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Abstract

The Spanish Inquisition (1478-1834) lasted for more than three centuries and conducted more than 100,000 trials. Why would the Spanish Crown adopt this type of repressive institution? What were the actual motives of its activity? This paper explores the role of the Spanish Inquisition as a repressive tool of the Spanish Crown. When the Crown had to move military resources abroad to fight a war, the likelihood of an internal revolt against the Crown increased. To minimize the threat of rebellion, the Crown would use the Inquisition to increase repression (trials) in Spain. In a theoretical framework, I show that while the Inquisition would conduct more trials the higher the intensity of the wars fought abroad, it would however decrease its level of repression (trials) if the likelihood of an internal revolt were large enough. This behavior indicates an inverse-U relationship between inquisitorial and war intensity. To test this prediction, I assemble time series data for seven Spanish inquisitorial districts on annual trials of the Inquisition and wars conducted by the Spanish Crown between 1478 and 1808. I show that there is an inverse-U relationship between wars and inquisitorial activity. My results are robust to the inclusion of data on the severity of the weather (droughts) and to adjustments for spillover effects from districts other than the main district under analysis. Moreover, using a new database of 35,000 trials of the Inquisition, I show that religious persecution was especially significant during early stages of the Inquisition, while repressive motives better explain its behavior in later periods.

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1 Introduction

The rise and development of the nation-state in early modern Europe is a historical example of the relationship between institutions and economics.[1] The literature has emphasized the role of European politics and the so-called military revolution as possible causes of this emergence.[2] The introduction of new war technology (e.g., the cannon) in the middle of the fifteenth century not only changed war strategies, but also caused an increase in war expenses. States had to both acquire new and costly technology and improve defense infrastructures. A centralization of power and authority helped to increase fiscal revenues and improve access to public debt to finance interstate wars.

Kings also used two forms of violence against their own citizens: repression of local enemies and wealth extraction.[3] The former ensured political stability and concentration of power, while the latter increased fiscal revenues to finance interstate wars. Gennaioli and Voth (2012) show how states that faced low internal political fragmentation (e.g. France and England) recruited large armies and reinforced the centralization of power. On the contrary, states that faced high levels of political fragmentation (e.g. Poland and Spain) could not engage in high cost wars since internal division prevented it.

Therefore, the organization of internal and external conflicts partly shaped institutions of early modern European states. States would allocate resources across different types of violence and organize their institutions depending on their goals and finances. These differences in institutional frameworks induced a diverse range of institutional development and economic patterns. North (1991) and North and Thomas (1973) find that states that ensured property rights promoted economic growth, while states that generated an inefficient set of property rights harmed economic development.

Although Spain has been traditionally considered as a country that did not ensure property rights,[4] recent works by Blaydes and Chaney (2011), Alvarez-Nogal and Chamley (2012)

[1] This process is defined as the "consolidation of political and military power that occurred in Europe in the early modern period", Bean (1973).

[2] Bean (1973) Brewer (1990) and Tilly (1985) examine the relationship between war and political power.

[3] Tilly (1985) also emphasizes the role of protection defined as the "elimination of the enemies of their clients". For example, the elimination of the commercial competitors for the local bourgeoisie

[4] Some examples are Davis (1973), De Long and Shleifer (1993) and Acemoglu, Johnson, and Robinson (2005).

and Grafe (2012) emphasize the role of the Spanish Parliament and towns in constraining the King, especially in the 15th and 16th centuries.[5] Thus, the organization of early modern Spanish institutional framework, including its characteristics, mode of development and economic interactions, remains partially unclear.[6] In this paper, I study the Spanish Inquisition, an institution developed during the process of emergence of the Spanish nation-state, to examine the relationship between war making (external conflicts), internal conflicts (revolts) and repression.

The Spanish Inquisition was officially founded in 1478 by means of a papal bull of Sixtus IV, who ceded its control to the Spanish Crown. Since then until its definitive abolition in 1834, the Spanish Inquisition conducted more than 100,000 trials that featured Jews, Muslims, Lutherans and other assorted "heretics".[7] Its relevance in Spanish history is twofold. First, it lasted for more than three hundred years, since its creation at the beginning of the Spanish Empire to its abolition when Napoleon invaded Spain in 1808.[8] Second, it was the first institution that had uniform *de facto* power over the entire Spanish territory. For this reason, General Council of the Inquisition became the second most important political institution in early modern Spain.[9]

I argue that the Spanish Crown used the Inquisition to prevent internal revolts by repressing any political ideology that differed from the official political establishment. Spanish King's demand for repression increased when he had to move military resources abroad because the likelihood of an internal revolt against the Crown increased. To minimize the threat of rebellion, the Crown would use the Inquisition to increase repression (trials) in Spain. In a theoretical framework, I show that while the Inquisition would conduct more trials the higher the intensity of the wars fought abroad, it would however decrease its level of repression (trials)

[5]For instance, they emphasize the role of the *Cortes*, the Spanish Parliament, in the 16th century as being much more relevant than the role traditionally assigned in the literature. They also argue how bilateral negotiations between the Spanish King and Spanish towns constrained the King in the 17th and 18th centuries.

[6]Drelichman's research on *la mesta* and the American silver and Grafe's works address part of the Spanish institutional framework at that time.

[7]Other type of heresies include bigamy, blasphemy, solicitation, fornication, superstition, false witness, oposition to the Inquisition and eating meat during fast.

[8]The final year of abolition was 1834. Between 1808 and 1834 it was abolished and reinstated several times, without having any influence on Spanish political and economic development.

[9]The General Council ruled and supervised all inquisitorial activity. The first institution of political importance was the General Council of Castile, which ruled and controlled the Crown of Castile.

if the likelihood of an internal revolt were large enough. There is no need to incur in costly repression to prevent a revolt that is going to happen with certainty.[10] This behavior indicates an inverse-U relationship between inquisitorial and war intensity. To test this prediction, I assemble time series data for seven Spanish inquisitorial districts on annual trials of the Inquisition and wars conducted by the Spanish Crown between 1478 and 1808. I show that there is an inverse-U relationship between wars and inquisitorial activity. My results are robust to the inclusion of data on the severity of the weather (droughts) and to adjustments for spillover effects from districts other than the main district under analysis.

Repression is arguably not the only reason for inquisitorial activity. Historians have focused on two other motivations behind inquisitorial activity: extracting wealth through confiscations to finance public expenses and religion persecution.[11] These three different hypotheses are not exclusive and all can explain inquisitorial activity. To disentangle the three possible explanations, I use the database described above and I assemble a new database of 35,000 Inquisition trials. Individual trial data will allow to determine, for instance, how wars and time are related to the different charges in inquisitorial trials. I present evidence that religious persecution was especially significant in the early stages of the Inquisition, while repressive motivations better explain the behavior of this institution in later periods. I do not find evidence supporting a wealth extracting motivation by the Inquisition.

This paper addresses the trade-off between international wars, internal conflict and repression by studying the role of the Spanish Inquisition between 1478 and 1808. In the same line as Gennaioli and Voth (2012), this paper supports the thesis that Spanish political fragmentation could prevent Spain from engaging in high cost wars. However, I show that the Spanish Crown used the Inquisition to repress Spanish population and, therefore, was able to engage in those wars. Therefore, the Inquisition was a tool to overcome a lack of political unification, which seem crucial in European wars success between 1500 and 1800.

[10] As I will show later in the paper, that situation happened when most of the Spanish army was abroad fighting wars against other European powers (i.e. France, England).

[11] Llorente (1822) proposed that the main objective of the Inquisition was extraction of wealth from those who were accused. Netanyahu (1995) proposed that the main and only motivation of the Inquisition was persecution of Judaism.

2 Motivations behind Inquisition trials

The black legend of the Spanish Inquisition sets it up as an institution, whose main mission was to eradicate any activity or behavior suspicious of heresy (mainly Judaism). However, if we look carefully at the data we can observe two facts. First, as we can see in Table 1, the relative number of executions by the Spanish Inquisition did not differ from other European countries. The two distinctive features of the Spanish Inquisition are its absolute number of trials and the persistence of its activity. Figures 1 through 4 show the number of trials and the intensity (trials per thousands of people) of other European repressive institutions or witchcraft episodes in Europe and Inquisition trials in six Spanish regions. We observe that not only the total number of trials was larger in the Spanish inquisitorial districts, but the intensity (trials per thousand inhabitants) and persistence of the Spanish Inquisition were greater compared to other European repressive institutions or to European witchcraft episodes.

Second, trials against Islam, Jewish and Lutherans accounted for barely half of the total trials of the Inquisition. Table 2 shows that the proportion of religious trials[12] was lower than the proportion of non-religious trials. This was the case both at the national level and for all districts with the exception of Valencia, which exhibited the highest concentration of *moriscos* in Spain.[13] Thus, the data suggests that inquisitorial activity cannot be explained by purely religious motives. Historians have extensively debated which were the actual reasons behind inquisitorial activity: income maximization, religious persecution and social control.

Very early on, Llorente (1822) proposed that the Inquisition was essentially an income maximizing institution. He argued that its main objective was the extraction of wealth from accused people through confiscations and penalties.[14] Later on, Millan (1984) and Kamen

[12] I define religious trials as those carried out against Islam, Lutherans and Jewish.

[13] *Moriscos* were Muslims that converted to Catholicism.

[14] There are also popular stories from across Spain that would support Llorente's hypothesis. Bouzas and Domelo (2000) tell the following popular story. Sometime in the late 16th century María Soliña married Pedro Barba, a fisherman and one of the wealthiest men of Cangas, a village in Galicia, Spain. Barba owned real estate, a boat, and a share of the donations collected by the churches Colexiata de Cangas and Iglesia de San Cibrán. In 1617, the Turks sacked the village of Cangas. Thirty-three people died, almost two hundred houses were burned and most of the fishermen's boats and gear were destroyed. According to the story, Maria lost her husband and her son in the attack; subsequently, she inherited all her husband's possessions. In the aftermath of the conflict the local nobility of Cangas, along with the village's richest men joined with the Inquisition to denounce "witches"– typically women with significant wealth. If convicted (or confessed) the Inquisition would seize the "witch's" wealth, some of which would also accrue to the local nobility. The nobles and others accused Maria of being a witch, offering as a proof that she used to go for a walk on the beach every night in order

(1965) disagreed regarding this hypothesis. On the one hand, Millan argued that the amount of confiscations and penalties represented a small proportion of total inquisition's wealth. On the other hand, Kamen emphasized that confiscations not only improved inquisition finances in a direct way and, therefore, Millan's conclusions would represent a lower bound of their importance.

