Bourbon Reforms and State Capacity in the Spanish Empire

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The state's ability to perform basic functions (e.g., raise revenue, protect life/property) is a major contributor to long-run development (Besley and Person, 2011; Dincecco and Katz, 2016; Johnson and Koyama, 2017). Understanding the factors that affect the state's ability to fulfill its various duties has been a perennial topic of interest in the social sciences. Raising tax revenues ranks among the most important foundations to develop these abilities. Even though investing in fiscal capacity is central in narratives of the origins and consolidation of the state (Besley and Persson, 2009, 2011; Berwick and Christia, 2018, Acemoglu, García-Jimeno and Robinson, 2015), there is no consensus on its ultimate determinants. Moreover, there is less evidence regarding other pillars of state capacity, such as the absence of internal conflicts. On the other hand, there is a growing interest in studying how the administrative reform of bureaucracies can lead to increasing the capacities of the state and fostering economic development (Besley et al., 2021). However, there is little evidence on the interaction between administrative reforms and fiscal capacity.

Developing a recipe for building a strong, well-functioning state remains a puzzle. Despite efforts to understand historical state formation, the most influential narratives -in particular, war-making- largely focus on Western Europe and lack external validity to other settings, such as the colonial Americas (Tilly, 1990). Here, the limited role for inclusive political institutions, the extension and diversity of territories, the prevalence of internal conflicts, and the notion of state-building from the outside could have impaired the incentives to sustain investments in state capacity. This makes the case for "successful" colonial states that faced political backlashes in the medium-run (Garfias and Sellars, 2021) and less long-run success (Acemoglu, Johnson and Robinson, 2001, 2002). Some of these insights can be useful to understand present-day state consolidation in the developing world.

In this paper, we study the impact of the Bourbon reforms on state capacity in the Spanish colonial empire in the Americas during the late 18th century. We focus on the introduction of the system of Intendencies by the Spanish Crown in its American empire, among the most ambitious administrative reforms ever attempted in the Colonial world and a cornerstone of the broad project of the Bourbon reforms. The system of Intendencies radically transformed the colonial bureaucracy by concentrating executive power in a new sub-national authority, the Intendant. This corp of provincial governors constituted a new administrative layer that replaced the previous form of local government embodied by the abusive corregidores. The intendants were well remunerated, carefully selected and endowed with fiscal, legal and executive powers to govern vast pieces of territory across the Spanish empire. This setting allows understanding the effects of administrative reforms to bureaucracies on state capacity.

Our identification strategy relies on the staggered adoption of the Intendency reform across different parts of the empire to conduct a difference-in-difference analysis. We exploit regional and time variation in the creation of Intendencies during the 1780s, extending from modern-day Mexico to Chile and Argentina (See Figure 1). Out of the four Viceroyalties that comprised the Spanish Empire at the time, Nueva Granada -modern-day Colombia- was the only one to not eventually adopt the system. Several features of our setting allow us to empirically study the effects of the Intendencies reform. First, we focus on a territorial unit that, despite its extension, was governed by the same institutions and rules provided by the Spanish Crown. Second, the reform was externally imposed and responded to the urge of the Spanish Crown to increase revenue to fund their military apparatus in Europe. Third, Intendencies were introduced in a short span of time that relied mostly on the endeavor of its primary advocate, José de Galvez, to travel across the continent promoting the administrative overhaul and stalled after his sudden death. To support our claim we show that the timing of the reform is uncorrelated with location, demographic and social characteristics (See Figure 2).

We rely on multiple data sources to paint a comprehensive outlook of the late Spanish empire. We focus primarily on the 1770-1800 period. To study the effects of the reform on fiscal capacity, we compile a continental dataset with fiscal data for revenue and expenditure -and their underlying categories- for 85 royal treasuries located in corresponding colonial municipalities. We build a continental dataset on indigenous rebellions and uprisings to account for the prevalence of conflict around the implementation period. To dig into the bureaucratic and operational mechanisms of the reform we code detailed biographical information for all Intendants in office during the period as well as institutional and geographical characteristics of the royal treasuries. To account for public good provision, we assemble a dataset of yearly colonial postal offices across the Spanish empire. We gather data on the names of over 700,000 people born in the colonies during the period to measure the name-driven sentiment towards the Spanish Crown. Finally, we build a novel municipal dataset on modern taxation outcomes to study the long-run effects of the reform. To our best knowledge, we are the first to harmonize these datasets for the continental Spanish Empire.

