Delegating Governmental Authority to Private Actors: Lordships, State Capacity and Development

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Abstract

This paper investigates the consequences of delegating governmental authority through the study of lordships, a pivotal political institution in historical Europe. I first document a negative relationship between being a seigneurial town and central state capacity in ancienregime Spain. Then, to shed light on the causal effect, I focus on the Kingdom of Granada after its conquest by Castile in 1492. Leveraging on that the initial distribution of lordships was conditionally exogenous, I provide plausibly causal evidence on the negative effect of lordships on central state capacity. In addition, I find a non-monotonic effect on economic growth. Contrary to conventional wisdom, lordships towns did not underperform royal towns during the Ancien Régime. Yet, despite not having started with disadvantage, former lordships towns began to experience slower growth in the 1910s, translating into lower income today. Crucially, the negative effect arose when the Spanish state significantly increased its public spending and investments, suggesting that lower central state capacity can account for the lagged negative growth effect of lordships.

Keywords: Lordships, Local political institutions, State capacity, Economic development.

JEL Classification: C21, N43, O10.

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1 Introduction

This paper investigates the consequences of delegating governmental authority to private actors through the study of lordships, a key political institution in historical Europe. Monarchs throughout Europe used to delegate public powers and functions to lords who were in charge of governing large parts of the territory. Lords exercised extensive public powers within the realm of their manors, including the administration of civil and criminal justice and the control of the town council (Fourquin, 1976; Dewald, 1996).¹ I explore whether lordships undermined state capacity and the implications of it, thus contributing to the vibrant literature on the origin and consequences of state building and capacity (Besley and Persson, 2009; Johnson and Koyama, 2017; Dell et al., 2018; Garfias and Sellars, 2022).

Focusing on old-regime Spain, I first document a negative relationship between 18th-century seigneurial jurisdictions and central state capacity for the whole country. To make progress towards causality, I study the distribution of lordships in the Kingdom of Granada after its conquest in 1492. Taking advantage that their initial distribution was conditionally random, I show that the negative effect on state capacity can be interpreted as causal. I further study the implications for comparative development, finding a non-monotonic effect: while having no contemporaneous effect when the institution was in place, former lordships towns began to experience slower growth in the 1910s, translating into lower income today. Remarkably, the negative effect arose when the Spanish state significantly increased its public spending and investments, suggesting that lower central state capacity can account for the lagged negative growth effect of lordships.

Improving our understanding about the political economy of lordships is not only important from a European and Western perspective. Similar institutions involving the delegation of governmental authority are very common throughout history and across countries. For instance, in medieval India land grants gave rise to landlords who collected rents and labor services and exercised fiscal, judicial and military functions, and in early modern Japan the daimyo lords had considerable governing and fiscal autonomy (Ravina, 1999; Sharma, 2003).

Governing through private agents is also related to the practice of indirect rule in the context of European colonialism. Feasibility or simply convenience led Metropolitan powers to favor indirect forms of government through native chiefs, rather than establishing direct political control (Banerjee and Iyer, 2005; Lange, 2009; Iyer, 2010; Acemoglu et al. 2014; Oto-Peralías and Romero-Ávila, 2014; Garfias and Sellars, 2021). Some of these government practices have persisted in the postcolonial era and "continue to structure contemporary state-society relations" (Naseemullah and Staniland, 2016: 13). Another clear manifestation of delegation of governmental authority was the practice of public office-selling, common in diverse settings such as England, France, China and the Ottoman empire, which has been

¹ My analysis focuses on the attribution of jurisdictional rights to secular lords. Throughout the text the expressions lordship, manor and seigneurial (or noble) jurisdiction are used interchangeably.

found to have a negative effect on development in the context of the Spanish empire (Guardado, 2018).

Spain is a convenient historical setting to analyze the political-economic effects of lordships for several reasons. There are rich data on the institutional and economic features of municipalities during the Ancien Régime, and the territory was well balanced between lordships and royal towns, so a meaningful comparison is feasible. Moreover, serfdom was weak and largely nonexistent after the Middle Ages, making it easier to isolate the institutional particularities of lordship as delegation of governmental authority. And importantly for the empirical strategy, the Spanish history provides sources of exogeneous variation. During the *Reconquista*, Christian monarchs granted lordships in some places but not in others, with the overall institutional and cultural environment being the same. This allows exploiting variation in institutions at the local level while holding constant a wide array of factors (Oto-Peralías and Romero-Ávila, 2016, 2017).

Whether the delegation of public powers represented by lordships had negative consequences for central state capacity is far from obvious. The king was the only sovereign and lords where just intermediaries of his power. Moreover, the central authority could be easier to enforce through lords with better local knowledge. I begin by analyzing the relationship between seigneurial jurisdiction and central state capacity for the whole country. After collecting data on the jurisdictional status of 8,000+ municipalities in 1787 (INE, 1987-1991), I compare municipalities under royal and noble jurisdiction, controlling for a wide array of variables and region fixed effects. The results reveal that municipalities that were lay lordship had less central state capacity in the 18th and 19th centuries, measured through the presence of royal employees, post offices, judicial district courts, and Civil Guard barracks. Additionally, I conduct an adjacent-municipality analysis to compare each lordship with royal towns located within a distance of 25 kilometers, rendering analogous results.

This negative relationship between lordships and state capacity appears fairly robust but there may be endogeneity problems making its causal interpretation tricky. Seigneurial jurisdictions were first created during the Reconquest, but they evolved. Some places initially under royal jurisdiction became lordships because they were granted to nobles or sold to raise money. Conversely, there were towns that gained the royal status after making a payment to buy their 'freedom' (Moxó, 1964; Domínguez Ortiz, 1964). While the initial distribution of lordships can be considered conditionally random, the subsequent evolution is likely to be endogenous to local economic and political factors. To make progress towards causality, the bulk of the analysis focuses on the Kingdom of Granada, the last Muslim state incorporated into Castile, which is particularly well-suited to analyze the effect of lordships. The late conquest of Granada makes it easier to trace the evolution of their lordships, which have been well studied by historians (Soria Mesa, 1997; Pérez Boyero, 1997).

Castile transplanted its political institutions into Granada as it had done in previous stages of the *Reconquista*. This transplantation process can be seen as a "treatment assignment" in which the type of jurisdiction was externally imposed upon the existing towns. Importantly, the initial distribution of lordships in Granada can be taken as conditionally random. The Crown kept under royal jurisdiction the main cities, but there was no systematic criterion for the distribution of lordships in the rest of the territory. The Crown had little knowledge, right after the conquest, about the economic potential of each place, and it was precisely within a short period after the conquest when most of the lordships were created. Consistent with this, a balancedness analysis shows that lordships are not systematically different than royal places except for distance to capital cities, which is properly controlled for in the analysis. I find that places initially granted as lordships had less central state presence in the 18th and 19th centuries, corroborating the results for the whole country.

The last part of the paper analyzes the effect on economic growth. First, I document that, contrary to conventional wisdom, lordships towns did not underperform royal towns during the Ancien Régime. Second, despite not having started with disadvantage, former seigneurial towns experienced lower population growth from the 1910s onwards, a period in which the Spanish state started to play a bigger investment role. Thus, towns with historically less state presence benefited less from state investments, lagging behind former royal towns. Slower population growth during the 20th century translated (arguably due to agglomeration forces dynamics) into lower income levels today.

Overall, the results show that lordships, by weakening the link with the central government, historically reduced the state's infrastructural capacity in the municipality, which became a persistent institutional feature. The fact that seigneurial towns were not poorer in the 18th century points to an evolving role of state capacity. In pre-industrial economies, the state can be seen as an extractor of resources and its absence is not necessarily negative for the population's living conditions. However, in industrial and post-industrial societies, the state plays a central role promoting economic development through the provision of a wide array of public goods, and towns with less state presence are at a disadvantage. This is consistent with recent research highlighting that state capacity per se does not enhance growth (Ogilvie, 2023).

By uncovering a negative effect of lordships on the state's infrastructural power, this paper contributes to the literature on state capacity and development (Gennaioli and Rainer, 2007; Michalopoulos and Papaioannou, 2013; Acemoglu et al., 2015, 2016; Dell et al., 2017). This study also relates to the literature on the causes and consequences of serfdom to the extent that lordships were the institutional framework enforcing feudal duties (Acemoglu and Wolitzky, 2011; Ogilvie and Carus, 2014; Ashraf et al., 2017; Klein and Ogilvie, 2017; Markevich and Zhuravskaya, 2018).² More generally, this article contributes to the vibrant literature on the role played by political institutions in development, adding new evidence based on within country variation in institutions (Dell, 2010; Bruhn and Gallego, 2012; Michalopoulos and Papaioannou, 2013; Angelucci et al., 2017) and following other recent

 $^{^{2}}$ In this regard, it is worth noting that the seigneurial regime does not require the existence of serfdom and is fully compatible with free peasants.

papers interested in old-regime institutions and dynamics (Franck and Michalopoulos, 2017; Cantoni et al., 2018; Johnson, 2019).

