Political Institutions and Economic Development in the Americas: the Long Run*

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1 Introduction

In the light of recent research, institutions are the "primary" cause of economic development, "deeper" than features of the natural environment, the supply of factors, and the technologies for their uses (North 1997; Rodrik, Subramanian, and Trebbi 2002; Acemoglu 2003). The institutions that matter may be those that protect property rights (North and Thomas 1973, Acemoglu, Johnson, and Robinson 2001), but perhaps also those that mobilize savings and coordinate investment (Bardhan 2004, Bordo and Cortes Conde 2001), as well as those that subject the rulers to sanctions by the ruled (Benhabib and Przeworski 2005, Keefer 2005). But before one asks "Which institutions promote development?," a prior question is "Are there any?."

An institutional order that would absorb and peacefully process potential conflicts of interests and values cannot be created and sustained under all circumstances. Political institutions must be self-sustaining, that is, they survive and function only if they continually generate outcomes that are preferred to the use of force by each and every group that could impose itself by violating the institutional order. More precisely, (1) No institutional system that peacefully processes conflicts may be possible when a country is poor, (2) If any such system is feasible given the historical conditions, to be self-sustaining it must be organized in such a way that the outcomes it generates, whether the distribution of incomes or division of rents or realization of some non-material values, must reflect the distribution of the "brute," pre-institutional power, including the military force of different groups, and (3) Such institutions must counteract increasing returns to incumbency, since otherwise forward-looking outsiders would prefer to fight immediately rather than

*This work was supported by a grant from the National Science Foundation.

wait for their power to be eroded.[1]

Given that political institutions may be absent if a country is too poor to sustain them or if they are designed in ways that do not generate compliance, we examine the effect of their presence or absence on economic development. We part from the simple observation that unless some institutions absorb potential conflicts and process them in a peaceful manner, the only way to resolve conflicts is by force. And fighting retards, at times paralyzes, development by diverting resources from production, making it insecure to invest, and impeding the provision of public goods. Hence, without some kind of an institutional framework economies stagnate.

Given that to be self-sustaining institutions must reflect the relations of forces, they may be inegalitarian, restricting political access to those groups that can mobilize military prowess and still favoring those more powerful among those groups that are admitted into the institutional interplay of interests. Yet even if institutions based on extensive political rights may be superior for growth by making it more secure for the poor to invest, as Acemoglu, Johnson, and Robinson (2001) claim, any kind of stable institutions are better for development than violent conflicts.

One might object against this argument by claiming that political order need not entail institutions but be maintained simply by force, without allowing any competition among conflicting interests or values. Yet when political power is not subject to any countervailing powers, owners of productive assets must fear arbitrary confiscation; hence, they do not invest. This hypothesis underlies the widespread use of "constraints on the chief executive" (a variable coded in the Polity data set) as indicating the security of property rights. Moreover, even if property owners feel safe under the current dictator, they still face the danger that he would be overthrown and power would fall into the hands of a political enemy. Hence, order imposed by sheer force is not conducive to economic growth. Only an order that emerges when conflicting forces find it in their interest to obey some rules promotes economic development.

Stable institutions provide the security necessary to foster investment and innovation. And institutional continuity marked a sharp difference between North and Latin America in the aftermath of independence. The fact that the British North American colonies had self-governing institutions was crucial, since as the result the United States as well as Canada became independent without a major break of institutional

[1] For a general logic of self-sustaining institutions, see Przeworski (2006); for models based on this logic, see Benhabib and Przeworski (2005) and Przeworski (2005).

continuity. In turn, while all Latin American countries are obviously not the same, the collapse of the Spanish colonial rule left all of them without viable national or even subnational institutions. These institutions could be established only either as a result of military victories of one organized force or of an agreement between armed elites exhausted by ruinous civil wars.

When they were finally founded, political institutions tended to be highly exclusionary, "oligarchical." Yet as long as the elites peacefully processed their conflicts – typically over centralization, tariffs, or the role of religion (*conservadores* vs. *liberales*, see Gargarella 2005) – Latin American economies developed. Political inequality, however, coexisted with economic inequality, which increased further as a consequence of integration into the world economy. Given economic inequality, the issue of political incorporation of the poor, urban workers as well as of agricultural laborers and tenant farmers, led to recurrent institutional instability. Even today, Latin American democracies find it difficult to absorb and process conflicts and Latin American economies remain exceptionally volatile (Machinea and Vera 2005).

In sum, contrary to Engerman and Sokoloff (2001, 2003) as well as Acemoglu, Johnson, and Robinson (2001), we believe that economies grew when political power protected economic power – this is what "security of property" meant in Latin America[2] – as long as political institutions absorbed conflicts among elites and processed them according to rules. But unequal political institutions perpetuated economic inequality and generated conflicts – over land (or wages of agricultural workers) and over wages and conditions of work in industry – which were politically destabilizing and economically costly. Hence, while political inequality may be statically efficient, it is dynamically inefficient.

Within the limits of the available data, the rest of this chapter provides empirical support for these hypotheses by comparing the development of North America with that of Latin America, as well as analyzing differences among Latin American countries. Specifically, we show that (1) Stable political institutions were conducive to growth, (2) The effect of the existence of political institutions on growth did not depend

[2] This is not the place for theoretical discussions, but note that "security of property rights" is a notoriously fuzzy concept. For one, in a Schumpeterian world of creative destruction, property would be secure only if it were defended by barriers to entry (Acemoglu 2005). Secondly, property can be made secure not by right but by might: in Latin America, land was often protected by private militias (López-Alves 2000). Most importantly, however, property rights mean something different for those who possess it and for those who do not. In the presence of barriers to entry and credit constraints – both prevalent in Latin America – property rights were exclusionary.

on whether these institutions were egalitarian, and (3) What mattered for growth was the stability of institutions rather than the duration of tenure of particular rulers. The next two sections summarize the economic and political history of Latin America, contrasting it with that of the United States. The analysis of the relation between the stability of political institutions and economic growth is presented in section 4. A brief summary closes the chapter.

2 When Did Latin America Fall Behind the United States?

According to Maddison (2003: 114) the income of the United States in 1700 was only slightly higher than that of Latin America, with the income of Mexico higher and of Brazil lower than the income of the United States. Coatsworth (1998) gives the income of Mexico in 1700 as 89 percent of that of the United States; he does not have data for Brazil, but shows Cuba to have been much wealthier than the United States. In a more recent paper, Coatsworth (2005: 128) concludes that "the areas of Latin America under effective Spanish and Portuguese control probably enjoyed per capita incomes on a par with Western Europe and at least equal to the British colonies that became the United States well into the eighteenth century." Yet in year 2000 per capita income in the United States was $28,129[3] and in the nineteen Latin American countries it was $5,844.

Hence, to use the expression of Haber (1997), Latin America "fell behind." Moreover, even if in 2000 the per capita income of Chile was six times larger than that of Nicaragua, all of Latin American fell behind: the income of the most developed Latin American country, Chile, was still only about a third of that of the United States.

When did this gap appear? By 1820 it was already noticeable. It is difficult to tell whether the gap opened up during the eighteenth century or only during the Latin American wars of independence. Bulmer-Thomas (2003: 27) cites estimates according to which per capita income of Latin America was at least as high as that of the United States still in 1800. Coatsworth (1998), however, finds these Latin American estimates exaggerated, giving the ratio of unweighted average of Latin American countries to the income of the United States as 66 percent in 1800.[4] If incomes were identical in 1700, this ratio would imply that the United

[3]Unless noted otherwise, throughout the paper the dollars are G-K 1990 purchasing power parity dollars, from Maddison (2003). While this is the most comprehensive income series available, Maddison's figures are not universally accepted by economic historians. Indeed, at times they constitute only rough guesses.

[4]Coatsworth provides ratios of per capita incomes of some Latin American coun-

States grew at the rate of 0.4 of one percent, while Latin America stagnated throughout the century. In fact, standard estimates of the growth of per capita income in the United States during the eighteenth century range from 0.3 to 0.6 of one percent. However, Mancall and Weiss (1999) estimate that between 1700 and 1800 the incomes of the colonists and their slaves grew only at the rate of 0.04 of one percent, so that the growth of the average income in the United States was due to the fact that Native Americans, who had lower incomes, were becoming a smaller part of the total population. In turn, Bulmer-Thomas (2003: 27) claims that the Bourbon reforms generated growth in Latin America in the second half of the eighteenth century. Hence, it is not apparent why incomes would have diverged during the eighteenth century.

It is clear, in turn, that the wars of independence and their aftermath were costly to growth. Per capita income in the United States fell by about 7 percent between 1775 and 1800, mainly because of the decline of agricultural exports (Mancall and Weiss 1999: Table 2), but growth picked up after 1800. Postponing independence was costly to growth.[5] The reason is not clear. One possibility is that continued colonial control retarded growth. Bulmer-Thomas (2003: 27) concluded that "The economic difficulties encountered in the first two decades of the nineteenth century can safely be assumed to have reduced real income per head in Latin America considerably," due to the disruption of trade and the decline of mining.[6] The alternative hypothesis entails the timing of independence. The United States reached independence exactly in time to reap the fruit of the technological revolution that shook England after 1750, while continental Latin American countries became independent some 35 to 50 years later. Hence, the gap that emerged by 1820 could be due to the fact that the United States was quietly growing, at the rate of 0.3 of one percent between 1800 and 1820, while Latin Americans fought for independence. Perhaps if the wars of independence had occurred in Latin America forty years earlier or later, there would have been no gap by 1820. Note that according to Maddison (2003), Canada,

tries to that of the US. Assuming the income in the US to have been $1,000 (extrapolation from 1820-1830 Maddison's numbers) and using these ratios, the income of Argentina in 1800 would have been $1,020, of Brazil $360 (Maddison's figure for 1820 is $646), of Chile $460, of Cuba $1,120, of Mexico $500 (Maddison's 1820 figure is $759), and of Peru $410.

[5] We estimate the effect of postponing independence below. See also Coatsworth (1993: 16), who estimates that had Mexico gained independent in 1800 instead of 1821, its GDP would have been 7.2 percent higher.

[6] Venezuela possibly lost one fifth of its population and more than three quarters of its cattle. Moreover, many countries began their independent lives heavily indebted (Safford and Jacobsen 2003).

which remained a British colony, had an income of $430 in 1700 and of $904 in 1820 thus passing Mexico. In turn, according to Coatsworth (1998: 25), Cuba, which remained a Spanish colony, had income higher than that of the United States until 1830.