Our main results examine the effects of the Intendencies reform on state capacity. First, we evaluate if the reform increased fiscal capacity, the building block of state capacity. Our results indicate that the adoption of Intendencies led to a 30% increase in total collected revenue in the royal treasuries under their jurisdiction (See Table 1). This effect persisted up to ten years after the reform was introduced. We test the robustness of these results to the inclusion of geographic, location, demographic and rebellion controls and show that there are no pre-existing differential trends in revenue collection between territories with and without Intendencies (See Figure 3). We address recent concerns about the use of two-way fixed effects estimators by presenting the robustness of our results to alternative estimators. We also present our results under a synthetic control strategy. Finally, we show the robustness of our results to removing individual treasuries, Intendencies, Viceroyalties and sources of revenue, to inference choices, and to possible SUTVA violations in which treated treasuries contaminate non-treated ones by aggregating the unit of analysis to the Intendency level and incorporating prevailing network controls. We also rule out alternative explanations, such as the influence of the Viceroys, parallel events such as the liberalization of trade or the creation of the Viceroyalty of Rio de la Plata in the late 1770s, and the prevailing intensity of rebellions.

We then explore the mechanisms underlying the operation of the reform that led to improved fiscal capacity. In particular, we focus on the roles of monitoring, namely improving agency and informational frictions, and extending the territorial reach of the state. We document: i) an efficiency-enhancing reshuffling of the royal treasuries in which new treasuries opened and others closed; ii) a reduction in the distance to administrative centers that improved revenue collection; and iii) reduced tax-collection expenses that confirm efficiency gains from the reform. We argue and present evidence that this is due to two elements.

First, a disruption of local elite capture in which peninsular intendants that accumulate experience in office drive revenue collection. Second, an increase in fiscal capacity where it was absent: revenue collection was shifted toward direct taxation and increased in previously isolated, low-fiscal capacity and non-traditional revenue treasuries. We also show that even though revenues were used to fund different expenses (in particular, war-related) it did not foster unbalanced fiscal budgets or changes in misreporting.

To expand our understanding of state capacity under the Intendencies reform we turn to an additional measure: the absence of internal conflict. Studying internal conflict is useful in our setting because: i) the empirical literature relies mostly on narratives in which external, rather than internal, war threats shape the consolidation of the state; and ii) the abusive relationship between the indigenous population and extractive corregidores makes the case for examining how Intendants disrupted it. We find that the introduction of Intendencies reduced indigenous rebellions and uprisings by at least 15%, thus reflecting improved governance (See Table 2). However, we take this finding with caution given that it is not clear whether it is driven by an improvement in the perceived legitimacy of the colonial bureaucracy or coercion towards the indigenous population.

We finally review the aftermath of the reform, which has been historically linked to the independence wars across the Americas. Even though we cannot identify the causal effect of the reform on independence, we find two pieces of suggestive evidence on the intersection between both events. First, we document a sharp erosion of fiscal data availability during the early 1800s (See Figure 4). Second, we find that the sentiment towards the Spanish Crown, measured by naming patterns that resemble the names of top colonial officials (e.g. Viceroys, Intendants), drops by at least 5% after the introduction of the reforms (See Figure 5). Third, we present evidence that the reforms did not increase the availability of local public goods, such as postal offices. We argue that the tension between local creole elites and Intendants, as well as the push from the Spanish Crown to finance its warfare ventures in Europe, threatened the sustainability of the colonial state in the Americas after the reforms. Furthermore, the effects of the reform may have been inherited by the independent new republics. In that sense, we evaluate the long-run effects of the reform and document a long-run erosion of fiscal capacity in places where there was a larger change in revenue collection due to the Intendants (See Table 3). This finding is especially relevant given the weakness of modern-day Latin American states (in particular their fiscal systems).