The rest of the paper is organized as follows. Section 2 provides a brief historical background about the origin and evolution of lordships. Section 3 presents the data while Section 4 reports the results for the whole country. Section 5 focuses on the distribution of lordships in the former Kingdom of Granada to shed light on the causal effect. Section 6 discusses and analyzes the effect on economic growth. Finally, Section 7 concludes.

2 Historical background³

Lordship was a pivotal political institution that marked the history of European local communities for a very long stretch of time. Its remote origins are in the great domain and the *villa* in Carolingian times and survived until the end of the Ancien Régime (Fourquin, 1976). Although lordships did not challenge the monarch authority, they functioned like a state apparatus at the local level. Fourquin (1976), describing the great fiefs in 14th-century France, writes: "organized as veritable States, they possessed all the administrative machinery and all the great corps of officers who, in the nature of things, vied with those of the Crown" (p. 231). Besides the village, lordships constituted one of the basic local units forming the European society (Dewald, 1996). Thus, the manorial regime had a great influence on the daily life of local communities and lords were powerful figures: "Together with his wealth, his power to intervene in tenants' affairs assured the lord a dominant place in local life, and made his household a center of local politics" (Dewald, 1996: 67).

Lordship can be defined as the transfer, by the Crown to a private person or entity, of jurisdictional functions (administration of justice and government) over a specific territory and its inhabitants (Guilarte, 1987; Soria Mesa, 1997). This transfer of public powers allows the lord to maintain "troops and fortresses, to judge in an instance above the municipality courts, to appoint the holder of many council posts, and to receive rights and rents" (Laredo Quesada, 1989: 149, my translation). Lords were also commonly landowners within their manors, so their vassals were also their tenants, but this was not necessarily the case.

While lordships were widespread across Europe, its strength was different from place to place. In the 15th century, northern France and western Germany, where feudal institutions originated, had the strongest manifestation of the seigneurial regime. In regions like Italy and southern France, much land was not under the manorial system because Roman models of property survived. In most of Spain and Eastern Europe lordships were also relatively weak as the need to attract settlers during the Middle Ages led to more freedoms (Dewald, 1996). This picture, however, changed over time. In Center and Eastern Europe lordships became stronger and lords expanded their rights, mainly as a consequence of the weakness of monarchs unable

 $^{^3}$ A much more detailed historical background is provided in Supplementary Material I (Suppl. Mat. I), available on the author's website.

to compete with the nobility. "By 1700, lordships in eastern Germany, Poland, Denmark, and Bohemia had grown enormously powerful [...] Spain too witnessed the expansion of seigneurial power." (Dewald, 1996: 69-70).

2.1 The seigneurial regime in Spain

There were three types of lordship depending on the holder of the jurisdiction, namely, noble, ecclesiastical (including monastic) and military order. Places that were not subject to the seigneurial regime depended directly on the Crown and had royal jurisdiction (*realengo* towns). Figure 1 depicts the geographic distribution of jurisdictions in Spain in 1787.

Lordships initially had a clear instrumental purpose during the Reconquest and subsequent repopulation of former Muslim lands. The interest of lords in developing settlements and promoting agriculture and population growth matched well with the objective of the Crown of repopulating and defending the conquered territory (Nader, 1990). Factors such as the southward expansion of the frontier and the feudal influence from Europe accelerated the creation of lordships in the 12th and 13th centuries. During this period, lordships satisfied a clear colonizing function, implying extensive lord's rights over land (Moxó, 1964).

The Trastamara dynasty (1369-1555) constituted the most important source of lordships in Castile. The new monarchs granted lordships as a reward for support during the dynastic disputes and to compensate the reduction in lords' rents due to plague and war (Cabrera, 2004). The growth of the manorial system went down with the Catholic Monarchs as they tried to preserve the existing *realengo* places and moderate the power of lords. They approved the *Pragmática de Medina del Campo* (1480), which established the freedom of movement of vassals (Moxó, 1964). Besides, royal jurisdiction remained predominant in the main cities.

After 1500, the financial needs of the Crown were the main driver of the creation of lordships. Emperor Charles V and his son Phillip II sold a significant proportion of ecclesiastical and military orders lordships, transforming them into lay manors. Later, during the 17th century, there were many sales of royal villages and towns. Having lost their colonizing mission, these late lordships only consisted of public functions (jurisdictional rights), which had low economic value. The reasons to buy a lordship had basically to do with social prestige, the desire to enter the nobility (Domínguez Ortiz, 1964).

The advent of the Bourbon dynasty in 1700 put an end to the expansion of the seigneurial regime. By that time, although lords' powers were less pervasive than in the past, they preserved the control of the local justice and the capacity to intervene in the local government, including the right to issue ordinances. This jurisdictional power gave them legal superiority over their vassals and a guarantee that their rights would prevail (Domínguez Ortiz, 1955).

The seigneurial regime was abolished by a number of legal reforms that started at the *Cortes de Cadiz* in 1810. The manorial regime had by then lost much of its economic significance in the sense that seigneurial rents were low. Where lords were also landowners,

they had lost interest in jurisdictional rights and become rentiers, a change in the economic significance of lordships common throughout Europe.

2.2 Lordships and state capacity

Monarchs delegated jurisdictional functions to lords, but this does not necessarily imply less central state capacity. These functions had to do with local matters, not with the general business of the monarchy. Lords were delegates of the king, who was the supreme authority in the whole kingdom. His decreets and commands were as mandatory in royal places as in noble towns. However, delegating power to lords could in practice undermine the king's capacity to enforce royal norms and even levy taxes. This is because lords had incentives to protect his vassals against royal taxes, commands, and repressive institutions such as the Inquisition. Lords, sometimes going against the law, offered tax exemptions to attract new vassals, and established fairs and freemarkets to stimulate the local economy (Soria Mesa, 1997; Domínguez Ortiz, 1964; Vassberg 1984). "More importantly, the lords, in their own interest, tried to preserve their vassals from the worst effects of billeting or tax collection" (Vassberg, 1984: 97).

As pointed out by Domínguez Ortiz (1974), "many lordships played a safe-haven role against the constant demands for men and money that overwhelmed the Castilian population. The *Cortes* complained that many inhabitants left places under royal jurisdiction to move to lordships where they paid less" (quoted in González Alonso, 1983: 367, my translation). Indeed, the minutes of the *Cortes* of Castille periodically report representatives complaining about the softer tax burden in lordships, which depopulated royal towns in favor of seigneurial ones (e.g., see *Cortes* of 1525, 1576, 1579, 1592 and 1625). For instance, representatives in the *Cortes* of 1525 complained that "many lordship places have grown in population while royal cities, towns and villages have declined because of the exemptions these lordships have" (*Actas de Cortes* of 1525, quoted in Carretero Zamora, 2009b: 21, my translation). Lords' vassals paid less royal taxes "because either lords took a passive attitude or the Crown lacked the means to effectively collect taxes in nobles' lands" (Guilarte, 1987: 227). Similarly, lords granted fairs where traders did not have to pay taxes, which also undermined the royal treasury (Guilarte, 1987).⁴

The same complaint can be found one century later. One of the representatives in the *Cortes* of 1625 argued that he was against the sale of jurisdictions "not because of the damage to them [the vassals] but to the others", since "it is known that conditions are softer in towns

⁴ The complaints about the softer taxation in lordships were indeed right according to calculations by Carretero Zamora (2009a, 2009b) using fiscal data from the early 16th century. Focusing on the royal tax *servicios del reino* levied in 1528, the average tax burden for *realengo* taxpayers was 137.2 maravedies while for lordship taxpayers only 98.1. This raw comparison is an unconditional mean difference, but it likely points to a more benign fiscal situation in lordships. Areas geographically close had sometimes to pay very different amounts depending on their jurisdictions. For instance, "a taxpayer from Simancas [royal town] paid on average 168.8 *maravedies* while a few leagues to the north a vassal of Admiral of Castile only paid 44.7" (Carretero Zamora, 2009a: 709, my translation). Therefore, lords, as intermediaries collecting this royal tax, used their power to reduce the amount that their vassals had to pay (Carretero Zamora, 1998, 2009a).

with noble jurisdiction than in royal places, where none stops the abuses of troops and none tries to reduce taxes as it happens in noble towns, where nobles use their influence to reduce the burden of villagers" (Domínguez Ortiz, 1964: 183, my translation).

Thus, lords tried to avoid the application of central measures that were directly detrimental to them, or indirectly by affecting their vassals' fiscal capacity. Relatedly, one "fiscal benefit" highly appreciated by vassals were not having to host royal troops in their homes. The law established that all towns were obliged to host troops, but lords used their influence and connections with senior army officers to avoid it (Pérez Boyero, 1997). Crucially, this protection by the lord undermined the capacity of the state to effectively impose its policies and regulations and was detrimental for neighboring towns.

Building on this, I test the hypothesis that the delegation of governmental authority represented by lordship undermined central state capacity in the municipality. Moreover, the protection provided by the lord against the royal administration, while beneficial in the shortterm, could create negative institutional dynamics hindering the subsequent development of seigneurial towns. The latter will be explored in Section 6, devoted to the implications for economic growth.