Netanyahu (1995) proposes that the main and only motivation for the Inquisition was religious persecution, mainly against Jews. This persecution and the creation of the institution would have arisen from the popular pressure to eradicate heresy.

The third motivation describes the Inquisition as a repressive tool of the Spanish Crown to suppress any ideology that differed from the official one to prevent a hypothetical revolt or political conflict. There is anecdotal evidence that inquisitorial activity depended upon the Crown's needs. For example, Haliczer (1990) explains how the Crown sought inquisitorial intervention to repress political disturbances in Valencia during the 1620's and Boeglin (1993) describes how inquisitorial repression depended upon the imperial and commercial interests of the Crown.[15]

As far as I know, there is no previous research addressing the Spanish Inquisition in the economics literature. However, there has been a recent growing interest in economics in studying persecution. In particular, Miguel (2005) and Oster (2004) investigate how witchcraft trials are related to adverse weather shocks. Miguel (2005) finds evidence that negative economic shocks (associated with high levels of precipitation) increase the number of witch-killings in Tanzania. He argues that "witches" are usually unproductive old women whose families cannot afford to sustain them during economic downturns. Oster (2004) finds evidence of a causal relationship between weather conditions and witchcraft in the sixteenth, seventeenth, and eighteenth centuries in Europe. She uses weather data from the little ice age period to explain witch trials. When an anomalous decrease in temperature occurred, there was an increase in the number of witch trials. Whereas witchcraft episodes seem to be a popular reaction

to commune with her husband and son; she was tortured until she confessed and her possessions were seized. The story ends with Maria dying poor and alone.

[15] In particular, there is anecdotical evidence that *Conde Duque de Olivares* (Spanish prime minister between 1621-1643) told the Inquisition not to persecute Jewish Portuguese bankers because they were lending to the Spanish King.

and pressure against some citizens because of weather and economic downturns, the Spanish Inquisition was an organized institution that did not necessarily require a popular reaction to accuse someone. It had a whole network of informers and representatives that covered all of the Spanish territory. There is at least another repressive institution that could be compared to the Inquisition: Stalin's system of repression. Harrison (2008) uses a qualitative explanation to explain Stalin's choices between military power and repression when facing foreign and domestic threats in 1930's.

3 Institutional Background

3.1 Organization

The Spanish Inquisition officially started in 1478 with a papal bull of Sixtus IV that established the Holy Office and ceded its control to the Spanish Crown. From that moment until its definitive abolition in 1834, the Spanish Inquisition conducted more than 100,000 trials against Jews, Muslims, Lutherans and other assorted "heretics". The Inquisition was a centralized institution that had the same *de facto* power throughout the Spanish territory.[16] The General Inquisitor and the Supreme Council of the Inquisition (*La Suprema*) coordinated and controlled the finances of all districts as well as their monthly activities and procedures.

The Inquisition divided Spain in twenty districts, which were grouped in two subdivisions of ten districts each: Castile and Aragon. Figure 5 depicts a map of the Iberian Peninsula with the Inquisitorial subdivisions of Aragon and Castile colored in grey and white respectively. This geographical distribution is very similar to the Spanish political distribution at that time.[17]

The organization of the Inquisition emphasizes the idea of a centralized institution that controlled the whole kingdom, but, at the same time, it suggests that regional and local differences may have been important. For example, the General Council of the Inquisition, *La Suprema*, could control the level of activity, but the regional districts would differ in the relative number of trials of each type of heresy. This local and national features will be exposed

[16]For this reason, its General Council became the second most important political institution in the early modern Spain.The General Council ruled and controlled all inquisitorial activity. The first institution of importance in Spain was the General Council of Castile, which ruled and controlled the Crown of Castile.

[17]The two most important and extensive Spanish kingdoms of the Iberian Peninsula, Castile and Aragon, merged in 1469 with the marriage of the Catholic Kings.

later in the paper when I confront religious and repressive motives of inquisitorial activity.

The intensity of the inquisition activity also varied across time. Historians, see Escandell-Bonet and Perez-Villanueva (2000), have identified five periods of the inquisitorial activity, taking into account the intensity and patterns of the behavior associated with the Inquisition. These periods are as follows: 1478-1519, 1520-1569, 1570-1621, 1621-1700 and 1700-1808. Severe persecution of Judaism characterized the first period of the Inquisition (1478-1519), while the second period (1520-1569) responded to a consolidation phase with the creation of tribunals all over Spain. The third period (1570-1621) saw a persecution increase of Old Christians and also the raise of the persecution against Lutheranism after the conclusion of the Council of Trent (1563). An increase of persecution against Judaism, *judeoconversos* as well as the continuation of repression against Old Christians distinguished the fourth period (1621-1700). The final period (1700-1808) saw a decrease of the overall activity of the Inquisition partially caused by the influence of the French Enlightenment.

3.2 Inquisitorial finances

The control over inquisitorial finances shifted from the Crown to the Inquisition in 1560. Historians distinguish two periods of the evolution of inquisitorial finances defined by who administered them.

1. 1480-1560

    - The Royal treasury administered the Inquisition's finances. The treasury paid all Inquisition expenses (wages, ordinary and extraordinary expenses) and was in charge of collecting confiscations, fines and penalties.

2. 1560-1834

    - The Inquisition had its own treasury, which was completely independent of the Royal treasury. Every district's tribunal independently managed its own finances under the supervision of the General Council of the Inquisition, *La Suprema*.

The primary expenses of the Inquisition were the salaries of the inquisitorial personnel, ordinary expenses (expenses from the ordinary activity of the tribunals) and extraordinary

expenses (construction and repairs costs, cost of feeding prisoners and the cost of the public trials of the Inquisition, called *Autos de fe*).

Regarding revenues, while in the first period the only sources of income were confiscations and fines, in the latter period the treasury of the Inquisition incorporated *censos* and canonries as sources of revenue. Confiscations were monetary punishments imposed on any prisoner convicted of heresy; fines and penalties were payments to allow prisoners who were not proven guilty to avoid "life sentences" or monetary punishments; canonries were the income collected from churches under Inquisitorial control; and *censos* were loans with high interest rates. Additionally, the Inquisition acquired *Juros* (Crown's bonds) from the King, from confiscations or Royal concessions.

One of the possible causes of the change in control over Inquisition's finances is the financial burden of maintaining inquisitorial activity as argued by Millan (1984). I explore this idea in the description of the theoretical framework in the next section.

4 Theoretical Framework

The theoretical framework presented in this section rationalizes why an absolute monarchy, like the Spanish Crown, might adopt an institution like the Inquisition for the purposes of repression: to impose its political ideology and purposes and to stamp out revolt.

This framework describes a mechanism that links wars and inquisitorial activity. The main intuition behind it is that Government's "demand" for repression (inquisitorial activity) was greater during periods of war. Citizens were more likely to revolt when the Crown was at war against other European powers, because external military effort diverted the Crown's attention away from domestic affairs. To prevent internal rebellions, the Inquisition should conduct more trials when Spain was at war than when it was at peace. However, if internal revolts were to happen with certainty, the Inquisition dropped its activity.[18]

The revolt of "Comunidades" (in 1520 in Castile), "Germanias' (in 1520 in Valencia)' and "Alpujarras" (in 1568) are examples of how citizens took advantage of a weak situation (most

[18]The reader may think that a similar mechanism could explain repression in other countries and periods. For example, political repression in Russia under Stalin. Harrison (2008) provides a similar argument to explain Stalin's political repression as a response to external threats.

of the Spanish army was abroad) of the King to organize a revolt. For instance, the conflicts of "Comunidades" and "Germanias' developed during the trip of Charles V to Germany to be crowned Emperor in 1520.[19] The revolt of Alpujarras started when most of the army was in the Netherlands to fight against the Dutch in the 80 years war.

The revolts of Catalonia and Portugal in 1640 provide another piece of anecdotal evidence.[20] At that time, Spain was fighting the Eighty Years War in the Netherlands; the Thirty Years War against France and England, among others; a continuation of the Mantuan War with France, and it was involved in the war in Parma (giving support to the Pope). In this year, the Spanish army was at its largest of any point in the period between 1500 and 1800. Over 120,000 men were fighting wars in Europe. In June of 1640 the Catalans revolted against the King, who had to organize an army from the North of Castile to repress the revolt. In December of the same year, Portugal revolted against Spain. The King tried to send an "improvised" army as he did with the Catalan revolt, but he could not recruit enough men. As a result, the Portuguese recovered their independence.

The aforementioned examples provide anecdotal evidence that there was a latent insurgent activity ready to revolt against the King whenever he did not have a minimum level of internal defence capacity because most of the army was abroad fighting against France, England, Netherlands and the Ottoman Empire to become the greatest Empire in Europe. Consequently, the Spanish King faced a trade-off when increasing his external military effort. A more powerful army increased its relative power with respect to other European states, but it simultaneously increased the probability of an internal revolt.

The objective of the Spanish King, as the one of any other European King at that time, was to become the most powerful state in Europe. To do so, he had to maximize his relative military strength with respect to other European rivals. However, by increasing his army he had to face the costs of an internal revolt. As Gennaioli and Voth (2012) point out, the political fragmentation of Spain faced by Spanish Kings at that time lead to less resources to fight wars. In this paper, I complement their argument. It is not only about economic

[19] Although these conflicts started in 1519 just after the *Cortes* of Santiago, the peak of their activity occurred when the King was outside Spain.

[20] Portugal was a part of Spain between 1580 and 1640.

resources to finance wars, but the threat of an internal revolt also matters. In this sense I also complement their story by showing that the Spanish King used the Spanish Inquisition to prevent such internal revolts to happen and, therefore, be able to fight against his European counterparts.[21]

The theoretical framework captures the trade-off between increasing relative military strength (raising an army) and the threat of internal revolts, and explores the relationship between Spanish external military effort and Inquisitorial activity (targeted at preventing internal revolts).