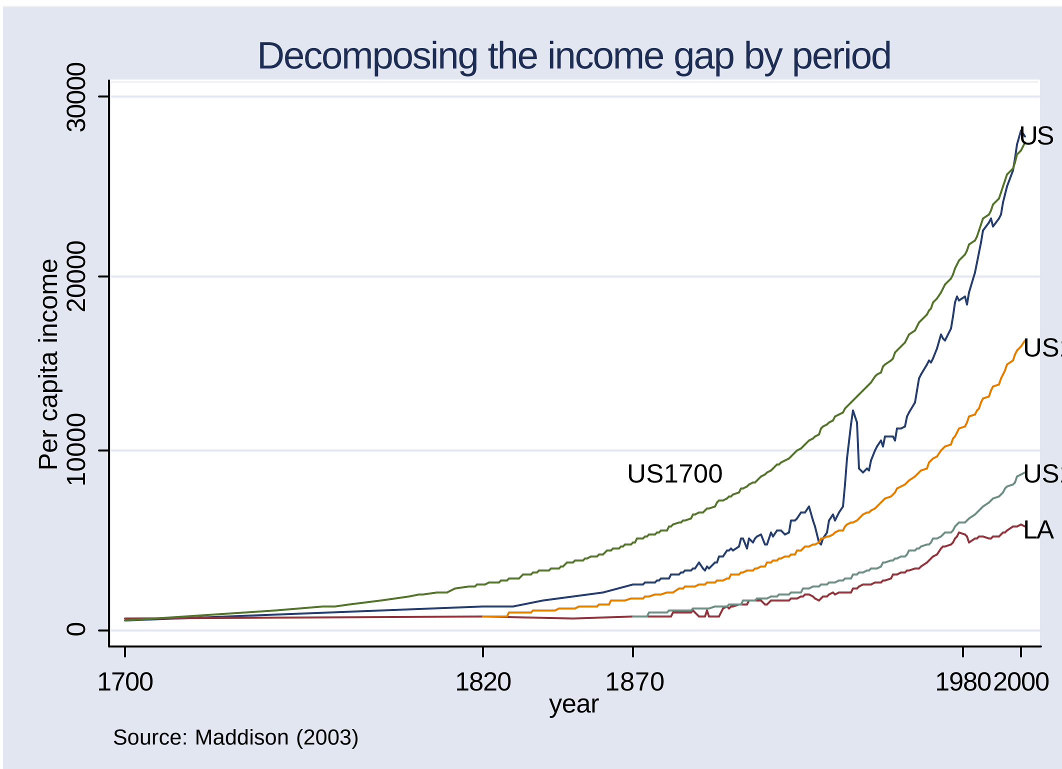
The aftermath of independence, the period between 1820 and roughly 1870, was disastrous for Latin America. Coatsworth (2005: 137) refers to "the catastrophic second quarter of the nineteenth century." Prados de la Escosura (2003: 4) observed that "independence was followed by a marked decline in economic activity: per capita income did not return to colonial levels until the mid-nineteenth century." As a consequence, by 1870 the gap between the United States and Latin America was already enormous.

In turn, between 1871 and 1980 the total GDP as well as per capita incomes grew slightly faster in Latin America than in the United States.[7] Remarkably, between 1871 – the date after which continuous time series are available for several countries - and 1930, per capita incomes grew slightly faster in Latin America than in the United States. By then, however, it was too late: compounded at the same rate, incomes diverged even more. And after 1930, growth of per capita incomes slowed down markedly in Latin America, while it accelerated in the United States. Hence, by 2000 the average income in the United States was 4.8 times higher than south of the Rio Grande.

*** Table 1 here ***

To summarize these patterns, it is useful to think in terms of three periods. Already by 1820, the difference between the United States and Latin America was sufficiently large that even if they had grown at the same rate since then, the gap in 2000 would have been large. Between 1820 and 1870, the gap increased further because total output grew very slowly in Latin America. After 1870, the total output in Latin American grew somewhat faster than in the United States, but so did population. Finally, growth of total output slowed down sharply after 1980, but we will not delve into this period.

[7] Coatsworth (1993: 10) argues that "all of the significant obstacles to economic growth in nearly all of the countries of Latin America had disappeared by the late nineteenth century."



Decomposing the income gap by period
Per capita income
30000
20000
10000
0
US
US1820
US1700
US1870
LA
1700
1820
1870
1980
2000
year
Source: Maddison (2003)

Figure 1:

To decompose the gap as of 2000, examine Figure 1, in which the smooth lines represent the counterfactual per capita incomes of Latin America, where the counterfactual is that they would have grown at the same rates as the United States from the initial conditions at different dates.[8] The upper irregular line is the actual income path of the United States, while the lower is the average per capita income in Latin America.[9] If you look vertically in 2000, the last year represented, you can interpret the distance between the actual income of Latin America and the smooth lines originating in 1700, 1820, and 1870 as the income gap due exclusively to growth rates falling behind those of the United States after these dates. As we see, the gap in relation to 1700 is very large: the difference between the income Latin America would have had it grown at the same rate as the United States since 1700 and the actual income it had in 2000 is $23,123. The 2000 gap relative to the initial conditions in 1820 is already smaller, $10,040 but still very large. In turn, the gap relative to the conditions in 1870 is small, $2,780. Indeed, the post-1870 gap is due almost exclusively to the slowdown of growth in Latin America after 1980.[10] Hence, while Latin America fell further and further behind in each period, it is clear that the current gap is due mainly to the period before 1870, and particularly before 1820, with a downward twist after 1930 and again in 1980.

3 A History of Political Institutions

From the political point view, the startling difference from the United States is the length of time it took Latin American countries to reach national integration and to establish political institutions. The period after independence was not completely peaceful in the United States and the election of 1800 brought the country to the edge of violence (Dunn 2004, Weisberger 2001). But the political unrest in the United States pales in comparisons to the persistence of instability in most Latin American countries, where the wars of independence were to large extent civil wars and where these wars continued well after independence had been achieved.[11] Explanations abound (López-Alves 2000) but systematic

[8]There is nothing special about using the same rate of growth as a yardstick. Indeed, in the light of convergence theories (see, for example, Lucas 2000), one would expect countries that lag behind the technological leader to grow faster. We use the same rate of growth merely as an accounting device.

[9]Remember that this is not quite accurate, since data for different countries are available at different dates.

[10]In 1980, this gap was $528; by 2000, it was $2,858.

[11]The United States experienced an exceptionally bloody, but short-lived, civil war ninety years after it gained independence. As Bushnell and Macaulay (1998: 29) observe, "all nineteenth-century Latin American revolutions together came nowhere

tests are few.

One story is that conflicts were more acute in Latin America, either because inequality generated more pressure toward redistribution or because of the contest between *peninsulares* and *creoles* for the rents accruing to political power.[12] Note, however, that the question whether and to what extent the wars of independence resulted in social transformations is also well familiar to students of the United States (Beard vs Jameson). But even if both economic and political conflicts were equally intense, there was a crucial institutional difference. That the British North American colonies had self-governing institutions is crucial, since they permitted the United States to gain independence without a break of institutional continuity. Colonies became states of the Union, with the same boundaries,[13] and the newly founded federal institutions arose from self-government institutions established under the British rule. In turn, the Spanish colonial administration was much more direct and much more centralized, leaving little space for self-government.[14] The access of those born in the colonies, *creoles*, to higher posts in the Spanish colonial administration was restricted by law, which gave rise to perpetual conflicts (Lynch 1985). The only institution that entailed some modicum of self-government in Spanish America – *the cabildo* – was an estate body, with offices that could be purchased and kept in perpetuity after 1556 and only few elective posts, subject to the confirmation by the Crown and elected under highly restricted suffrage. The fiscal powers of the *cabildo* were minimal. These institutions functioned so badly that in 1789 *intendentes* appointed by the Crown took over most of their functions. Summarizing its evolution, Haring (1947: 165) concluded that "the *cabildo* had virtually disappeared at the end of the colonial era."

Hence, when the Spanish colonial administration disintegrated – and it collapsed not because of pressure for independence in the Americas but because of events in Europe – the ensuing conflicts, whether among territorial units or between landowners and peasants over land or be-

near to equaling the death toll of the one US Civil War" Note, however, that this conflict did not result in a breakdown of institutional continuity.

[12]On the controversies whether and to what extent the Latin American wars of independence were social revolutions, see the essays in Hanke (1967: pages 1-59).

[13]Territorial consolidation in Latin America entailed some failed projects (Cundinamarca, Gran Colombia, Central American Republic) as well as attempts of some provinces to become independent on their own. Inter-state wars, however, were rare in Latin America.

[14]Note that although the Spanish colonies lacked a tradition of self-goverment, civil servants were recruited locally. Only the top levels were novice to the task of governing, but the deeper issue was probably the overall unfamiliarity with representative institutions (Bushnell and Macaulay 1994: 30-1).

tween *creoles* and *peninsulares* over political power or just among different militias over nothing, could not be resolved within a pre-existing institutional framework. Until one of the forces established its military domination or the opposing forces agreed to process conflicts according to some rules, conflicts could only take violent forms. And it took time before any kind of stable institutions were established.

As soon as they declared independence, all countries sought to establish some kind of a constitutional framework. However, independence was not a one-time event for several Latin American countries (see Table 2). Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua declared independence from Spain in 1821 but were then briefly absorbed into Iturbide's Mexican Empire until its dissolution in 1823. Afterwards, they constituted the United Provinces of Central America (later called Federal Republic of Central America), with Guatemala as its political center. Under federal provisions, each component state issued its own constitution and elected local officials. Nicaragua, Costa Rica, and Honduras seceded in 1838, while El Salvador formally did so in 1841. The Dominican Republic declared independence in 1821, but was subsequently occupied by Haiti until 1844. Mexico declared independence from Spain in 1813, but was reconquered and could not establish independent institutions until 1821. Panama declared independence from Spain in 1821 but remained a part of Colombia throughout the 19th century. Even before its liberation from Spanish domination in 1822 by Bolivarian troops, the fate of Ecuador had been decided at the 1819 Angostura Congress, and the country remained a part of the Republic of Colombia until 1830. After an eleven year struggle against Spain, Venezuela left the colonial rule as a component state of the Republic of Colombia, leaving it only in 1829. In Uruguay, revolutionary struggle began in 1811, and after conflicts with Buenos Aires, Portuguese Brazil annexed it between 1816 and 1825. Having attained independence from Spain respectively in 1821 and 1825, Peru and Bolivia constituted in 1836 the Peru-Bolivian Confederation, which survived only three years, largely due to Chilean intervention.