3 Data

I collect data on all Spanish localities in 1787 from the Census of *Floridablanca* (INE, 1987-1991). This population census is a milestone in the history of demographic statistics. No other major western country has a population census with a comparable quality (Pérez Moreda, 2010). Both the original census and the modern publication are monumental works. The former consists of more than 50,000 manuscript pages and the latter of more than 6,000 pages. For each one of the more than 20,000 settlements existing in the country in 1787, I gather data on its jurisdictional status, total population, and job occupation structure.

These census data are used to create a dataset for modern-day municipalities. I use the list of municipalities corresponding to the year 2013, about 8,100 (IGN, 2013).⁵ Table 1 summarizes the distribution of municipalities, population, and surface area by type of jurisdiction. Noble jurisdiction was the most common jurisdiction among the localities of the Ancien Régime, which also applies when considering modern-day municipalities. The second most frequent category was royal jurisdiction. These two categories together account for about 80% of all localities. A much lower percentage of places were under the jurisdiction of the Church and the military orders. In terms of population, royal jurisdiction was the most important, particularly when considering current population data, while in surface area both noble and royal jurisdictions occupied the same percentage of the territory.

I also collect data on the initial distribution of lordships in the Kingdom of Granada from

 $^{^5}$ All the details about the collection of census data and the creation of the dataset at the municipality level can be found in Suppl. Mat. II.

Soria Mesa (1997), complemented when necessary with other sources (Pérez Boyero, 1997; Garzón Pareja, 1977; Segura Graiño, 1982). Finally, I also gather data on a wide array of geographic and climatic variables, preexisting conditions, as well as current outcomes. To save space, the descriptions and sources and the descriptive statistics of all variables are provided in Tables A1 and A2 in Suppl. Mat. III.

4 Lordships and state capacity in Spanish municipalities

This section analyzes the relationship between lordships in 1787 and central state capacity in the 18th and 19th centuries. I focus on the comparison between royal and noble jurisdiction, by far the two most common types. Observations with the other types of jurisdiction are omitted. Provincial capitals are also removed, as almost all of them belonged to the Crown. First, I take a look at the correlation of lordships with geographic, climatic and pre-existing historical conditions. Table 2 reports the coefficient on lordship controlling for historical region fixed effects (i.e., dummy variables capturing Spain's 33 historical intendencies) for a large array of indicators, including altitude, ruggedness, soil quality, temperature, rainfall, aridity, distance to the coast, distance to the provincial capital, distance to a major river, distance to Madrid, distance to Roman roads, and distance to pre-medieval settlements. The coefficients are most of the time statistically insignificant, indicating a good balance. When they turn significant, in two cases they are associated with a positive feature (less aridity and closer to a river) and in one case with a disadvantageous one (further from capital cities).⁶

4.1 Standard regression analysis

To study the relationship between noble jurisdiction and central state capacity, I estimate the following equation using ordinary least squares and clustering standard errors at the historical-region level:

$$Y_{i,r} = \Upsilon \cdot Lordship_{i,r} + \beta \cdot X_{i,r} + \eta_r + \varepsilon_{i,r}$$
 Eq (1)

where $Y_{i,r}$ represents an indicator of central state capacity in municipality *i* in region *r*, *Lordship*_{*i,r*} is a dummy variable measuring whether the municipality was under noble jurisdiction in 1787, $X_{i,r}$ represents a vector of geographic and climatic control variables, η_r is a set of 33 historical-region dummies, and $\varepsilon_{i,r}$ is the error term. Regarding the vector of control variables, I include altitude, ruggedness, temperature, rainfall, a coast dummy, distance to the coast, distance to the capital city, and the quadratic polynomial in latitude and longitude. By including a wide array of variables related to geographic location, I try to prevent the spatial dimension of the local data from influencing my results (Kelly, 2020).

Central state capacity is measured through six indicators from the 18^{th} and 19^{th} centuries.

⁶ I thank Pau de Soto for sharing the Roman roads layer (de Soto, 2021), which is much more exhaustive for the Iberian Peninsula than McCormick et al. (2013).

The first three indicators come from the job classification tables of the 1787 census: the percentage of state-related job occupations, the percentage of royal employees, and a dummy variable capturing the presence of at least one royal employee. Arguably, the state's infrastructural capacity is proxied by these indicators, similar to others used in the literature (Acemoglu et al., 2015). The fourth indicator is a binary variable capturing whether the town was head of a judicial district, which were created by Decree in April 1834 (Gómez Bravo, 2008). Being the head of a judicial district meant being its bureaucratic-administrative center and, consequently, more central state infrastructure. Next, I use a variable capturing the presence of a barrack of the Civil Guard in 1853. This gendarmerie force was the first national law enforcement agency of the country, created in 1844 (Martínez Ruiz, 1980).⁷ The sixth indicator is a post office dummy in 1830. The post service (*Correos*) was a royal service since the beginning of the 18th century. This early public service reflects well the presence of the state's infrastructural capacity, with important effects on economic activity (Acemoglu et al. 2016).

Columns 1 to 3 in Table 3 report a negative and statistically significant relationship of noble jurisdiction with state-related job occupations and royal employees. For example, column 3 indicates that towns under noble jurisdiction were about one-third less likely to have a royal employee than royal towns (given an average value of 0.3). This reflects the fact that royal offices and establishments were less frequent in noble towns. Arguably, if the Crown had to open -for instance- an office to collect rents, it would choose a place under royal jurisdiction, under its direct control. In the same vein, if a new law required setting up a new judicial territorial organization, royal towns would benefit more from being head of judicial districts, hosting the courts. This is precisely shown in column 4: lordships were approximately twothird less likely to be head of a judicial district. The same applies when deciding where to establish Civil Guard barracks: column 5 reports a large and negative coefficient on lordships (-0,041, vs. an average value of 0.14). Finally, column 6 also shows that noble towns were much less likely to have post offices (-0.036 vs an average value of 0.046).

These results document that the presence of the central state through their agents and offices was lower in lordships towns. We can reasonably infer that the capacity of the state to implement their policies and enforce the law was lower too -in line with the complaints of the *Cortes* cited above. The large array of geographic controls used provides assurance that these findings are not driven by geographical or locational characteristics of lordships, including distance to the capital city, which is properly controlled for. I have further checked that adding the squared and cubic terms of the latter does not affect the results. Importantly, I have checked that the results do not change when controlling for the town population in 1787 which, despite being a "bad control", rules out the possibility that lordships had less state presence simply because they were smaller localities. I have also checked that the findings are

 $^{^{7}\,}$ I thank General Eduardo Martínez Viqueira for his help in finding this data.

robust to using province fixed effects rather than historical-region fixed effects.⁸

4.2 Adjacent-municipality analysis

As an alternative approach, I conduct a local analysis in which each municipality with noble jurisdiction is compared to a group of adjacent municipalities with royal jurisdiction, so that geographic proximity alleviates concerns related to unobserved heterogeneity. More specifically, I perform the following steps for each municipality with noble jurisdiction: i) find its 10 nearest neighbors with royal jurisdiction, ii) delete neighbors whose centroids are more than 25 km away of the municipality, iii) take averages for each variable for the resulting group of neighbors, and iv) calculate the difference, for every variable, between the municipality and its group of neighbors.

Table 4 reports the results. Odd columns only include an intercept, which reflects the unconditional mean difference in the dependent variable. The coefficients reveal that lordships are associated with less central state presence. Control variables capturing differences in geographic and climatic factors are added in even columns. The variable of interest is again the intercept, which reflects the average difference between lordships and royal municipalities when differences in the observables are zero. The results are very robust when introducing these controls. Moreover, it is noting that the difference between lordship and royal jurisdiction here is very similar to that found in the previous standard regression analysis.

5 The distribution of lordships after the conquest of Granada

The previous section documents a negative relationship between being under seigneurial jurisdiction and several proxies for central state capacity in the 18^{th} and 19^{th} centuries. Whereas this relationship appears fairly robust, its interpretation as causal may have limitations. Since the initial distribution of lordships that took place during the Reconquest, there was a long evolution in the jurisdictional status of towns until 1787 (year of the *Floridablanca* Census), and some unobserved factors could affect this evolution. To shed more light on the causal effect of lordships, I focus on the territory of the Kingdom of Granada, which provides a better setting to tackle this question.

5.1 The seigneurial regime in Granada.

5.1.1 Initial distribution of lordships.

The Nasrid Kingdom of Granada was the last Muslim state conquered by Castile (c. 1482-1492). As a conquered land, its institutional framework was created from scratch. The Catholic

⁸ The territorial division into provinces was established in 1833 which, almost without changes, continues to exist today. All these unreported results are available in Suppl. Mat. III.

Monarchs transplanted the Castilian institutions into the new territory as their predecessors had done in the past. Importantly for my empirical strategy, most of Granadian lordships were created right after the conquest, as shown in Figure 2. Granada passed into Christian hands in January 1492 and most of lordships were granted five months later, in June. The Catholic Monarchs granted them in compensation for military help, palace services and financial loans. The Granada Kingdom was thus used as an economic reserve to reward the conquerors and, as Queen Isabella ordered in her will, to pay personal and political debts (Soria Mesa, 1997; Peinado, 2011).

