

The Colonial and *non-Colonial* Origins of Institutions in Latin America

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1 Introduction

This study sheds light on the origins of Latin American political institutions. The origins of institutions in former colonies are considered to be deeply rooted in the colonial times. While most of these theories seem quite convincing, this study argues that these cannot explain the origins of Latin American institutions.

A crucial hypothesis of the literature on colonial origins of institutions and development is that early and current institutions are highly correlated. This study shows that this is not the case for Latin America. Current and early institutions in the region are not correlated¹. The explanation for this can be found on the early process of independence of these countries. The bulk of Latin American economies obtained their independence in the first half of the nineteenth century in contrast with the rest of the colonised world which started the process of decolonisation a century later in the mid of the twentieth century, this is almost a century earlier than the rest of the world. The nature of current institutions may have changed respect to early ones, and the colonial traits that shaped

¹*Early institutions* are the institutions set immediately after independence (the first 10 years after a country's independence was declared and recognised). *Current institutions* are institutions in contemporary times, generally the period 2000-2010.

early institutions may have different effects on current ones.

This study proposes an alternative explanation for the origin of institutions in Latin America. It does not consider the possible colonial origins, but it also considers after-independence events. Four colonial origins are going to be investigated. Coloniser identity, European settlements, pre-colonial populations, and natural resource endowments. Furthermore, it considers some features that have characterised these countries through their history: high levels of inequality and dependence on natural resources.

2 The Origins of Latin American institutions

2.1 Colonial Origins

Although not all countries in Latin America were British colonies, the British influence in the region did not stop at its colonies, but it expands after the independence wars until early twentieth century. Britain had commercial and financial interests in Latin America due to the opportunities that the new-born countries offered as a trade-partner and as investment destination. In fact, Latin America was a good market for British growing textile exports in the second half of the nineteenth century and as a provider of raw materials (mainly gold and silver). In addition, Latin American governments tapped the London bond markets and the massive British capital in Latin America which occurred after the 1860s totally redefined the nature of Britain's relations with Latin America. On the eve of the World War I, British investments in Argentina were the second largest group of investments made by British investors in a foreign country. Therefore, the impact of Britain on Latin America goes beyond the interest for its colonies and this study does analyse the effects of this sort of indirect British colonisation on the region.

During colonial times, many European colonisers settled the conquered territories. Territories with larger European and European-descendent populations are considered to have better institutions. Europeans are believed to replicate their home institutions in those areas where they settled. So large European settlements have been associated to better property rights protection, greater levels of representation and democracy, greater checks and balances against government expropriation which are associated to higher levels of development [Acemoglu et al., 2001; Easterly and Levine, 2012].

An intrinsic characteristic of the colonised territories was their endowment of different

resources. The colonisation process was driven by the promise of economic returns mainly based on the exploitation of human and natural resources. Due to the lack of currency in Europe, the search of mineral wealth became a quite urgent one and the search for sources of gold and silver carried the colonisers far and wide across the world. Following the increase of demand of tropical crops in Europe, agriculture plantation for export also became very profitable. While the role of colonial mining and cash-crop production have been debated by economic historians and other social scientist first on European economies (e.g. on price inflation in the sixteenth century) and then on the role in the economic development of Latin America, economists have given less attention to this [Tandeter et al., 2005].

2.2 Inequality

Latin America has the highest levels of inequality in the world. Even if in most Latin America countries the level of inequality has decreased since 2000, these levels are still high. The richest one-tenth of the population in Latin America earn 50% of total income, while the poorest tenth earn 2.5 percent. Using the Gini index, the inequality in the region measures 50 percent in the period 2000-09, this is higher than in Africa (43.9%) and Asia (37.5%) and OECD countries (35%) [World Bank, 2011].

