., Persson, T., & Sturm, D. (2010). Political competition, policy and growth: theory and evidence from the US. *The Review of Economic Studies*, 77(4), 1329-1352.
- Brew, R. (1977). *El desarrollo económico de Antioquia desde la Independencia hasta 1920* (Vol. 38). Bogotá: Banco de la República.
- Bruhn, M., & Gallego, F. (2012). Good, bad, and ugly colonial activities: do they matter for economic development? *Review of Economics and Statistics*, 94(2), 433-461.
- Bushnell, D. (1971). Voter participation in the Colombian election of 1856. *The Hispanic American Historical Review*, 51(2), 237-249.
- Bushnell, D., & Macaulay, N. (1994). *The emergence of Latin America in the Nineteenth century*. New York: Oxford University Press.

- Camacho, S. (1872). Memoria del Secretario de Hacienda y fomento al Congreso. *Secretaría de Hacienda, Colombia*.
- Cameron, T., & James, M. (1987). Efficient estimation methods for closed-ended contingent valuation surveys. *The review of economics and statistics*, 69(2), 269-276.
- Deas, M. (1982). The fiscal problems of Nineteenth-century Colombia. *Journal of Latin American Studies*, 14(2), 287-328.
- Deas, M. D., & Michelsen, A. L. (1993). *Del poder y la gramática y otros ensayos sobre historia, política y literatura colombianas*. Bogotá: Tercer Mundo Editores.
- Dell, M. (2010). The persistent effects of Peru's mining mita. *Econometrica*, 78(6), 1863-1903.
- De Tocqueville, A. (1856). *The old regime and the revolution* (No. 119). New York: Harper & Brothers.
- Duran y Diaz, J. (1794). *Estado general de todo el Virreynato de Santafé de Bogota*. Bogota.
- Engerman, S., & Sokoloff, K. (1997). Factor endowments, institutions, and differential paths of growth among new world economies. In S. Haber (Ed.), *How latin america fell behind* (p. 260-304). Stanford: Stanford University Press.
- Fazio, A., López, M., & Sánchez, F. (2010). Land conflicts, property rights, and the rise of the export economy in Colombia, 1850-1925. *The Journal of economic history*, 70(02), 378-399.
- Fergusson, L. (2013). *La trampa de los bienes públicos*. <http://www.portafolio.co/opinion/analisis-la-trampa-los-bienes-publicos>.
- Fergusson, L., Mejía, J., & Robinson, J. (2015). Committing not to build a state: theory and comparative evidence. *Unpublished*.
- Fergusson, L., Molina, C., & Robinson, J. (2017). The vicious cycle of clientelism and state weakness. *Unpublished*.
- Fergusson, L., & Riaño, J. (2014). La política colombiana a la luz de la ELCA: entre el desinterés y el clientelismo. In X. Cadena (Ed.), *Colombia en movimiento 2010-2013*. Ediciones Uniandes.
- Fergusson, L., & Vargas, J. F. (2013). Don't make war, make elections-franchise extension and violence in XIXth-Century Colombia. *Documento CEDE 19/2013, Universidad de Los Andes*.
- Fergusson, L., Vargas, J. F., & Vela, M. (2013). Sunlight disinfects? Free media in weak democracies. *Documento CEDE 14/2013, Universidad de Los Andes*.
- Gallup, J., Gaviria, A., & Lora, E. (2003). *Is geography destiny? Lessons from Latin America*. Palo Alto: Stanford University Press.
- García, M., & Espinosa, J. (2013). El derecho al estado: los efectos legales del Apartheid institucional en Colombia. *Bogotá, DC: Antropos*.
- GRECO. (2002). El crecimiento económico colombiano en el siglo XX. *Banco de la República and Fondo de Cultura Económica, Bogotá, Grupo de Estudios del Crecimiento Económico*.
- Grupo de Memoria Histórica. (2016). *La tierra en disputa: memorias del despojo y resistencias campesinas en la costa Caribe 1960-2010*. Bogotá: Organización Inter-

- nacional para las Migraciones.
- Helg, A. (2001). *La educación en Colombia, 1918-1957: una historia social, económica y política*. Bogotá: Universidad Pedagógica Nacional.
- Jara, D. (2007). Administración territorial y representación política: antecedentes de la violencia en la intendencia nacional del Meta, 1930-1949. *Memoria y Sociedad*, 11(22), 37-50.
- LeGrand, C. (1986). *Frontier expansion and peasant protest in Colombia, 1850-1936*. Albuquerque: University of New Mexico Press.
- Maldonado, H. (1992). *Evolución del producto interno bruto en los departamentos de Colombia*. Bogotá: Departamento de Economía, Universidad Javeriana.
- McFarlane, A. (2002). *Colombia before independence: economy, society, and politics under Bourbon rule* (Vol. 75). New York: Cambridge University Press.
- McFarlane, A. (2014). *War and independence in Spanish America*. New York: Routledge.
- McGreevey, W. P. (1971). *An economic history of Colombia 1845-1930*. New York: Cambridge University Press Cambridge.
- McLean, I., & Mitchener, K. (2003). The productivity of US states since 1880. *Journal of Economic Growth*, 8(1), 73-114.
- Meisel, A. (2011). El PIB de la República de la Nueva Granada en 1846 ¿Qué nos dice acerca del impacto económico de la Independencia? *Cuadernos de Historia Económica y Empresarial*, 008892, Banco de la República.
- Meisel, A. (2012). ¿Quién manda aquí? Poder regional y participación de la costa Caribe en los gabinetes ministeriales, 1900-2000. *Cuadernos de Historia Económica y Empresarial*, 009424, Banco de la República.
- Meisel, A. (2014). No reversal of fortune in the long run: geography and spatial persistence of prosperity in Colombia, 1500-2005. *Journal of Iberian and Latin American Economic History (New Series)*, 32(03), 411-428.
- Nunn, N. (2008). The long-term effects of Africa's slave trades. *The Quarterly Journal of Economics*, 123(1), 139-176.
- Nunn, N., & Wantchekon, L. (2011). The slave trade and the origins of mistrust in Africa. *The American Economic Review*, 101(7), 3221-3252.
- Ocampo, J. (2010). El sector externo de la economía colombiana en el siglo XIX. In A. Meisel & M. Ramírez (Eds.), *Economía colombiana del siglo XIX*. Bogotá: Fondo de Cultura Económica.
- Pachón, Á., & Ramírez, M. (2006). *La infraestructura de transporte en Colombia durante el siglo XX*. Fondo de Cultura Económica.
- Palacios, M. (1980). *Coffee in Colombia, 1850-1970: an economic, social and political history* (Vol. 36). New York: Cambridge University Press.
- Parsons, J. (1968). *Antioqueño colonization in western Colombia* (No. 6-14). Berkeley: University of California Press. (2nd Revised Edition)
- Phelan, J. (1978). *The people and the king: the Comunero Revolution in Colombia, 1781*. Madison: University of Wisconsin Press.
- Pincus, S. (2007). Rethinking revolutions: a neo-Tocquevillian perspective. In C. Boix & S. Stokes (Eds.), *The Oxford Handbook of Comparative Politics*. New York: Oxford

- University Press.
- Posada, E. (2005). La tradición electoral. In F. Cepeda (Ed.), *Fortalezas de Colombia*. Bogotá: Banco Interamericano de Desarrollo.
- Posada-Carbó, E. (1997). Limits of power: elections under the conservative hegemony in Colombia, 1886-1930. *The Hispanic American Historical Review*, 77(2), 245-279.
- Ramírez, M., & Téllez, J. (2007). La educación primaria y secundaria en Colombia en el siglo xx. In J. Robinson & M. Urrutia (Eds.), *Economía colombiana del siglo XX: un análisis cuantitativo*. Bogotá: Fondo de Cultura Económica.
- Reyes, A. (2009). *Guerreros y campesinos. el despojo de la tierra en Colombia*. Bogotá: Norma.
- Riascos, E. (1950). *Geografía guerrera de Colombia*. Cali: Imprenta Bolivariana.
- Robinson, J. (2007). ¿Un típico país latinoamericano? Una perspectiva sobre el desarrollo. In J. Robinson & M. Urrutia (Eds.), *Economía colombiana del siglo XX: un análisis cuantitativo*. Bogotá: Fondo de Cultura Económica.
- Robinson, J. (2013). Colombia: another 100 years of solitude? *Current history*, 112(751), 43-48.
- Robinson, J. (2015). The misery in Colombia. *Desarrollo y Sociedad*, 1(76), 9-90.
- Roldán, M. (2002). *Blood and fire: la violencia in Antioquia, Colombia, 1946-1953*. Duke University Press.
- Rueda, J. (1999). El campo y la ciudad: Colombia, de país rural a país urbano. *Credencial Historia*(119).
- Sánchez, F., & Núñez, J. (2016). Geography and economic development: a municipal approach for Colombia. *Planeación y Desarrollo*, 31(3-4), 379-452.
- Tovar, H., Tovar, J., & Tovar, C. (1994). Convocatoria al poder del número: censos y estadísticas de la Nueva Granada 1750-1830. *Censos y estadísticas de la Nueva Granada, 1830*.
- Twinam, A. (1982). *Miners, merchants, and farmers in colonial Colombia*. Austin: University of Texas Press.
- Wright, G. (2013). *Sharing the prize: the economics of the civil rights revolution in the American South*. Cambridge: Harvard University Press.