The Utility of the King is increasing on the relative strength of his army because it represents the relative power of the King versus his European counterparts. However, by raising such an army he faces direct costs of maintaining an army and also a greater chance of internal revolts. I assume that internal revolts diminish the image of power of the King as well as his war resources.

Therefore, the Spanish Crown's utility depends positively on the relative size of the Spanish army with respect to the rest of European armies, and negatively on the direct costs of the army, internal revolts, and costs of inquisitorial activity (repression). I define the costs of internal revolts as the product of the probability that there is an internal revolt $\left(\frac{aw_1}{R+aw_1}\right)$ and its costs to the King, χ.

The King maximizes his utility, U_{king}, by choosing the optimal external military effort, w_1, and the opimal level of repression to prevent revolts, R,

$$U_{king} = \left(\frac{w_1}{w_0}\right)^{\frac{1}{2}} - \mu\, w_1 - \left(\frac{aw_1}{R+aw_1}\right)\chi - \rho\, R \tag{1}$$

where w_1 is the size of the Spanish army; w_0 is the size of the army of the other European states; $\mu\, w_1$ represents the cost of the army; R the level of repression (inquisitorial activity); aw_1 the level of insurgent activity. a indicates the level of response to the missing army in Spain. That is, the larger a the more insurgent activity for a given external military effort and, therefore, the higher the likelihood of an internal revolt. $\rho\, R$ are the costs of employing repression R. χ are the costs of an internal revolt.

[21] Preventing internal revolts can be understood as reducing political fragmentation.

The first expression in equation (1) represents the benefits of the Spanish army, the relative army force of Spain with respect to the European enemies' army. The Spanish King's utility increases with this ratio because a larger relative army will increase the power of Spain in Europe. However, there are decreasing marginal benefits of increasing the Spanish army (holding w_0 constant).

The last three terms in equation (1) describe the costs of raising an army. The first term, μw_1, is the direct costs of maintaining an army. For simplicity, I assume that there are constant marginal costs of maintaining an army. The second term, $\left(\frac{aw_1}{R+aw_1}\right)$, is the probability that there is an internal revolt, which is defined as the ratio of insurgent activity aw_1 divided by the sum of aw_1 and repressive activity (inquisitorial activity) R. Relative repressive activity and insurgent activity determine the likelihood that there is an internal revolt.[22] The King's utility decreases when the probability of an internal revolt increases. I also assume constant marginal costs of inquisitorial activity. Thus, the costs of inquisitorial activity are $\rho\, R$.

This utility captures the two main objectives of the King. First, to become the most powerful European State. Second, any internal revolt could damage the power of Spain.

The first order conditions are the following:

$$\frac{\partial U_{king}}{\partial w_1} = \frac{w_1^{-\frac{1}{2}}}{2w_0^{\frac{1}{2}}} - \frac{aR\chi}{(R+aw_1)^2} - \mu = 0 \tag{2}$$

$$\frac{\partial U_{king}}{\partial R} = \frac{aw_1\chi}{(R+aw_1)^2} - \rho = 0 \tag{3}$$

From these first order conditions we can find the relation between the level of repression and external military effort of the Spanish King.

$$R = \left(\frac{aw_1\chi}{\rho}\right)^{\frac{1}{2}} - a\, w_1 \tag{4}$$

From equation (4) we observe that the level of repressive activity (Inquisition trials) will increase with Spanish external military effort as long as $w_1 < \frac{\chi}{4a\rho}$. Once this threshold

[22] This is a common functional form for the probability of winning a conflict in the conflict resolution literature. See Alesina Spolaore (2004), Tullock (1980) and Hirshleifer (1990). The likelihood of winning a conflict depends on the relative investment of each of the parts involved in the conflict.

is surpassed, inquisitorial activity will decrease,[23] which implies an inverse-U relationship between external military effort and repressive activity.

Intuitively, when the external military effort is low, repressive activity is larger than insurgent activity and, thus, the likelihood of an internal revolt will be low. However, when external military effort is too high, repressive activity becomes relatively smaller relative to insurgent activity and, therefore, the likelihood of an internal revolt increases. In the extreme case, the likelihood of an internal revolt will be close to 1 and repressive activity (at any level) cannot prevent an internal revolt.

The threshold ($w_1 < \frac{\chi}{4a\rho}$) is determined by the marginal cost of repression (ρ) and the propensity towards insurgent activity (a). When insurgent activity is less reactive to external military effort (a is low) and the marginal cost of repression, ρ, is low, the King will be able to recruit a large army without fearing that repressive activity is relatively weak with respect to insurgent activity. When the opposite happens, ρ and a are large, the King will be able to recruit a much smaller army without an internal revolt. In this sense, the King is constrained when deciding the size of his army.

It is interesting to note that we can relate finance control and inquisitorial behavior. As seen in Section 3.2, The Spanish Kings maintained control of inquisitorial finances until 1560, when the Inquisition took over. As a consequence, the King beared lower inquisitorial activity costs. One way to incorporate this in the framework is decreasing ρ after 1560. Holding everything else constant, a decrease in ρ means the King was able to form a larger army without the fear of a decrease in internal repressive activity.

In fact, in 1560, the size of the Spanish army was at its maximum of the period 1478-1560. After 1560, the size of the army increased in some years to more than double its maximum size prior 1560. Figure 4 shows the relation between the size of the army and inquisitorial activity before and after 1560. It shows how after the Inquisition took control of its own finances, which decreased repression costs for the King, Spain was able to expand the size of its army without the fear of a decrease in repressive activity. In fact, the Inquisition did increase its activity. In both scenarios we observe an inverse-U relationship between inquisitorial activity

[23] Note that $\frac{\partial R}{\partial w_1} = \frac{1}{2}\left(\frac{a\chi}{\rho\, w_1}\right)^{\frac{1}{2}} - a$

and external military effort, consistent with the main prediction of the framework.

In summary, there are three predictions of the framework: (i) there exists an inverse-U relationship between inquisitorial intensity and wars; (ii) when the King gives the control of inquisitorial finances to the Inquisition, he can increase the size of his army; (iii) the likelihood and intensity of an internal revolt increases once inquisitorial effort drops.

Figure 8 shows prediction (i). The solid line shows the fitted values of the relationship between army size (on the x-axis) and inquisitorial activity (on the left y-axis). We can see an inverted-U shape relationship. The dashed line represents the fitted values of the relationship between army size and an internal revolt index (on the right y axis). We can be observe how these revolts increase when inquisitorial activity decreases and the size of the army is large.

Figure 6 depicts the second prediction of the framework: the number of wars increased once the Inquisition took control of its own finances. The line describes inquisitorial intensity and the bars represent the number of wars in which Spain was involved. This same analysis can be performed using the data presented in Figure 7, which shows the size of the army fighting wars instead of number of wars.

The Revolt of the Catalans in 1640 provides anecdotal evidence of the theoretical predictions. Just prior to 1640, we can see in Figure 6 how inquisitorial intensity increased jointly with the number of wars (and/or their intensity), but as soon as the quantity of wars reached its maximum in 1640, inquisitorial effort declined and Catalans revolted.

5 Data

To empirically evaluate the three predictions of the theoretical framework, I bring together time series data from Spanish inquisitorial districts with available information on trials and information about wars in which Spain was involved. Moreover, to control for adverse weather and economic shocks, I use data on the severity of the weather, as described by an index of rainfall anomalies, wages and wheat prices. Below I present the sources of information for each of these types of data in detail.

5.1 Inquisition Data

5.1.1 Trials

Inquisitorial districts sent monthly activity reports to *La Suprema*, which controlled the activity, procedures and finances of all districts. Therefore, there were two copies of each Inquisitorial district activity report: one was kept in each Inquisitorial district and the second was located in Madrid, where *La Suprema* met every weekday. Some of the archives of the sees are still available, such as Barcelona Archives, which are held in the *Arxiu de la Corona Catalano-Aragonesa* in Barcelona. However, most of them were lost, burned or destroyed. Fortunately, most *La Suprema* archives can be consulted iat the National Historical Archives in Madrid.

Historians have studied these archives and published books, articles and catalogues about Inquisitorial activity (trials). The first catalogue about the Inquisiton trials (for the district of Toledo) was published in 1903 by Vicente Vignau. In 1982, Perez Ramirez published the catalogue of Cuenca after completing a version written by Cirac Estopañan in 1965. Several years later, Blazquez Miguel published the catalogues of Murcia and Barcelona in 1987 and 1990, respectively. Contreras (1982) and Carcel (1980) and Carcel (1976) contain the lists of trials in Galicia and Valencia, respectively. I use the aforementioned trial records to assemble the time series data including the number of trials and inquisitorial intensity (trials per ten thousand of inhabitants) per year and for the seven districts for which I have information: Barcelona, Valencia, Galicia, Murcia, Cuenca, Granada and Cordoba.

In addition, I build a dataset containing individual data of 35,000 trials from the following five districts: Barcelona, Valencia, Murcia, Cuenca and Toledo from the aforementioned sources. These published trial records contain the names of the accused, the name of the village where they lived, year of trial, the charges and the final sentence. In some cases, there is information about the defendant's occupation and nationality.

5.1.2 Finances

I match the trials data with detailed information on the Inquisition revenues and expenses. Millan (1984) is the most extensive work on the finances of the Spanish Inquisition. It describes

all sources of revenues and expenses of the Inquisition from 1560 to 1700. That is, information on confiscations, fines and penalties, *juros* and *censos*, regarding revenues; and information on wages, ordinary and extraordinary costs, regarding expenses.

5.2 Population Data

The data on Spanish population comes from several sources: the Census of 1591, Censo de Floridablanca, Nadal (1974), and Contreras , Cerrillo Cruz, Garcia Carcel and Salomon (1964). Missing year data are calculated by linear extrapolation of actual data.

5.3 Weather Data

Unfortunately, actual weather conditions were not recorded during the period under study. I use instead a proxy for yearly rainfall anomalies measured by the intensity of ecclesiastical rogations for rain, from Barriendos and Martin-Vide (1998) and Barriendos and Rodrigo (2008)). Rogation's intensity levels range from one to five depending on the intensity of activities involved in each rogation. Level 1 would consist of a simple prayer for rain, while level 5 involved a procession of the local religious community to the nearest mount. The annual index is defined by the yearly sum of the level of every rogation episode.

