War and Inquisition: Social control in the Spanish Empire

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ABSTRACT

The motivations behind the Spanish Inquisition (1478-1834) have long intrigued historians. This paper contributes to the literature by examining quantitative evidence on the relationship between inquisitorial activity and war. The basic idea is that the government’s demand for social control was greater in periods of war, because war increased the likelihood of internal revolts. To minimize the threat of rebellion, the Inquisition conducted more trials when Spanish war activity was intense. To test this hypothesis, I develop a theoretical framework and I assemble time series data for seven Spanish inquisitorial districts on activities of the Inquisition as well as wars conducted by the Spanish crown. I show that there exists 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) in the regression as well as adjustments for spillover effects from other districts than the main district under analysis.

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1. INTRODUCTION

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.¹

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.² 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, arguing as a proof that she used to go for a walk on the beach every night in order 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. This popular story from 17th century Spain paints a very different picture of the Inquisition from the popular one of eradicating religious heresy.

Historians have vigorously debated the motivations of the Spanish Inquisition. Early on, Llorente (1835) argued that the Inquisition primary motive was to maximize its income, an argument that, needless to say, seems appealing to economists. However the most accepted explanations come from the new and recent wave of Inquisition historians³, who put forth a social control argument. I interpret the idea of social control in that context as the repression of any political ideology that differed from the official one in order to prevent a successful revolt.

Within the economics literature, Miguel (2003) and Oster (2004) have focused on the economic downturns as possible explanation for an increase in witch killings in

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¹ Babra also had a say in church policies, according to the story.
² The Crown suspended peasants’ payment of taxes to the local nobility (an important source of noble incomes) after the attack; the local nobility, therefore, had a financial motive to support the Inquisition’s persecution of witches.
³ Some of these historians are Contreras (1984), Henningsen (1984), Garcia Boix (1984), and Garcia Carcel (1984).
Africa and witch trials in Modern Europe. They claim that witchcrafts are explained by economic downturns – popular reactions to hard times that blamed somebody as a scapegoat. Witch killings are “bottom up” institutions, but the Spanish Inquisition was described as a “top-to-bottom” institution created by the Pope and the Spanish Crown and may not, therefore, respond in the same way to economic shocks.

This paper contributes to the literature by examining theoretically and empirically the hypothesis of social control. The basic idea is that the government’s “demand” for social control was greater during periods of war. Spanish cities were more likely to revolt when the Crown was at war, because war diverted King’s attention from internal control. To minimize the threat of rebellion, the Inquisition conducted more trials when Spain was at war than when she was at peace.

I develop a simple theoretical framework to elucidate the mechanism just described. In a very simple static game of delegating internal control where the information on wars is public, Spanish cities decide if they revolt against the King. Then, the King decides if he represses the revolt, if he did not delegate internal control. Otherwise, the Inquisition will take hold. This simple framework provides two main predictions. First, inquisitorial activity is increasing with war intensity if the optimal activity cannot prevent insurrections. Second, if war intensity is too high, inquisitorial activity will drop and the cities would be very likely to revolt.

To evaluate these predictions empirically, I bring together time series data of eight Spanish inquisitorial districts on Inquisitorial activity, as well as number of wars in which Spanish crown was engaged and their total army size. I present empirical evidence of an inverse-U relationship between wars and inquisitorial activity, which corresponds to the predictions of my framework. My results on the relationship between trials and war are robust to the inclusion of data on the severity of the weather (droughts) in the regression as well as adjustments for “spillover” effects from other districts than the main district under analysis.

2. INSTITUTIONAL BACKGROUND

The modern Spanish Inquisition started officially in 1478 with a papal bull of Sixtus IV, which established the Holy Office and ceded control to the Spanish Crown.
From that moment on until her definitive abolition in 1834 the Spanish Inquisition conducted more than 100,000 trials of Jews, Muslims, Lutherans and other assorted “heresies”.

The Inquisition was a centralized institution and thus covered all the Spanish territory. The General Inquisitor and the Supreme Council of the Inquisition (La Suprema) coordinated and gave general rules to the Inquisition districts, which had their own tribunal and covered different regions.

The General Inquisitor, who was the Head of the Holy Office, was in charge of La Suprema – he appointed the members of this Council and the officials of each district; he managed and decided the most important activities and rules of the Inquisition and he could confirm, modify or overturn any sentence of any Inquisitorial district. The General Inquisitor was also a member of the Council of Castile and he was chosen by the Pope from a short list of candidates proposed by the Spanish King.