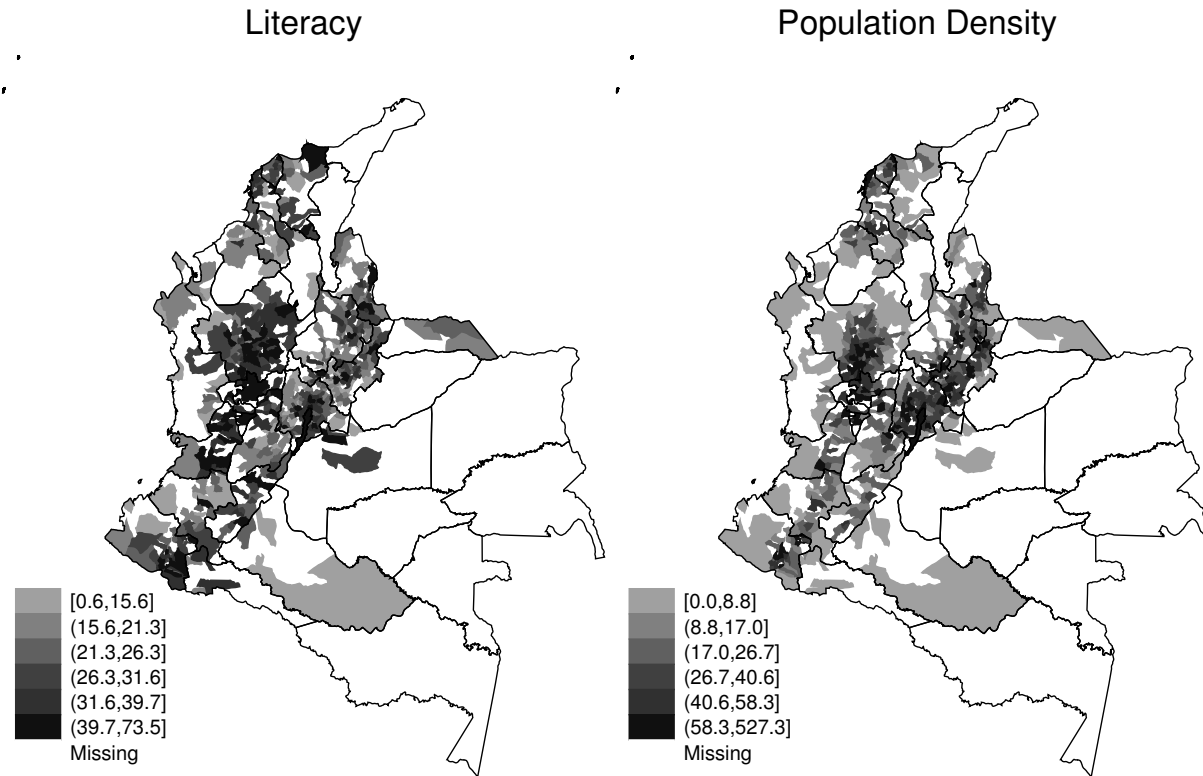
Figure 1: Population Density at the end of the Eighteenth Century



Source: Tovar et al. (1994).

Note: The figure shows the population density (total provincial population divided by area in squared kilometers) during census years, depicted using the historical political division of the country. Bins are divided by quintiles. The censuses were collected for all provinces in *Nueva Granada* (census years in parenthesis): Riohacha (1777), Choco (1778), Mariquita (1778), Neiva (1778), Popayan (1779), Santafe (1779), Cartagena (1780), Casanare (1780), Pamplona (1780), Socorro (1780), Tunja (1780), Antioquia (1784), Santa Marta (1793).

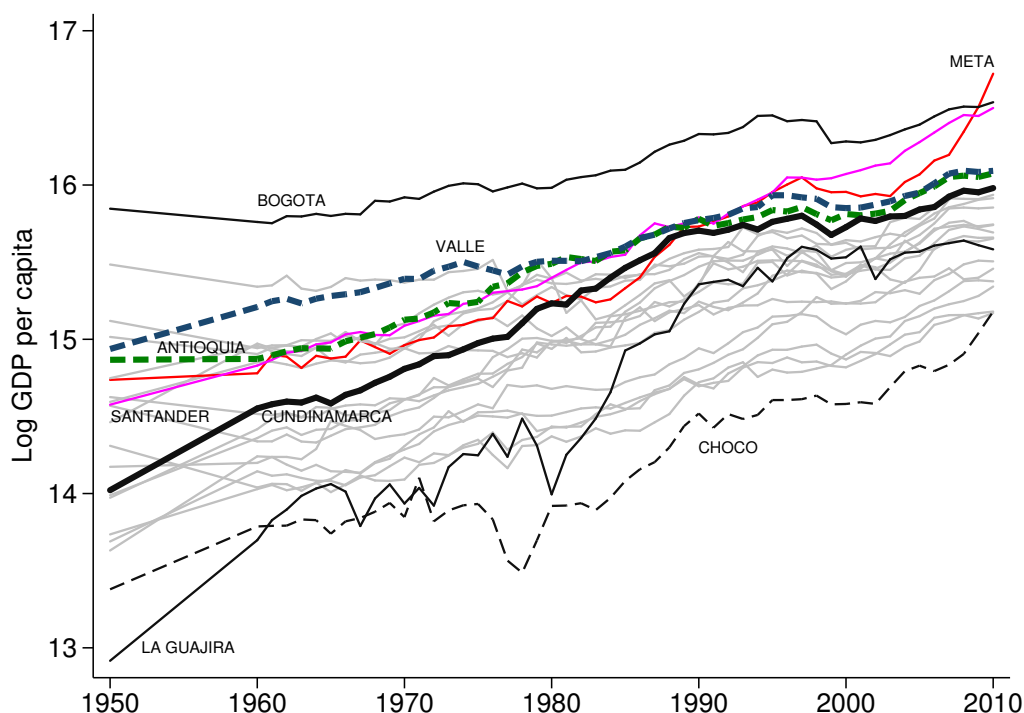
Figure 2: Literacy and Population Density in 1918



Source: National Census of 1918.

Note: Population density is computed using municipal boundaries in 2000. Bins are divided by sextiles.

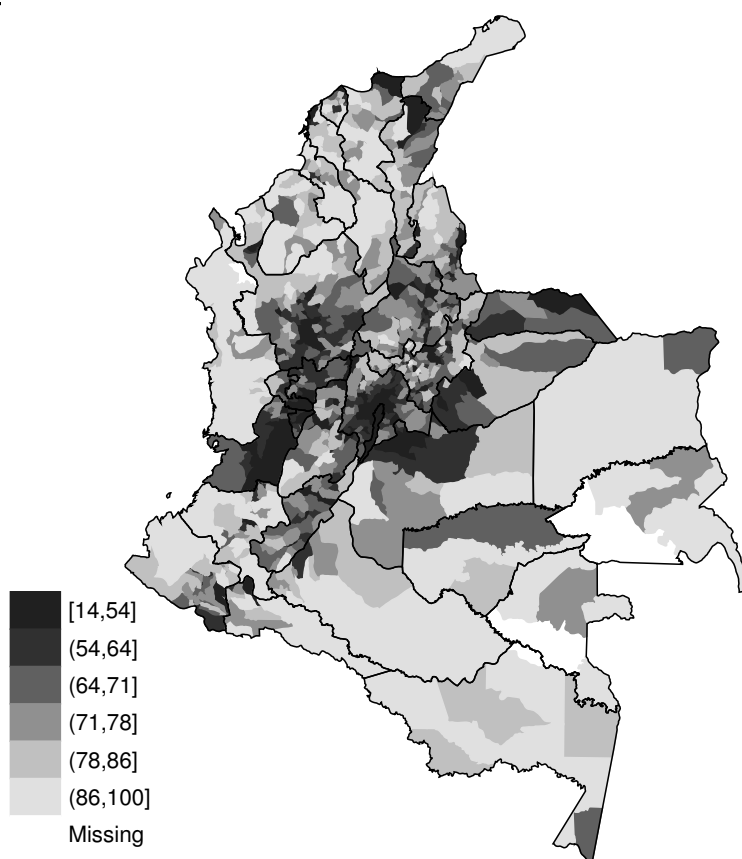
Figure 3: GDP per capita by department, since 1950



Source: Given methodological changes in measurement, there is no single GDP per capita series for Colombia in the entire period. Thus, we rely on the most recent estimates for the *levels* from 2000 to 2010 (the National Statistics Department (Dane) “Base 2005” estimates) and project them backwards using *growth rates* from historical measurements. In particular, we rely on the yearly growth rate of GDP per capita from the National Planning Department (DNP) from 1950 to 1974 (assuming a constant growth rate throughout the 1950s, as there is only data for 1950 and 1960), [Maldonado \(1992\)](#) from 1975 to 1979, the Dane “Base 1975” from 1980-1989, and the Dane “Base 1994” estimates from 1990 to 2000.

Note: GDP per capita is total GDP (in 2005 pesos) divided by population. The following departments are not in the graph: Amazonas, Arauca, Caquetá, Casanare, Guainia, Guaviare, Putumayo, San Andres, Vaupés and Vichada.