Constitutions were adopted within three years of the declaration of independence[15] in all newly independent countries, except for Argentina, where several attempts to establish a national constitution failed;[16] Paraguay, where a document composed of eleven articles was issued in 1811, and then other proto-constitutions in 1813, 1814, and 1841, until a constitu-

[15] We count only those constitutions that were in effect at least once as of December 31st .

[16] For an explanation of the difficulties to reach national unity in Argentina, in contrast to the US, see Saguir (1998).

tion was adopted in 1844; and the United States, where the Articles of Confederation, drafted in 1777, had to wait until 1781 for ratification by individual states. Most of these first constitutions had a short life. Nine of them did not survive more than five years. Only the 1824 constitution of the Brazilian empire and the Uruguayan one of 1830 proved to be long-lived. If we think that constitutional stability is reached when a constitution lasts at least during the life of one generation, which we take to be twenty-five years, only three countries achieved it within the first generation of the final independence (Cuba, Panama, and Uruguay). Six countries, including the United States, had to wait for the second generation, while the remaining ones waited even longer. El Salvador, Nicaragua, and Brazil had the same number of constitutions as the United States, two, during their first twenty-five years. Three countries went through three constitutions each, three had five constitutional changes, two had six, four had seven, one had eight, and Argentina had no constitution.

Constitutions, however, were often not more than pieces of parchment. Political institutions are stable only if they regulate at least the struggle for power. We take as a yardstick of stability the fact that the chief executive, in all the relevant cases the president, completed a second consecutive term of office,[17] whether or not the same person served the two terms. More precisely, we consider a term to be complete if (1) its duration was specified previously to someone assuming the office,[18] (2) the incumbent did not extend his current term while in office,[19] (3) he either lasted in office until the end of the term or died peacefully while in office or resigned due to ill health[20] and was succeeded by his constitutional successor, who then completed the term.

[17]We include here only presidential terms that lasted at least four years, so that when the second term is completed, we can count at least eight years of completed terms. Two consecutive four-year terms is the rule for most countries. Guatemala and Argentina had terms of six years when two consecutive terms were first completed, while in Chile the presidential term was of five years. Paraguay is the exception, where the 3-year term *Consulado* and the ten year term tenure of Carlos Antonio Lopez were completed in succession, adding up to thirteen years and are therefore included. Note that if we were to consider terms of any duration, the dates would have been earlier in El Salvador (1856), Honduras (1844), and Nicaragua (1851), which all had two-year terms.

[18]We do not consider as previously specified terms that are explicitly specified to apply only to the current incumbent. Thus, we code General Augusto Pinochet's tenure between 1980 and 1989 as not having a previously specified term. In addition, provisional and interim chief executives are coded as not having a term.

[19]If an incumbent completed one term and only the subsequent term was extended, we consider the first term completed.

[20]Terms not completed because the incumbent was assasinated are treated as incomplete.

*** Table 2 here ***

Table 2 shows the date when independence from the colonial power was declared,[21] the date when final independence was achieved, the date when a second consecutive term was completed, and the length of the period between independence and the completion of the second term of at least four years. We call this period "turmoil."

The period of thus defined turmoil was indeed long in several countries. While in the United States the second consecutive term was completed within twenty one years of independence,[22] eight Latin American countries reached institutional stability within the first generation following independence, and three did so within the second generation. The remaining eight Latin American countries had to wait more than fifty years before constitutional incumbents could feel safe in office.[23] Thus, most Latin American countries experienced "wars of attrition," which ended only either when one side was militarily victorious and established its dictatorship or when prolonged warfare destroyed so many resources that little could be gained by winning the military conflicts and the antagonists agreed to some rules to process them peacefully.[24]

The institutions that first generated political stability in Latin America are often described as "oligarchical" but they were in fact more often "polyarchical."[25] They were highly inegalitarian, restricting political rights to a small portion of male adult population, but also typically pluralistic, allowing a modicum of official opposition to function within the institutional framework. While elections were carefully manipulated

[21] Note that the dates of declaration of independence from the colonial power may not coincide with the days in which the first *grito* of independence was exclaimed (not shown in Table 2). Consider the case of Ecuador. According to Hurtado (1980), the creoles had progressively come to recognize the desirability of replacing the Spanish authorities. In August of 1809, they perpetrated a successful coup, declared independence, and swore allegiance to the king. By August of the following year, the patriots had been assassinated (1980: 36-8) and Spain retained power until the Battle of Pichincha in 1822.

[22] We refer to the independence date established in Table 2 as the landmark to calculate the period of turmoil.

[23] Several commentators on earlier versions of this paper complained at our treatment of Brazil, arguing that it was institutionally stable under the imperial rule. Yet none of the Brazilian rulers completed the (lifelong) term in office: Dom João returned to Portugal, Dom Pedro I resigned under revolutionary pressures, the Regency was cut short by what Haring (1958: 54) describes "a parliamentary coup d'etat," and Dom Pedro II was overthrown by the Republican revolution.

[24] For the logic of "jump starting" democracy as a result of destruction of resources by a civil war, see Wood (2000) and Wantchekon (2004).

[25] Dahl (1971) used the term "polyarchy" to denote any kind of an imperfect democracy. We mean it literally, as "plural oligarchy."

by the incumbent governments, thus assuring either their own permanence in office or the victory of their appointed successors, opposition was legally tolerated, allowed to win some seats in the legislature, and sometimes even a share of power. And these incentives were most often sufficient for the opposition to participate. Hence, intra-elite conflicts were processed according to rules and, even if not without sporadic repression and sporadic rebellions, were peacefully resolved. Following Chile after 1831 (about which see Valenzuela 1995), several Latin American countries established stable systems of succession in which incumbent presidents completed their terms, faithfully obeying term limits chose their successors, and through various devices assured their victory at the polls.[26] The stability of such systems of oligarchical pluralism – Chile between 1831 and 1891 and again until 1924, Nicaragua between 1856 and 1890, Brazil between 1894 and 1930, Argentina between 1897 and 1916, Uruguay between 1898 and 1932 – was remarkable.

Immediately after independence, most Latin American countries instituted fairly broad male suffrage. Male suffrage was universal in Argentina by 1856[27] as well as in the countries that became independent late, namely Cuba and Panama. In nine other countries, the original provisions included all "independent" males, while eight countries first adopted narrower qualifications. While the data are extremely fragmentary, we guess that the provisions for all "independent" or all males enfranchised about 20 percent of adult males by 1850 and about 40 percent by 1870. However, this early wave of extensive rights was soon reversed everywhere except in El Salvador by introducing literacy or minimum income requirements, which we guess restricted suffrage to about 16 percent of adult males by 1870.[28] Contrary to Engerman and Sokoloff (2001, 2003) and Sokoloff (2002), we find it next to impossible to tell whether franchise was narrower in Latin America than in the United States, particularly after 1870, when suffrage became restricted to cit-

[26] For a summary of devices by which governments controlled results of elections, see Posada-Carbó (2000).

[27] The Argentine constitution of 1853 lef the regulation of the franchise to ordinary legislation. In 1856, the National Congress gave the right to vote in national elections to all male adults (Alonso 1996). Buenos Aires, it its provincial constitution of 1821, adopted broad but not universal suffrage, allowing all free men the right to vote.

[28] During the entire period, income or literacy requirements enfranchised 8.0 percent of total population (N=58), while "independent" or universal male qualifications gave suffrage to 19.4 percent (N=77). Yet because income and literacy increased over time, the same formal requirements were more restrictive in the earlier periods. Our guestimates are based on eye-balling lowess regressions of the proportion of the population eligible to vote on time and assuming that males were a half of the adult population while the adult population was a half of total population (hence, multiplying the numbers by 4).

izens, strict residency requirements were applied at four levels (state, county, city, and precinct), by 1880 twenty-eight out of thirty-eight states had some form of registration in effect, while poll taxes, literacy tests, and grandfather clauses made registration difficult for a large segment of the population. The Anti Poll-Tax Amendment was passed only as late as 1964 and it was only in 1970 that the last twelve states repealed their literacy requirements. Only the Voting Rights Act of 1970 and the subsequent Supreme Court decision in Dunn vs. Blumstein (1972) reduced the variation among the states to a minimum (Rusk 2001).

While we show the general trends of electoral eligibility in Figure 2, where the Latin American data are averaged and the series are smoothed, the United States "eligible" series (from Rusk 2001) is for the proportion of the population qualified to vote given only requirements based on sex, age, and slavery, not the proportion that was registered to vote. The latter series is available only after 1960 and during this period it tracks closely the Latin American series that mixes eligibles and registered (it is not always possible to tell what the numbers refer to). Testi (1998: 400) estimates that about one-third of formally eligible persons could not register to vote in the United States after 1900. Hence, the gap must have been much smaller than the United States eligible series indicates.

Yet whether or not Latin America lagged behind the United States in extending political rights, it seems obvious that suffrage was highly restricted in Latin America during the nineteenth century and the main barrier to political rights was the literacy requirement. The mean percentage of the total population eligible to vote for the 20 observations from the nineteenth century is 4.1, with the range of 0.3 in Ecuador in 1830 to 13.2 in Costa Rica in 1885.

While inegalitarian, these institutions were pluralistic, in that they formally tolerated the existence of some opposition. By pluralistic politics, we mean something very weak: only that a legislature is elected and that there is some electoral opposition.[29] Many elections that we consider pluralistic were manipulated, vote buying (*cohecho*) was widespread, and the results were frequently fraudulent.[30] Indeed, to our

[29] Non-pluralistic years, therefore, are those without an elected legislature or those with only one party or those in which a party (or presidential candidate) run unopposed.

[30] Electoral fraud is notoriously difficult to define. On the ambiguity of this concept in nineteenth century Latin America, see Annino (1995: 15-18).