The Crown's policy was initially to resettle the main cities with Christians from other parts of the kingdom, while maintaining a *Mudejar* majority in the countryside.⁹ Notably, beyond the main cities, which were kept as royal jurisdiction, there was no systematic criterion for the distribution of lordships.¹⁰ Modern Andalusian historian Soria-Mesa (1997) states that "in the distribution [of lordships] it dominated the ignorance of the Granadian geography, and the logical confusion produced by foreign toponyms" (p. 57, my translation). Because of this confusion and lack of knowledge, the royal chancery made mistakes when identifying certain places (Pérez Boyero, 1997).¹¹

Spanish historian Laredo Quesada (1968) points out that the repopulation of Granada was conducted "according to the circumstances of each conquest and each capitulation" (p. 492, my translation). This also introduces an element of randomness since these were contingent factors of that time. In this regard, Almería and Málaga are the provinces where more lordships were granted arguably because they were conquered first, and monarchs needed to materialize soon the rewards to nobles for their military help (Birriel Salcedo and Soria Mesa, 1993).

Regarding the economic potential of the territory granted to lords, the Crown did not choose the worst places (or least profitable) to create lordships (Soria Mesa, 1997). The empirical analysis below shows that there are no statistically significant differences in

 $^{^9}$ Mudejars refer to the Muslim population of al-Andalus that remained in Spain after the Christian conquest. Moriscos refer to Mudejars forcibly converted into Christianity.

¹⁰ It is worth noting that the Catholic Monarchs did not grant any lordship to the Church and military orders, as they did not want to increase their already huge power (Pérez Boyero, 1997).

¹¹ An example of the poor knowledge of the Crown about the Granadian territory was the agreement dated in April 1495 to grant several lordships to the count Luis de Beaumont, constable of Navarre. "As circumstances forced to act quickly, the Monarchs decided to grant to the constable of Navarre the jurisdiction of Huéscar, Castilléjar [...] The decision was made *without having enough information* about the number of inhabitants and the value of the rents of these towns" (Pérez Boyero, 1997: 36, my translation; italics are mine). This suggests that as late as 1495, three years after the capitulation of Granada, the Crown did not have systematic information about the basic characteristics of Granadian towns. Furthermore, there was also lack of knowledge from the point of view of the beneficiaries of lordships, suggesting that the monarchs' decisions were not based on specific nobles' demands. For instance, Catholic King Ferdinand II granted Almayater in 1508 to the count of Tendilla to pay his services as ambassador in Rome and with the purpose of repopulating the Granadian coast. Shortly after, the count of Tendilla organized a visit to the place as he "wanted to get his first look at Almayater, 'this gift that the king gave me", getting a very bad impression of it (Nader, 1990: 48).

geographic and climatic factors between lordships and royal towns. The only significant difference is that lordships tend to be located further from capital cities.

The recent literature on state capacity and centralization points out the risk of population unrest and fiscal legibility as two factors that may affect the Crown's decision to deploy indirect rule (Naseemullah and Staniland, 2016; Mayshar et al., 2017; Garfias and Sellars, 2021). However, they did not play a relevant role in this setting. Lordships were not created to indirectly govern the Mudejar population, as it cannot explain why places like the *Alpujarras*, densely populated and difficult to control, did not end up under noble jurisdiction (Soria Mesa, 1997). Indeed, only one out of every four *Mudejars* lived in a lordship in 1504, the same proportion as the overall population (Galán Sánchez y Peinado Santaella, 1997). In any case, the morisco uprising in 1568 led to the expulsion of the native Muslim population and to a new resettlement of the territory, but without affecting the jurisdictional status of towns. The economic and social conditions afterwards had little to do with the previous situation.

To sum up, beyond the fact that the main cities remained royal, the distribution of lordships was conducted "without a fixed criterion" and with the "ignorance of the Granadian geography" (Soria-Mesa, 1997, p. 57). Thus, according to López de Coca (1993), "it is legitimate to ask whether there ever existed any criterion in the distribution of lordships" (p. 141, my translation). All this discussion suggests that, except for the largest cities, the geographic distribution of lordships was unrelated to the economic potential and characteristics of the territory.

5.1.2 Evolution of the seigneurial regime in Granada

The distribution of seigneurial jurisdictions did not remain static. Sales of lordships started in the 1550s driven by the financial needs of the Crown and stimulated by a pre-existent demand (Pérez Boyero, 1997). Buyers were generally urban upper classes, owners of large estates in the affected territory, being almost always town councilors (*regidores*) –hence arising a clear conflict of interest (Soria Mesa, 1997).¹²

Regarding lords' prerogatives, two stages can be differentiated. The first one spans from the time of the conquest until 1568 and is characterized by high rents from the exploitation of the *Morisco* population, including labor services. Despite this highly extractive character, *Moriscos* preferred lordships because lords were much more permissive regarding their culture and customs -this being another example of lack of law enforcement in seigneurial lands. In this sense, López de Coca (1993) states that "there is no doubt that nobles are going to protect their *Mudejar/Morisco* vassals to the extent that their interests favored in the long term an increase in seigneurial rents" (p. 161). Neighboring royal towns complained about the indulgence of lords allowing *Moriscos* to continue with their Muslim customs, carrying

¹² Not all sales of jurisdictions became effective. Half of the times towns successfully avoided becoming a lordship (Soria Mesa, 1997). These facts imply that the randomness of the subsequent distribution of lordships was lower than that of the initial distribution.

weapons, and even welcoming fugitives.

The second stage started after the *Morisco* uprising in 1568 and their subsequent expulsion from Granada, which had a very negative impact on lords' rents. Besides a reduction in the number of vassals, the new ("old Christian") vassals had more rights and paid much less. The repopulation process after the expulsion of *Moriscos* was controlled by the Crown, protecting colonists' rights and controlling lords' abuses (Muñoz Buendía, 1992; Soria Mesa, 1997). For this second period, the main sources of income of Granadian lords were the *tercias* (one third of the tithe), the *alcabalas* (a sales tax), and rents from lords' properties. Other sources with much lower importance were the seigneurial rents related to the administration of justice, local monopolies, and appointments of local officials.¹³

5.2 Empirical analysis

This section analyzes the effect of lordships granted shortly after the conquest on central state capacity measured in the 18th and 19th centuries. I refer to 'old lordships' as those created before 1515, all of them the result of royal grants. Table 5 shows that old lordships are very similar to the rest of municipalities in terms of geographic and climatic conditions (columns 1 to 10). There is a minor significant difference in temperature: lordships towns are 0.6 degree Celsius colder. Lordship municipalities are also closer on average to a major river (the Guadalquivir). Notably and consistent with the historical discussion, lordships tend to be further from capital cities, which is therefore a relevant factor to control for.

It is worth noting the absence of differences in pre-existing historical conditions such as distance to Roman roads and distance to pre-medieval settlements (columns 11 and 12). Importantly, using data on Muslim (native) population density in 1504 (Galán Sánchez and Peinado Santaella, 1997), I find that lordships did *not* have a higher density of Muslim population. This strongly suggests that lordships were not created to indirectly govern the Mudejar population. Hence, the results of Table 5 are consistent with the previous historical discussion: the only criterion for the distribution of lordships was to keep the largest cities under royal jurisdiction. Beyond the main urban centers, the Crown was largely indifferent. Therefore, the initial distribution of lordships can be considered conditionally random: controlling for distance to the capital city, it is possible to identify the effect of lordship on

¹³ Chaney and Hornbeck (2016) argue that *Morisco* lordships in the region of Valencia were more extractive than Christian lordships, and this difference in harshness persisted after their expulsion. The case of Granada is however different. After the *Morisco* expulsion, there was a repopulation process carefully monitored by the King, who issued a specific regulation to organize it. The newcomers did not suffer the bad conditions of *Morisco* times. The arrival of new settlers and the intervention of the King largely reduced the "feudal" rights of lords. "The pressure of the settlers, old Christians, supported by the Crown, led to an important softening of the feudal subjection to which the Moorish vassals were subjected"; moreover, against the manorial abuses "there was always a powerful weapon left to the vassal, his legal right to leave, which would ruin seigneurial rents" (Muñoz Buendía, 1992: 279, my translation). The repopulation that followed the 1568 uprising was thus a structural break in the seigneurial regime of Granada.

state capacity. The exogeneity of lordship is also favored by the fact that Granada was a conquered land, and its institutional and economic orders were fully reset. Particularly with the expulsion of *Moriscos* after the revolt in 1568, Castilian Granada had very little to do with the former Muslim country (Ladero Quesada, 1979).