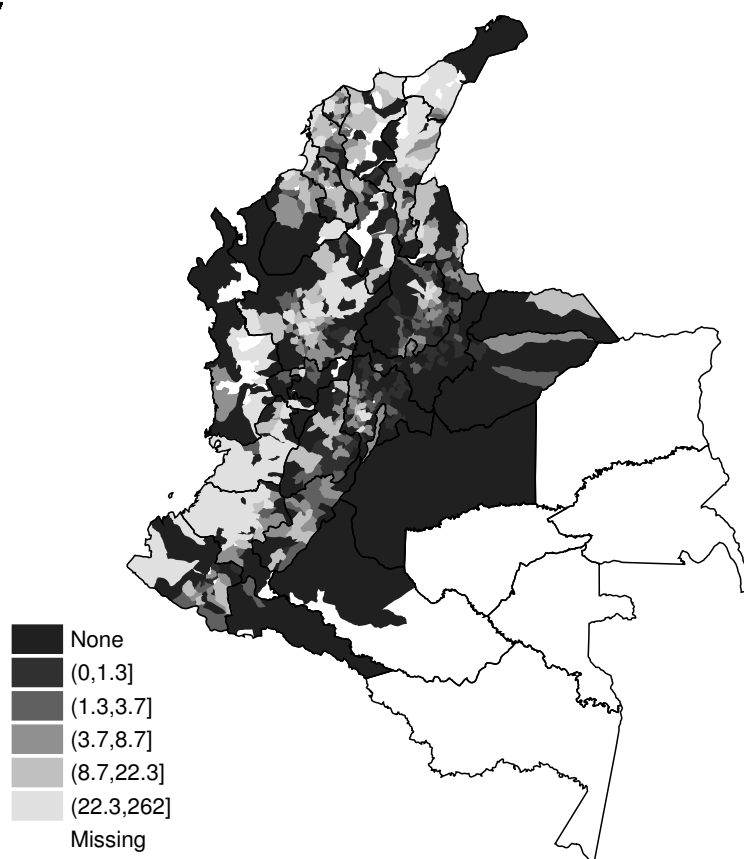
Figure 4: Distribution of Poverty in 2005



Source: Oxford Poverty & Human Development Initiative (OPHI).

Note: The Multidimensional Poverty Index measures the proportion of poor people in each municipality. It relies on five dimensions: educational attainment, conditions of children and youth, health, employment, access to public services and housing conditions. Bins are presented by sextiles. A household is considered poor if it is deprived in at least a third of a set of weighted indicators. The indicators (with their weights in parenthesis) are: low educational attainment (10%), illiteracy (10%), school absenteeism (5%), educational lags (5%), access barriers to care services for early childhood (5%), child labour (5%), economic dependency (10%), informal employment (10%), no health insurance (10%), access barriers to health services (10%), without access to improved water source (4%), inadequate elimination of excrement (4%), inadequate floors (4%), inadequate exterior walls (4%), critical overcrowding (4%).

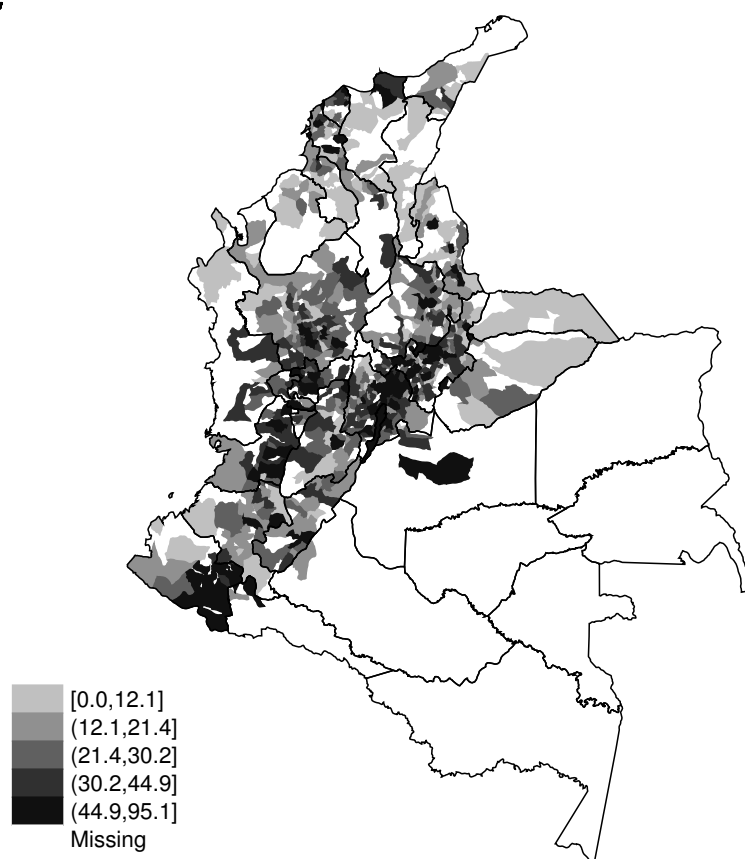
Figure 5: Distribution of Slavery in 1843



Source: [Acemoglu, García-Jimeno, and Robinson \(2012\)](#).

Note: Slaves by 100,000 inhabitants. Municipal boundaries in 2000. Bins are presented by quartiles.

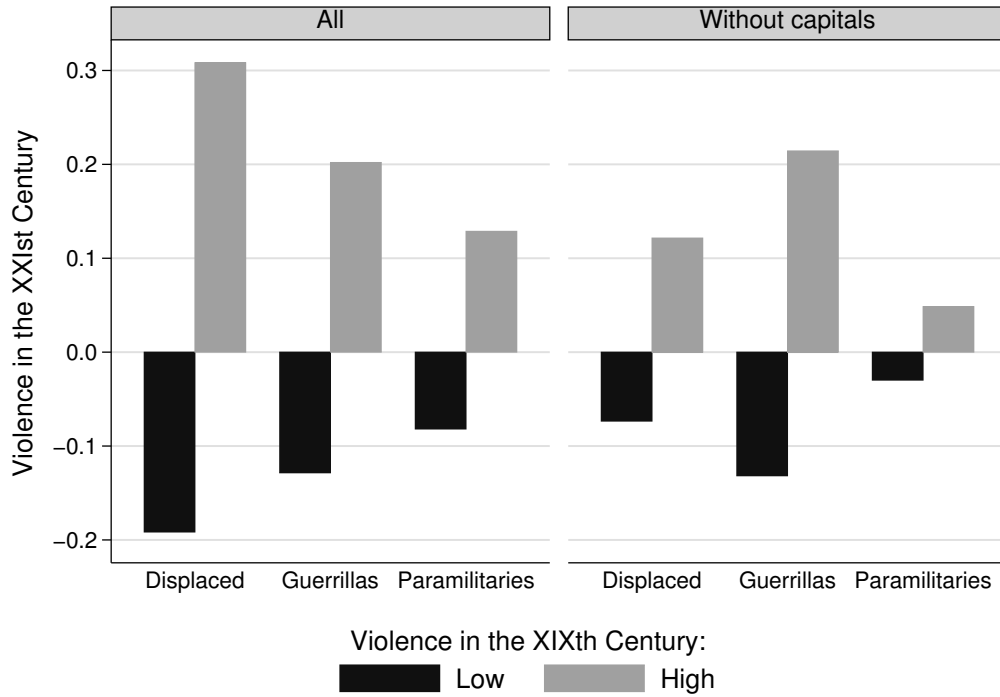
Figure 6: Vaccination rates from 1918



Source: Census 1918.

Note: Percent of vaccinated people. Municipal boundaries in 2000.

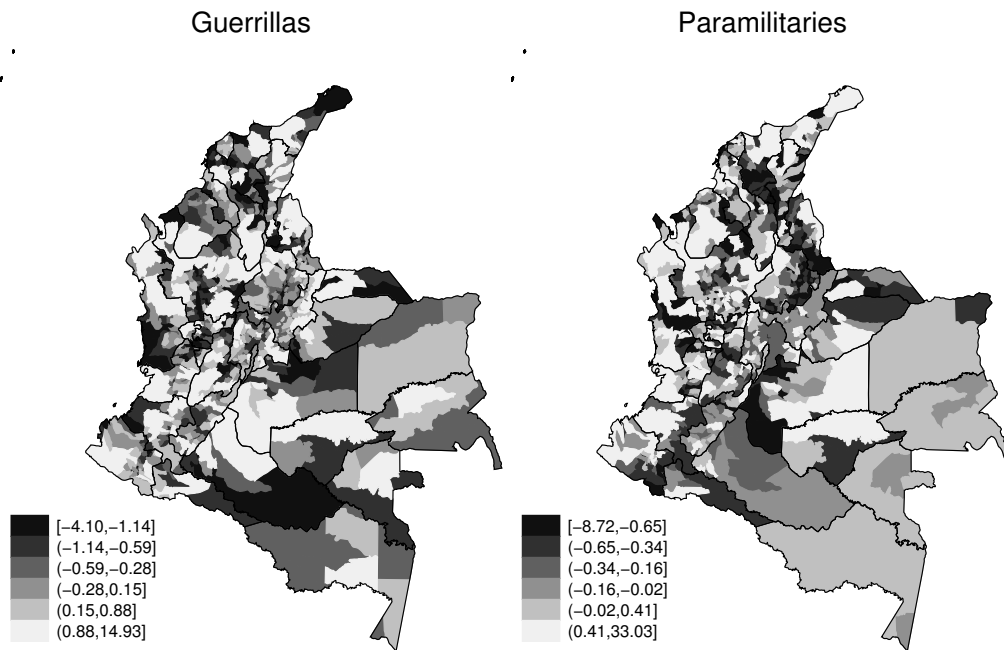
Figure 7: XIXth Century and XXIst Century Violence



Source: Fergusson and Vargas (2013), Centro de Recursos para el Análisis de Conflictos (CERAC) and Universidad del Rosario, and Unidad para la Atención y Reparación Integral de Víctimas (UARIV).