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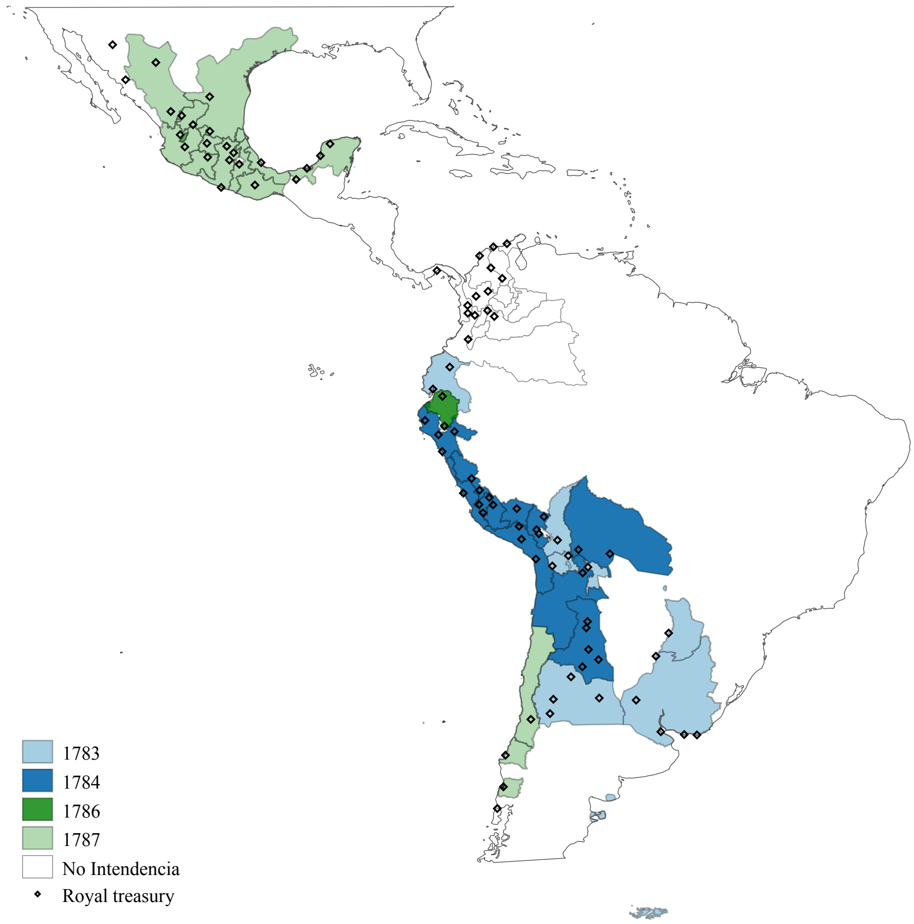
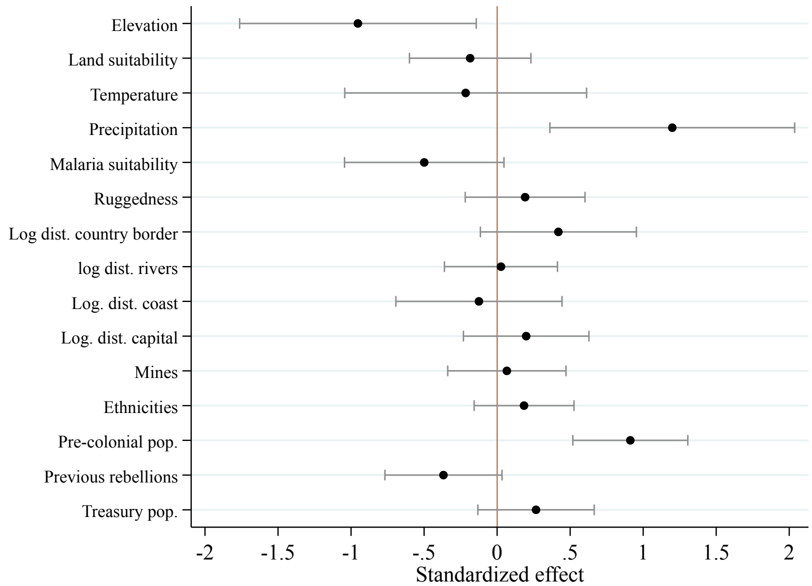
1 Figures and Tables