La Suprema gave advice to the General Inquisitor, controlled the finances of all districts, their monthly activity and their procedures, resolved debates between District Inquisitors and interpreted the directives and guidelines of the General Inquisitor. It was the third most important political Council of the kingdom. The first two were the Council of Castile and the Council of Aragon.

During the fifteenth and sixteenth centuries, La Suprema did not have the authority to make decisions – only the General Inquisitor did. However in the following two centuries it became more important and took any Inquisition decision. La Suprema was composed initially by six Councilors named by the General Inquisitor, two members of the Council of Castile and one secretary of the King. This composition varied across time. The number of councilors and the presence of members of the Castilian Councils increased as long as La Suprema became more relevant in the decision process.

The Inquisition divided Spain in twenty districts. In order to control all districts, the Holy Office created two subdivisions: Castile and Aragon, which comprised ten districts each. That division coincides with the political division. The only difference with

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4 Castile districts are: Toledo, Valladolid, Córdoba, Granada, Sevilla, Murcia, Llerena, Cuenca, Santiago de Compostela, Canarias. Aragonese districts are: Barcelona, Zaragoza, Valencia, Sicilia, Mallorca, Sardenya, Logroño, México, Lima and Cartagena de Indias.
respect to the political division is that Indian districts were under Aragonese control, while Indian colonies were part of the Castilian Empire.

**Figure 1. Districts of the Spanish Inquisition**

![Map of Spain showing districts of the Spanish Inquisition]

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

Each district had its own Inquisitor and functionaries, or *familiares*. These functionaries had to investigate possible heresies and make someone else report them. In this way they would remain anonymous. Therefore, they were some kind of intermediaries between the Inquisition and the prisoner and they formed a network that was spread all over the territory.

Dedieu (1986) divides Inquisition activity in four periods after studying the trials of the District of Toledo. During the first and second epochs, 1483 to 1525 and 1526 to 1614 respectively, the Inquisition was particularly active in the first years and she was mainly worried about Judaism. The third and four stages, 1615 to 1720 and 1721 to 1820
respectively, are declining phases because of the bureaucracy and routine of the institution and the appearance of the French Revolution ideas.

Along the same lines, Contreras and Henningsen (1986) distinguish different periods in the Inquisition activity. Although they do not contradict Dedieu’s conclusions, the particulars differ since they took into consideration trials from all over the territory from 1540 to 1700. Thus, they claim that they can identify two different stages in that period. The first epoch, “aggressive, expanding, militant and dogmatic”, goes from 1540 to 1595. The second, “decadent and bureaucratic”, goes from 1596-1700.

The frequency of trials declined over time; most of the Inquisition’s activity, in other words, was concentrated early in its history. Contreras and Henningsen (1986) claim that this trend is due to several factors: inquisitors traveled less around their districts, there was an ennoblement of the inquisition offices, the Suprema’s relaxation when encouraging the prosecution of heresy, the bureaucratization and routine of the tribunals and the decrease of public readings of the Edict of Faith. All these factors and the initial strong prosecution of Judaism, Islamism and Protestantism, which decreased the number of trials for these reasons in following years, are possible causes of the decreasing of the Inquisition intensity.

Inquisition finances

The two main periods of the Inquisition finances are:

(i) 1480-1560

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

(ii) 1560-1830

The Inquisition had its own treasury, completely independent of the royal treasury. District tribunals administered their own income and expenses under the supervision of the Suprema.
While in the first phase the sources of income were just confiscations and fines, in the second stage the Inquisition treasury incorporated *censos* and canonries as sources of income\(^5\).

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 *Autos de fe*).

**State, Church and the Inquisition**

The establishment of the Holy Office was the result of an agreement between the Pope and the Catholic Kings to maintain the social order established in both political and religious spheres. However, the Spanish Crown and the Church differed on how they wanted to implement these rules. As a result, each institution tried to obtain control over the Inquisition.

Nevertheless, what seems clear is the dichotomy of the Inquisition’s origin: on the one hand, the Holy Office had to persecute and prosecute heretics as well as spread and confirm Catholicism as the dominant religion in Spain. On the other hand, she was also under control of the Spanish Crown, who used her as a tool of social control. The relationship between the state and the Inquisition can be summarized as follows. First, the Holy Office was the only one that could operate with the same authority level in all Spanish territory. Not even the King had the same authority in Castile and in Aragon\(^6\). For example, the King could not impose the same laws in both territories. Hence, the Inquisition was a powerful tool to obtain a certain level of social control over all regions.