5.4 Wars and Internal Revolts Data

I use data on wars in which Spain was involved in a given year between 1490 and 1820 obtained from Levy (1983) and Kiser, Drass, and Brustein (1995). Moreover, I use data on the size of the Spanish army as a proxy for war intensity, obtained from Sorokin (1937). The author describes the number of men who were fighting in several wars for Spain.

I use the information about internal revolts contained in Sorokin (1937) as well. There is information about the existence of an internal revolt in a given year and an index of its intensity. This index, which goes from 0 to 100, is calculated through a geometric average of four elements: the extent of the area of the revolt, the population involved, its duration, and the amount of violence. For example, the French Revolution has an index of 79.43, the revolt of the Catalans in 1640 an index of 26.50 and the conflict of *comunidades* in 1520 an index of 34.20.

5.5 Village Information

I use the *Catastro de Ensenada* (1749) to classify villages into three different types. Villages can be classified as *Realengas* if they belonged to the King; *de Señorío* if they belonged to a Noble; or *Eclesiásticas* or *Abadengas* if they were under Church's jurisdiction. *Catastro de Ensenada* contains information about village characteristics in 18th century Castile, and it includes a specific question asking about the type of village.[24] This survey only covers Castilian territory. The classification for Catalonia is based on Bautista-Golobardas (1831) and Frigola (1824). To obtain Valencia's classification, I use data from Miñona and Bedoya (1826) and Madoz (1848). Finally, if the villages could not be classified with the above mentioned sources, I went through the city hall's websites.

6 Empirical Strategy

To test the prediction of the framework that states that there is an inverse-U relationship between war intensity and inquisition intensity (trials per 10,000 inhabitants), I estimate the following model:

$$\begin{aligned} intensity_{it} =& \beta_0 + \beta_1\, f(t) + \beta_2\, wars_t + \beta_3\, wars_t^2 + \beta_4\, droughts_{it} + \\ &+ \beta_5\, spillover_{it-1} + \beta_6\, D_{jt} + \mu_i + \epsilon_{it} \end{aligned} \tag{5}$$

where $intensity_{it}$ is the number of trials per 10,000 inhabitants in district i at time t; $wars_t$ is the size of the Spanish army in war at time t; $droughts_{it}$ represents the severity of the weather in district i at time t; μ_i denotes district fixed effects, and D_{jt} are three sets of dummies for 5 years prior and after the expulsion of the *Moriscos*, and the expulsion of the Jews and for years after the French Revolution. I also control for a cubic time trend ($f(t)$).

In addition, I include yearly wheat prices and a droughts index at the district level to control for further time-varying factors that may create local conflicts that require inquisitorial intervention. Miguel (2005) and Oster (2004) show that severe weather conditions can cause witchcraft episodes. Berger and Spoerer (2001) show that wheat prices, as a proxy for "shortfall of food supply", can predict revolutions.

[24] Figure 9 shows this question (2) of the survey for Albacete, whose representatives said that the village belonged to the King.

Finally, I include lagged intensity of the Inquisition in the subdivision of a particular district (excluding the district under analysis) to control for spillover effects. That is, the number of trials per 10,000 inhabitants at time $t-1$ in the subdivision of the district under analysis. For example, if a neighborhood district persecuted witches in the previous period, the district under analysis might pursue more witchcraft trials because of peer effects.

If the empirical results are consistent with the first prediction of the framework, our coefficients of interest β_2 and β_3 will be positive and negative, respectively. This implies an inverse-U shaped relationship between the number (or intensity) of wars and inquisitorial intensity. That is, the size of the army fighting wars abroad increases inquisitorial intensity until the former hits a threshold, after which inquisitorial intensity decreases with the size of the army.

One may wonder that the repressive mechanism might have been relevant in those districts that were more likely to initiate a revolt. For this reason, I complement my analysis with a time series model for each of the districts.

6.1 Results

Table 4 shows the results for the Panel Data Analysis of the effects of army size on the activity of the Spanish Inquisition. In all specifications, our main coefficients of interest β_2 and β_3 are significantly positive and negative, respectively, indicating an inverse-U relationship between army size and inquisitorial intensity. Moreover, the magnitude of the coefficients is consistent across all specifications and both coefficients are jointly significant in most models, except 3 and 4. These results support the first prediction of the framework and are robust to the most conservative specification in column (6) as well as to the inclusion of Inquisitor's and inquisitorial periods' fixed effects.

Table 5 shows the results when clustering at the year level (column 1), correcting standard errors for contemporaneous correlation across districts (column 2) and correcting for both contemporaneous correlation and heteroskedasticity (column 3). Previous results are robust to these corrections. I cluster at the year level because the size of the army just varies across time and not across districts. Correcting by heteroskedasticity and contemporaneous correlation allows me to increase the precision of my estimates. Although the joint test in column 2 do

not let us reject that both army coefficients are jointly significant, we can observe that this is the case for the other two columns. Moreover, the magnitude of the coefficients do not change and do not differ significantly from the results in Table 4, supporting the hypothesis of an inverse-U relationship between war intensity (size of the army) and inquisitorial intensity (trials per 10,000 inhabitants).

I repeat the analysis collapsing all information by decades. Table 6 shows the result of the panel analysis where each observation refers to a district in a particular decade. The results support the quadratic relationship between inquisitorial activity and war activity.

These results support the hypothesis of a repressive tool. When more resources are diverged from internal control, the likelihood of an internal revolt increases; thus, the Inquisition would increase its intensity to prevent it. However, when too many resources are diverted, a high level of inquisitorial intensity would not stop a revolt; thus, intensity of inquisitorial activity drops.

To investigate whether there is any inquisitorial district that is driving the results, I repeat the analysis using time series analysis separately for each district. Table 7 shows that Barcelona, Granada and Valencia appear to drive the results. This result is not surprising, as those were the areas that carried out most of the revolts against the Spanish Crown during the period under analysis. Moreover, the Kings might be especially concerned about those regions because they had been historically more belligerent than their counterparts. Granada was the source of Muslim discontent and Barcelona was the capital of Catalonia, where two of the most important revolts took place in 1640 and 1714.

To summarize, I find consistent evidence of a significant quadratic relation between number of wars and intensity of the Inquisition. In particular, the marginal increase of the Spanish Inquisition intensity is higher when war activity is not too high. However, when wars reach a certain threshold inquisitorial intensity decreases. This would correspond to the first prediction of the theoretical framework, emphasizing the role of the Inquisition as a repressive tool of the Spanish Crown.

6.2 Religious Persecution or Repression?

Tables 8 and 9 respectively show the total number of trials and relative activity for each type of accusation sorted by districts. Panels A to E show inquisitorial activity in the five historical periods described in section 3. Panels F show activity for the whole period of the Inquisition, between 1478 and 1808. We observe that trials involving Lutheranism, Islam and Judaism together represent slightly less than 50% of the total trials carried out by the Inquisition (see Panel F of Table 9). Therefore, motivations for inquisitorial activity were not purely religious. In fact, trials against other religions are carried out more importantly during the first years of the Inquisition and in certain districts as Valencia and Murcia. Moreover, different districts have one common objective, Judaism, and a more specific objective. For example, we can see in Panel F in Tables 8 and 9 that Barcelona had more trials involving Lutheranism than Granada in both absolute and relative terms; in Panel F in Tables 8 and 9, we can see that Valencia had more trials involving Islam than Barcelona. Therefore, district characteristics determined the type of inquisitorial trials that each region experienced. Possible explanations for the differences across districts are the distance to the rest of Europe (for a higher activity regarding Lutheranism), and the initial population associated with each of the "heresies". For example, Valencia had one of the highest concentrations of *Moriscos*, and that is reflected with a greater number of inquisitorial trials involving Islam.

Therefore, these tables suggest that inquisitorial activity may have had different motivations across time and across districts as well. To analyze if repression was one of these motivations, I will use the whole dataset of 35,000 individual trials and its classification. I run a Multinomial Logit to observe if the trials on some "heresies" responded to an increase in foreign war intensity. The description of this process is the following:

Each unit of observation $(x_i, charge_i)$ is a random draw from the population of trials across regions and time, where i is a trial and charge=others, Judaism, Islam, Lutheranism, Bigamy, Blasphemy. x includes a constant, the year when the trial occurred, a dummy for the region where the trial happened, wheat price, army size and the interaction terms between region and army size and year. The errors are i.i.d. with Weibull distribution and, therefore, the response probabilities are:

$$\Pr(\text{charge}_i = j|x) = \frac{exp(x\beta_j)}{1+\Sigma_{m=1}^{J} exp(x\beta_m)} \tag{6}$$

for all $j = Judaism, Islam, Lutheranism, Bigamy, Blasphemy$, and

$$\Pr(\text{charge}_i = others|x) = \frac{1}{1+\Sigma_{m=1}^{J} exp(x\beta_m)} \tag{7}$$

Tables 10 and 11 present the marginal effects on the probability of having a trial with charge j. The expression is the following (example: army size):

$$\frac{\partial Pr(charge_i = j|x)}{\partial x_{i,armysize}} = Pr(charge_i = j|x)\left[\beta_{j,armysize} - \frac{\Sigma_{m=1}^{J}\beta_{m,armysize} exp(x\beta_m)}{1+\Sigma_{m=1}^{J} exp(x\beta_m)}\right] \tag{8}$$

If repression is one of the motivations of inquisitorial activity, trials of religious "heresies" (Islam, Judaism and Lutheranism) should decrease with wars (or their intensity). However, the likelihood of the rest of charges should increase with wars (or their intensity). The reason for that increase is that charges that are not against other religions would be expected to respond to the demand for repression, given the distraction caused by foreign wars, whereas charges against other religions would respond more strongly to religious motives.

Table 10 shows that trials against other religions decreased with the size of the army. In particular, an army of 10,000 men is associated with a 1% decrease on the probability of being tried against Judaism, Islam or Lutheranism. Moreover, the probability of being accused of Judaism decreases with time. This result suggests that trials against other religions were particularly significant during the early stages of the Inquisition. In later periods, it persecuted Catholic citizens. The results show that there was a change in the goal of the inquisitorial activity over time. While in early stages the Inquisition persecuted non-Catholic religions, repression seems to explain inquisitorial activity later on because of its persecution of Catholic citizens. Finally, I also run a Multinomial Logit to see how a change in the size

of the army affects the probability of being tried in a village under the King's jurisdiction or in a village under the jurisdiction of a member of the church or a noble (Lord). Because the most important revolts in Spain started in villages that the King did not control (e.g., *Germanias* in Valencia and *Comunidades* in Castile), I expect an increase in the size of the army abroad to be associated with an increase in the probability of being tried in a village that was not controlled by the King. In other words, the King would like to increase repression in the villages where he did not have direct control.