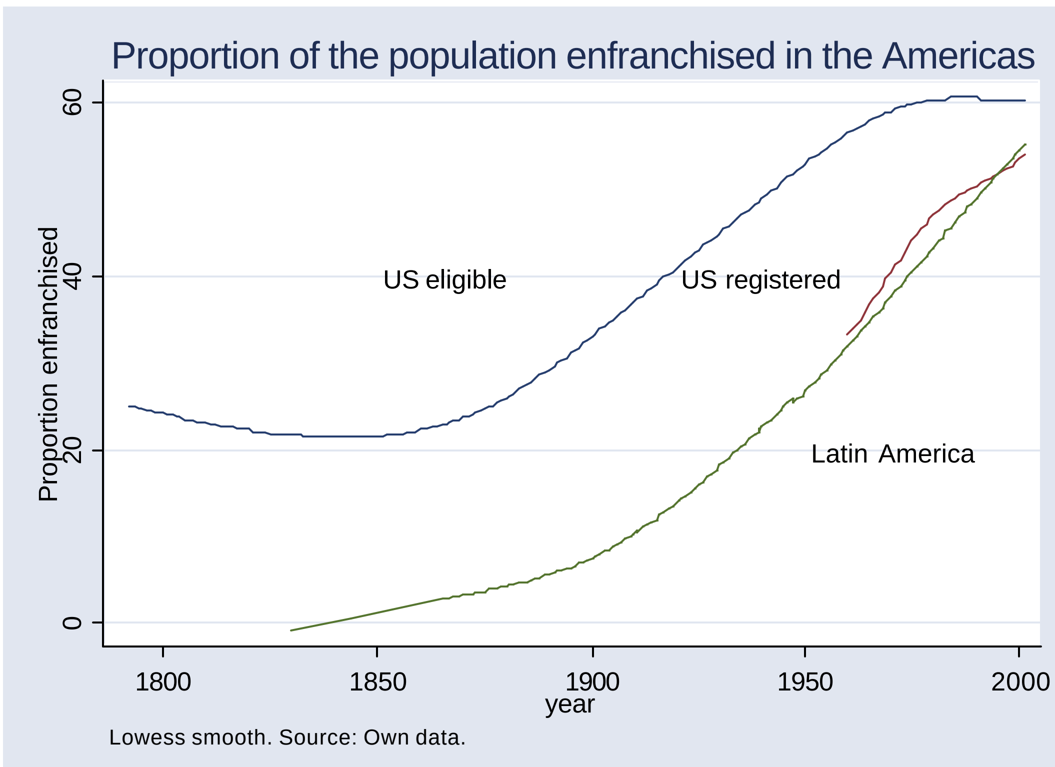

Proportion of the population enfranchised in the Americas
Proportion enfranchised
0
20
40
60
US eligible
US registered
Latin America
1800
1850
1900
1950
2000
year
Lowess smooth. Source: Own data.

Figure 2:

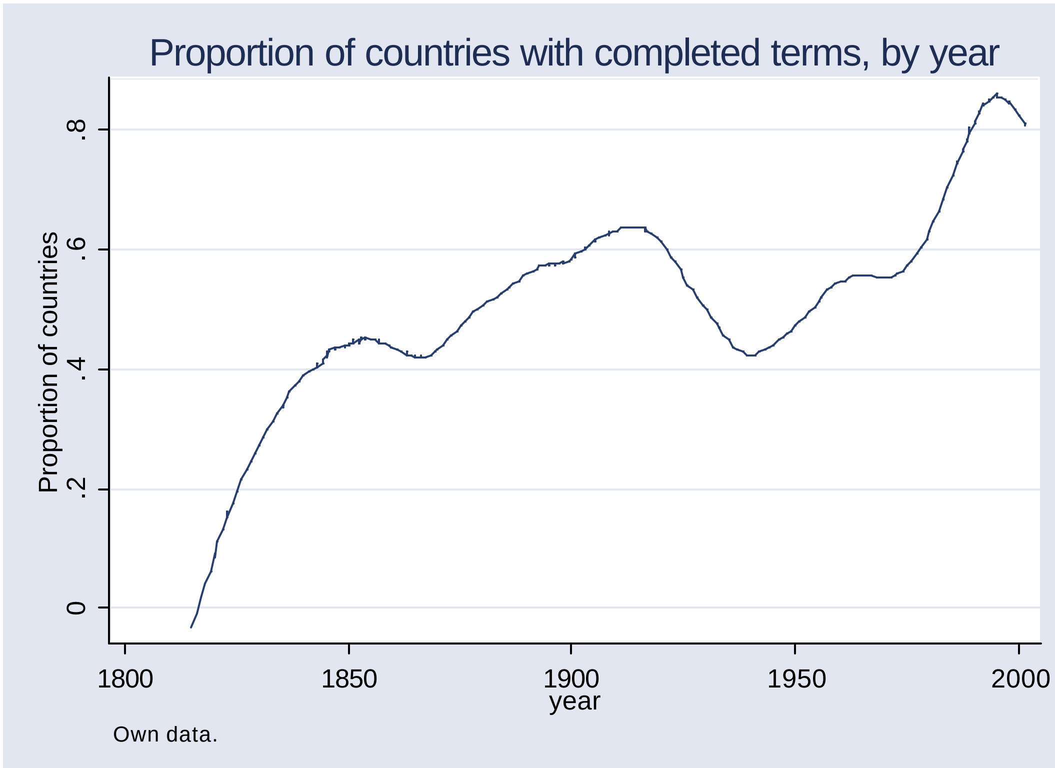


Figure 3:

best knowledge, in the entire history of Latin America only two incumbent presidents who presented themselves for reelection ever lost, both recently.[31] As Halperin-Donghi (1973: 116) observed, "Among the many ways of overthrowing the government practiced in postrevolutionary Spanish America, defeat at the polls was conspicuously absent." Yet we do not exclude manipulation or fraud, thinking that they are prima facie evidence of political pluralism.

Such polyarchical institutions became gradually more stable as the century progressed. Different manifestations of political (in)stability point to the same conclusion. The proportion of countries in which chief executives completed their terms rose until mid-1920s.

[31] There is also the case of the Costa Rican Braulio Carrillo, first elected in 1835 to complete the term of an incumbent who was forced to resign. Braulio Carrillo lost reelection in 1837 but one year later he overthrew the electoral winner and enacted a constitution that declared him president for life. He was deposed in turn in 1843.

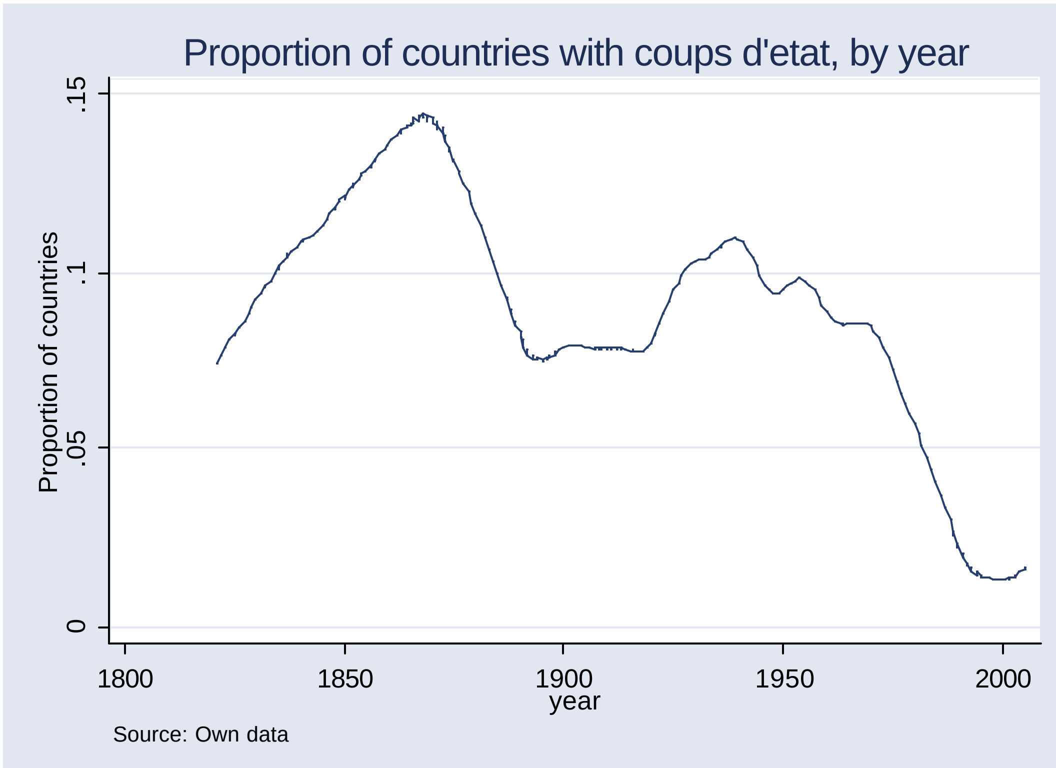


Figure 4:

The frequency of countries that suffered coups during a particular year fell sharply after 1970, reaching the lowest level in the first decades of the twentieth century.

Finally, the frequency of constitutional change followed a similar pattern.

As these figures show, the political dust of independence slowly settled down and after about 1870 many Latin American countries enjoyed political stability that lasted through the first quarter of the next century.