Second, her organization was similar to the State itself. She centralized her decisions, through a Council similar to the Council of Castile, and decentralized her actions by creating districts in order to be more effective. Moreover, members of *La Suprema* were

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\(^5\) Confiscations were monetary punishments imposed to any prisoner convicted of heresy; Fines and penalties were payments in order to avoid “life sentence” or monetary punishments for prisoners that were not proven guilty; *Canonries* was the income collected from the canonries under Inquisitorial control; *censos* were forced loans with high interest rates. Moreover, the Inquisition acquired *Juros* (Crown’s bonds) from directly purchasing them from the king, from confiscations or from royal concessions.

\(^6\) That is true until 1714, when Philip V won the Succession war and abolished Aragonese and Catalan Institutions.
part also of the Council of Castile and, therefore, there was a clear connection between Political and Inquisitorial decisions.

Third, the Royal treasury found in the Inquisition treasury another source of income. In the first years of her existence, the Royal treasury was in charge of the Inquisition treasury too. Afterwards, the Royal treasury obtained income from the Inquisition in two ways: the sale of inquisitorial offices and the sale of *juros* to the Inquisition. Given the strong relationship between the Inquisition and the Spanish Crown, it is important to have a look at the link between the King’s and the Inquisition activities.

3. MOTIVATIONS BEHIND INQUISITORIAL ACTIVITY

Historians have extensively debated the actual reasons behind inquisitorial activity. This debate has been mainly focused on three different motivations: income maximization, religious persecution and social control.

Llorente, a nineteenth century Inquisition historian, 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. Years later, Millán (1984) and Kamen (1965) offered different opinions of this view of the Inquisition. While Millán argued that the amount of confiscations and penalties represented a small percentage of the total wealth obtained by the Inquisition, Kamen emphasized the role of confiscations through their indirect effect on the finances of the institution. His argument is that confiscations allowed the Inquisition either to buy *juros* or to obtain *censos*, which would ensure a significant amount of income. Netanyahu (1978) also rejects Llorente’s explanation, arguing that the Catholic Kings would not create an institution that would harm part of their taxpayers.

Instead, he proposes that the main and only motivation of the Inquisition was the religious persecution, mainly against *Jews*. This persecution and the creation of the institution would be due to the popular pressure to eradicate heresy. However, Contreras (1984) states that the Inquisition was a top-to-bottom institution, given that the Pope created it while the Spanish Crown controlled and supported it. Moreover, given the strong hierarchy existing in that society, he continues, it does not seem plausible that a popular pressure could influence the creation of an institution like the Inquisition.
The third motivation is that the Inquisition was a social control tool of the Spanish Crown. It would have been created to control any ideology that would differ from the official one in order to prevent a hypothetical successful revolt or political conflict. Although Netanyahu would argue that the Catholic Kings had the nobility under control and, therefore, they did not need to waste their efforts to increase even more their control, there is anecdotic evidence that inquisitorial activity depended on the Crown’s needs. For example, Haliczer (1984) explains how the Crown asked inquisitorial intervention to repress political disturbances in Valencia in 1620’s and Boeglin (1993) describes how inquisitorial repression depended on imperial and commercial interests of the Crown.

As far as I know, there are no previous works on the Spanish Inquisition in the economics literature. However, there are some articles that study persecution. In particular, Miguel (2003) and Oster (2004) study how witchcrafts episodes are related to adverse weather shocks. Miguel (2003) finds evidence that negative economic shocks (high levels of precipitations) increase the number of witch-killings in Tanzania. He argues that “witches” are usually unproductive old women and their family 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 Europe. She uses weather data of the little age period to explain witch trials. When an anomalous decrease in temperatures occurred, there was an increase of witch trials. While Oster deals with what seems a popular reaction and pressure against some citizens because of weather and economic downturns, this paper deals with a complete organized Institution. The Spanish Inquisition had a whole network of informers and representatives that covered all territory and it did not necessarily need a popular reaction in order to accuse somebody. Nevertheless, both organizations might have had in common that they could react to exogenous variables as weather conditions.
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 social control: to impose its political ideology and to stamp out revolt.