Figure 1: Treasury location and timing of Intendencia establishment

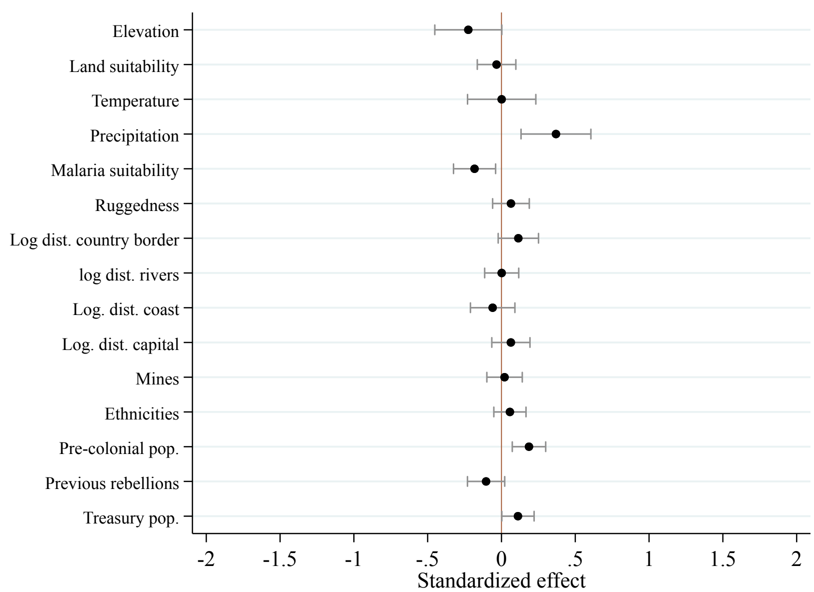


Notes: The figure presents the geographical extent of each Intendencia along with Royal Treasury locations across Latin America. It also displays the date in which each Intendencia was established. The Colombian territory of the viceroyalty of Nueva Granada was not subject to Intendencias and thus its provinces are displayed.