These polyarchical institutions, however, could not absorb and process conflicts of distributional nature. The development of Latin America during the second half of the nineteenth century sharply increased income inequality. While according to Sokoloff (2000: 78-79; echoed by

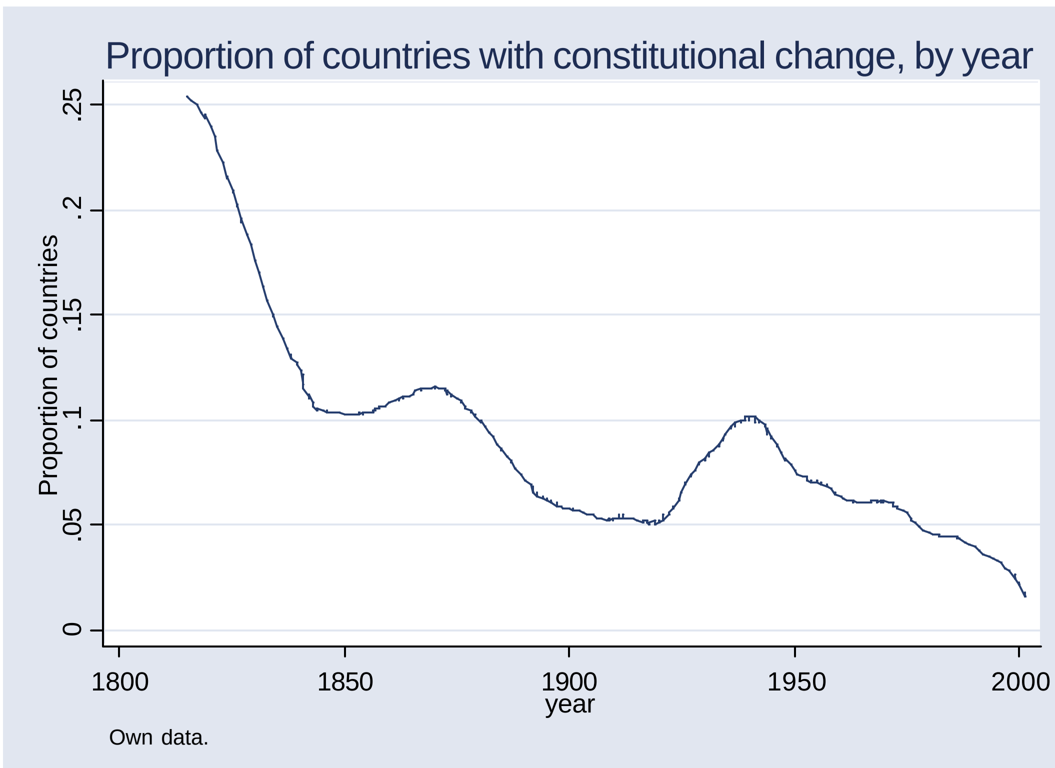

Proportion of countries with constitutional change, by year
Proportion of countries
0
.05
.1
.15
.2
.25
1800
1850
1900
1950
2000
year
Own data.

Figure 5:

Karl 2002: 7-8), Spanish America as well the Caribbean and Brazil were characterized by extreme inequality already from the colonial times, Coatsworth (2005) maintains that "landownwership (and wealth more generally) was *not* more concentrated in Latin America than in the thirteen British colonies (or the industrializing Britain itself)," pointing out that (1) most of the Spanish colonies were not slave economies, (2) throughout Mesoamerica and the Andes, the indigenous States population occupied most of the arable land, (3) even where large estates existed, land was abundant and its value contributed little to concentrating wealth. Both Coatsworth (1998: 39; 2005: 30) and Prados de la Escosura (2003) argue that inequality increased in Latin America only during the second part of the nineteenth century, when improved transport and expansion of trade made land more valuable. Their arguments find confirmation by Williamson (2004: Table 7) who shows that, with 1913 as 1.0, the ratio of real wages to land value declined from 6.9 in 1880-1884 to 0.7 in 1930 in Argentina and from 11.1 in 1870-1874 to 1.1 in 1930 in Uruguay.

Yet regardless of whether extreme inequality was congenital or arose only in the course of development, inequality led to the emergence of two major distributional conflicts: over land (or wages in agriculture) and over wages and working conditions in industry.[32] It is easy to believe that the widespread combination of literacy requirements, indirect elections and open ballots[33] was intended to disable political organization of peasants, keep down prices of food, and wage costs outside agriculture. Land distribution was a perennial issue in Latin America and continued to be so still in the second half of the twentieth century, when twelve Latin American countries instituted twenty-seven reforms that entailed some land redistribution.[34] Extending political rights to agricultural masses made it impossible to maintain such "*pactos urbanos*" and in several countries led to military intervention.[35] In turn, the rise of working class movements presented a threat to private property or at least to the control by owners of the organization of production. This threat was not that the newly enfranchised voters would demand redistribution through the fiscal system – *pace* Acemoglu and Robinson (2000, 2001) this possibility was simply absent from the intellectual horizon of the time – but that they would use their political rights to orga-

[32]According to the data collected by Godio (1972), the reason for strikes in Argentina became increasingly heterogeneous with time.

[33]Until 1925, 64 percent of elections used open ballot. 63 percent of presidential and 35 percent of legislative elections were indirect.

[34]Based on preliminary data kindly provided by Anjali Thomas.

[35]Agrarian reform was a highly divisive political issue in Brazil before 1964, Chile before 1973, and in Peru before 1968..

nize and strike to undermine the authority of employers at the place of production or to redistribute private incomes or even productive assets. These conflicts could not be handled either by the exclusive and semi-competitive polyarchical institutions or by entrenched dictatorships. As Collier and Collier (1995: 8) report, "the incorporation [of the working class] experience produced a strong political reaction and in most countries this reaction culminated in the breakdown of the national political regime under which the incorporation policies had been implemented." And again, union industrial militancy and the accompanying specter of communism were major factors in destabilizing political regimes. A new wave of destabilization occurred after 1924, when several countries experienced the first military coups in their history,[36] fewer terms were completed, the turnover of chief executives increased, and the frequency of constitutional change rose again. Only after 1980, when fully democratic regimes, based on universal suffrage, took hold in Latin America, was political stability restored again, even if turnover of the chief executives accelerated again in the most recent years.[37]

4 Institutional Stability and Development

Comparing these two periodizations – economic and political – strongly suggests that they coincide. The period roughly before 1870 witnessed political instability and slow growth; when political institutions stabilized, growth accelerated; when a new wave of instability erupted, growth again slowed down. Yet periodizations are always arbitrary and can be tendentious. To support the claim that institutional stability promotes development, we need to examine the full variation of the data for individual countries during particular years.

To assess the economic cost of the period during which newly independent countries did not have functioning institutions, we regress per capita incomes in 2000 on the date of independence[38] and the length of

[36] The first in a series of coups occurred in Chile in 1924. According to Rouquie (1994: 223), "Between February and December of 1930, the military were involved in the overthrow of governments in no fewer than six, widely differing Latin American nations - Argentina, Brazil, the Dominican Republic, Bolivia, Peru, and Guatemala. The same year also saw four unsuccesfull attempts to seize power by force in other Latin American countries. Over the following years, Ecuador and el Salvador in 1931, and Chile in 1932, joined the list of countries in which military-provoked political shifts and unscheduled changes of the executive had taken place."

[37] Eleven Latin American presidents left office precipituously in the last ten years. It is notable, however, that contrary to the past, in all cases succession occurred according to strict observance of constitutional rules.

[38] We include the dates employed in calculationg turmoil, that is, those dates underlined in Table 2.

the period we called above "turmoil." The results, shown in Table 3, are quite startling: each year without institutions reduced the 2000 income by $87. Given how long this period lasted in some countries, the institutional breakdown following independence reverberates loudly in current incomes: the two variables together explain 32 percent of variance of per capita incomes in 2000. Latin America fell behind the United States when each country struggled to establish political institutions, while the United States was already growing. As we have seen in Figure 1, compounded at equal rates the gap that emerged by 1870 accounts for a large part of the income gap today.

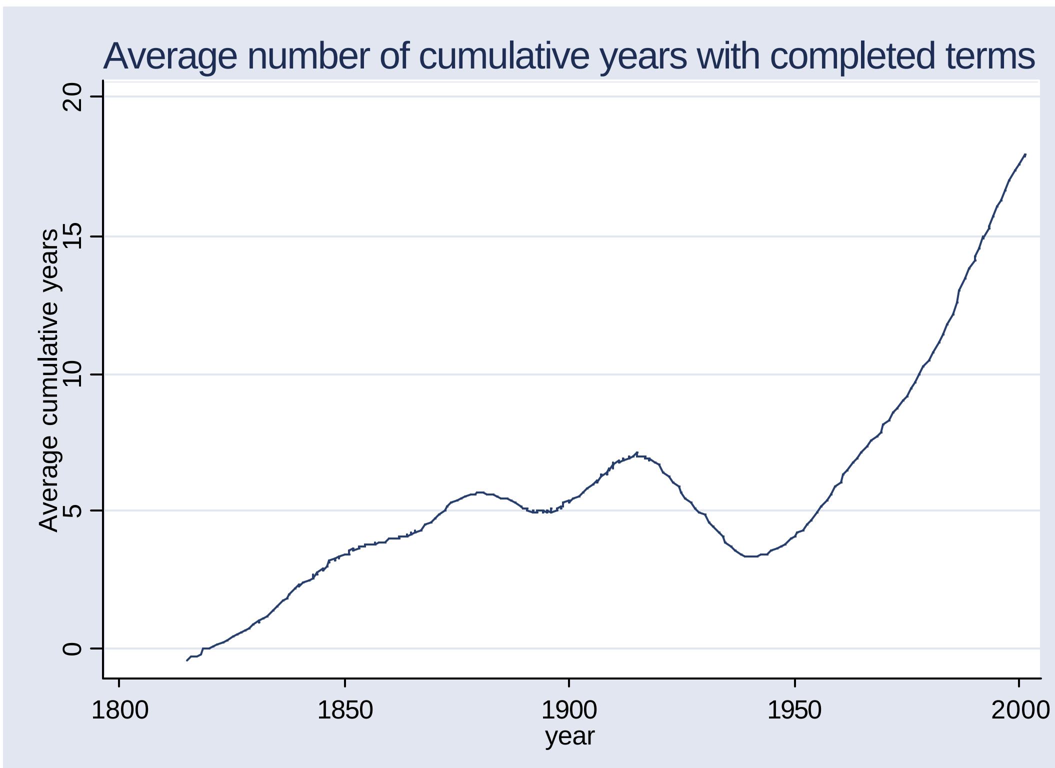
*** Table 3 here ***

Even after institutions became first consolidated, however, their instability continued to have a pernicious effect on growth. Analyzing the period following the beginning of the first completed term in both North and Latin America[39] shows that during the 1232 of subsequently completed presidential terms for which income data is available, economies grew at the rate of 1.81 per annum, while during 658 years without terms or with terms that were not completed, they grew at the rate of 1.25. During the 1710 years when no coups occurred, the growth rate was 1.75, during the 106 years when at least one coup took place this rate was 0.02.

Yet while they are suggestive, these differences cannot be interpreted in causal terms. Institutions are endogenous, and this means that the "stable"and "unstable" years do not occur under the same conditions. And since it may be the conditions rather than the institutions that affect growth, one must be wary of causal inferences based on such crude comparisons.