In particular, it elucidates the social control mechanism that links wars and inquisitorial activity. The idea behind it is that the government’s “demand” for social control was greater during periods of war. Spanish cities were more likely to revolt when the Crown was at war, because war diverted the Crown’s attention away from domestic affairs. To minimize the threat of rebellion, the Inquisition conducted more trials when Spain was at war than when she was at peace.

The game I describe has three players (King, Cities and Inquisition) and three stages. I took as given the existence of the Inquisition and the public knowledge of the wars Spain is fighting. That is, before the game starts the Inquisition has already been created and every player sees the true value of wars.\(^7\)

In the first stage, the King decides whether to externalize inquisitorial finances or to internalize the inquisitorial finances as a part of the Royal Treasury. Once the Cities observe this decision they decide whether they will insurrect against the King. In the third stage, either the King or the Inquisition will decide to repress an insurrection or not to repress it.\(^8\) Figure 2 represents the extensive form of the game and shows the payoffs for each final node.

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\(^7\) I assume wars are exogenous since Spain only started approximately 40% of the wars in which it was involved during the period under consideration.

\(^8\) In my framework I abstract from a possible agency problem between the King and the Inquisition. The agency problem, between a principal and an agent that control possible insurrections, is explained in Padró i Miquel and Yared (2010). Moreover, I don’t take into account that cities may generate a type of crypto-morality as it is explained in Greif and Tadelis (2010).
Below, I describe how players’ utilities are affected by each situation in order to understand the payoffs observed in figure 2 as well as the strategies they can take.

**King**

The King first decides if he externalizes inquisitorial finances. Then, after the cities decide if they insurrect, he will decide if he defrays the cost of repressing them. Otherwise, the Inquisition will take hold.

The King has a budget $G$ that he will spend on the costs of war ($c(wars)$, where $c'(.)>0$) and the costs of the repressive activity of the Inquisition ($d$).

When the King does not repress the insurrection of the cities, he will have a personal cost $\theta$. We can imagine this cost as the personal damage incurred by the king during a revolt. In a very extreme case this personal cost would represent the death of the king. Finally, if the King represses a revolt, he will incur in the cost $d$ already mentioned.

**Inquisition**

The Inquisition would suffer the same personal cost, $\theta$, if it does not repress a revolt.

Moreover, inquisitorial trial activity reported some benefits to the institution, some could be monetary benefits, but in general would be political and social benefits.
These benefits from the trials are represented by \( f(e) \), where \( f'(.) > 0 > f''(.) \). However, this trial activity generates costs \( e \).

**Cities**

Cities decide if they insurrect once the King has taken the decision of supporting the Inquisition.

Cities will have disutility from inquisitorial activity \( (\phi(e), \phi'(e) > 0) \), and from the repression if they insurrect \( (R^K(d) \) if the King exerts it or \( R^I(e) \) if the Inquisition exerts it, \( R'(.) > 0) \).

If the cities insurrect they will obtain some utility from the fact that the King is distracted by external wars. The idea is that Cities are more likely to generate a successful insurrection when the King is engaged in more external wars and he is not able to provide enough internal control. In other words, the greater the distraction of the king, the smaller the collective action problem of organizing a successful revolt. This utility is represented by \( \gamma(wars) \), where \( \gamma'(wars) > 0 \).

We also could think that Cities have a disutility from taxation, which is increasing in wars also, and that they do not have this disutility when they insurrect. The inclusion of such disutility would not modify the predictions of the theoretical framework.

**Solving the game by Backward Induction**

**Repress or not repress a revolt**

The King will repress a revolt if the costs of repressing are lower than the costs of not repressing. That is if, \( \theta > d \).

In a similar way, the Inquisition will repress if the benefits from doing so are greater than the costs. \( \theta + f(e) > e \).