I estimate the following equation to analyze the effect of the initial distribution of lordships on central state capacity:

$$Y_{i,r} = \Upsilon \cdot Old \ Lordhips + \beta \cdot X_{i,r} + \varepsilon_{i,r}$$
 Eq (2)

where all the variables are the same as in Eq (1) except the main independent variable which is a dummy variable capturing whether the municipality was a lordship early in the 16th century. I report Conley (1999)'s standard errors robust to spatial correlation of unknown form.¹⁴

Table 6 presents the baseline results. Besides the six proxies for central state capacity used in the whole Spanish sample, I have collected another five indicators for the Granadian sample to reinforce the analysis. First, a variable quantifying the presence of government employees in charge of collecting and managing royal rents, which comes from the Ensenada Census of 1752 (INE, 1998). Second, a variable capturing the presence of a *Corregimiento* in 1597, whose *corregidores* were appointed by the monarchs and had several governmental functions, including the administration of justice. Moreover, I collect three additional indicators measuring the deployment of the post service in different years (1789, 1850 and 1878).

Columns 1 to 4 in Table 6 show that the four indicators measuring the presence of central government employees carry a negative and significant coefficient. Columns 5 to 7 show that the same applies to the presence of corregimientos in 1597, heads of judicial districts in 1834, and Civil Guard barracks in 1853. All these variables are related to the very basic functions of states (defense, justice, and public order), but state capacity also involves the ability to deliver public goods. In this regard, the post service (*Correos*) is a good example of early public service to analyze local variation in central state capacity. Columns 8 to 11 also report large, negative and statistically significant relationships between old lordships towns and post offices. Thus, early in the 19th century, there were two main and ten secondary post office administrations in the former Kingdom of Granada and, among all of them, only one secondary administration was located in a lordship (data from de Cabanes, 1830). In the mid-19th century, right after the abolition of the seigneurial regime in Spain, there were 67 post offices (including smaller offices, *carterías*) in the region. The percentage of former royal towns with post offices was almost twice as large as that of former lordships (20.3 vs 12.1%). In 1878 the number of post offices increased to 82 but the difference between former royal and lordships towns persisted (25 vs 15.9%). This indicates that half a century after the

¹⁴ I employ cutoffs of 100 km, beyond which spatial correlation is assumed to be zero. The quadratic terms in latitude/longitude are excluded due to collinearity in this smaller sample (notwithstanding, including them do not change the results). As in the analysis of the whole country, provincial capitals are excluded (i.e., Almería, Granada and Málaga).

dismantlement of the old regime, there was a clear persistence in the presence of the central state in municipalities, reflected in the post service.

The negative effect reported in Table 6 is not driven by distance to the capital city as this variable is in the control set. The inclusion of latitude, longitude and their interaction control, in a more general way, for the potential confounding effect of spatial trends in the data. In addition, I conduct further robustness checks reported in Table A6 (Sup. Mat. III). First, I include a set of 3 province dummies to only exploit variation within smaller geographic areas. Second, I include a flexible (cubic) polynomial in distance to the capital city, to reassure that this variable is not driving the results. Third, I address the possibility that my proxies for state presence might be mechanically related to population size and proximity to roads. Even though these two variables can be considered "bad controls" (i.e., influenced by lordships themselves), adding them to the regression helps gauge whether the effect of lordships is independent to these factors. Reassuringly, the coefficient on lordship is fairly robust to all these tests. Fourth, I delete observations corresponding to late lordships (those created after the first half of the 16th century). The latter tries to address a potential concern with respect to the comparison group used. So far, old lordships are compared to the rest of municipalities, which include some towns that became lordships over time. For the sake of completeness I report the results when these late lordships are removed. The coefficient of interest becomes larger in size, reflecting that central state presence in late lordships was also lower than in royal towns so excluding them increases the differences.

Table 7 presents an adjacent-municipality analysis analogous to the one conducted in Section 4.2. Odd columns report the unconditional difference between old lordships and the rest of municipalities, while even columns test this difference when differences in the observables are equal to zero. The results provide again support to the previous findings, being all the coefficients negative, similar in size to those of the standard regression analysis, and most of the time statistically significant.

6 Lordships, state capacity and economic growth

6.1 The effect of lordship on local economic growth

The results so far document a negative effect of lordships on central state capacity at the local level. I next study whether lordships affect economic growth. Given lack of data on income at the local level for the analyzed period, I use (rough) proxies for economic development at different points in time as well as measures of population growth. Column 1 in Table 8 shows that there are no differences in the amount of taxes per capita paid in 1591. This refers to a special tax named "servicio extraordinario de millones", created to pay the debt from European wars. The amount of tax corresponding to each town was proportional to its size and productive capacity, being the only available proxy for local income in this early period (Castillo Pintado, 1961). Column 2 indicates that old lordships were somewhat smaller in population, but column 3 reports absent of differences in population density.

Columns 4 to 11 use several measures of economic activity and development from the second half of the 18^{th} century: total labor income, labor income per capita, labor income from liberal professions (%) and labor income from agricultural occupations (%), from the census of 1752; and labor force in agriculture (%), labor force in occupations with low qualification (%), total population and population density, from the census of 1789. Interestingly, the coefficient on lordship is always small and highly insignificant, suggesting that living conditions in lordships were not worse than in *realengo* towns.¹⁵

Column 12 uses taxable wealth per capita in 1841 as a proxy for economic development. In line with previous columns, this new dependent variable renders an insignificant coefficient on lordships. These results reveal interesting and novel evidence, namely, that lordships did not negatively affect local economic development in the Ancien Régime.

Columns 13 to 25 use population growth over periods with available data from 1840 onwards.¹⁶ Municipalities doing economically well are expected to attract people and grow faster, so population growth captures reasonably well economic growth. Interestingly enough, we do not observe royal towns outperforming lordships towns during the second half of the 19th century. The negative effect arises during the 1910s and remains since then (except 1950-1960), suggesting that lordships generated some institutional dynamics (lower state capacity) that did not have implications for growth until well after their dissolution.

Finally, columns 26 to 30 employ five modern-day indicators of economic development. The closest available indicator at the local level to measure income per capita comes from tax returns and measures the average gross income, calculated as total gross personal income divided by the number of taxpayers in each municipality. This indicator is only available for municipalities larger than 1,000 inhabitants, but they make 97% of the total population. I also use other proxies for economic development with a wider geographic coverage. These include light density at night, average number of vehicles per household, educational attainment, and average socioeconomic condition. Notably, in all cases the coefficient on lordships is negative and almost always statistically significant.

To sum up, these results reveal that lordship did not have a contemporaneous effect on economic activity and growth; rather, the effect arose during the 1910s. In addition, former lordships towns are relatively poorer today, indicating that the effect on growth that arose in the 1910s has continued until the present day.

 $^{^{15}}$ The lack of a statistically significant relationship between lordship and population in 1789 indicates that, even if population in 1591 was smaller, lordships were able to catch up during this period.

¹⁶ Running independent regressions for each period allows more flexibility in the coefficients of the control variables than the case of a panel regression where the lordship dummy is interacted with period dummies.

6.2 Why the effect took place in the 1910s but not before: the evolving role of state capacity

Contrary to conventional wisdom, the results strongly suggest that living conditions in lordships were not worse than in royal towns. Therefore, the long-term negative effect of lordships can hardly be attributed to a supposedly more extractive character. If so, the negative effect should be visible much earlier. The institutional data reported in the Cadaster of Ensenada (1752) also show no evidence of lordships being a more extractive institution.¹⁷ Essentially, all towns had to pay the same set of taxes. Vassals of lords rarely had to pay additional rents, and when they had, rents were low. Consistent with this, historians sustain that seigneurial rents were a minor source of lords' income (Domínguez Ortiz, 1955).

Columns 1 to 3 in Table 9 employ additional dependent variables measuring several aspects of the local society. I check in column 1 whether there are differences in the presence of communal resources (common lands and productive factors such as mills and ovens). If lordships were very extractive, they would arguably have less of such goods (for instance, due to usurpations by the lord). Column 2 uses the percentage of ruined houses as an indicator of living conditions.¹⁸ Column 3 employs a variable measuring the presence of "hospitals", which at that time were houses providing shelter to pilgrims and poor people, and rarely endowed with enough rents for medical care. This variable captures to some extent the societal willingness to provide basic public goods and help the poor. The coefficient on lordships is insignificant, again pointing out that lordships did not undermine the local economy.

Columns 4 to 7 focus on the distribution of economic resources, mainly, land. Extractive institutions are associated with unequal societies, where the elite concentrates a large share of economic assets and rents. I measure inequality through i) the ratio of total (labor and capital) income of the richest individual (*mayor hacendado*) to total labor income of the whole town in 1750, ii) the percentage of daily workers over the active agricultural population in 1787, and iii) recent measures of land concentration (under the reasonable assumption that land inequality is very persistent over time). The results do not indicate an association between lordships and inequality.

Taken together, the evidence shows that lordships are not more extractive than royal towns. This applies to Granada and arguably also to Castile in the modern era. This leaves us with state capacity as a plausible mechanism to explain the slower growth of former lordships towns during the 20th century. The timing of the effect is very revealing here. Public spending by the central state started to increase notably from the 1910s onwards, as shown in Figure 3 (using data from Comín and Díaz, 2005, and Prados-de-la-Escosura, 2017). The increase was

¹⁷ The Cadaster of Ensenada (1750s) contains detailed information for each town concerning taxes and rents paid, the owner of the jurisdiction, etc. This data has been manually extracted from thousands of 18th-century manuscript pages (PARES, 2021).