2.3 Natural Resource Dependence

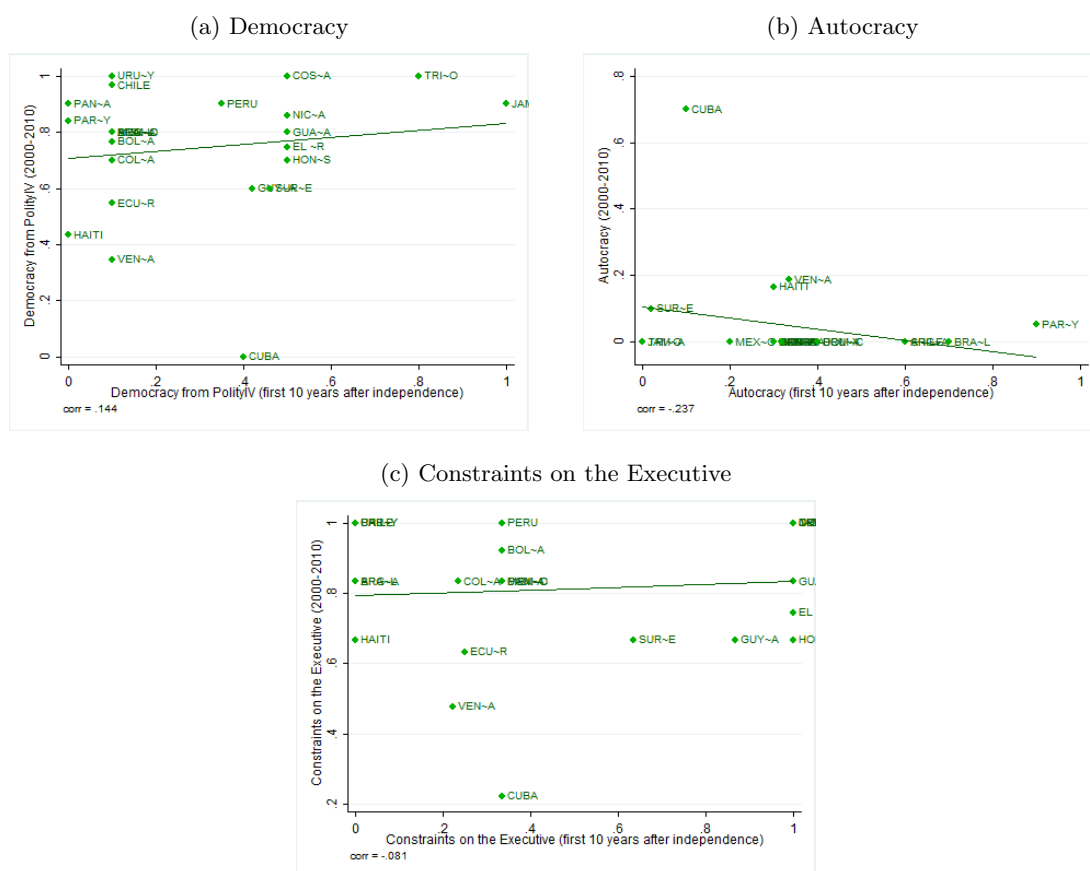
Abundance of land and natural resources is an intrinsic characteristic of these countries. Resource wealth has been crucial in the participation of these economies on the international market since their colonisation but also in more recent times. In the past decade, commodities accounted for 52 percent of the region's exports according to the World Bank. This is down from 86% in the 1970s, but over the same period the figure in East Asia and the Pacific fell from 94 to 30%.

One of the greatest risks with the exploitation of natural resources is the unproductive rent-seeking behaviour. Rents from natural resources tend to be large, volatile, geographically concentrated, and controlled by the government.

3 Empirical Analysis

One of the main characteristics of the literature on colonial origins of institutions is the assumption that early institutions and current ones are strongly correlated. This study explains the reasons why this is not the case in Latin America. Figure 1 plots the correlation between early and current institutions in Latin America. We can observe that early and current institutions in the area are weakly correlated.

Figure 1: CURRENT VS EARLY INSTITUTIONS IN LATIN AMERICA



In addition, this study argues that none of the mentioned characteristics – colonisation, inequality and natural resource exploitation – taken singularly can explain the evolution of Latin American institutions. It is necessary to elucidate the specific mechanisms on how these interact among each other and with other macroeconomic variables in order to understand what have held this region back. The social structures, the distribution of power and wealth, the role and strength of its elites, and the complex, often painful pro-

cess of state-building, in combination with the legacy of colonial times and the economic and political difficulties that the newly independent states has in positioning themselves on the world stage, have all been decisive factors and all have something to do with the successes and failures of Latin Americas economies.

One mechanism through which inequality and bad institutions reinforce each other may be found in the specialisation of resource production. It has already been explained that the specialisation on the production of natural resources may harm the economy of producer countries. For instance, the discoveries of oil or mineral resources in general tend to harm institutions that promote distribution due to the nature of these resources. As a matter of fact, natural resources have been found to negatively affect the governance mechanisms that enable general taxation and therefore less mechanisms that allow redistribution. Natural resources can thus affect both quality of institutions and levels of inequality.