Results in Table 11 show that villages that were under the jurisdiction of a Lord or the Church are associated with a higher probability of having a trial due to an increase in the size of the army. However, army size had a negative impact on the probability of being subjected to a trial in villages that belonged to the Crown. Therefore, results show a higher demand for repression in villages where the King had less control.

6.3 War, Inquisitorial finances and Trials

The relationship between wars, finances and inquisitorial activity may raise still another reasonable doubt: an increase in inquisitorial intensity could be due to a greater need for the Spanish Crown to finance its wars. If this were the case, we would observe a positive correlation between inquisitorial activity and inquisitorial revenues.

In this section first I explore if the activity of the Inquisition (i.e. trials) is related to inquisitorial revenues. Second, I analyze if an increase in inquisitorial activity could be due to a greater need for the Spanish Crown to finance wars.

Table 12 shows the results of a simple regression of sources of inquisitorial revenue as confiscations, *censos* and canonries on the size of the Spanish army. Table 13 show correlations between army size, trials and inquisitorial revenue variables. We observe that neither army size nor trials are positively correlated to an increase in inquisitorial revenues. Actually, results show a negative relation: the greater the number of trials and the intensity of war, the less inquisitorial revenues.

Tables 14 and 15 show that confiscations and other sources of revenues are not related either to the activity of the inquisition or to war activity. They show the results at a national

(column 1) and at a district level of regressing confiscations or other sources of revenues on the number of trials as well as on the size of the Spanish army. The sign of the coefficients on both war activity and trial activity is not positive, as we would expect if the Inquisition was carrying on trials to extract wealth from population. In fact, These results suggest that the sources of revenue of the Inquisition are not related to the need of financing the wars of the Spanish King. Moreover, trial activity is not related to revenues. Granada appears to be the only district in which there is a positive and significant relationship between trials and revenues.

These simple correlations suggest two things. First, the Inquisition did not increase its activity to obtain an increase in its revenues. Therefore, inquisitorial trials do not appear to be income motivated, as Llorente (1822) proposed. Second, army size did not increase inquisitorial revenues. Thus, it does not appear that the Inquisition increased its revenues in order to pay for the wars that the Spanish Crown was fighting. This excludes the possible argument that suggests that the Inquisition increased its activity in order to finance Spanish wars. In fact, the opposite can be observed: when the intensity of the wars increased, the Inquisition experienced a decrease in its revenues. Therefore, these results support the role of the Inquisition as a government tool for repression.

7 Conclusions

This paper shows strong evidence that the Inquisition was a repressive tool of the Spanish Crown. Using both theoretical and empirical evidence, I show an inverse-U relationship between wars and inquisitorial activity. The Inquisition can supply the repression sought by the King as long as his external military effort is low enough. However, when an internal revolt will occur with certainty (external military effort is too large), the Inquisition will decrease its activity.

In addition, I show that religious persecution was one of the primary motivations for the Inquisition during its early stages. However, repression better explains its behavior later on. Although the Spanish Inquisition was initially created to persecute religions other than Catholicism, later on the Spanish Kings realized they could use it as a repressive tool. Finally,

I show suggestive evidence that the Inquisition was not an extractive tool to finance Spanish King's wars.

Explaining the motivations behind inquisitorial activity sheds light on the institutional framework of Spain, the Inquisition, and its development in early modern Spain as well as on the mechanisms through which a repressive institution affects long-term economic performance. If the Inquisition had a negative impact in the long term, it is important to discern what kind of institution it was to explain how it affected economic development. From the results showed in the paper, it does not seem that the Inquisition could have affected Spanish economic development due to its effects on secure property rights. However, it might have affected Spanish development through trust and a lack of innovation.

Given the nature of inquisitorial trials, accusations always remained anonymous, levels of interpersonal trust and levels of trust on institutions might have been negatively affected. Poor levels of trust are identified by Nunn and Wantchekon (forthcoming) to directly affect economic performance in the long-run. Given the inquisitorial repression of other religions as well as of ideas that differed from the established ones, one may think that the level of Spanish creativity may have been harmed. Poor creativity would be linked to poor levels of innovation, which may have hindered Spanish development in long-run.

Although plausible, these explanations are just mere hypotheses. Therefore, further research should address first if the Inquisition harmed Spanish economic development and, second, if trust and innovation are two possible channels of this effect.

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Figures

Figure 1: Witchcraft and Inquisition Trials in Europe

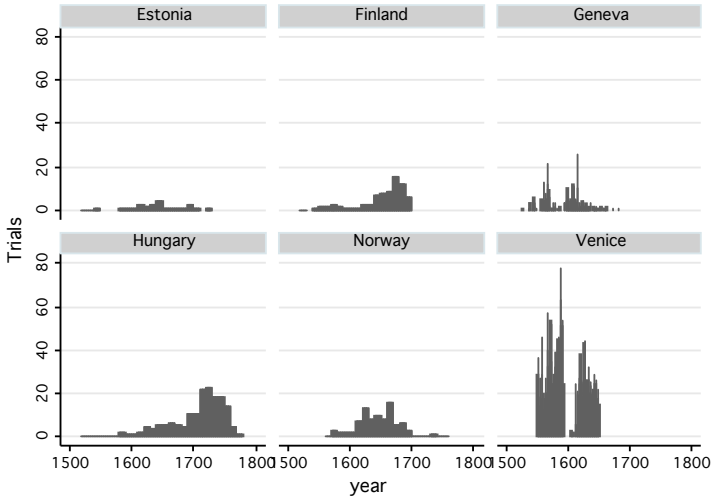


Figure 2: Inquisition Trials in Spain

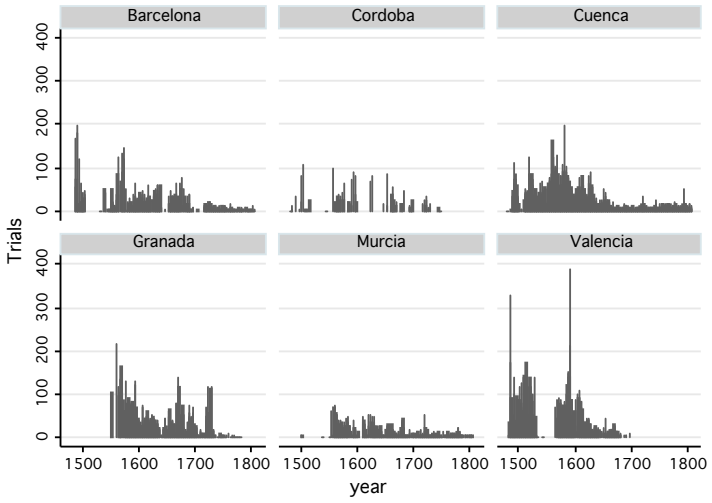


Figure 3: Witchcraft and Inquisition Intensity in Europe

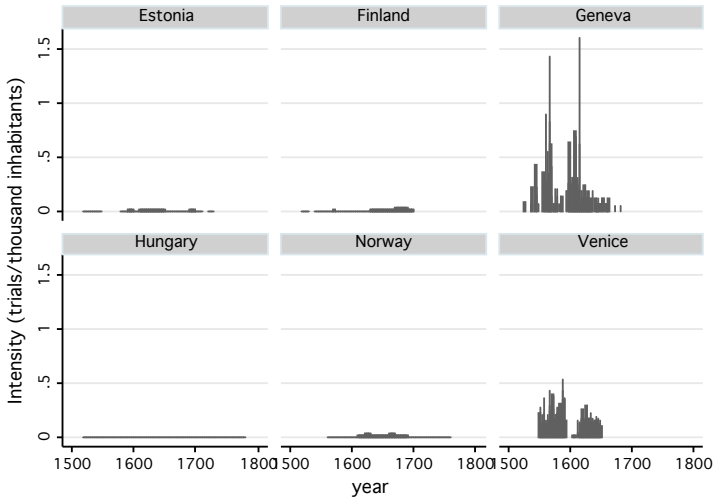


Figure 4: Inquisition Intensity in Spain

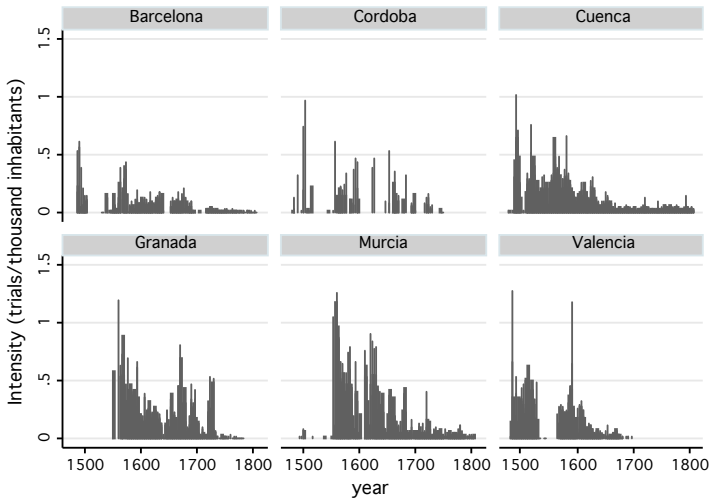


Figure 5: Districts of the Spanish Inquisition

Districts under Aragonese subdivision are in grey. White districts belong to Castilian subdivision.
Source: Contreras and Henningsen (1986)