Note: Conflict variables in the XXIst century are: *Displaced* (average number of displaced people between 1997 and 2009), *Guerrillas* and *Paramilitaries* (average number of violent events in which guerrillas and paramilitaries participated between 1996 and 2012) after controlling for population and department fixed effects. Municipalities with *low* and *high* violence level in the XIXth century are those below and above of the average incidence of battles and after controlling for population and department fixed effects.

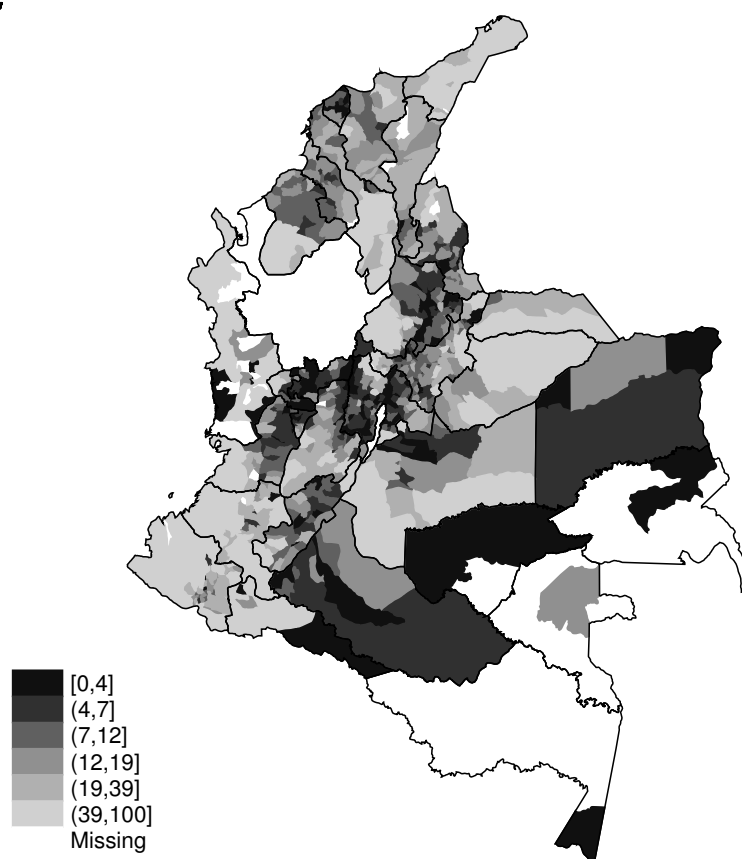
Figure 8: The Spatial Distribution of Violence in Colombia



Source: Centro de Recursos para el Análisis de Conflictos (CERAC) and Universidad del Rosario.

Note: *Guerrillas* and *Paramilitaries* are average number of violent events in which guerrillas and paramilitaries participated between 1996 and 2012, after controlling for population and department fixed effects.

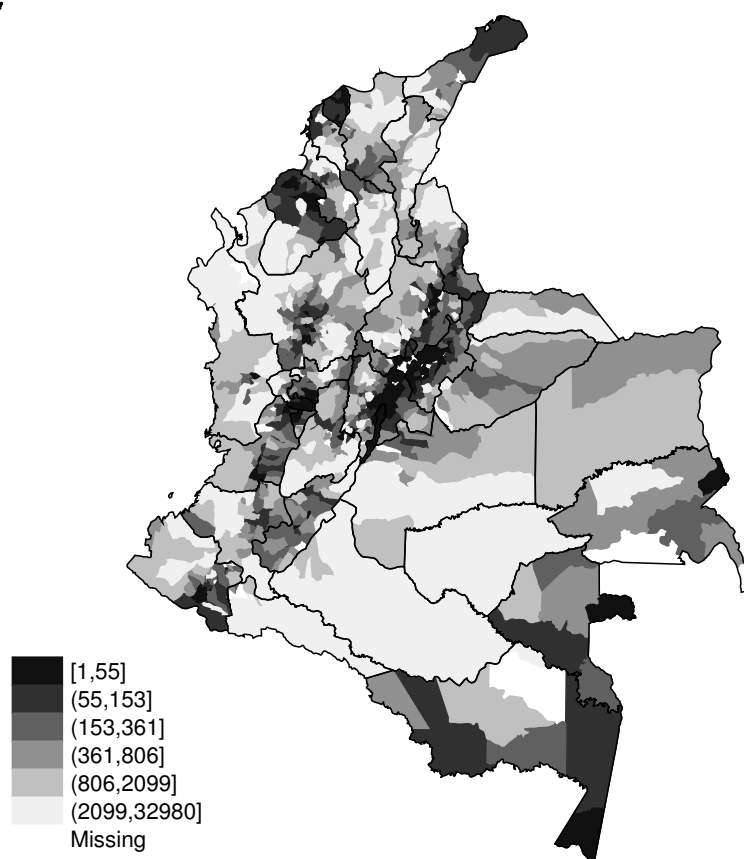
Figure 9: Informality of Property Rights



Source: Instituto Geográfico Agustín Codazzi (IGAC).

Note: Proportion of land without formal title or registration. Average between 2000 and 2009. Data not available for Antioquia which collects its own cadastral data. Bins are presented by sixtiles.

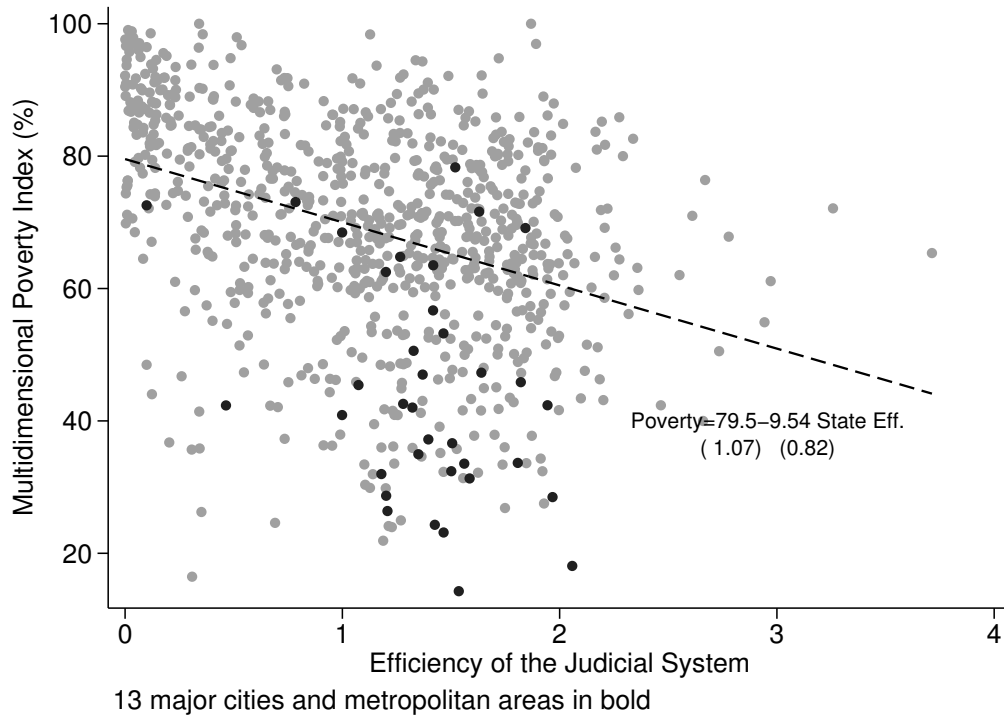
Figure 10: The Spatial Distribution of Displacement



Source: Unidad para la Atención y Reparación Integral de Víctimas (UARIV).

Note: Number of displaced people per 100,000 inhabitants. Average between 1997 and 2009. Bins are presented by sixtiles.