To identify the causal effect of institutional stability, we focus on the impact on growth of the cumulative number of years during which chief executives completed their terms (whether or not individuals changed). We call this variable ACCTERM, for cumulative years of completed terms. As Figure 6 shows, this variable exhibits the same pattern as other indicators of institutional stability discussed above, with gradual stabilization through the first quarter of the twentieth century and a destabilization during the inter-war period.

[39] In fact, growth data are not available for the earlier period for any country. This is why we analyze differently the period before and after the first institutional consolidation.



Average number of cumulative years with completed terms
Average cumulative years
0
5
10
15
20
1800
1850
1900
1950
2000
year

Figure 6:

Table 4 shows the duration of the longest spell of years with accumulated terms and the year it ended, separately for the years when suffrage was narrow and ever. Note that while in seven countries the longest run of completed terms was as of 1999, other countries experienced the longest periods of stability earlier, some under highly restricted suffrage. The longest spell of both Bolivia (22 years) and Chile (61 years) took place under male suffrage restricted by income and literacy criteria (alternating in Chile). Brazil had a maximum spell of 37 years at a time when only literate males had the right to vote, while Nicaragua and Guatemala experienced their longest spells, of 34 and 24 years respectively, under male suffrage restricted by income criteria.

*** Table 4 here ***

The effect of cumulative years of completed terms on the rate of growth is shown in Table 5. Since completing the current year may be endogenous with regard to the growth rate this year, ACCTERM is lagged one year. In panel A we estimate a model with panel-corrected standard errors (allowing the autocorrelation. to be different across countries). Since countries could not accumulate completed terms before they became independent, in panel B we replace country effects with the year in which independence was attained. In both cases we control for lagged per capita income (GDPcap_lag) and its square (GDPcap_lag^2), the rate of growth of the world in a particular year (Growth World), and the rate of growth of population (Growth Pop). The estimates of the effect of ACCTERM are almost identical, very large, and highly significant: each additional year during which terms were completed increases the growth rate by 0.17.

*** Table 5 here ***

We see these results as providing a rather resounding confirmation of the hypothesis that a stable system of political institutions is necessary for development. During terms that were not completed, incomes grew at the rate of 1.25. A country that accumulated eight years of completed terms– the average for Latin America – would grow at the rate 1.39 percent, while a country that experienced a spell twenty-six years – average for the United States – would grow at the rate of 1.69. The observed difference in the average rates of growth between the United States and Latin America is 0.48. Hence, institutional instability appears to explain about two-thirds of this difference: $(1.69 - 1.39)/(2.02 - 1.54) = 0.625$.

Moreover, what mattered was the stability of institutions, not just any kind of political stability. Latin America experienced several long-lasting rulers. Dom Pedro II reigned over Brazil from 1841 to 1889, Fidel Castro has ruled Cuba 29 years under indefinitely renewable terms he instituted, Porfirio Diaz governed Mexico from 1884 and 1910 while General Estrada Cabrera ruled Guatemala from 1898 to 1920, both with terms and elections but no term limits. General Santos Zelaya, remained in power in Nicaragua from 1893 to 1909, extending his term while in office, while Carias Andino survived sixteen years in Guatemala between 1933 and 1948, by both extending his term and abolishing term limits. General Pinochet ruled Chile from 1973 to 1989, first without terms and then with a 10-year term designed specially for him. One might think, as Huntington (1968) would, that what matters for development is simply order, so that long-lasting rulers would generate development. The rival hypothesis, then, is that any kind of political stability, whether or not it results from rule by force or from obeying previously specified rules, is conducive to growth.

*** Table 6 here ***

To test this hypothesis, we regressed, using the same specification, the rate of growth on the number of consecutive years a particular chief executive had been in office (ACCHEADS).[40] The results, shown in Table 6, show that duration of particular individuals in power does not affect growth, while the cumulative years of completed terms continue to have a strong positive effect. Hence, it is the stability of institutions, not of rulers, that matters for growth.

Finally, we should consider another rival hypothesis, namely, that the existence of political institutions matters only when these institutions incorporate broad masses, thus offering them political instruments to protect their property rights. Several writers have argued that political rights in the form of suffrage promote development, either by protecting property rights and thus inducing investment (North and Weingast 1989, Acemoglu, Johnson, and Robinson 2001) or by stimulating the demand for public goods, including public productive goods (Lizzeri and Persico 2004) or by promoting policies in favor of the modern, industrial, sectors (Llavador and Oxoby 2005). Yet the effect of political rights on economic development is subject to sharply divergent beliefs. In a view dominant during the first half of the nineteenth century and represented in contemporary economics by the median voter model (Meltzer and

[40] In order to be counted as a consecutive year of tenure, the head has to have held office for the whole year.

Richards 1971), extensions of suffrage, by lowering the relative income of the decisive voter, should lead to increased demand for redistribution, higher taxes, and lower growth. Sokoloff (2002: 76) entertains both possibilities:

> Where an economic elite wields highly disproportionate political power [...], a broadening of political influence through an extension of the franchise might diminish the returns to members of the elite and dampen their rates of investment. On the other hand, there could well be advantages for growth to having a more equal distribution of political influence. Many would expect, for example, more substantial support of infrastructure and other public goods and services [...], a reduction in the levels of corruption, and perhaps more competition throughout the economy....

To isolate the effect of institutional stability from the effect of political equality, we coded franchise restrictions as those that kept franchise low, namely, property, income of some minimum level, or literacy, and those that permitted franchise to be broad, those allowing all "independent" persons or simply everyone to vote (for both sexes). We then coded separately whether franchise was extended to females, regardless of the other qualifications. Finally, we recorded the minimum age at which people were enfranchised. Introducing these variables into the previously specified regression shows that (1) incorporation of poorer people reduces the growth rate, presumably because of their demands for redistribution, (2) conditional on the class composition of the electorate, the incorporation of women increases the growth rate, presumably because they demand more public goods,[41] (3) lowering voting age reduces growth, and (4) the effect of institutional stability does not depend on political inequality. What is most relevant for our argument is that institutional stability matters regardless to whom these institutions give a political voice; more precisely, as long as institutions give voice to at least wealthy males.

*** Table 7 here ***

To summarize, what institutional stability promotes growth. Political order imposed by long-lasting rulers does not affect growth: what

[41] These results do not include the United States, since we have concluded that coding suffrage restrictions for the country as a whole is next-to-impossible given that each state regulated the franchise qualifications and introduced restrictions well into the 20th century. The results with year of independence and country-clustered standard errors are much weaker, but qualitatively similar.

matters is whether entry and exit into power are regulated by rules, not how long rulers remain in office. Moreover, institutional stability matters whether or not political institutions are egalitarian.

5 Conclusion

Before we ask what kind of institutions are conducive to development, we must inquire what is the impact of having any institutions at all. It may well be, as an enormous literature already testifies, that some institutions – those that make property rights secure for everyone or those that mobilize and coordinate investment or those that render rulers accountable – are "good," better for development. But in many countries a stable institutional framework is a luxury, regardless of whether it would protect property or not, provide public infrastructure or not, control corruption or not. And development cannot proceed when people keep fighting, and they have no other way of resolving their conflicts unless they can process them according to some rules. Moreover, rule by sheer force, established by *golpes* or perpetuated by *autogolpes*, impedes growth, even if rulers stay in power for a long time.

The existence of institutions cannot be taken for granted. Institutions emerge and survive only if they are capable of generating outcomes that all the groups that can mobilize physical force prefer to fighting. This means that the outcomes generated by the institutional framework must to some extent reflect the capacities of the particular groups to impose their interests or values by force. Hence, when the distribution of the "brute," pre-institutional, power is highly unequal, institutions must be highly inegalitarian to be stable. In turn, institutions can be destabilized when new groups acquire the capacity to hurt the entrenched interests, if only by striking or taking over land. Institutional re-equilibration may not always be peaceful.

In the story we told, in contrast to the United States, Latin America was left without ready-made institutions when it freed itself from colonial control. The period until new institutions could be consolidated was economically costly and the consequences of the turmoil that ensued are felt until today. But eventually institutions emerged and growth took off. They were highly inegalitarian but this did not prevent development. We agree with Coatsworth (2005: 140) that "What Engerman and Sokoloff saw as obstacles to economic growth – elite power and economic inequality – actually facilitated the region's transition to sustained, if unstable, economic growth ..." Yet since development reproduced or perhaps even increased economic inequality, the prospects of political incorporation, particularly the right of workers and peasants to organize, threatened property. While Southern tenant farmers were impeded from voting by obstacles to registration and while the emergence of the industrial working class was met in the United States with a fair dose of outright repression, the institutional framework survived the incorporation of new groups. Yet in most Latin American countries, the oligarchical institutions fell apart when new conflicts emerged, to be reconstituted only quite recently, albeit under exceptionally unfavorable circumstances. And institutional instability hampered development.

6 References

Acemoglu, Daron. 2003. "Root Causes: A historical approach to assessing the role of institutions in economic development." *Finance and Development*: 27-30.

Acemoglu, Daron, and James Robinson. 2000. "Why Did the West Extend the Franchise? Democracy, Inequality, and Growth in Historical Perspective." *Quarterly Journal of Economics 115:* 1167-1199.

Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2001."The Colonial Origins of Comparative Development." *American Economic Review 91*: 1369-1401.

Acemoglu, Daron, and James Robinson. 2001. "A Theory of Political Transition." *American Economic Review* 91*:* 938-963.

Alonso, Paula. 1996. "Voting in Buenos Aires (Argentina) before 1912." In Eduardo Posada-Carbó (ed.). *Elections Before Democracy: The History of Elections in Europe and Latin America*. New York: St. Martin's Press.

Annino, Antonio. 1995. "Introducción." In Annino (ed.). *Historia de la elecciones en Iberoamérica, siglo XIX.* México: Fondo de Cultura Económica.

Bardhan, Pranab. 2004. "History, Institutions and Underdevelopment." Ms. Department of Economics. University of California, Berkeley.

Benhabib, Jess and Adam Przeworski. 2006. "The Political Economy of Redistribution under Democracy." *Journal of Economic Theory.*

Bordo Michael D. and Roberto Cortes Conde. 2001. "Introduction." In Bordo and Cortes Conde (eds.). *Transferring Wealth and Power from the Old to the New World*. Cambridge: Cambridge University Press.

Bulmer-Thomas, Victor. 2003. *The Economic History of Latin America Since Independence.* Second edition. Cambridge: Cambridge University Press.