Figure 2: The timing of Intendencia establishment and locational fundamentals



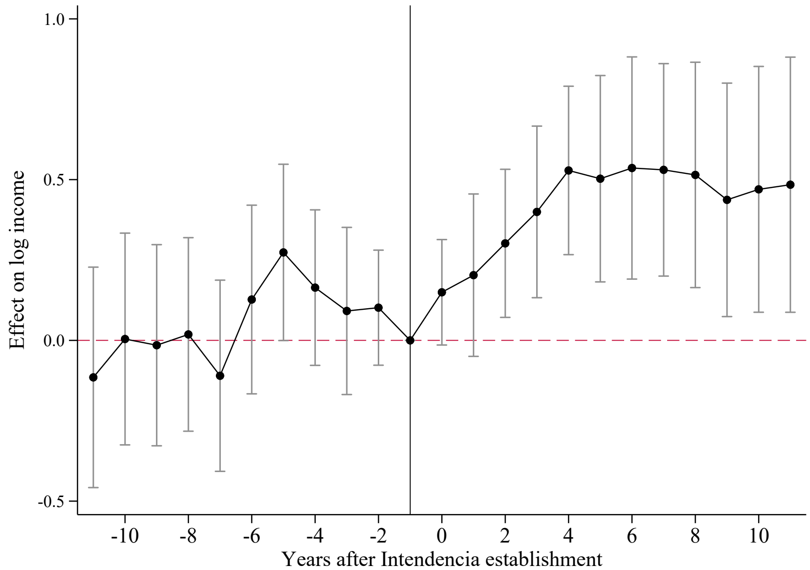
(a) Year of adoption



(b) Late adopter

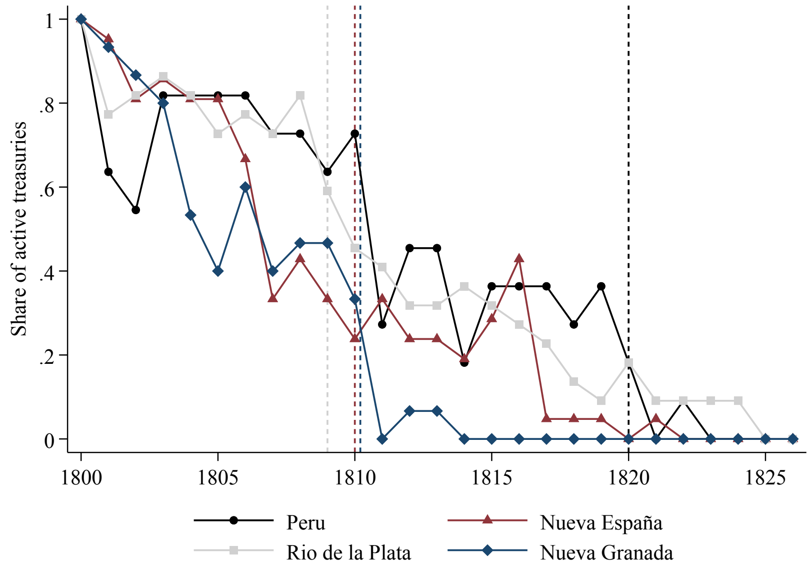
Notes: The figures present OLS estimates of the timing of Intendencia establishment on locational fundamentals at the royal treasury level. Year of adoption corresponds to the year the Intendencia to which a given treasury belongs was established. Late adopters is an indicator that takes the value of one for royal treasuries whose Intendencias were established in 1786 or 1787.

Figure 3: Intendencias and state capacity



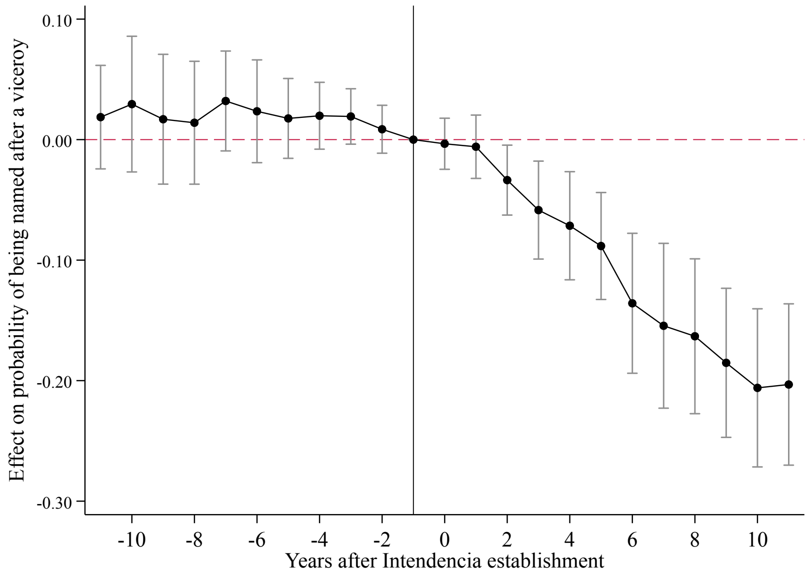
Notes: The figure presents event study estimates of Intendencia establishment on the logarithm of income for the royal treasuries. Intendencias were adopted between 1783 and 1787 across the Spanish Empire. A given treasury becomes treated when its corresponding Intendencia is established. Treasuries within the Colombian territory of the viceroyalty of Nueva Granada and Jaen de Bracamoras were not subject to intendencias and thus are pure controls.

Figure 4: Shutdown of treasuries during the early 1800s, by Viceroyalty



Notes: The figure presents the share of active treasuries in each viceroyalty. The share is calculated relative to active treasuries in each viceroyalty in 1800. Dashed lines indicate corresponding independence first attempts.

Figure 5: Intendencias and Viceroy Naming Sentiment



Notes: The figure presents event study estimates of Intendencia establishment on the probability of being named after a Viceroy at the individual level. Intendencias were adopted between 1783 and 1787 across the Spanish Empire. A given treasury becomes treated when its corresponding Intendencia is established. Treasuries within the Colombian territory of the viceroyalty of Nueva Granada and Jaen de Bracamoras were not subject to intendencias and thus are pure controls.