Figure 6: Wars and Inquisitorial Activity

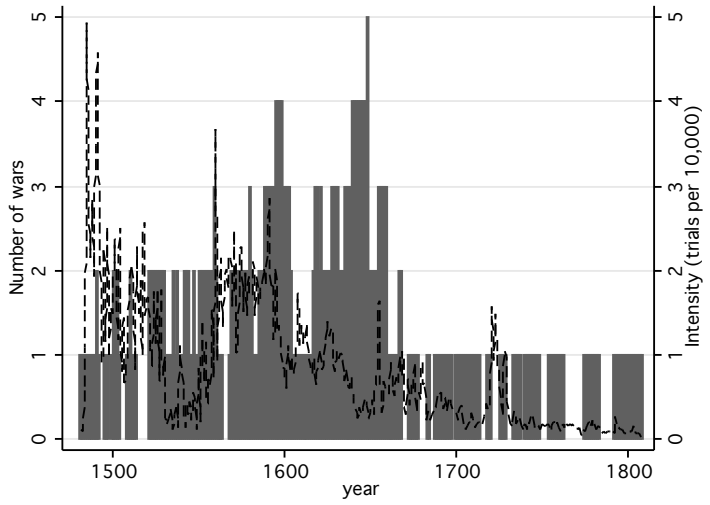


Figure 7: Army Size and Inquisitorial Activity

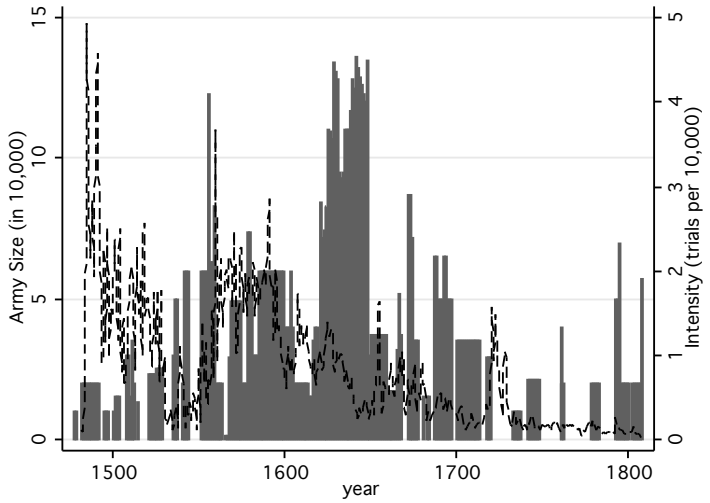


Figure 8: Army Size and Inquisitorial Activity

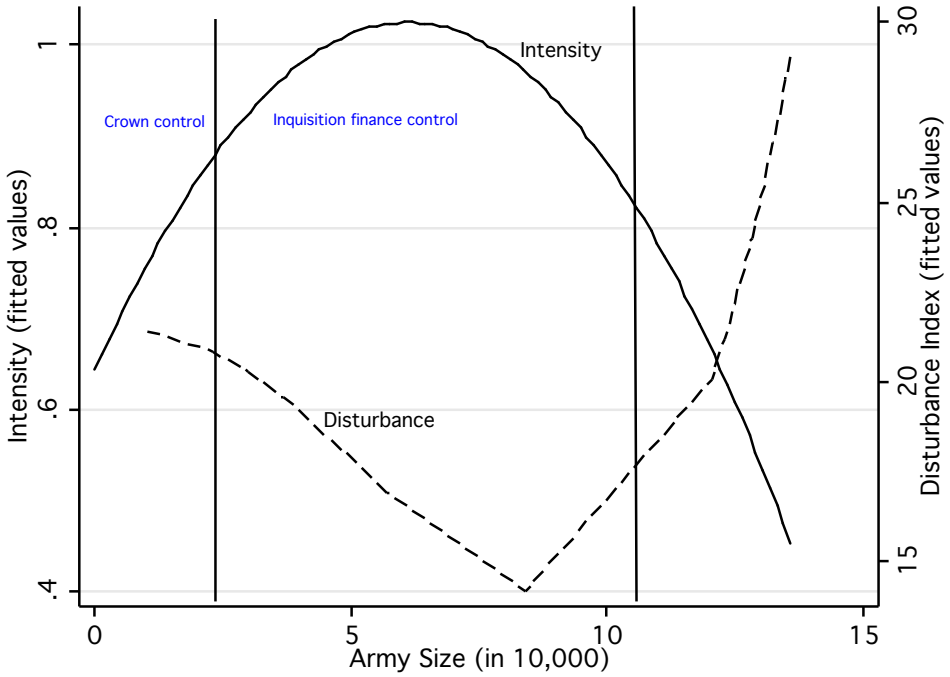


Figure 9: Catastre of Ensenada

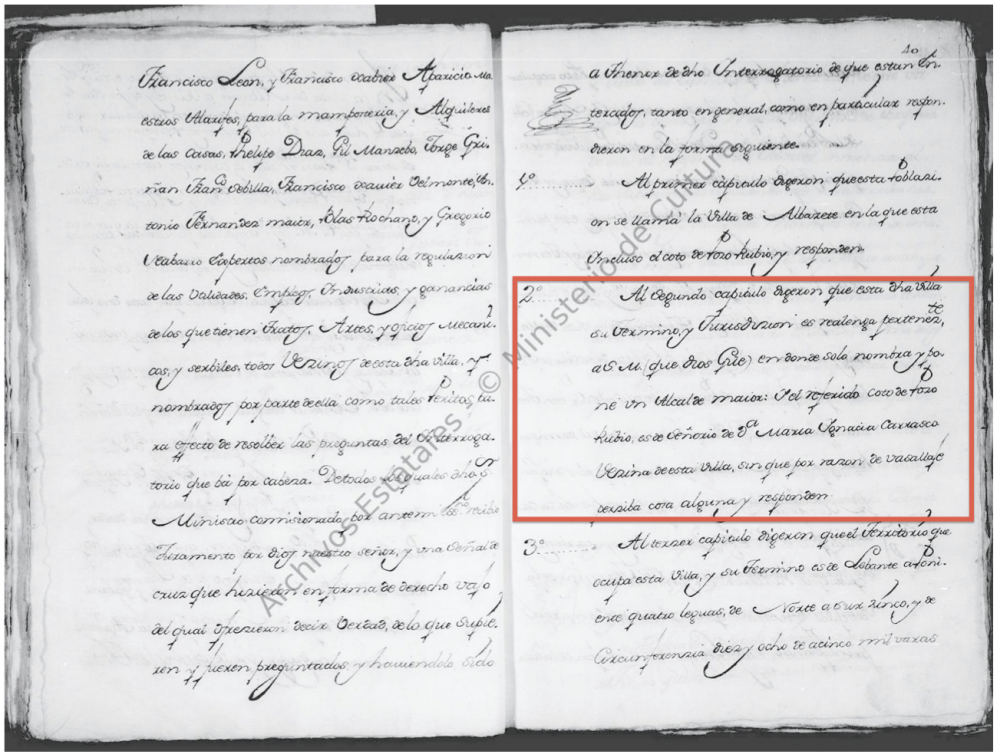


Figure 10: Regional Inquisitorial Activity

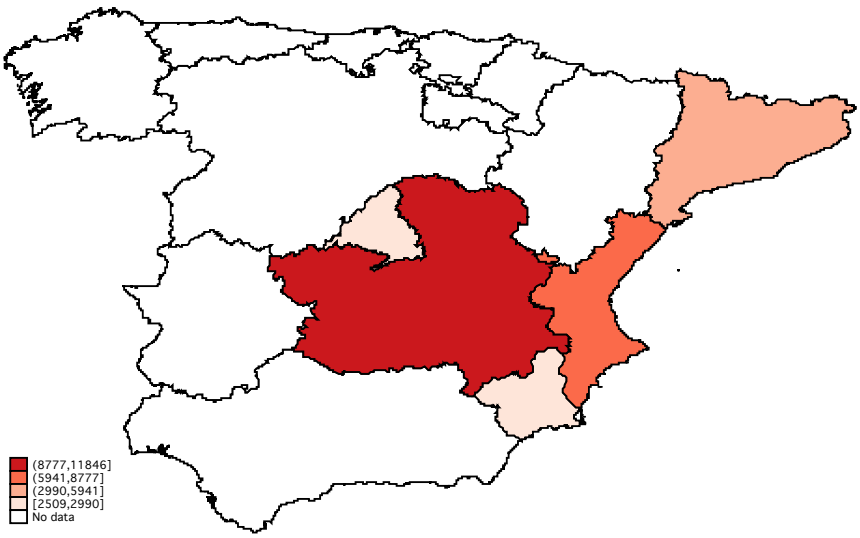
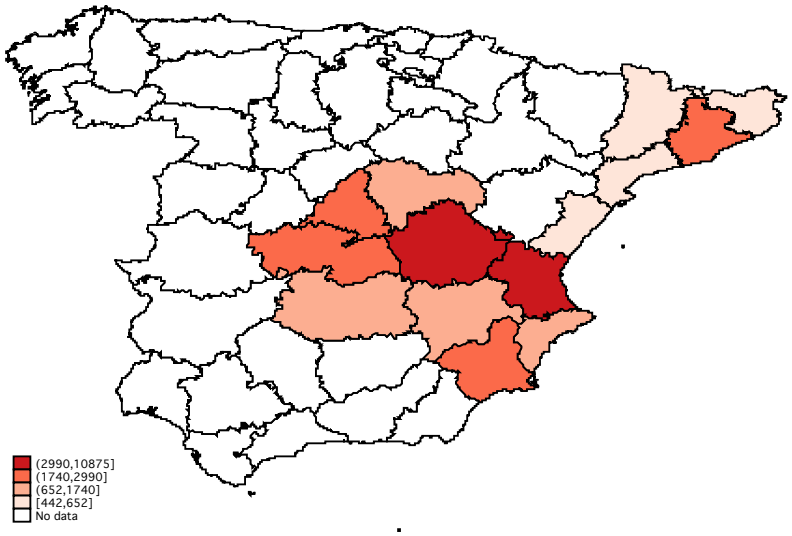


Figure 11: Province Inquisitorial Activity



Tables

Table 1: European Tribunals Activity

Tribunal	Period	Trials	Trials/year	Executions
Spanish Monarchy	1540-1700	49,092	305	3%
Venetian Inquisition	1541-1592	1,560	30	1%
Toulouse Parliament	1500-1560	1,074	18	6%
Bordeaux Parliament	1541-1559	477	25	4%
Chambre Ardente (Paris)	1547-1550	557	139	7%
Coimbra Inquisition	1567-1631	3,837	59	7%

Source: Parker (1982).