Bushnell, David and Neill Macaulay. 1994. *The Emergence of Latin America in the Nineteenth Century*. Second Edition. New York: Oxford University Press.

Coatsworth, John H. 1993. “Notes on the Comparative Economic History of Latin America and the United States.” In Walther L. Bernecker and Hans Werner Tobler (eds.). *Development and Underdevelopment in America: Contrasts of Economic Growth in North and Latin America in Historical Perspective.* Berlin: Walter de Gruyter.

Coatsworth, John H. 1998. “Economic and Institutional Trajectories in Nineteenth-Century Latin America.” In John H. Coatsworth and Alan M. Taylor (eds). *Latin America and the World Economy Since 1800.* Cambridge, MA: Harvard University Press.

Coatsworth, John H., and Gabriel Tortella Casares. 2003. ”Institutions and Long-Run Economic Performance in Mexico and Spain, 1800-2000.” Working Paper No. 02/03-1. The David Rockefeller Center for Latin American Studies, Harvard University.

Coatsworth, John H. 2005. “Structures, Endowments, and Institutions in the Economic History of Latin America.” *Latin American Research Review 40:* 126-144.

Collier, Ruth Berins, and David Collier. 1995. *Shaping the Political Arena.* Princeton: Princeton University Press.

Dahl, Robert. 1971. *Polyarchy: participation and opposition.* New Haven: Yale University Press.

Dunn, Susan. 2004. *Jefferson’s Second Revolution: The Election Crisis of 1800 and the Triumph of Republicanism.* Boston: Houghton Mi- in.

Engerman, Stanley L., and Kenneth L. Sokoloff. 2001. “Inequality, Institutions, and Differential Paths of Growth Among New World Economies.” Paper presented at the meeting of the MacArthur Research Network on Inequality and Economic Performance, Boston.

Engerman, Stanley L. and Kenneth L. Sokoloff. 2003. “Institutional and Non-institutional Explanantions of Economic Differences,” NBER Working Paper 9989.

Gargarella, Roberto. 2005. *Los fundamentos legales de la desigualidad: El constitucionalismo en América (1776-1860).* Madrid: Siglo XXI.

Godio, Julio. 1972. *Historia del Movimiento Obrero Argentio: Immigrantes Asalariados y Lucha de Clases, 1880-1910.* Buenos Aires: Editorial Tiempo Contemporáneo.

Haber, Stephen (ed.). 1997. *How Latin America Fell Behind: Essays on the Economic Histories of Brazil and Mexico, 1800-1914.* Stanford: Stanford University Press.

Halperin-Donghi, Tulio. 1973. *The Aftermath of Revolution in Latin America.* New York: Harper&Row.

Hanke, Lewis (ed.) 1967. *History of Latin American Civilization:*

Sources and Interpretations. Vol. II/The Modern Era. New York: Little, Brown.

Haring, C.H. 1947. *The Spanish Empire in America.* New York: Harcourt, Brace&World.

Haring, C.H. 1958. *Empire in Brazil: A New World Experiment with Monarchy.* New York: W.W. Norton.

Huntington, Samuel P. 1968. *Political Order in Changing Societies.* New Haven: Yale University Press.

Hurtado, Osvaldo. 1980. *Political Power in Ecuador.* Albuquerque: University of New Mexico Press.

Karl , Terry L. 2002. "The Vicious Circle of Inequality in Latin America." Working Paper 2002/177. Madrid: Centro de Estudios Avanzados en Ciencias Sociales, Instituto Juan March.

Keefer, Philip. 2005. "From settler mortality to patrimonialism: weaving the dynamics of political competition into the political economy of development." The *Political Economist* 12.

Lizzeri, Alessandro, and Nicola Persico. 2004. "Why did the elites extend the suffrage? Democracy and the scope of government, with an application to Britain's 'Age of Reform'." *Quarterly Journal of Economics* 119*:* 707-765.

Llavador, Humberto and Robert J. Oxoby. 2005. "Partisan competition, growth and the franchise." *The Quarterly Journal of Economics 120*: 1155-1189.

López-Alves, Fernando. 2000. *State Formation and Democracy in Latin America, 1810-1900.* Durham: Duke University Press.

Lucas, Robert. 2000. "Some Macroeconomics for the 21st Century." *Journal of Economic Perspectives 14:* 159-168.

Lynch, John. 1985. "The origins of Spanish American Independence." In Leslie Bethell (ed.), *The Cambridge History of Latin America, Volume III: From Independence to c. 1870.* Cambridge: Cambridge University Press. Pages 3-50.

Machinea, José Luis, and Cecilia Vera. 2005. "Comercio, inversión directa y politicas productivas." Paper presented at the Seminar on "Una nueva agenda de desarrollo para América Latina," Salamanca, October 7-8

Maddison, Angus. 2003. *The World Economy: Historical Statistics.* Paris: OECD.

Mancall, Peter C. and Thomas Weiss. 1999. "Was Economic Growth Likely in Colonial British North America?" *Journal of Economic History 56:* 17-40.

Meltzer, A. H., Richard, S. F., 1981. "A rational theory of the size of government," *Journal of Political Economy* 89: 914–927.

North, Douglass C., and Robert P. Thomas. 1973. *The Rise of the Western World: A New Economic History*. Cambridge: Cambridge University Press.

North, Douglass C. 1997. "Some Fundamental Puzzles in Economic History/Development" in W. Brian Arthur, Steven N. Durlauf, and David A. Lane (eds.), *The Economy as an Evolving Complex System II.* Addison-Wesley.

North, Douglass C., and Barry W. Weingast. 1989. "The Evolution of Institutions Governing Public Choice in 17th Century England." *Journal of Economic History 49:* 803-832.

Posada-Carbó, Eduardo. 2000. "Electoral Juggling: A Comparative History of the Corruption of Suffrage in Latin America, 1830-1930." *Journal of Latin American Studies 32:* 611-644.

Prados de la Escosura, Leandro. 2003. "Assessing the Economic Effects of Latin American Independence." Working Paper 03-12. Madrid: Universidad Carlos III.

Przeworski, Adam. 2005. "Democracy as an equilibrium." *Public Choice 123:* 253-273.

Przeworski, Adam. 2006. "Self-sustaining Democracy." In Barry Weingast and Donald Wittman (eds.), *Oxford Handbook of Political Economy.* New York: Oxford University Press.

Rodrik, Dani, Arvind Subramanian, and Francesco Trebbi. 2002. "Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development," NBER Working Paper #9305.

Rouquie, Alain. 1994. "The military in Latin American Politics since 1930." In Leslie Bethell (ed.). *The Cambridge History of Latin America, Volume VI, Part 2: 1930 to the Present.* Cambridge: Cambridge University Press. Pages 233-306.

Rusk, Jerrold G. 2001. *A statistical history of the American electorate.* Washington, DC: CQ Press.

Saguir, Julio. 1998. "Entre el Conflicto y la Organización Institucional. Los Procesos Constituyentes de Estados Unidos (1776-1787) y Argentina (1810-1860). *Agora 8.*

Safford, Frank and Nils Jacobsen. 2003. "Las economias de la America andina 1830-1885." In Juan Maiguashca (ed.) *Historia de America Andina*, Volumen 5: Creacion de las Republicas y Formacion de la Nacion. Quito: Universidad Andina Simon Bolivar. Pages 29-92.

Sokoloff, Kenneth L. 2000. "The Institutional Foundations of a Market Economy." Villa Borsig Workshop Series.

Sokoloff, Kenneth L. 2002. "The Evolution of Suffrage Institutions in the New World: A Preliminary Look." In Stethen Haber (ed.), *Crony Capitalism and Economic Growth in Latin America: Theory and Evi-*

dence. Stanford: Hoover Institution Press. Pages 75-107.

Testi, Arnaldo. 1998. "The Construction and Deconstruction of the U.S. Electorate in the Age of Manhood Suffrage, 1830s-1920s," in Raffaele Romanelli (ed.), *How Did They Become Voters? The History of Franchise in Modern European Representation.* The Hague: Kluwer Law International. Pages 387-414.

Valenzuela, Samuel J. 1995. "The Origins and Transformation of the Chilean Party System." Working Paper #215. The Helen Kellog Institute for International Studies, University of Notre Dame.

Wantchekon, Leonard. 2004. "The Paradox of 'Warlord' Democracy." *American Political Science Review*, 98: 17-33.

Weisberger, Bernard A. 2001. *America Afire: Jefferson, Adams, and the First Contested Election.* New York: Perennial.

Williamson, Jeffrey G. 2004. "Real Wages, Inequality and Globalization in Latin America before 1940." *Revista de Historia Económica 17:* 101-142.

Wood, Elisabeth Jean. 2000. *Forging Democracy from Below: Insurgent Transitions in South Africa and El Salvador.* New York: Cambridge University Press.

Table 1: Per capita incomes 1700-2000

	1700	1820	1870	1930	2000
Brazil	459	646	713	1048	5556
Mexico	568	759	674	1618	7218
LA^a	521	701	756	1873	5844
United States	527	1257	2445	6123	28129
$LA^a/United\ StatesA$	0.99	0.56	0.31	0.31	0.21

Note: a Population weighted averages for countries for which data are available: seventeen countries in 1700 and 1820 (excluding Cuba and Dominican Republic), Brazil, Mexico, Argentina, Uruguay, and Venezuela in 1870, thirteen countries in 1930, eighteen in 2000. Source: Maddison (2003: 114) and Maddison (2003) data set.