**Decision of insurrection**

Note first that Cities will insurrect always if there is no repression. If the King did not externalize inquisitorial finances, Cities will decide to insurrect if the disutility of King’s repression is smaller than the utility they obtain from revolting. That is, if \( \gamma(wars) > R^K(d) \).
From this expression we can see that there exists a \( w \) such that if \( \text{wars} > w \), then \( \text{d} > \theta \). Thus, repress will be too costly for the King and he will not repress an insurrection. Therefore, Cities will always revolt in this case.\(^9\)

If the King externalizes inquisitorial finances, Cities will insurrect if their disutility of inquisitorial repression is smaller than their utility of revolting. That is if, \( \gamma(\text{wars}) > R^I(e) + \phi_1(e) - \phi(e^*) \). Where \( e^* \) is the optimal inquisitorial activity when there is no insurrection. As before, we can see that there exists \( \bar{w} \) such that if \( \text{wars} > \bar{w} \), then \( e > f(e) + \theta \). In this case, repression will be too costly for the Inquisition and it will not repress a revolt. Therefore, Cities will always revolt. From the conditions \( \text{d} > \theta \) and \( e > f(e) + \theta \) we can infer that \( \bar{w} > w \).

From these conditions we can see how inquisitorial intensity will be increasing until \( \bar{w} \) is reached and it will drop when \( \text{wars} > \bar{w} \). That describes an inverse-U relationship between inquisitorial intensity and wars.

**Decision of externalizing inquisitorial finances**

The King then decides to externalize the finances of the Inquisition. This decision will depend on the level of wars and the costs and benefits of repressing.

When \( \text{wars} < w \) or \( \text{wars} > \bar{w} \), the King will be indifferent. In the former case, the indifference comes from the fact that the king can pay the repressive activity of the Inquisition. When wars exceed \( \bar{w} \), the indifference exists because neither the Inquisition nor the King will repress a revolt. However, when \( \bar{w} < \text{wars} < w \) the King will externalize the Inquisition. Once the king externalizes the finances we can think that he won’t have incentives to have a conflict with the Inquisition to control again its finances.

This simple framework provides four main predictions. First, the King will decide to externalize inquisitorial finances if the number of wars is not very low or very high. Second, once inquisitorial finances have been externalized, the King will never internalize them again. Third, inquisitorial activity is increasing with the number of wars if the optimal activity cannot prevent insurrections. Fourth, if the number of wars is too high, inquisitorial activity will drop and the cities would be very likely to revolt.

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\(^9\) Note that when the King decides to repress, he always will choose \( d \) such that \( \gamma(\text{wars}) > R^K(d) \). In the case in which \( \text{wars} > w \), the King could decide to choose \( d \) such that \( d = \theta \).
5. DATA

To evaluate empirically the four predictions of the theoretical framework, I bring together time series data of seven Spanish inquisitorial districts on inquisitorial activity, as well as information on the wars the Spanish crown was fighting. Moreover, in order to control for adverse weather and economic shocks, I obtained data on severity of the weather, described by an index of rainfall anomalies, wages and prices. Below I describe in detail the sources of information for each of this data.

*Inquisition data*

Inquisitorial districts sent periodical activity reports to *La Suprema*. In particular, peninsular districts sent monthly reports, while American and Italian districts sent annually reports. In this way, *La Suprema* controlled the activity, procedures and finances of all districts. Therefore, there were two copies of each Inquisitorial district activity report: one was in the See of each Inquisitorial district and the second was in Madrid, where *La Suprema* met every weekday.

Some of the archives of the Sees are still available, like Barcelona Archives, which are hold in the *Arxiu de la Corona Catalano-Aragonese* in Barcelona. However, most of them are no longer available because they were lost, burned or destroyed. Fortunately, most of *La Suprema* archives did not get lost and they can be consulted in the Inquisition section of the *Archivo Historico Nacional* in Madrid.

Historians have studied these archives and published books, articles and catalogues about Inquisitorial activity of several districts. The first catalogue of Inquisitorial activity (district of Toledo) was published in 1903 and written by Vicente Vignau. In 1982, Perez Ramirez published the Catalogue of Cuenca, after completing an earlier version of Cirac Estopañan. Some years later, Blazquez Miguel published the catalogues of Murcia and Barcelona in 1987 and 1990 respectively. Contreras (1982) and Garcia Carcel (1980) and Gracia Boix (1982) contain the list of trials of Galicia and Valencia respectively.

I use these published trial records, which contain data of the name of the accused (and therefore her gender), the location where she lived, the year of the trial, the charges and the final sentence. In some cases, there is information about the defendant’s
occupation and nationality too. I assemble time series data with the number of trials and inquisitorial intensity (trials per thousand of inhabitants) per year and for seven of the eight districts I have information so far.

**Population data**

Spanish population is obtained from several sources: Census of 1591 (contained in Menendez Pidal, 1990), *Censo de Floridablanca*, Nadal (1974), Contreras, Cerrillo Cruz, Garcia Carcel and Salomon (1964). Missing year data is calculated by linear extrapolation of actual data.