The relationship between institutions and inequality is also characterised by its high persistence. Both institutions and inequality tend to evolve slowly over time. Inequality of wealth from colonial era led directly to narrow participation and continued political inequality, extending down to the present day [Engerman and Sokoloff, 2002]. The evidence from the colonies in the Americas suggests that those which began with extreme inequality and population heterogeneity exhibit persistence over time in evolving institutions that restricted access to economic opportunities.

The empirical analysis is based on the following equations:

$$Inst_{i,t} = \alpha_1 + \alpha_2 Ineq_{i,t} + \alpha_3 Nat Resources_{i,t} + \alpha_4 Colonial Hp_i + \epsilon_{it} \quad (1)$$

$$Ineq_{i,t} = \beta_1 + \beta_2 Inst_{i,t} + \beta_3 Nat Resources_{i,t} + \beta_4 Colonial Hp_i + v_{it} \quad (2)$$

The methodology consist of estimating these two regressions in a panel setting for up to 20 Latin America countries² for the period 1906-2005³.

In order to deal with the endogeneity problems that the relationship between institutions and inequality may cause, this study uses a Hausman-Taylor estimator (a transformed random effect model with instrument variables). The results of using this estimator are showed in Tables 1 and 2.

²Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela.

³period for which data is available

Table 1: HAUSMAN-TAYLOR ESTIMATOR FOR INSTITUTIONS

| Explanatory Variables | Democracy | | Autocracy | | Constraints on the Exec. | |
|---------------------------------|-----------|----------|-----------|----------|--------------------------|-----------|
| | (a) | (b) | (a) | (b) | (a) | (b) |
| <i>Time variant Endogenous</i> | | | | | | |
| Family | 1.32*** | 1.31*** | -.750*** | -.745*** | 1.35*** | 1.34*** |
| Farms | (.164) | (.165) | (.165) | (.166) | (.168) | (.168) |
| <i>Time variant Exogenous</i> | | | | | | |
| natural | -.087** | -.089** | .099** | .099** | -.085** | -.087** |
| resources | (.043) | (.043) | (.042) | (.043) | (.043) | (.044) |
| <i>Time invariant Exogenous</i> | | | | | | |
| Trade with | .040** | .040** | -.032** | -.032** | .022 | .025 |
| Britain late 19th | (.020) | (.020) | (.014) | (.014) | (.018) | (.017) |
| British Invest. | -.110*** | -.107*** | .059*** | .059*** | -.097*** | -.095*** |
| early 20th | (.282) | (.028) | (.019) | (.019) | (.026) | (.024) |
| Mineral | .011 | .021 | -.045 | -.046 | .055 | .036 |
| colonial centre | (.076) | (.079) | (.052) | (.056) | (.069) | (.068) |
| Sugar | .103** | .107** | -.049 | -.049 | .037 | .065 |
| suitability | (.044) | (.048) | (.030) | (.034) | (.040) | (.041) |
| Early European | | -.355 | | .010 | | -.790* |
| settlements | | (.532) | | (.374) | | (.456) |
| native | | -.026 | | .002 | | -.001 |
| population | | (.035) | | (.025) | | (.030) |
| constant | .040 | .002 | .531*** | .528*** | .058 | .230* |
| | (.089) | (.151) | (.073) | (.025) | (.090) | (.133) |
| n | 320 | 320 | 320 | 320 | 320 | 320 |
| T | 16 | 16 | 16 | 16 | 16 | 16 |
| Wald χ^2 | 93.08*** | 95.06*** | 47.99*** | 47.92*** | 93.01*** | 102.07*** |

notes:

Standard errors in parentheses

***, **, *; significance at 1, 5 and 10 percent respectively

Table 2: HAUSMAN-TAYLOR ESTIMATOR FOR INEQUALITY

| Explanatory Variables | Dependent Variable: Family Farms | | | | | |
|--|----------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | (a) | (b) | (a) | (b) | (a) | (b) |
| <i>Time variant Endogenous</i> | | | | | | |
| Democracy | .135*** (.017) | .134*** (.017) | | | | |
| Autocracy | | | -.086** (.019) | -.086** (.019) | | |
| Constraints on the Executive | | | | | .133*** (.016) | .132*** (.016) |
| <i>Time variant Exogenous</i> | | | | | | |
| natural resources | -.021 (.014) | -.021 (.014) | -.026* (.015) | -.025* (.015) | -.019 (.014) | -.018 (.014) |
| <i>Time invariant Exogenous</i> | | | | | | |
| Trade with Britain late 19th | .004 (.007) | .005 (.006) | -.008 (.007) | -.009 (.006) | .006 (.007) | .007 (.006) |
| British Invest. early 20th | .021** (.010) | .020** (.009) | .012 (.010) | .011 (.009) | .019** (.009) | .018** (.009) |
| Mineral colonial centre | -.037 (.076) | -.052** (.026) | -.044* (.025) | -.060** (.025) | -.043* (.025) | -.054** (.025) |
| Sugar suitability | -.037** (.015) | -.027* (.016) | -.031** (.015) | -.018 (.015) | -.028** (.014) | -.022** (.015) |
| Early European settlements native population | | -.139 (.173) | | -.211 (.167) | | -.082 (.170) |
| constant | .224*** (.030) | .256*** (.047) | .290*** (.030) | .337*** (.045) | .206*** (.029) | .256*** (.047) |
| n | 320 | 320 | 320 | 320 | 320 | 320 |
| T | 16 | 16 | 16 | 16 | 16 | 16 |
| Wald χ^2 | 86.64*** | 92.10*** | 42.57*** | 49.60*** | 89.03*** | 93.97*** |

notes: Standard errors in parentheses
 ***, **, *; significance at 1, 5 and 10 percent respectively

4 Brief Conclusions

This study analyses the origins of political institutions in Latin America. One crucial finding is that the assumption that current institutions are strongly correlated with early ones (and in the case of colonies, current institutions reflect those ones inherited from the colonial legacy) is not valid for Latin America.

This work analyses the impact of Britain in Latin America. After the independence the trade with Britain rapidly increased and so did the British capital invested in this region. This analysis shows that although the region benefited from the increase in trade with Britain, the affluence of British capital has a negative impact for the evolution of institutions in the area. Latin American governments acquired a large debt in the British capital market and this flow of currency stopped with the advent of the first World War. This situation left these countries with high levels of public and private debt and it may be the origins of the high debt crises that these countries faced at the end of the twentieth century.

European settlements and pre-colonial populations have no effect on the evolution of institutions in the region (unlike claimed by other scholars). However, this study offers evidence to support Engermann and Sokoloff theory of the origins of inequality in Latin America. Mineral centres and those areas with soils and climates that allowed for a comparative advantage in the production of sugar and other cash-crops are characterised by extreme inequality. Inequality from colonial era led directly to narrow participation and continued political inequality, extending down to the present day. The evidence suggests that those territories that began with higher levels of inequality due to the exploitation of natural resources exhibit persistence over time in evolving institutions that restricted access to economic opportunities.

In fact, the analysis shows that there exists a relationship between institutions and inequality. In particular, we observe that the paths of institutional development in Latin America are sensitive to the incidence of inequality: higher levels of inequality are related to lower quality of institutions.

There is also evidence that the discovery of natural resources, negatively affect the quality of political institutions in Latin America. There is no evidence that these resources directly affect the levels of inequality. However this study has only considered the discovery of mineral resources (oil and natural gas), there is still room to investigate the effects of the production of other resources on both institutions and inequality.

5 Some Literature

On the importance of institutions for development see Kaufmann and Kraay [2002] Venieris and Gupta [1983]; Alesina and Perotti [1996]; Kaufmann and Kraay [2002]; Fedderke and Klitgaard [1998]; Maloney [2002]; Butkiewicz and Yanikkaya [2005].

On the role of coloniser identity: La-Porta et al. [1998, 1999]; Grier [1999]; Bertocchi and Canova [2002]; Djankov et al. [2003]; Botero et al. [2004]. On the British influence in Latin America see Miller [1993]; Victor Bulmer-Thomas [1998]. The theory of European settlements is from Acemoglu et al. [2001]; Easterly and Levine [2012]. The relevance of initial resource endowments: Engerman and Sokoloff [2002].

Some literature on inequality: Okun [1975]; Forbes [2000]; Li and Zou [1998]; Alesina and Rodrik [1994]; Persson and Tabellini [1994]. And on the role of natural resources: [Sachs and Warner, 1997, 2001; Auty and Gelb, 2001; Mahdavy, 1970; Beblawi, 1987; Ross, 2003; Fearon and Laitin, 2003].

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