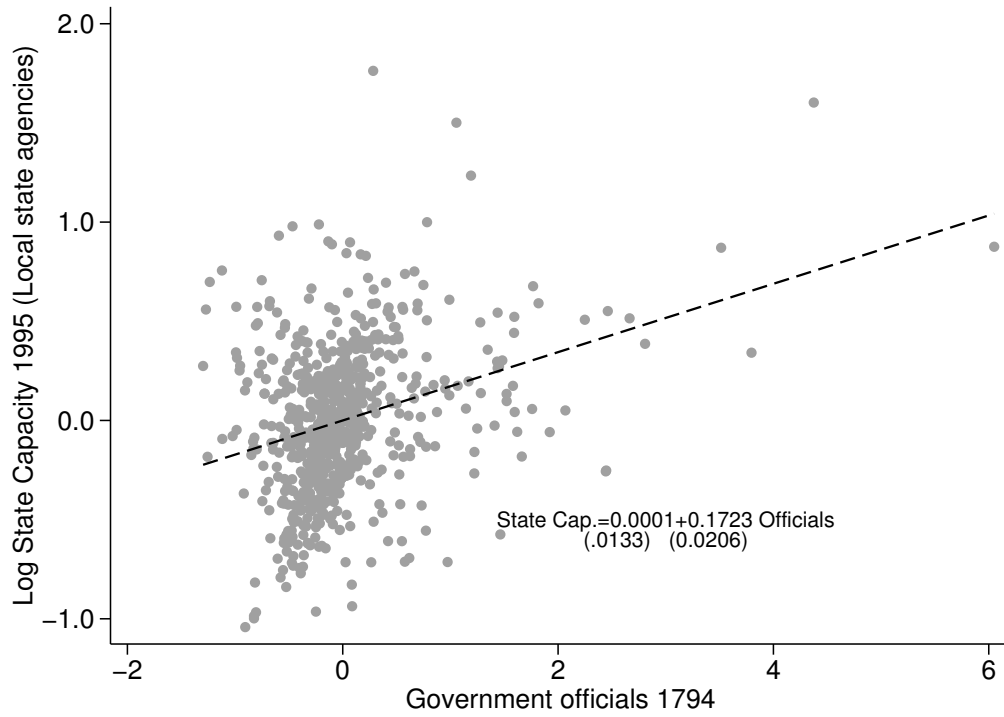
Figure 11: Efficiency of the Judicial System and Poverty Rates



Source: Efficiency of the Judicial System, from [García and Espinosa \(2013\)](#).

Note: Efficiency of the Judicial System is the weighted average of an index that is smallest (-1) when people are not sentenced for homicides and largest (1) when everyone is sentenced, plus an index that measures judges per inhabitant and per area. The exact formula for the first one is $\frac{TotalSentences_i - (TotalCases_i - TotalSentences_i)}{TotalCases_i}$. The formula for the second is $\frac{Judges}{Population * Area}$. Each of these indices are rescaled on a [0,100] range and then added with a weight of 0.6 on the first and 0.4 on the second. We use the logarithm of index plus one (since some municipalities have zero).

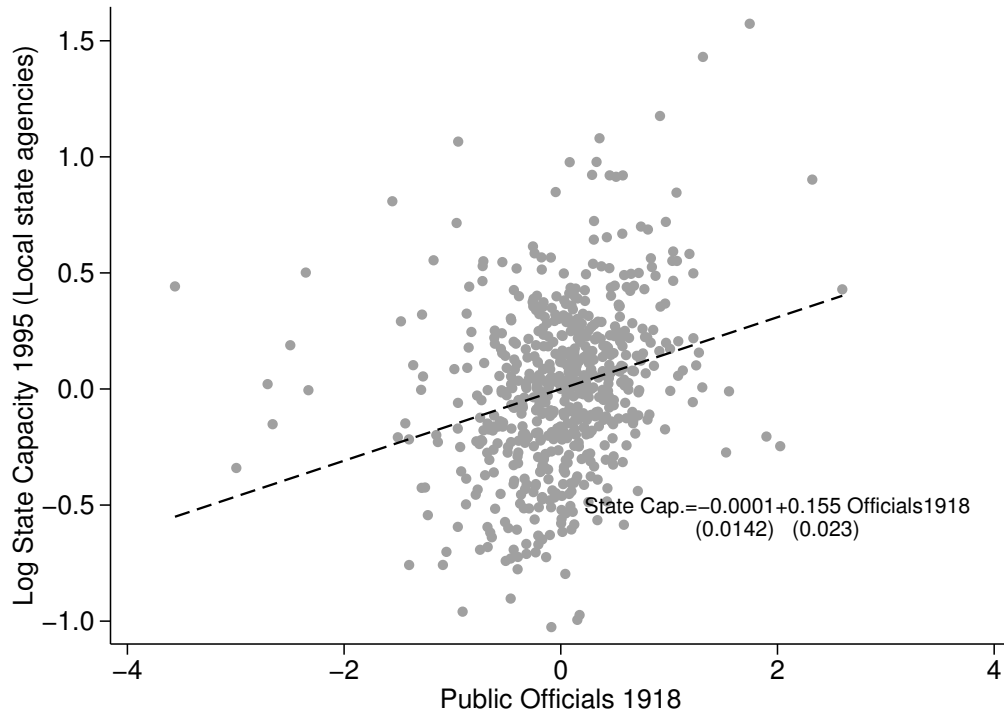
Figure 12: State Persistence (1794 vs 1995)



Source: [Duran y Diaz \(1794\)](#) and [Acemoglu et al. \(2015\)](#).

Note: We use the logarithm the number of Government officials in 1794 plus one (since some municipalities have zero). Both variables are conditional on the log of total population and department fixed effects.

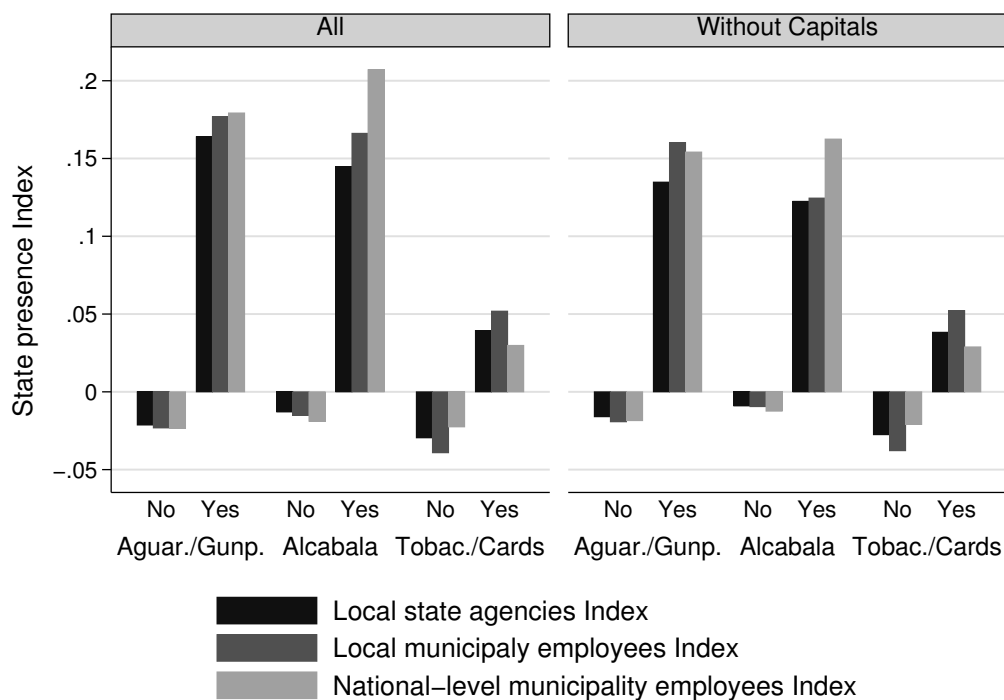
Figure 13: State Persistence (1918 vs 1995)



Source: Census 1918 and [Acemoglu et al. \(2015\)](#).

Note: We use the logarithm the number of public officials in 1918 plus one (since some municipalities have zero). Both variables are conditional on the log of total population and department fixed effects.

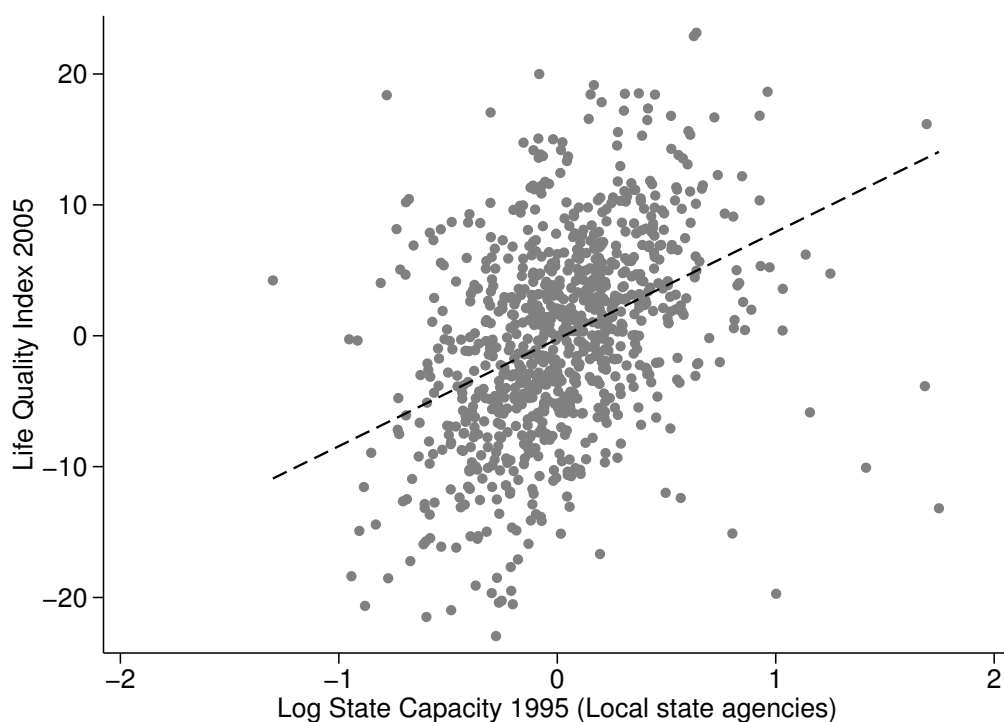
Figure 14: Colonial Institutions and Current State Presence



Source: [Duran y Diaz \(1794\)](#) and [Acemoglu et al. \(2015\)](#).