Table 2: Typology of trials

Heresy / District	Barcelona	Cordoba	Cuenca	Galicia	Granada	Murcia	Valencia	Spain
Religious Trials	0.390	0.448	0.329	0.339	0.503	0.405	0.699	0.467
Judaism	0.207	0.359	0.260	0.206	0.279	0.201	0.346	0.271
Islam	0.039	0.080	0.059	0.036	0.224	0.204	0.323	0.161
Lutheranism	0.144	0.009	0.010	0.097	0.000	0.000	0.030	0.035
Non-religious trials	0.610	0.552	0.671	0.661	0.497	0.595	0.301	0.533
Bigamy	0.059		0.022			0.060	0.009	
Blasphemy	0.042		0.096			0.066	0.026	
Superstition	0.096	0.025	0.050	0.063	0.064	0.052	0.043	0.057

Table 3: Inquisition intensity and wars

	War=0	War=1	War=2	War=3	War=4
Spain	0.610	0.675	1.226	1.069	0.720
	(0.635)	(0.795)	(0.805)	(0.578)	(0.568)
Barcelona	0.230	0.420	0.764	0.857	0.275
	(0.535)	(0.846)	(1.150)	(0.466)	(0.373)
Murcia	0.854	0.921	1.984	2.563	2.031
	(1.539)	(1.951)	(2.891)	(2.478)	(1.466)
Cuenca	0.919	0.986	1.977	1.411	0.768
	(1.534)	(1.481)	(1.481)	(0.733)	(0.327)
Cordoba	0.258	0.232	0.631	0.361	1.000
	(0.551)	(0.951)	(1.471)	(1.173)	(1.747)
Valencia	0.585	0.680	1.438	1.620	0.902
	(1.273)	(1.605)	(1.538)	(2.454)	(0.850)
Galicia	0.088	0.078	0.213	0.351	0.259
	(0.256)	(0.216)	(0.313)	(0.294)	(0.185)
Granada	0.812	0.965	1.772	2.027	1.653
	(1.694)	(1.546)	(2.405)	(1.320)	(1.787)
Obs	66	155	67	30	12

Standard deviations in parentheses.

Table 4: Inquisitorial Activity and Spanish War Intensity

Dependent variable: Inquisitorial intensity (trials per 10,000 inhabitants)						
	(1)	(2)	(3)	(4)	(5)	(6)
Army Size (10,000)	0.112**	0.123**	0.114*	0.128*	0.076**	0.114
	(0.042)	(0.046)	(0.049)	(0.057)	(0.029)	(0.084)
Army Size squared	-0.009**	-0.010*	-0.010*	-0.011*	-0.007**	-0.012*
	(0.004)	(0.004)	(0.004)	(0.004)	(0.002)	(0.005)
Droughts		Yes	Yes	Yes	Yes	Yes
Jewish expulsion			Yes	Yes	Yes	Yes
Moriscos expulsion			Yes	Yes	Yes	Yes
French Revolution			Yes	Yes	Yes	Yes
Spillover effects				Yes	Yes	Yes
Lagged intensity					Yes	Yes
Wheat prices						Yes
Mean Intensity	0.8	0.8	0.8	0.8	0.8	0.8
Joint test	3.87	7.80	2.90	2.92	4.42	9.42
$Prob > \chi^2$	0.083	0.020	0.146	0.144	0.078	0.020
Observations	1,855	1,590	1,590	1,433	1,433	657
R-squared	0.185	0.167	0.181	0.158	0.313	0.294

Robust standard errors in parentheses, adjusted for clustering at the district level. All columns include cubic time trend, as well as district fixed effects.

Table 5: Inquisitorial Activity and Spanish War Intensity

Dependent variable: Inquisitorial intensity (trials per 10,000 inhabitants)			
	(1)	(2)	(3)
Army Size (10,000)	0.076*	0.076	0.076*
	(0.039)	(0.047)	(0.039)
Army Size squared	-0.007**	-0.007*	-0.007**
	(0.003)	(0.003)	(0.003)
Droughts	Yes	Yes	Yes
Jewish expulsion	Yes	Yes	Yes
Moriscos expulsion	Yes	Yes	Yes
French Revolution	Yes	Yes	Yes
Lagged intensity	Yes	Yes	Yes
Spillover effects	Yes	Yes	Yes
Mean Intensity	0.8	0.8	0.8
R^2	0.313	0.313	0.313
Obs	1433	1433	1433
Joint test	3.83	3.98	5.59
$Prob > \chi^2$	0.023	0.137	0.061

Corrected standard errors in parentheses. All columns include cubic time trend, as well as district fixed effects.

Table 6: Decade Panel

Dependent variable: Inquisitorial intensity (trials per 10,000 inhabitants)				
	(1)	(2)	(3)	(4)
Army Size	0.327**	0.834***	0.273*	0.072
	(0.157)	(0.222)	(0.162)	(0.045)
Army Size Squared	-0.002	-0.006***	-0.002	-0.001
	(0.001)	(0.002)	(0.002)	(0.001)
Droughts		Yes	Yes	Yes
Moriscs expulsion		Yes	Yes	Yes
Jewish expulsion		Yes	Yes	Yes
French Rev		Yes	Yes	Yes
Council Trent		Yes	Yes	Yes
Lagged intensity			Yes	Yes
Wheat Price				Yes
Mean Intensity	0.8	0.8	0.8	0.8
Joint test	7.06	17.44	4.97	2.76
$Prob > \chi^2$	0.0293	0.0002	0.0834	0.256
Obs	238	204	198	91

Standard errors clustered at the district level. All columns include cubic time trend, as well as district fixed effects. (*** p<0.01, ** p<0.05, * p<0.1)

Table 7: Inquisitorial activity and Spanish war intensity: Time Series

Dependent variable: Inquisitorial intensity (trials per 10,000 inhabitants)							
	Spain	Cordoba	Granada	Cuenca	Murcia	Valencia	Barcelona
Army Size (10,000)	0.052*	0.051	0.225**	-0.017	-0.054	0.203*	0.141**
	(0.031)	(0.074)	(0.094)	(0.055)	(0.123)	(0.110)	(0.069)
Army Size squared	-0.004*	-0.005	-0.021***	0.001	0.005	-0.017**	-0.012**
	(0.002)	(0.006)	(0.007)	(0.004)	(0.009)	(0.008)	(0.005)
R^2	0.599	0.079	0.341	0.608	0.307	0.430	0.276
Obs	263	257	263	263	263	191	191
Joint test	1.469	0.455	4.709	0.049	0.213	2.258	2.577
$Prob > F$	0.232	0.635	0.01	0.952	0.808	0.107	0.079

Standard errors in parentheses. All columns include cubic time trend, as well as spillover effects, droughts index and lagged intensity. (*** p<0.01, ** p<0.05, * p<0.1)

Table 8: Classification of Trials per Heresy and District

Panel A. From 1478 to 1520

	Barcelona	Cordoba	Cuenca	Galicia	Granada	Murcia	Valencia	Spain
Trials	1142	297	1170	0	0	12	3244	5865
Religious Trials	1133	10	991			12	3105	5251
Judaism	1131	10	983			12	3091	5227
Islam	2	0	8				12	22
Lutheranism	0	0	0				2	2
Non-religious trials	3	287	44	0	0	0	17	351
Bigamy	2	0	0				2	4
Blasphemy	0	0	17				4	21
Superstition	1	0	27				11	39
Others	0	287	0					287

Panel B. From 1520 to 1570

	Barcelona	Cordoba	Cuenca	Galicia	Granada	Murcia	Valencia	Spain
Trials	686	217	2682	237	1020	607	1053	6502
Religious Trials	211	17	1004		767	405	126	2446
Judaism	0	1	809		69	282	0	1163
Islam	47	11	134		598	0	95	1008
Lutheranism	164	5	61		0	123	31	275
Non-religious trials	522	200	1678	237	253	202	927	4056
Bigamy	58	0	103	49		38	6	254
Blasphemy	57	0	259	132		23	19	490
Superstition	14	0	48	6	2	3	3	76
Others	393	200	1268	50	251	138	899	3236

Panel C. From 1570 to 1621

	Barcelona	Cordoba	Cuenca	Galicia	Granada	Murcia	Valencia	Spain
Trials	1631	602	2969	1153	2714	1080	3725	13874
Religious Trials	349	336	614	237	1092	517	2910	6055
Judaism	5	189	170	129	352	81	21	947
Islam	70	137	413	3	740	436	2732	4531
Lutheranism	164	5	61		0	123	31	577
Non-religious trials	1282	267	2355	916	1622	563	815	7819
Bigamy	124		57			37	29	247
Blasphemy	112		391			120	149	772
Superstition	152	15	114	28	30	31	76	446
Others	892	252	1793	888	1592	375	561	6353

Panel D. From 1621 to 1700

	Barcelona	Cordoba	Cuenca	Galicia	Granada	Murcia	Valencia	Spain
Trials	1657	602	1592	815	2800	1390	1025	9881
Religious Trials	469	380	431	493	1337	560	185	3859
Judaism	23	378	424	323	1274	318	15	2755
Islam	93	2	4	76	67	242	85	569
Lutheranism	353	0	3	94	0	0	85	535
Non-religious trials	1188	222	1161	322	1463	830	820	6022
Bigamy	93		22			71	41	229
Blasphemy	62		158	23		98	63	394
Superstition	279	27	175	106	358	92	298	1335
Others	754	195	806	193	1105	669	418	4064

Panel E. From 1701 to 1808

	Barcelona	Cordoba	Cuenca	Galicia	Granada	Murcia	Valencia	Spain
Trials	568	163	1151	0	953	1111	0	3946
Religious Trials	51	100	106		671	208		1136
Judaism	17	98	99		397	155		764
Islam	8	1	2		274	53		340
Lutheranism	26	1	5		0	0		32
Non-religious trials	517	63	1045		182	903		2810
Bigamy	61		28			103		192
Blasphemy	18		85			34		137
Superstition	102	5	114		87	94		402
Others	336	58	818		95	672		2072

Panel F. From 1478 to 1808

	Barcelona	Cordoba	Cuenca	Galicia	Granada	Murcia	Valencia	Spain
Trials	5684	1881	9564	2205	7487	4200	9047	40068
Religious Trials	2213	843	3146	746	3771	1702	6326	18747
Judaism	1176	676	2485	454	2092	846	3127	10856
Islam	220	151	561	79	1679	856	2924	6470
Lutheranism	817	16	100	213	0	0	275	1421
Non-religious trials	3471	1038	6418		3716	2498	2721	21321
Bigamy	334		211			253	77	864
Blasphemy	241		914			279	231	1665
Superstition	548	47	478	140	477	220	388	2298
Others	2348	991	4815	1459		1746	2025	16494