¹⁸ This indicator may also reflect economic decline, that is, emigration and abandoned properties.

particularly important in public infrastructure and -although departing from very low levels- in education. The lower central state capacity of former lordships towns could jeopardize them from benefiting from the increase in government investment, contributing to explain why the effect arose in this period. Interestingly, columns 8 and 9 in Table 9 show that state's investments in the form of post offices and, most importantly, telegraph offices (a more recent technological development) were still scarcer in former lordships towns.

My interpretation of the results is that lordship, by undermining the presence of the central administration as well as the application of government policies in the municipality, historically weakened the capacity and willingness of the state to build public infrastructure and provide other local public goods. This institutional trait persisted over time and, although initially did not damage the local economy, started to erode it later, when the role of the state as developmental agent emerged. The weak link of lordships with the royal administration in the Ancien Régime could even have advantages, as the central government was seen as an extractor of resources. However, since the 19th and particularly the 20th century (for the case of Spain), the central government has increasingly played an active role promoting economic development through investments in infrastructure and human capital, and municipalities with less state presence were at disadvantage.

6.3 What does explain the current negative effect of lordship on modernday outcomes?

Columns 26 to 30 in Table 8 document a negative relationship between old lordships towns and modern-day economic outcomes. This section explores why the negative effect that arose in the 1910s has persisted until today. I consider two possibilities. First, central state capacity may still be lower in former lordships towns, continuing to undermine their growth progress. Second, the persistence of the effect may be due to the advantages of agglomeration. According to this, state capacity contributed to the initial population growth divergence that took place in the 1910s, but later this initial divergence self-perpetuates. Naturally, both explanations are not exclusive: a combination of both can also explain the relative underdevelopment of former lordships towns.¹⁹

While providing final evidence on this is very difficult, my approach is to analyze whether former lordships towns still exhibit lower state capacity today than what would be expected according to their population. The underlying assumption is that if the effect on state capacity is not robust to controlling for population, the "default mechanism" of agglomeration forces should be the most relevant. Columns 1 to 6 in Table 10 employ six proxies for state capacity,

¹⁹ Another plausible hypothesis is that lordship, by undermining historical state capacity, could have favored the creation of a culture of lack of trust, confidence, and cooperation with state-level institutions. This could have affected, in turn, the application of national policies and the provision of public goods. Using modern-day data on voter turnout I find no evidence of a negative effect of lordships on participation in local, regional, or general elections.

related to public services not depending on the local government, such as secondary education, non-municipal roads, broadband access, the percentage of regional government employment, and the presence of a Civil Guard office. The coefficient on old lordships is generally negative and statistically significant. However, when including the logarithm of population as a control variable, the coefficient largely declines in size and generally loses the statistical significance. Thus, controlling for population, the presence of the state in former old lordships is not weaker than in former royal towns. This suggests that the persistence of the effect until today is mostly due to the "default mechanism", that is, lower growth after the initial divergence due to self-perpetuating agglomeration forces.

7 Conclusions

This paper investigates the consequences of delegation of governmental authority through the study of a pivotal local political institution in historical Europe: the lordship. I collect data on seigneurial rights for ancien-regime Spain and document a negative relationship between seigneurial jurisdictions and central state capacity at the municipality level for the whole country. To shed light on the causal effect, I study the distribution of lordships in the former Kingdom of Granada after its conquest by Castile, which can be taken as conditionally random. The results confirm the negative effect of lordship found for the whole country: towns that shortly after the conquest were granted to nobles had less central state presence in the 18th and 19th centuries. The negative effect of lordship is robust both in a standard regression framework with region fixed effects and when comparing adjacent municipalities.

Contrary to conventional wisdom, lordships towns were not poorer nor grew less when this institution was in place. Interestingly enough, the negative effect on population growth arose in the 1910s, well after its abolition. Precisely in the 1910s, the Spanish state notably increased its investments and public expenditure. Lordships towns, with historically weaker ties with the central administration, benefited less from this new developmental role of the state. I further show that slower population growth has translated into lower income today.

Consistent with the evidence reported, seigneurial jurisdictions, as a privatization of the local government, hindered the application of government policies and the ability of municipalities to attract government investments. While lordship had not negatively affected economic development by the end of the Ancien Régime, there was already evidence of lower state's infrastructural capacity at that time. This suggests an evolving role of state capacity. Before industrialization, when the main economic sector is agriculture, the central government was seen as an extractor of resources and the public goods it provided -such as national defense- only had an indirect effect on the local economy. In such a context, weak state capacity in a municipality was not necessarily negative for local economic development and could even bring some benefits by lowering the state's tax burden and protecting the population from repressive institutions such as the Inquisition and from army conscription. However, with the expansion of the secondary and tertiary sectors, central governments started to play a more active role promoting economic development through investments in infrastructure, education and the provision of other public goods and services highly complementary to the new economic activities. This made state capacity crucial for economic development in sharp contrast to the previous situation.

This paper thus contributes to the vibrant literature on the effect of local political institutions on economic development and the role played by state capacity (Iyer, 2010; Michalopoulos and Papaioannou, 2013; Acemoglu et al., 2015, 2016; Johnson and Koyama, 2017; Dell et al., 2017). This is to my knowledge the first attempt to empirically study the economic consequences of lordships, an institution not only important for medieval and modern Europe but also for other world regions and historical periods. An analysis of lordships, as an instance of privatization of local governmental functions, can inform research on other recurrent phenomena in which the central state delegates functions and powers to private agents. In addition, this paper sheds new light on channels of persistence. The presence of the state's infrastructural power is an institutional feature that persists over time. It is a mechanism independent of the cultural one, which has been highlighted in the literature (Guiso et al., 2016; Dell et al., 2017).

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Figures and tables

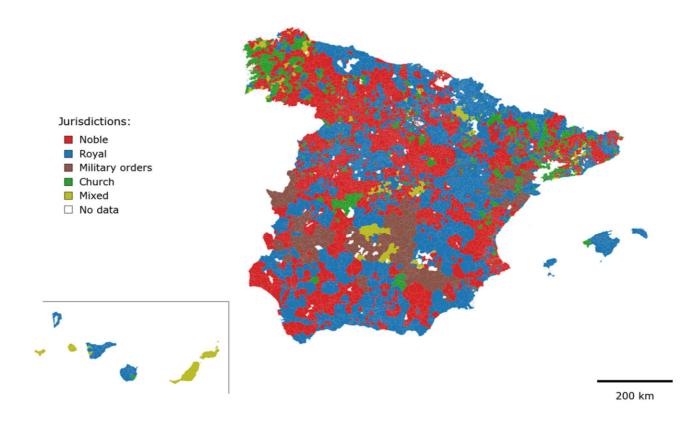


Figure 1. The distribution of types of jurisdiction in 1787

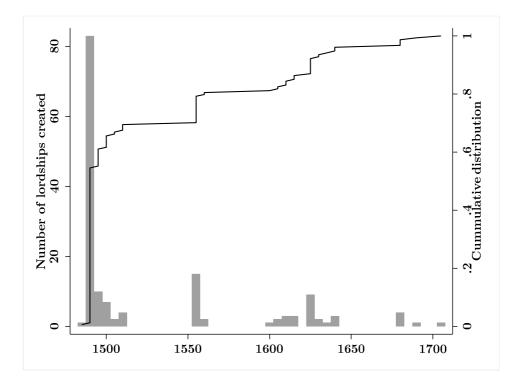


Figure 2. Evolution of lordships granted in Granada Note: The graph shows the number of lordships created during each 5-year interval (bars, left y-axis) as well as its cummulative distribution (line, right y-axis).