**Weather data**

I use annual indexes of rainfall anomalies as a proxy for weather data in Inquisition districts. Rainfall anomalies index is calculated from an indirect source of information. That is, there is no actual measurement of rainfall in the fifteenth, sixteenth or seventeenth century. However, Barriendos (1998, 2008) constructs an index from ecclesiastical rogations that asked for some rain. He describes five different levels of rogations depending on the activities of each of them. Level five means a severe drought period and level one is just a very mild drought. He multiplies every rogation episode by its level and adds the ones that correspond to the same year in order to obtain a yearly rough index of rainfall anomalies.

**War data**

I use data on wars in which Spain was involved from 1490 to 1820 from Levy (1983) and Kiser et al. (1985). In particular, I use the number of wars in which Spain was involved in a given year. Moreover, I will use data on army size obtained in Sorokin (1932). The author describes the number of men that were fighting in several wars for Spain. I will use this measure as a proxy for intensity of the wars.

6. EMPIRICAL ANALYSIS

The theoretical framework presented in section four obtained four main predictions:

i) The Spanish Crown externalized inquisitorial finances when the number of wars (or their intensity) in which Spain was fighting was neither too high nor too low.
ii) Once the finances were already externalized, the Spanish Crown would not internalize them again.

iii) Inquisitorial effort will be increasing with the number of wars (or their intensity) if the optimal effort cannot prevent insurrections.

iv) If the number of wars (or their intensity) is too high, then inquisitorial effort will drop.

Predictions three and four imply an inverse U-relationship between wars and inquisitorial effort.

This section will provide empirical evidence of these four predictions. On the one hand, I will show some preliminary evidence on the time of the externalization and the link between wars and intensity of the Inquisition’s activity. On the other hand, I will develop my econometric approach to test the predicted relationship between wars and Inquisition’s intensity.

**Early evidence of predictions of the framework**

**Figure 3. Wars and inquisitorial intensity (trials per thousand inhabitants)**

![Graph showing wars in progress and inquisitorial intensity over time](image)

Note: Inquisitorial intensity is defined as number of trials per thousand inhabitants.

Figure 3 shows inquisitorial intensity (line) and the number of wars in which Spain was fighting (bars). We can identify the predictions of the framework in this graph. We observe that the number of wars was neither very high nor very low when the
Inquisition took control of its own finances. This fact corresponds to the first prediction of the framework. Moreover, once the finances were externalized, they were not internalized again in the period under consideration (until 1808 when Napoleon abolished the Inquisition). Thus, the second prediction is also observed in the data. Figure 3, which shows inquisitorial intensity (line) and intensity of wars (bars), also identifies first and second predictions.

**Figure 4. Army size and inquisitorial intensity (trials per thousand inhabitants)**

![Graph showing army size and inquisitorial intensity](image)

With respect to the other predictions, table 1 shows the mean intensity of inquisitorial activity in each district by number of wars. We can observe how, inquisitorial intensity increases when the number of wars goes from 1 to 2, but this intensity is decreasing when the number of wars is high enough.
To observe anecdotic evidence of the theoretical predictions, we should look back to figure 3 (and figure 4) and focus on the Revolt of the Catalans episode in 1640. Just before 1640, we observe how inquisitorial intensity is increasing with the number of wars (or their intensity), but when this number reaches its maximum, inquisitorial effort drops. That happened around 1640, the year that the Revolt of the Catalans started.

In the last parts of this section I will develop the econometric analysis to find this inverse-U relationship between inquisitorial intensity and wars.

### Econometric analysis

Table 2 shows the summary statistics for the inquisitorial districts considered in this paper. The first column presents statistics at a Spanish level (mean of all the districts with information available). We observe that Spain was involved in average at least in a war during the period of time under analysis and that the proportion of executions is consistent with Parker (1982). Parker shows 3% while here I obtain an 8%. The difference comes from the period of time covered. While Parker’s data covers only from...
1540 onwards, I am covering from 1478 onwards. Contreras and Henningsen (1986) explain that the Inquisition carried out a relative higher number of executions during its beginnings. This fact explains the difference that exists between Parker and this paper.