Table 2: Years of independence from the colonial power and from other powers, final independence, completion of second consecutive term, and duration of turmoil.

country	Independence from colonial power	other	final	Completed	Turmoil
Argentina	1816	--	--	1874	58
Bolivia	1825	1839	--	1888	63
Brazil	1822	--	--	1902	80
Chile	1818	--	--	1841	23
Colombia[a]	1810,1819	1830	--	1841	22
Costa Rica	1821	1823	1838	1833	10
Cuba	1898	1902	--	1917	15
Dominican Rep	1821	1844	--	1938	94
Ecuador	1822	1830	--	1843	13
El Salvador	1821	1823	1841	1907	84
Guatemala	1821	1823	1840	1910	87
Honduras	1821	1823	1838	1891	68
Mexico[b]	1813,1821	--	--	1884	63
Nicaragua	1821	1823	1838	1867	44
Panama	1821	1903	--	1920	17
Paraguay	1811	--	--	1854	43
Peru	1821	1839	--	1894	73
United States	1776	--	--	1797	21
Uruguay[c]	1815	1825	--	1864	39
Venezuela[d]	1811,1821	1829	--	1847	18

Notes:
-- not applicable

a) Independence from Spain was declared in 1810, but the Spanish returned in 1815 until their decisive defeat in the Battle of Bocaya (1819). We consider Colombia to be a continuation of Great Colombia (or Republic of Colombia) and therefore take 1821 and not 1830 to calculate turmoil.
b) Although Mexico declared independence from Spain in 1813, the Spanish regained control. Independence was possible only in 1821.
c) Uruguay's revolutionary struggle began in 1811 under the leadership of Artigas, but Montevideo was invaded in 1814 by troops from Buenos Aires. Uruguay had an autonomous government briefly in 1815 but it was annexed to Brazil from 1816 to 1825.
d) Although Venezuela declared independence from Spain in 1811, it could not maintain the institutions of neither the short-lived first or second republic due to continued fighting. Only the triumph of Bolivar's forces in the Battle of Carabobo of 1821 effectively achieved independence from Spain. The Cucuta Congress of 1821 organized the Republic of Colombia, which Venezuela joined.

Table 3: The Effect of Delayed Independence and of the Duration of Turmoil on Per Capita Income in 2000.

Source	SS	df	MS
Model	241656333	2	120828167
Residual	387470493	17	22792381.9
Total	629126826	19	33111938.2

Number of obs	20
F(2, 17)	5.30
Prob > F	0.0162
R-squared	0.3841
Adj R-squared	0.3117
Root MSE	4774.1

gdpcap	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
independence	-111.0724	39.85567	-2.79	0.013	-195.1605	-26.98429
turmoil	-86.96173	39.42376	-2.21	0.041	-170.1386	-3.78487
constant	213234.9	73287.52	2.91	0.010	58611.76	367858.1

Notes:
a) The nineteen Latin American countries and the US are included in the regression.
b) The variable independence reports the year in which each country was able to establish and maintain independent institutions (see underlined dates in Table 2).

Table 4: Longest spells of completed terms, under narrow suffrage and ever (until 1999).

Country	Under narrow suffrage		Ever	
	Year	Duration	Year	Duration
Argentina[a]	always broad		1930	33
Bolivia	1920	22	1920	22
Brazil	1930	37	1930	37
Chile	1891	61	1891	61
Colombia[b]	1852	20	1999	42
Costa Rica	1858	6	1999	51
Cuba	always broad		1999	24
Dominican Rep	1856	8	1999	34
Ecuador	1925	15	1997	19
El Salvador[c]	broad		1999	16
Guatemala	1921	24	1921	24
Honduras	1862	7	1999	18
Mexico[d]	no terms completed		1999	66
Nicaragua	1892	34	1892	34
Panama	always broad		1931	20
Paraguay	1869	29	1989	36
Peru	1914	20	1999	20
Uruguay	1917	19	1933	35
Venezuela	1857	19	1993	35

Notes:
Narrow suffrage means that only males could vote and that they had to have property or income of some minimum value or be literate or both.

a) Argentina did not have a national policy towards the franchise until 1856; earlier, each province regulated suffrage. In turn, the completion of terms by the national chief executive could only be counted from 1853, when the country finally adopted a national constitution.
b) The 1863 federal constitution of Colombia established that each state would regulate the franchise. During that period (1863-1884), the maximum spell of completed terms is of 14 years.
c) The first completed term in El Salvador was in 1850. The longest spell before 1883 is of six years, from 1852 to 1858.
d) The federal Mexican constitution of 1824, succeeded by the 1836 constitution, left the regulation of suffrage to state legislatures, but slavery was only abolished in 1829. During that period, only Guadalupe Victoria completed a 4-year term. Under the 1836 and 1843 constitutions (both charters established income restrictions) no terms were completed.

Table 5: The effect of cumulative years of completed terms on the rate of growth

A. Prais-Winsten regression, correlated panels corrected standard errors (PCSEs)

Group variable:	country	Number of obs =	1893
Time variable:	year	Number of groups =	21
Panels:	correlated (unbalanced)	Obs per group: min =	51
Autocorrelation:	panel-specific AR(1)	avg =	90.14286
Sigma computed by casewise selection		max =	131
Estimated covariances =	231	R-squared =	0.0945
Estimated autocorrelations =	21	Wald chi2(5) =	207.08
Estimated coefficients =	6	Prob > chi2 =	0.0000

	Coef.	Panel-corrected Std. Err.	z	P>|z|	[95% Conf.	Interval]
accterm_lag	.0168548	.0049887	3.38	0.001	.0070771	.0266325
gdpcap_lag	-.0002547	.0001065	-2.39	0.017	-.0004634	-.000046
$(\text{gdpcap\_lag})^2$	9.05e-09	4.45e-09	2.03	0.042	3.22e-10	1.78e-08
growth_pop	-.4342863	.1074538	-4.04	0.000	-.6448919	-.2236808
growth_world	.8540371	.0622356	13.72	0.000	.7320576	.9760165
constant	1.57196	.3766092	4.17	0.000	.8338192	2.3101

rhos = .185319 -.2965481 -.1025931 -.1642165 .1151961 ... .1039643

B. Regression with robust standard errors

F(6, 20) =	24.95
Prob > F =	0.0000
R-squared =	0.0897
Root MSE =	5.8917

Number of clusters (country) = 21

growth	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
accterm_lag	.0128864	.006084	2.12	0.047	.0001954	.0255773
indep_inst	-.0027922	.0037359	-0.75	0.464	-.0105851	.0050008
gdpcap_lag	-.0002039	.0000872	-2.34	0.030	-.0003858	-.0000219
$(\text{gdpcap\_lag})^2$	7.60e-09	3.34e-09	2.27	0.034	6.31e-10	1.46e-08
growth_pop	-.4623756	.1127134	-4.10	0.001	-.6974918	-.2272595
growth_world	.8404023	.0888997	9.45	0.000	.6549609	1.025844
constant	6.680115	6.775428	0.99	0.336	-7.45318	20.81341

Table 6: Effect of the number of consecutive years a particular chief executive had been in office on the rate of growth

A. Linear regression, correlated panels corrected standard errors (PCSEs)

Group variable:	country	Number of obs =	1894
Time variable:	year	Number of groups =	21
Panels:	correlated (unbalanced)	Obs per group: min =	51
Autocorrelation:	no autocorrelation	avg =	90.19048
Sigma computed by casewise selection		max =	131
Estimated covariances =	231	R-squared =	0.0885
Estimated autocorrelations =	0	Wald chi2(5) =	188.63
Estimated coefficients =	6	Prob > chi2 =	0.0000

	Coef.	Panel-corrected Std. Err.	z	P>|z|	[95% Conf.	Interval]
accheads_lag	.0232711	.0235007	0.99	0.322	-.0227895	.0693318
gdpcap_lag	-.0001296	.0000742	-1.75	0.081	-.0002749	.0000157
$(\text{gdpcap\_lag})^2$	5.88e-09	3.33e-09	1.77	0.077	-6.41e-10	1.24e-08
growth_pop	-.4671322	.1031777	-4.53	0.000	-.6693567	-.2649076
growth_gdp_world	.8424501	.0637829	13.21	0.000	.7174379	.9674624
constant	1.452287	.3504603	4.14	0.000	.7653976	2.139177

B. Linear regression, correlated panels corrected standard errors (PCSEs)

Group variable:	country	Number of obs =	1893
Time variable:	year	Number of groups =	21
Panels:	correlated (unbalanced)	Obs per group: min =	51
Autocorrelation:	no autocorrelation	avg =	90.14286
Sigma computed by casewise selection		max =	131
Estimated covariances =	231	R-squared =	0.0897
Estimated autocorrelations =	0	Wald chi2(6) =	197.52
Estimated coefficients =	7	Prob > chi2 =	0.0000

	Coef.	Panel-corrected Std. Err.	z	P>|z|	[95% Conf.	Interval]
accheads_lag	.0133957	.0236611	0.57	0.571	-.0329793	.0597706
accterm_lag	.0114763	.004181	2.74	0.006	.0032816	.0196709
gdpcap_lag	-.0001935	.0000898	-2.15	0.031	-.0003696	-.0000175
$(\text{gdpcap\_lag})^2$	7.45e-09	3.73e-09	2.00	0.046	1.38e-10	1.48e-08
growth_pop	-.4554737	.1030581	-4.42	0.000	-.6574639	-.2534836
growth_world	.8411795	.0631533	13.32	0.000	.7174014	.9649576
constant	1.505454	.3537505	4.26	0.000	.8121161	2.198793

Note: The nineteen Latin American countries, Canada, and the US are included in the regressions.

Table 7: The effect of institutional stability on economic growth, controlling for political equality

Prais-Winsten regression, correlated panels corrected standard errors (PCSEs)

Group variable:	country	Number of obs =	1610
Time variable:	year	Number of groups =	19
Panels:	correlated (unbalanced)	Obs per group: min =	51
Autocorrelation:	panel-specific AR(1)	avg =	84.73684
Sigma computed by casewise selection		max =	131
Estimated covariances =	190	R-squared =	0.1002
Estimated autocorrelations =	19	Wald chi2(8) =	190.72
Estimated coefficients =	9	Prob > chi2 =	0.0000

	Coef.	Panel-corrected Std. Err.	z	P>|z|	[95% Conf.	Interval]
accterm_lag	.0302924	.0086042	3.52	0.000	.0134284	.0471565
franchise_broad	-.4421441	.2617362	-1.69	0.091	-.9551376	.0708495
franchise_female	1.07962	.3173961	3.40	0.001	.4575348	1.701705
franchise_age	.1296628	.0686907	1.89	0.059	-.0049685	.2642942
gdpcap_lag	-.0004178	.0002647	-1.58	0.114	-.0009365	.000101
gdpcap_lag)^2	1.84e-08	2.89e-08	0.64	0.524	-3.82e-08	7.50e-08
growth_pop	-.4661159	.1116592	-4.17	0.000	-.6849638	-.247268
growth_world	.8283261	.0676805	12.24	0.000	.6956747	.9609775
constant	-.936467	1.519442	-0.62	0.538	-3.914519	2.041585
rhos =	-.3114731	-.112739	-.1717621	.1218148	.094227 ...	-.0615724

Note: The nineteen Latin American countries are included in this regression.