Note: Variables in the horizontal axes are indicator variables that equal one if the municipality: had an aguardiente or gunpowder estanco (*Aguar./Gunp.*), an alcabala (*Alcabala*), and a tobacco or playing cards estanco (*Tobac./Cards*). State presence Index, from [Acemoglu et al. \(2015\)](#), is the log of Local state agencies Index, local municipality employees Index, and National level municipality employees conditional on the log of total population and department fixed effects.

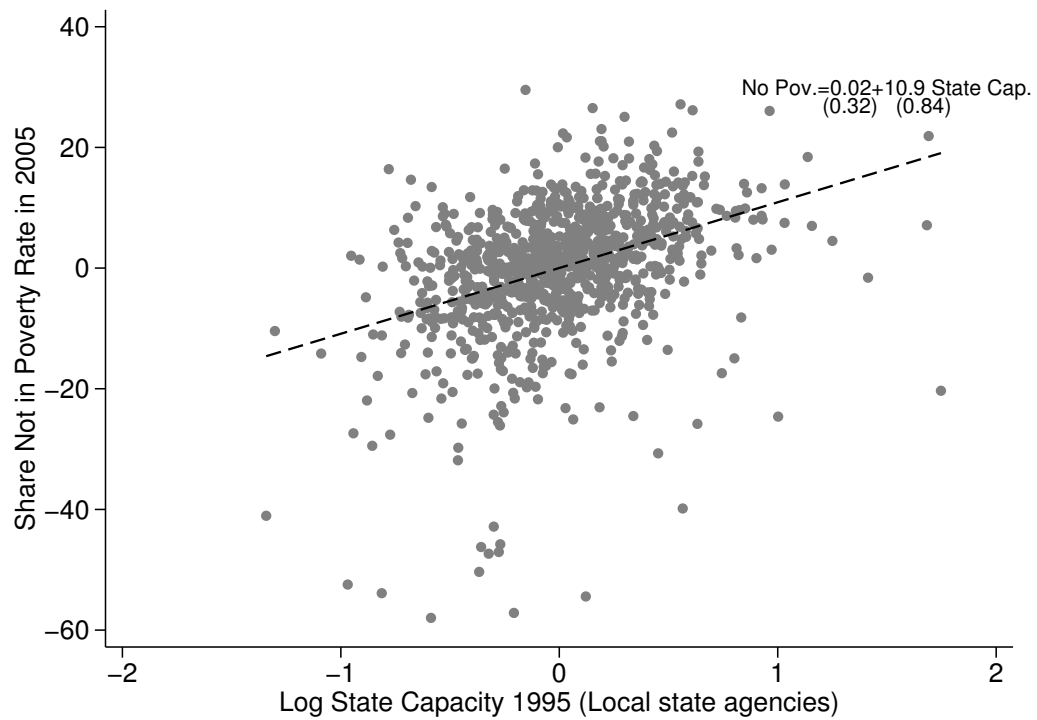
Figure 15: Life Quality Index 2005 vs State Capacity



Source: Life Quality Index from the 2005 National Census, state capacity from [Acemoglu et al. \(2015\)](#).

Note: Log State Capacity 1995 is the log of Local State Agencies in 1995. Both variables are conditional on the log of total population and department fixed effects. The Life Quality Index is a principal component index of four factors. Factor 1 includes excreta disposal, quality water supply, garbage collection, and fuel for cooking. Factor 2 includes average schooling of people 12 or more years, schooling of the household head, and school attendance from 12 to 18 years. Factor 3 includes overcrowding, proportion of children under 6 years, and school attendance for children 5 to 11 years. Factor 4 includes material of the walls of housing and type of housing floors.

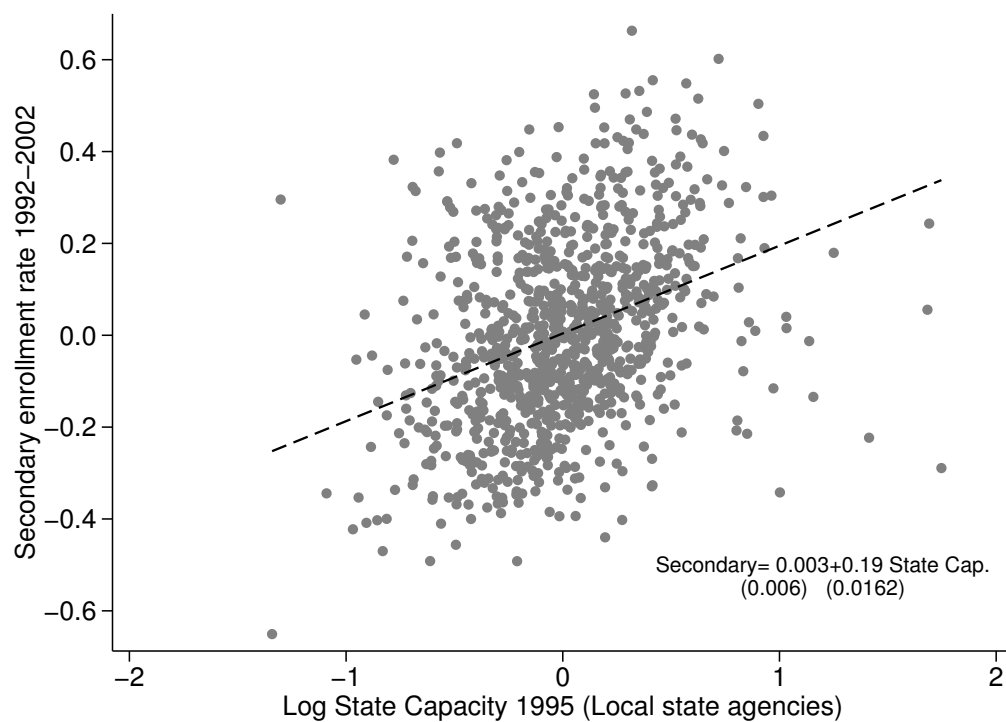
Figure 16: Share Not in Poverty in 2005 vs State Capacity



Source: Author calculations using data from [Acemoglu et al. \(2015\)](#).

Note: Log State Capacity 1995 is the log of Local State Agencies in 1995. Share not in Poverty is the fraction of the population not in poverty (above the poverty line) in 2005. Both variables are conditional on the log of total population and department fixed effects.

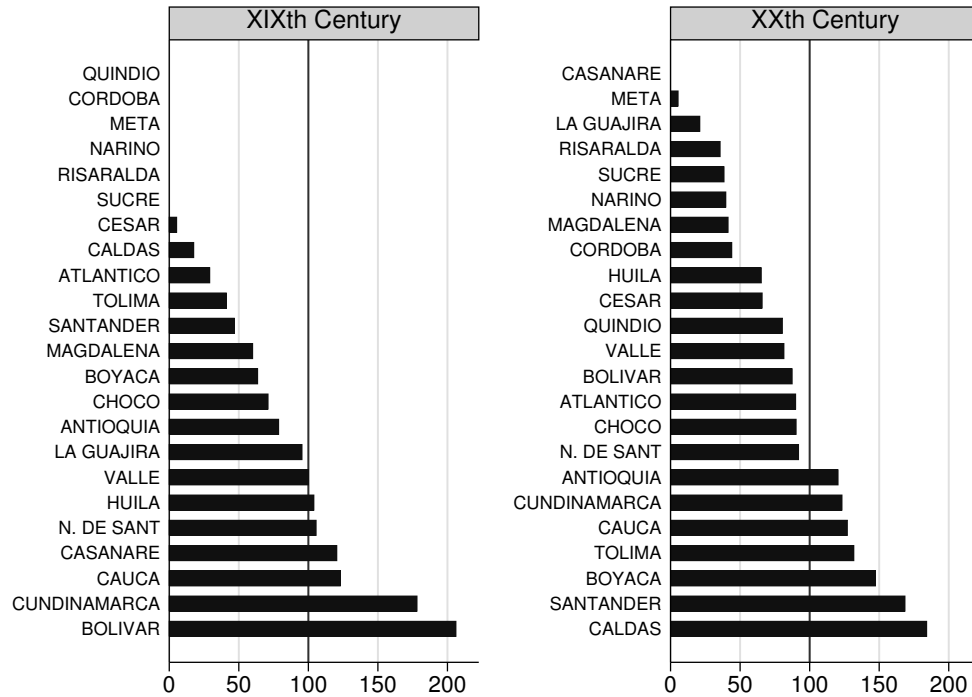
Figure 17: Secondary Enrollment Rate 1992-2002 vs State Capacity



Source: Author calculations using data from [Acemoglu et al. \(2015\)](#).