Table 9: Proportion of Heresies per District and Time Period

Panel A. From 1478 to 1520

	Barcelona	Cordoba	Cuenca	Galicia	Granada	Murcia	Valencia	Spain
Religious Trials	0.992	0.034	0.847			1	0.958	0.893
Judaism	0.990	0.034	0.840			1	0.953	0.891
Islam	0.002	0.000	0.007			0	0.004	0.002
Lutheranism	0.000	0.000	0.000			0	0.001	0.000
Non-religious trials	0.003	0.966	0.015			0	0.042	0.107
Bigamy	0.002		0.000			0.000	0.001	
Blasphemy	0.000		0.015			0.000	0.001	
Superstition	0.001	0.000	0.023			0	0.003	0.005

Panel B. From 1520 to 1570

	Barcelona	Cordoba	Cuenca	Galicia	Granada	Murcia	Valencia	Spain
Religious Trials	0.308	0.079	0.375	0.067	0.654	0.668	0.119	0.376
Judaism	0	0.005	0.302	0.008	0.068	0.465	0.000	0.179
Islam	0.069	0.051	0.050	0.000	0.586	0.203	0.090	0.155
Lutheranism	0.239	0.023	0.023	0.059	0.000	0.000	0.029	0.042
Non-religious trials	0.692	0.921	0.625	0.933	0.346	0.332	0.881	0.624
Bigamy	0.085		0.038	0.207		0.063	0.006	
Blasphemy	0.083		0.097	0.557		0.038	0.018	
Superstition	0.020	0	0.018	0.025	0.002	0.005	0.003	0.012

Panel C. From 1570 to 1620

	Barcelona	Cordoba	Cuenca	Galicia	Granada	Murcia	Valencia	Spain
Religious Trials	0.215	0.559	0.204	0.206	0.403	0.479	0.781	0.437
Judaism	0.003	0.314	0.057	0.112	0.130	0.075	0.006	0.068
Islam	0.043	0.228	0.139	0.003	0.273	0.404	0.733	0.327
Lutheranism	0.168	0.017	0.010	0.091	0.000	0.000	0.042	0.042
Non-religious trials	0.785	0.441	0.796	0.794	0.597	0.521	0.219	0.624
Bigamy	0.171		0.021			0.061	0.027	
Blasphemy	0.152		0.144	0.726		0.194	0.138	
Superstition	0.093	0.025	0.038	0.024	0.011	0.029	0.020	0.032

Panel D. From 1621 to 1700

	Barcelona	Cordoba	Cuenca	Galicia	Granada	Murcia	Valencia	Spain
Religious Trials	0.283	0.631	0.271	0.604	0.479	0.403	0.181	0.391
Judaism	0.014	0.628	0.266	0.396	0.455	0.229	0.015	0.279
Islam	0.056	0.003	0.003	0.093	0.024	0.174	0.083	0.058
Lutheranism	0.213	0.000	0.002	0.115	0.000	0.000	0.083	0.054
Non-religious trials	0.717	0.369	0.729	0.396	0.521	0.597	0.819	0.609
Bigamy	0.056		0.014			0.051	0.040	
Blasphemy	0.037		0.099	0.028		0.071	0.061	
Superstition	0.168	0.045	0.110	0.130	0.128	0.066	0.291	0.135

Panel E. From 1701 to 1808

	Barcelona	Cordoba	Cuenca	Galicia	Granada	Murcia	Valencia	Spain
Religious Trials	0.086	0.613	0.092	0	0.705	0.188	0	0.288
Judaism	0.030	0.601	0.086		0.417	0.138		0.194
Islam	0.014	0.006	0.002		0.288	0.050		0.086
Lutheranism	0.046	0.006	0.004		0.000	0.000		0.008
Non-religious trials	0.914	0.387	0.908	0	0.295	0.912	0	0.712
Bigamy	0.107		0.024			0.093		0.000
Blasphemy	0.032		0.074			0.031		0.000
Superstition	0.180	0.031	0.099		0.091	0.085		0.102

Panel F. From 1478 to 1808

	Barcelona	Cordoba	Cuenca	Galicia	Granada	Murcia	Valencia	Spain
Religious Trials	0.390	0.448	0.329	0.339	0.503	0.405	0.699	0.467
Judaism	0.207	0.359	0.260	0.206	0.279	0.201	0.346	0.271
Islam	0.039	0.080	0.059	0.036	0.224	0.204	0.323	0.161
Lutheranism	0.144	0.009	0.010	0.097	0.000	0.000	0.030	0.035
Non-religious trials	0.610	0.552	0.671	0.661	0.497	0.595	0.301	0.533
Bigamy	0.059		0.022			0.060	0.009	
Blasphemy	0.042		0.096			0.066	0.026	
Superstition	0.096	0.025	0.050	0.063	0.064	0.052	0.043	0.057

Table 10: Army Size Effect on the Proportion of Trials: Marginal Effects

	Judaism	Islam	Lutheranism	Bigamy	Blasphemy	Others
Army Size (in 10,000)	-0.002***	-0.007***	-0.0002	-0.0006	0.0002	0.010***
	(0.001)	(0.001)	(0.0005)	(0.0004)	(0.0006)	(0.001)
Year	-0.001***	-0.0002***	0.00003	0.0000	0.0002***	0.0009***
	(0.000)	(0.00001)	(0.0001)	(0.0000)	(0.0001)	(0.0001)
Comunidad Valenciana	0.084***	0.334***	-0.099***	-0.042***	0.009	-0.286***
	(0.005)	(0.010)	(0.007)	(0.004)	(0.007)	(0.010)
Murcia	0.178***	0.186***	-0.093***	-0.016***	0.027***	-0.284***
	(0.015)	(0.014)	(0.009)	(0.006)	(0.012)	(0.015)
Castilla la Mancha	-0.073***	0.035***	-0.117***	-0.019***	0.093***	0.080***
	(0.007)	(0.006)	(0.007)	(0.005)	(0.006)	(0.010)
Madrid	0.014	-0.014	-0.110***	-0.014	0.075***	0.049***
	(0.011)	(0.013)	(0.017)	(0.011)	(0.020)	(0.027)
Pseudo-R^2	0.32	0.32	0.32	0.32	0.32	0.32
Observations	21126	21126	21126	21126	21126	21126

Standard errors in parentheses. Judaism=1 if the charge of the trial is Judaism. Similarly for the rest of charge options. Catalunya is the ommitted region.

Table 11: Army Size Effect and Village Types: Marginal Effects

	King	Church	Lord
Army Size (in 10,000)	-0.005***	0.002***	0.003***
	(0.001)	(0.0004)	(0.001)
Year	0.0005***	0.00005**	-0.0006***
	(0.0000)	(0.00002)	(0.0000)
Comunidad Valenciana	-0.309***	-0.112***	0.404***
	(0.009)	(0.006)	(0.003)
Murcia	0.054	-0.100	-0.049***
	(0.051)	(0.062)	(0.010)
Castilla la Mancha	-0.184***	-0.082***	0.136***
	(0.009)	(0.019)	(0.006)
Madrid	-0.067***	-0.035***	0.107***
	(0.016)	(0.011)	(0.015)
R^2	0.12	0.12	0.12
Obs	22424	22424	22424

Standard errors in parentheses. Lord=1 if a village belonged to a Lord, Church=1 if a village belonged to the Church and Crown=1 if a village to the Crown. Catalunya is the ommitted region.

Table 12: Inquisitorial Income and Army Size

	Confiscations	*Censos*	Canonries
Army Size	-17,713***	-43,595	-22,362
	(6,089)	(10,903)	(3,467)
Cubic Time Trend	Yes	Yes	Yes
	(0.009)		
Observations	126	126	122
R^2	0.202	0.422	0.460

Standard errors in parentheses.*** p<0.01, ** p<0.05, * p<0.1

Table 13: Inquisitorial Income, Trials and Army Size

	Army Size	Trials	Confiscations	*Censos*	Canonries
Army Size	1				
Trials	-0.0322	1			
Confiscations	-0.2289	-0.26	1		
Censos	-0.295	-0.5011	0.5119	1	
Canonries	-0.4333	-0.4331	0.7288	0.7253	1

Table 14: Confiscations, Trials and War Activity

Dependent variable: Confiscations (in mrs.)								
	Spain	Barcelona	Valencia	Murcia	Cuenca	Granada	Cordoba	Galicia
Trials	-128.687	689.379	-668.445*	-8,605.344	-5,738.998**	-9,938.064	9,706.958***	-4,224.650
	(3,514.883)	(780.905)	(396.008)	(11,920.080)	(2,607.569)	(29,147.607)	(12,882.001)	(3,324.305)
Army Size	-15.398**	-0.270	-1.587*	-4.492	-7.017	-17.947	-11.967**	-3.056***
	(6.477)	(0.993)	(0.908)	(5.707)	(4.946)	(11.504)	(5.938)	(1.116)
Observations	141	81	42	42	24	37	82	82
R-squared	0.172	0.062	0.429	0.075	0.302	0.226	0.172	0.100
Linear Time Trend	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Droughts	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No

Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 15: Other revenues, trials and war activity

Dependent variable: Other revenues (in mrs.)								
	Spain	Barcelona	Valencia	Murcia	Cuenca	Granada	Cordoba	Galicia
Trials	-9,970.707	7,735.991	-264.596	-93,516.782*	7,284.375	95,239.027***	-1.468.55	-11,406.564
	(7,319.821)	(7,275.816)	(2,305.201)	(46,830.980)	(7,811.073)	(231,321.385)		(7,952.581)
Army Size	-30.812**	-8.672	13.324***	38.818*	-9.062	-18.581	-8.017***	-0.701
	(13.488)	(8.539)	(3.728)	(22.522)	(8.693)	(12.054)	(2.596)	(2.656)
Observations	141	90	80	43	29	38	82	84
R-squared	0.414	0.553	0.214	0.192	0.239	0.328	0.114	0.172
Linear Time Trend	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Droughts	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Other revenues are total revenues excluding confiscations. Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1