Table 1: Intendencias and state capacity

	Dependent Variable: Log(Income)				
	(1)	(2)	(3)	(4)	(5)
Intendencia	0.296**	0.371***	0.300**	0.271*	0.273*
	(0.114)	(0.134)	(0.143)	(0.141)	(0.141)
Mean Dep. Variable	11.516	11.516	11.516	11.516	11.516
R Squared	0.938	0.944	0.950	0.953	0.954
Observations	1959	1959	1959	1959	1959
Treasuries	79	79	79	79	79
Treasury FE	✓	✓	✓	✓	✓
Year FE	✓	✓	✓	✓	✓
Geographic controls		✓	✓	✓	✓
Locational controls			✓	✓	✓
Population controls				✓	✓
Rebellion controls					✓

Notes: * p<0.1, ** p<0.05, *** p<0.01. The table presents difference in difference estimates of Intendencia establishment on the logarithm of income at the royal treasury level. Intendencias were adopted between 1783 and 1787 across the Spanish Empire. A given treasury becomes treated when its corresponding Intendencia is established. Treasuries within the Colombian territory of the viceroyalty of Nueva Granada and Jaen de Bracamoras were not subject to intendencias and thus are pure controls. Geographic controls are a set of time dummies, each interacted with elevation, land suitability, temperature, precipitation, malaria suitability, and ruggedness. Locational controls include log distance to country border, log distance to rivers, log distance to the coast, and log distance to the nearest port. Population controls include the number of ethnicities and the log of population density in 1492. Rebellion controls include the number of rebellions in the corresponding Intendencia before 1783.

Table 2: Intendencias and indigenous rebellions, intendencia level

	Dependent Variable: Indigenous rebellions					
	Number		Dummy		Log	
	(1)	(2)	(3)	(4)	(5)	(6)
Intendencia	-0.237***	-0.108	-0.165***	-0.111**	-0.139***	-0.076*
	(0.060)	(0.073)	(0.037)	(0.052)	(0.033)	(0.042)
Mean Dep. Variable	0.105	0.105	0.076	0.076	0.063	0.063
R Squared	0.224	0.534	0.276	0.586	0.262	0.575
Observations	1099	1099	1099	1099	1099	1099
Intendencias	40	40	40	40	40	40
Intendencia FE	✓	✓	✓	✓	✓	✓
Year FE	✓	✓	✓	✓	✓	✓
Full controls		✓		✓		✓

Notes: * p<0.1, ** p<0.05, *** p<0.01. The table presents difference in difference estimates of Intendencia establishment on rebellions at the Intendencia level. Intendencias were adopted between 1783 and 1787 across the Spanish Empire. Provinces within the Colombian territory of the viceroyalty of Nueva Granada and Jaen de Bracamoras were not subject to intendencias and thus are pure controls. Standard errors are clustered at the Intendencia Level. Full controls include geographic, locational, population, and rebellion controls.

Table 3: Fiscal capacity around Intendencia establishment and contemporary per capita municipal income (Intendencia jurisdictions)

	Dep. Variable: Log(Municipal tax income per capita)				
	(1)	(2)	(3)	(4)	(5)
Change in log income	-0.751***	-0.814***	-0.507***	-0.507**	-0.507**
	(0.076)	(0.086)	(0.089)	(0.232)	(0.224)
	[-0.180]	[-0.195]	[-0.122]	[-0.122]	[-0.122]
Log income before reforms	0.104***	-0.049	0.033	0.033	0.033
	(0.025)	(0.034)	(0.034)	(0.089)	(0.099)
	[0.078]	[-0.037]	[0.025]	[0.025]	[0.025]
R Squared	0.452	0.468	0.509	0.509	0.153
Observations	3466	3466	3466	3466	3466
Country FE	✓	✓	✓	✓	✓
Locational Controls		✓	✓	✓	✓
Geographic Controls			✓	✓	✓
Intendencia cluster				✓	
Conley 200 km					✓

Notes: * p<0.1, ** p<0.05, *** p<0.01. The table presents OLS estimates of log per capita income in 2015 on fiscal income around Intendencia establishment at the municipal level. Municipalities are linked to their corresponding Intendencia jurisdiction variation, which comes from the average values of the treasuries under its domain. Included countries are Bolivia, Chile, Ecuador, Peru, and Mexico. Geographic controls are elevation, land suitability, temperature, precipitation, malaria suitability, and ruggedness. Locational controls are the log distance to country border, log distance to capital city, log distance to rivers, and log distance to the coast. Robust SE in parenthesis. Beta coefficients in brakets.