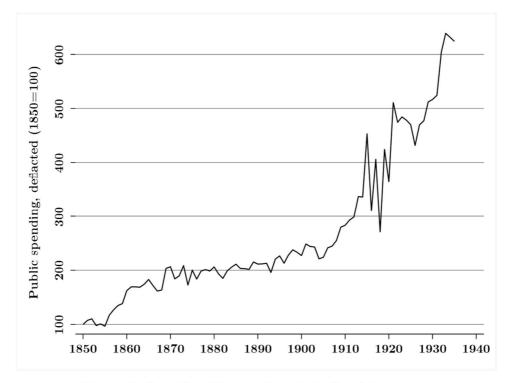


Figure 3. Overall public spending of the Spanish government

| | Settlements in 1787 | Current municipalities | Population in 1787 | Population in 2001 | Surface area |
|----------------------------|------------------------|---------------------------|-----------------------|-----------------------|--------------|
| Noble | 43% | 44% | 34% | 22% | 39% |
| Royal | 36% | 37% | 46% | 63% | 39% |
| Church | 13% | 8% | 10% | 7% | 7% |
| Military orders | 3% | 6% | 7% | 4% | 11% |
| Lordship (mixed) | 2% | 2% | 2% | 2% | 2% |
| Royal and lordship (mixed) | 1% | 1% | 1% | 1% | 0% |
| Missing data | 2% | 3% | 1% | 2% | 2% |
| Total | 20,197 | 8,115 | $10,\!413,\!198$ | 40,703,749 | 504,465 |

Table 1. Distribution of settlements and municipalities by jurisdictional status in 1787

Notes: Variables' descriptions are provided in Table A1.

| | 1a | ble 2. Balance | edness analy | sis of lordshi | ps | |
|---------------|--------------------------|------------------------------|-----------------------|---------------------------------|---|----------------------------|
| | Altitude | Ruggedness | Soil quality | Temperature | Precipitation | Aridity |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Lordship | -0.323 | -0.05 | 0.002 | 0.203 | -0.186 | -336.559 |
| | (0.463) | (0.064) | (0.076) | (0.235) | (0.126) | (191.795) |
| Region fixed- | | | | | | |
| effects | Yes | Yes | Yes | Yes | Yes | Yes |
| R-squared | 0.39 | 0.23 | 0.21 | 0.59 | 0.67 | 0.63 |
| Observations | 6,518 | 6,518 | 6,517 | 6,518 | 6,518 | 6,458 |
| | Distance to the coast | Distance to a major river | Distance to Madrid | Distance to the capital city | Distance to pre- medieval settlements | Distance to Roman roads |
| | (7) | (8) | (9) | (10) | (11) | (12) |
| Lordship | 3.894 | -7.09 | 0.048 | 5.439 | 0.827 | 0.46 |
| | (4.517) | (3.258) | (5.037) | (2.222) | (0.605) | (0.361) |
| Region fixed- | | | | | | |
| effects | Yes | Yes | Yes | Yes | Yes | Yes |
| R-squared | 0.85 | 0.94 | 0.94 | 0.16 | 0.16 | 0.14 |
| Observations | 6,518 | 6,518 | 6,518 | 6,518 | 6459 | 6,397 |

Table 2. Balancedness analysis of lordships

Notes: Variables' descriptions are provided in Table A1. Regressions include a constant term which is omitted for space considerations. Standard errors clustered at the historical region level are in parentheses.

| | State-related job occupations in 1787 (%) | Royal employees in 1787 (%) | Royal employee dummy in 1787 | Head of judicial district in 1834 | Civil Guard barrack in 1853 | Post office in 1830 |
|--------------------------|---|--------------------------------|---------------------------------|--------------------------------------|--------------------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Lordship in 1787 | -0.162 | -0.068 | -0.093 | -0.035 | -0.041 | -0.036 |
| | (0.066) | (0.019) | (0.032) | (0.009) | (0.011) | (0.011) |
| Altitude | -0.055 | -0.009 | -0.008 | -0.005 | -0.011 | -0.015 |
| | (0.026) | (0.007) | (0.011) | (0.006) | (0.009) | (0.009) |
| Ruggedness | 0.112 | 0.026 | 0.064 | 0.033 | 0.051 | 0.026 |
| | (0.039) | (0.013) | (0.013) | (0.008) | (0.012) | (0.011) |
| Temperature | -0.027 | 0.016 | 0.031 | 0.009 | 0.011 | -0.012 |
| | (0.042) | (0.015) | (0.028) | (0.011) | (0.015) | (0.013) |
| Precipitation | 0.031 | 0.023 | 0.018 | -0.003 | -0.006 | -0.011 |
| | (0.033) | (0.013) | (0.016) | (0.004) | (0.007) | (0.005) |
| Coast dummy | 0.555 | 0.133 | 0.097 | 0.001 | -0.026 | 0.003 |
| | (0.098) | (0.034) | (0.035) | (0.017) | (0.031) | (0.023) |
| Distance to the coast | 0.000 | 0.000 | -0.001 | 0.000 | 0.000 | 0.000 |
| | (0.001) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| Distance to capital city | 0.002 | 0.001 | 0.001 | 0.001 | 0.000 | 0.001 |
| | (0.002) | (0.000) | (0.001) | (0.000) | (0.000) | (0.000) |
| Quadratic polynomial in | 37 | 37 | 37 | 37 | 37 | 37 |
| lattitude and longitude | Yes | Yes | Yes | Yes | Yes | Yes |
| Region fixed-effects | Yes | Yes | Yes | Yes | Yes | Yes |
| R-squared | 0.23 | 0.13 | 0.24 | 0.05 | 0.07 | 0.06 |
| Observations | 6,397 | 6,391 | 6,397 | 6,081 | 6,518 | 6,518 |

Table 3. Lordships and state capacity in Spain

Notes: Variables' descriptions are provided in Table A1. Regressions include a constant term which is omitted for space considerations. Standard errors clustered at the historical region level are in parentheses.

| | State-related job occupations in 1787 (%) | | <i>v</i> - | oyees in 1787 %) | Royal employee dummy in 1787 | |
|---|--|------------------------|-------------------|---------------------|---------------------------------|-------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Difference between lordship and royal jurisdiction | -0.197 (0.065) | -0.171 (0.054) | -0.088 (0.016) | -0.084 (0.016) | -0.098 (0.027) | -0.089 (0.027) |
| Differences in control variables included | No | Yes | No | Yes | No | Yes |
| R-squared | 0.00 | 0.02 | 0.00 | 0.02 | 0.00 | 0.04 |
| Observations | 3,256 | 3,252 | 3,255 | 3,251 | 3,258 | 3,254 |
| | v | icial district 1834 | | l barrack in 53 | Post office in 1830 | |
| | (7) | (8) | (9) | (10) | (11) | (12) |
| Difference between lordship and royal jurisdiction | -0.050 (0.013) | -0.046 (0.012) | -0.063 (0.015) | -0.059 (0.015) | -0.048 (0.013) | -0.050 (0.014) |
| Differences in control variables included | No | Yes | No | Yes | No | Yes |
| R-squared | 0.00 | 0.03 | 0.00 | 0.03 | 0.00 | 0.04 |
| Observations | 3,224 | 3,220 | 3,306 | 3,302 | 3,306 | 3,302 |

Table 4. Adjacent municipalities analysis

Notes: Variables' descriptions are provided in Table A1. The table reports the coefficient on the constant term ("difference between lordship and royal jurisdiction") from regressions in which the dependent variables measure the difference between each lordship municipality and a comparison group of neighboring royal towns. Standard errors clustered at the historical region level are in parentheses.

| | Altitude Ruggedness | | Soil quality | Temperature | Precipitation | Aridity | Distance to the coast |
|--------------|-------------------------------------|------------------------------|---|------------------------------------|--|---|--------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Old lordship | 0.941 (0.589) | 0.282 (0.191) | -0.231 (0.146) | -0.607 (0.281) | 0.052 (0.33) | 143.946 (310.34) | 5.479 (5.598) |
| R-squared | 0.01 | 0.01 | 0.02 | 0.02 | 0.00 | 0.00 | 0.01 |
| Observations | 353 | 353 | 353 | 353 | 353 | 353 | 353 |
| | Distance to a major river (8) | Distance to Madrid (9) | Distance to the capital city (10) | Distance to Roman roads (11) | Dist. to pre- medieval settlements (12) | Density of Muslim population in 1504 (13) | |
| Old lordship | -10.469 (5.419) | -2.106 (10.625) | 16.466 (6.247) | -1.881 (2.54) | 0.345 (0.715) | 0.225 (1.633) | |
| R-squared | 0.04 | 0.00 | 0.13 | 0.01 | 0.00 | 0.00 | |
| Observations | 353 | 353 | 353 | 353 | 353 | 353 | |

Table 5. Balancedness analysis of Granadian lordships

Notes: Variables' descriptions are provided in Table A1. Regressions include a constant term which is omitted for space considerations. Standard errors corrected for spatial dependence are in parentheses.

| | Empoyees in royal rents in 1752 (% of labor income) | State-related job occupations in 1787 (%) | Royal employees in 1787 (%) | Royal employee dummy in 1787 | Corregimientos in 1597 | Head of judicial district in 1834 |
|---|---|---|-----------------------------------|------------------------------------|---------------------------|---|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Old lordship | -0.406 (0.186) | -0.426 (0.162) | -0.142 (0.054) | -0.096 (0.057) | -0.048 (0.016) | -0.046 (0.023) |
| Geographic, climatic and locational controls | Yes | Yes | Yes | Yes | Yes | Yes |
| R-squared | 0.11 | 0.23 | 0.07 | 0.13 | 0.07 | 0.08 |
| Observations | 276 | 345 | 345 | 345 | 353 | 353 |
| | Civil Guard barrack in 1853 | Post office in 1789 | Post office in 1830 | Post office in 1850 | Post office in 1878 | |
| | (7) | (8) | (9) | (10) | (11) | _ |
| Old lordship | -0.077 (0.029) | -0.088 (0.033) | -0.04 (0.012) | -0.094 (0.032) | -0.116 (0.039) | |
| Geographic, climatic and locational controls | Yes | Yes | Yes | Yes | Yes | |
| R-squared | 0.09 | 0.10 | 0.05 | 0.09 | 0.11 | |
| Observations | 353 | 353 | 353 | 353 | 353 | |