Note: Log State Capacity 1995 is the log of Local State Agencies in 1995. Average 1992-2002 Secondary Gross Enrollment Rate. Secondary Gross Enrollment Rate is the total enrollment in secondary relative to total population between 12 and 15 years. Both variables are conditional on the log of total population and department fixed effects.

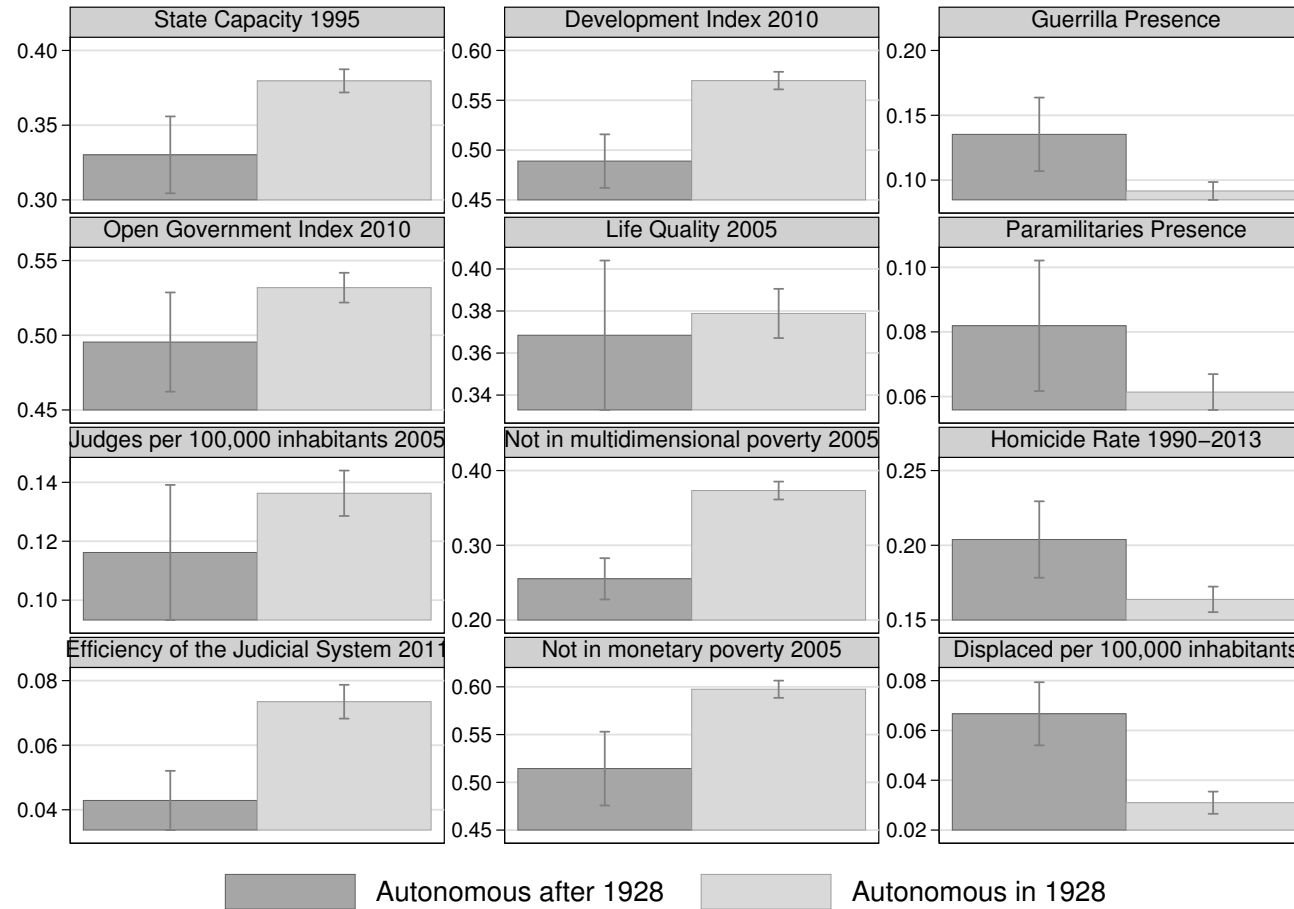
Figure 18: Cabinet Ministers Index



Source: Author calculations using information from *Memorias de Hacienda*, Web Sources, and Censuses in 1842 and 1993. Meisel (2012) for the XIXth Century.

Note: The Cabinet Ministers Index is the ratio between: the ratio of cabinet ministers born in a department to the department population and the ratio of all cabinet ministers to the total population in the country. We express this as a percent. Thus, departments with an index above (below) 100 have a ratio of ministers to population that exceeds (is lower than) the national average. For the XIXth century we use the population from 1843 Census. For the XXth century we use the 1993 Census. We weight ministers with their duration in office.

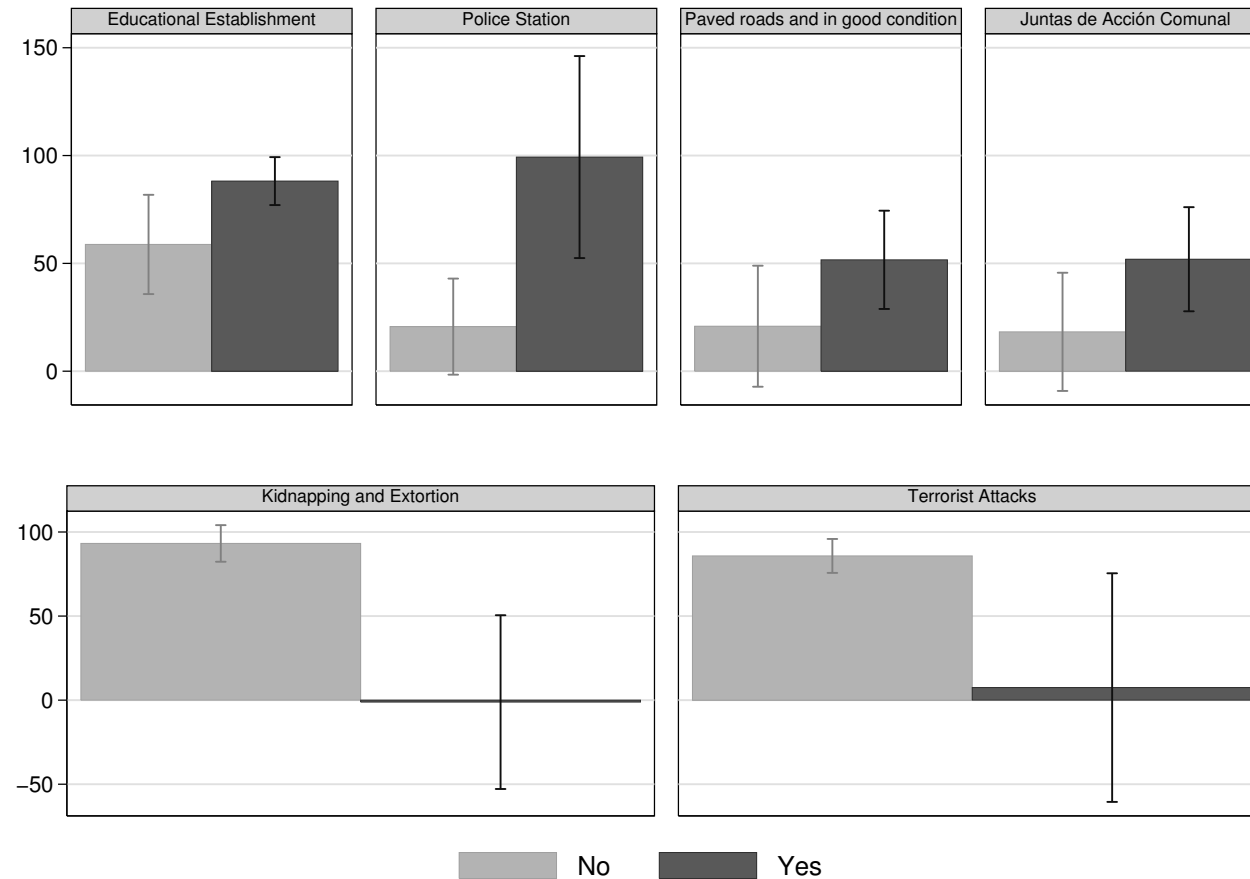
Figure 19: Outcomes by Political Status



Source: Authors calculations using information from [Acemoglu et al. \(2015\)](#), [Fergusson, Vargas, and Vela \(2013\)](#), CERAC, García and Espinosa (2013), Medicina Legal, Procuraduría, and Oxford Poverty & Human Development Initiative (OPHI).

Note: *State Capacity 1995* and *Judges per 100,000 inhabitants* are conditional on the log of total population. We rescale all variables ranging from zero to one using $\frac{x-x_{min}}{x_{max}-x_{min}}$ where x is each variable, x_{max} is its maximum and x_{min} is its minimum. See all variable definitions in Table [A-1](#).

Figure 20: Willingness to Sell the Vote



Source: Encuesta Longitudinal Colombiana de la Universidad de los Andes (ELCA) 2013.

Note: Estimated average price at which respondents are willing to sell their vote (in thousands of pesos). To measure state presence we use the community questionnaire and identify people living in communities with and without: *Educational Establishment* (preschool, primary or secondary establishment), *Police Station*, most of the internal roads in this community *Paved roads and in good condition*, Community action boards (*Juntas de Acción Comunales*), and reports of *Kidnapping and Extortion* and *Terrorist Attacks* in the last 3 years. Average price after controlling for wealth and area (urban versus rural).

Table A-1: Variables and sources

Variable	Source	Description
<i>Population Density at the end of the 18th Century</i>	Population density (provincial population divided by area in squared kilometers). Population date varies by year, depending on province census (years in parenthesis): Riohacha (1777), Choco (1778), Mariquita (1778), Neiva (1778), Popayan (1779), Santafe (1779), Cartagena (1780), Casanare (1780), Pamplona (1780), Socorro (1780), Tunja (1780), Antioquia (1784), Santa Marta (1793).	Tovar et al. (1994)
<i>Literacy in 1918</i>	People who read and write or can read but not write, relative to total population.	National Census of 1918
<i>Population density in 1918</i>	Population density (Total department population divided by area in squared kilometers). Area is computed using municipal boundaries in 2000.	National Census of 1918
<i>Department GDP per capita</i>	Total GDP (in 2005 pesos) divided by population. The following departments are excluded: Amazonas, Arauca, Caquetá, Casanare, Guainia, Guaviare, Putumayo, San Andres, Vaupés and Vichada. Estimates from 2000 to 2010, the “Base 2005” Dane estimates, are projected backwards using growth rates from historical measurements. We rely on the yearly growth rate of GDP per capita from the DNP from 1950 to 1974 (assuming a constant growth rate throughout the 1950s, as there is only data for 1950 and 1960), Maldonado (1992) from 1975 to 1979, the Dane “Base 1975” from 1980-1989, and the Dane “Base 1994” estimates from 1990 to 2000.	National Statistics Department (Dane), National Planning Department (DNP), and Maldonado (1992).
<i>Multidimensional Poverty Index in 2005</i>	Proportion of poor people in each municipality, relying on five dimensions: educational conditions, conditions of children and youth, health, employment, access to public services and housing conditions. A household is considered poor if it is deprived in at least a third of a set of weighted indicators. The indicators (with their weights in parenthesis) are: low educational attainment (10%), illiteracy (10%), school absenteeism (5%), educational lags (5%), access barriers to care services for early childhood (5%), child labour (5%), economic dependency (10%), informal employment (10%), no health insurance (10%), access barriers to health services (10%), no access to improved water source (4%), inadequate elimination of excrement (4%), inadequate floors (4%), inadequate exterior walls (4%), critical overcrowding (4%).	Oxford Poverty & Human Development Initiative (OPHI)
<i>Slavery in 1843</i>	Slaves by 100,000 inhabitants. Uses municipal boundaries in 2000.	Acemoglu, García-Jimeno, and Robinson (2012)
<i>Vaccination rate 1918</i>	Vaccinated people divided by total population.	1918 National Census
<i>Displaced</i>	Average number of forcefully displaced people between 1997 and 2009. In figures, we present residuals after controlling for population and department fixed effects, as well as sixtiles of the simple measure per 100,000 inhabitants.	Unidad para la Atención y Reparación Integral de Víctimas (UARIV)

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Table A-1 – Variables and sources, continued from previous page

Variable	Description	Source
<i>Guerillas and Paramilitaries</i>	Average number of violent events in which guerillas and paramilitaries participated between 1996 and 2012. In figures, we present residuals after controlling for population and department fixed effects.	Centro de Recursos para el Análisis de Conflictos (CERAC) and Universidad del Rosario.
<i>Violence level in the XIXth century</i>	Total number of battles. In figures, we present residuals after controlling for population and department fixed effects and show descriptions for municipalities with <i>low</i> and <i>high</i> incidence of battles, defined by those below and above of the average incidence.	Fergusson and Vargas (2013) from Riascos (1950)
<i>Informality of property rights</i>	Proportion of land without formal title or registration. Average between 2000 and 2009. Data not available for Antioquia.	Instituto Geográfico Agustín Codazzi (IGAC).
<i>Efficiency of the Judicial System 2011</i>	Weighted average of an index that is smallest (-1) when people are not sentenced for homicides and largest (1) when everyone is sentenced, plus an index that measures judges per inhabitant and per area. The exact formula for the first one is $\frac{TotalSentences_i - (TotalCases_i - TotalSentences_i)}{TotalCases_i}$. The formula for the second is $\frac{Judges}{Population * Area}$. Each of these indices are rescaled on a [0,100] range and then added with a weight of 0.6 on the first and 0.4 on the second. We use the logarithm of index plus one (since some municipalities have zero).	García and Espinosa (2013)
<i>Government officials in 1794</i>	Government officials per municipality as reported by Durán y Díaz. In figures we show residuals conditional on the log of total population and department fixed effects.	Duran y Diaz (1794)
<i>State Capacity in 1995</i>	Logarithm the number of Government officials in 1794 plus one (since some municipalities have zero). In figures we show residuals conditional on the log of total population and department fixed effects. Were indicated, we also show a more complete composite index, state presence index, which is the log of Local state agencies Index, local municipality employees Index and National level municipality employees conditional on the log of total population and department fixed effects.	Acemoglu et al. (2015)
<i>Public Officials in 1918</i>	Logarithm of the number of public officials in 1918 plus one (since some municipalities have zero). In figures we show residuals conditional on the log of total population and department fixed effects.	1918 National Census
<i>Institutions in 1794</i>	Indicator variables that equal one if the municipality: had an aguardiente or gunpowder estanco (<i>Aguar./Gunp.</i>), an alcabala (<i>Alcabala</i>), and a tobacco or playing cards estanco (<i>Tobac./Cards</i>).	Duran y Diaz (1794)

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Table A-1 – Variables and sources, continued from previous page

Variable	Description	Source
<i>Life Quality Index in 2005</i>	Principal component index of four factors. Factor 1 includes excreta disposal, quality water supply, garbage collection, and fuel for cooking. Factor 2 includes average schooling of people 12 or more years, schooling of the household head, and school attendance from 12 to 18 years. Factor 3 includes overcrowding, proportion of children under 6 years, and school attendance for children 5 to 11 years. Factor 4 includes material of the walls of housing and type of housing floors.	DANE from 2005 National Census
<i>Share not in the Poverty 1993 and 2005</i>	Fraction of the population not in poverty (above the poverty line) in 1993 and 2005.	Acemoglu et al. (2015)
<i>Secondary Enrollment Rate 1992-2002</i>	Average 1992-2002. Secondary Gross Enrollment Rate is the Total Enrollment in secondary relative to population between 12 and 15 years.	Acemoglu et al. (2015)
<i>Cabinet Ministers Index</i>	Ratio between: the ratio of cabinet ministers born in a department to the department population and the ratio of all cabinet ministers to the total population in the country. We express this as a percent. Thus, departments with an index above (below) 100 have a ratio of ministers to population that exceeds (is lower than) the national average. For the XIXth century we use the population from 1843 Census. For the XXth century we use the 1993 Census. We weight ministers with their duration in office.	Author calculations using information from <i>Memorias de Hacienda</i> , Web Sources, and Censuses in 1842 and 1993. Meisel (2012) for the XIXth Century.
<i>Judicial Efficiency 2008-2010</i>	Difference between Total Resolved Judicial Cases and Total Unresolved Judicial Cases relative to Total Judicial Cases. Unresolved cases are those where nobody is found guilty or terms expire and the judge is forced to close the case with no definite action. Cases included are those pertaining to crimes against life (homicides, homicides attempts, and so on) that entered the criminal justice system from 2008 to 2010.	Fergusson et al. (2013)
<i>Judges per 100,000 inhabitants 2005</i>	Total judges in a municipality per 100,000 inhabitants.	García and Espinosa (2013)
<i>Open Government Index 2010 (IGA)</i>	Synthetic indicator that measures the performance of strategic anti-corruption standards according to indicators of internal control, recruitment, administrative management systems and accountability.	General Attorney
<i>Municipal Development Index 2010</i>	Index based on the proportion of: people in urban areas, households with sewage, pipe water and energy, people without unsatisfied basic needs in urban and rural areas, literate people, school attendance, and fiscal variables including per capita tax revenue, per capita public investment and non-dependence on transfers.	National Planning Department
<i>Homicide Rate 1990-2013</i>	Number of Homicides per 100,000 inhabitants in each municipality per year. Average between 1990 and 2013.	Medicina Legal

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Table A-1 – Variables and sources, continued from previous page

Variable	Description	Source
<i>Willingness to Sell the Vote</i>	We rely on the following question: “As you know, some politicians offer money in exchange for votes. Do you think that someone like you, from your neighborhood or community would accept \$X pesos for its vote?” Following the <i>contingent valuation method</i> techniques, the amount \$X is randomized across respondents and we can estimate an average price at which voters would be willing to sell the votes (Cameron & James, 1987). Specifically, we run a <i>probit regression</i> for vote selling on \$X, wealth (the first principal component of a variety of assets) and area (urban or rural).	ELCA 2013