Table 6. Lordships and state capacity: Former Kingdom of Granada

Notes: Variables' descriptions are provided in Table A1. The geographic, climatic and locational controls include altitude, ruggedness, temperature, precipitation, coast dummy, distance to the coast, capital city dummy, distance to the capital city, latitude, longitude and the interaction of the two latter. Regressions include a constant term which is omitted for space considerations. Standard errors corrected for spatial dependence are in parentheses.

| | rents in 1 | es in royal 1752 (% of ncome) | occupatio | lated job ns in 1787 %) | | ployees in 7 (%) | v | mployee in 1787 | Corregimie | <i>ntos</i> in 1597 | | judicial in 1834 |
|--|------------------|-------------------------------------|-------------------|-------------------------------|-------------------|---------------------|-------------------|--------------------|-------------------|---------------------|-------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| Difference between old lorcships and the rest | -0.628 (0.17) | -0.924 (0.139) | -0.415 (0.098) | -0.378 (0.142) | -0.075 (0.061) | -0.055 (0.072) | -0.027 (0.045) | -0.046 (0.046) | -0.097 (0.032) | -0.098 (0.034) | -0.108 (0.037) | -0.13 (0.038) |
| Differences in control variables included | Yes | | Yes | | Yes | | Yes | | Yes | | Yes | |
| R-squared | 0.00 | 0.22 | 0.00 | 0.15 | 0.00 | 0.05 | 0.00 | 0.11 | 0.00 | 0.11 | 0.00 | 0.16 |
| Observations | 82 | 82 | 99 | 99 | 99 | 99 | 99 | 99 | 100 | 100 | 100 | 100 |
| | | d barrack in 353 | Post offic | ce in 1789 | Post offic | ce in 1830 | Post offic | ce in 1850 | Post offic | ce in 1878 | | |
| | (13) | (14) | (15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) | | |
| Difference between old lorcships and the rest | -0.13 (0.026) | -0.179 (0.039) | -0.024 (0.022) | -0.068 (0.028) | -0.022 (0.012) | -0.051 (0.017) | -0.098 (0.029) | -0.142 (0.036) | -0.132 (0.031) | -0.15 (0.032) | | |
| Differences in control variables included | Yes | | Yes | | Yes | | Yes | | Yes | | | |
| R-squared | 0.00 | 0.09 | 0.00 | 0.17 | 0.00 | 0.32 | 0.00 | 0.23 | 0.00 | 0.21 | | |
| Observations | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | | |

Table 7. Adjacent municipalities analysis: Granada

Notes: Variables' descriptions are provided in Table A1. The table reports the coefficient on the constant term ("difference between old lordships and the rest") from regressions in which the dependent variables measure the difference between each lordship municipality and a comparison group of neighboring towns. Standard errors corrected for spatial dependence are in parentheses.

| | Log taxes per capita in 1591 (serv. extr. de millones) | Log population in 1591 | Log population density in 1591 | Log total labor income in 1752 | Labor income per capita in 1752 | labor income from liberal professions in 1752 (%) | occupations in 1752 (%) | | tion jobs in 1787 | 1787 |
|--------------|---|--|---|---|--|---|-------------------------------|--|----------------------|---|
| Old lordship | (1) 0.031 | (2) -0.214 | (3) -0.004 | (4) -0.176 | (5) -12.999 | (6) -0.042 | (7) 0.282 | (8) 0.728 | (9) 0.652 | (10) -0.093 |
| Old loldship | (0.095) | (0.089) | (0.137) | (0.137) | (12.963) | (0.183) | (2.215) | (2.243) | (0.876) | (0.099) |
| R-squared | 0.31 | 0.320 | 0.23 | 0.22 | 0.16 | 0.11 | 0.11 | 0.09 | 0.11 | 0.26 |
| Observations | 290 | 292 | 292 | 276 | 276 | 276 | 276 | 345 | 345 | 346 |
| | Log popula- tion density in 1787 | Taxable wealth per capita in 1842 | 1949 1970 | 1960 1000 | 1000 1010 | Population 1910-1920 | 0 | 1930-1940 | 1940-1950 | 1950-1960 |
| | (11) | (12) | 1842-1860 (13) | 1860-1900 (14) | 1900-1910 (15) | (16) | 1920-1930 (17) | (18) | (19) | (20) |
| Old lordship | 0.09 (0.108) | -4.86 (3.761) | 0.018 (0.033) | -0.055 (0.043) | 0.016 (0.013) | -0.027 (0.01) | -0.037 (0.01) | -0.054 (0.013) | -0.042 (0.017) | -0.017 (0.02) |
| R-squared | 0.33 | 0.100 | 0.10 | 0.31 | 0.23 | 0.22 | 0.35 | 0.24 | 0.27 | 0.2 |
| Observations | 346 | 343 | 343 | 353 | 353 | 353 | 353 | 353 | 353 | 353 |
| | 1960-1970 | Populatio: 1970-1981 | n growth (<i>con</i> 1981-1991 | ntinued): 1991-2001 | 2001-2011 | Income (2013-18) | Light density (2000-05) | Vehicles per household (2001) | Education (2001) | Socio- economic condition (2001) |
| | (21) | (22) | (23) | (24) | (25) | (26) | (27) | (28) | (29) | (30) |
| Old lordship | -0.048 (0.015) | -0.063 (0.019) | -0.09 (0.02) | -0.089 (0.028) | -0.079 (0.026) | -0.062 (0.026) | -0.569 (0.143) | -0.074 (0.029) | -3.002 (2.089) | -2.606 (1.243) |
| R-squared | 0.29 | 0.340 | 0.35 | 0.41 | 0.41 | 0.34 | 0.56 | 0.40 | 0.25 | 0.39 |
| Observations | 353 | 353 | 353 | 353 | 353 | 214 | 353 | 353 | 353 | 353 |

Table 8. Lordships and economic growth

Notes: Variables' descriptions are provided in Table A1. Regressions include a constant term and geographic, climatic and locational controls (altitude, ruggedness, temperature, precipitation, coast dummy, distance to the coast, capital city dummy, distance to the capital city, latitude, longitude and the interaction of the two latter), all omitted for space considerations. Standard errors corrected for spatial dependence are in parentheses.

| | Presence of communal resources in 1752 | Ruined houses in 1752 (%) | Hospitals in 1591 | Top income/total labor income in 1750 (in log) | Daily workers (%) in 1787 | | Land occupied by large estates in 1962 | Post office in 1910 | Telegraph office in 1911 |
|--------------|---|---------------------------------|----------------------|--|---------------------------------|------------------|--|------------------------|--------------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Old lordship | 0.006 (0.062) | -0.002 (0.01) | -0.049 (0.039) | 0.192 (0.172) | -0.092 (2.738) | -3.744 (2.22) | -1.876 (4.322) | -0.083 (0.046) | -0.101 (0.03) |
| R-squared | 0.12 | 0.070 | 0.18 | 0.24 | 0.14 | 0.35 | 0.35 | 0.13 | 0.16 |
| Observations | 335 | 319 | 349 | 254 | 342 | 252 | 352 | 353 | 353 |

Table 9. Why did the effect take place in the 1910s but not before?

Notes: Variables' descriptions are provided in Table A1. Regressions include a constant term and geographic, climatic and locational controls (altitude, ruggedness, temperature, precipitation, coast dummy, distance to the coast, capital city dummy, distance to the capital city, latitude, longitude and the interaction of the two latter), all omitted for space considerations. Standard errors corrected for spatial dependence are in parentheses.

| | High school dummy | Log non- municial roads (in km) | Broadband access (ADSL lines over population) | Broadband dummy | Regional government employees | Civil Guard barrack in 2021 |
|----------------------|------------------------|---------------------------------------|---|--------------------|-------------------------------------|-----------------------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Panel A) Without co | ntrolling for log popu | lation in 2001 | | | | |
| Old lordship | -0.131 (0.04) | -0.218 (0.11) | -21.95 (5.148) | -0.226 (0.076) | -0.118 (0.105) | -0.056 (0.046) |
| R-squared | 0.16 | 0.26 | 0.37 | 0.21 | 0.08 | 0.12 |
| Observations | 353 | 344 | 353 | 353 | 352 | 353 |
| Panel B) Controlling | for log population in | n 2001 | | | | |
| Old lordship | 0.034 (0.045) | -0.007 (0.13) | -5.812 (3.079) | -0.081 (0.075) | 0.054 (0.126) | 0.131 (0.04) |
| R-squared | 0.54 | 0.38 | 0.65 | 0.40 | 0.21 | 0.44 |
| Observations | 353 | 344 | 353 | 353 | 352 | 353 |

Table 10. Lordship and current state capacity

Notes: Variables' descriptions are provided in Table A1. Regressions include a constant term and geographic, climatic and locational controls (altitude, ruggedness, temperature, precipitation, coast dummy, distance to the coast, capital city dummy, distance to the capital city, latitude, longitude and the interaction of the two latter), all omitted for space considerations. Standard errors corrected for spatial dependence are in parentheses.