Table 2. Summary Statistics

<table>
<thead>
<tr>
<th></th>
<th>Spain</th>
<th>Barcelona</th>
<th>Valencia</th>
<th>Murcia</th>
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<td>0.12</td>
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<td>(0.09)</td>
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<td>(0.38)</td>
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<td>420870.7</td>
<td>95600.8</td>
<td>190375.9</td>
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<td>265103.8</td>
<td>607179.7</td>
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<td>(464175.4)</td>
<td>(150280.9)</td>
<td>(165068.8)</td>
<td>(45302.42)</td>
<td>(66410.74)</td>
<td>(61790.76)</td>
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<td>(372929.7)</td>
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<td>3.14</td>
<td>2.20</td>
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<td>2.20</td>
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<td>(2.38)</td>
<td>(2.49)</td>
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<td>1.31</td>
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<tr>
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<td>30.77</td>
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<td>2.52</td>
<td>.65</td>
<td>1.31</td>
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<td>(22.00)</td>
<td>(12.44)</td>
<td>(7.76)</td>
<td>(3.40)</td>
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<td>(3.93)</td>
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<td>Executions/trials</td>
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<td>0.12</td>
<td>0.09</td>
<td>0.07</td>
<td>0.23</td>
<td>0.06</td>
<td>0.07</td>
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</tr>
<tr>
<td></td>
<td>(0.09)</td>
<td>(0.14)</td>
<td>(0.13)</td>
<td>(0.07)</td>
<td>(0.23)</td>
<td>(0.06)</td>
<td>(0.07)</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>331</td>
<td>331</td>
<td>331</td>
<td>331</td>
<td>331</td>
<td>331</td>
<td>331</td>
<td>331</td>
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</tbody>
</table>

Panel Data Analysis

I assemble first a panel data of seven districts of the Spanish Inquisition from 1478 to 1808.

The equation of interest is the following one:

$$
\text{intensity}_{it} = \alpha_i + \gamma f(t) + \beta \text{wars}_t + \lambda \text{wars}_t^2 + \sigma \text{droughts}_{it} + \delta X_{it} + \theta \text{Spillover}_{it-1} + \psi D_{jt} + u_{it}
$$

(1)

I regress trials per thousand inhabitants in a given district $i$ and year $t$ ($\text{intensity}_{it}$) on the variables of interest, wars in year $t$. I control for severity of the weather in region $i$ ($\text{droughts}_{it}$); for “spillover” effects, intensity from other districts than the main district under analysis, and time. I also include district fixed effects ($\alpha_i$), dummy variables for years close to the expulsion of Moriscs and Jews to control for religious persecution and years posterior to the French Revolution ($D_{jt}$).

---

10 Unit root tests for Panel Data were conducted for variables intensity and wars. They rejected unit root process for both variables.
This specification allows me to test the hypothesis of social control, as predicted in the theoretical framework. Furthermore, it allows me to control for adverse weather shocks, religious persecution and economic shocks.

I use the variable number of wars and the total army size fighting wars as a proxy for social control. I will test predictions 3 and 4 of the theoretical framework: inquisitorial activity is increasing with the number of wars (or their intensity, represented by army size) up to a certain threshold. Once this threshold has been surpassed, inquisitorial activity drops, since the effort of repressive activity is too costly for the Inquisition. Combining these predictions we should find an inverse-U shaped relationship between number (or intensity) of wars and inquisitorial intensity. That relationship would reflect the social control mechanism described in this paper.

In order to control for other possible motivations of the Inquisitorial activity, I include dummy variables for years close to the expulsion of moriscs and judeoconversos, for years posterior to the French Revolution, as well as for adverse weather conditions. The dummies for the expulsion of moriscs or judeoconversos will control for religious persecution motives. If one of the main objectives of the Inquisition was to persecute these two groups, I assume that its activity would be higher during the years close to the year in which the Crown decided to impose the law of their expulsion.

I also control with a dummy for French Revolution years since its ideas, which spread all over Europe, could also have influenced Inquisition activity during the last years of the 18th century and beginning of the 19th century.

Finally, I also take into account adverse weather shocks (droughts index) to control for an increasing inquisitorial activity when there are bad economic shocks, like Oster (2004) describes.

**Time Series Analysis**

My second econometric approach is time series analysis. I do the same analysis I did with the panel data analysis, but for each district individually. Moreover, I construct a Spanish level time series from the data I have from seven inquisitorial districts.

---

11 My main variables, intensity and wars, do not have unit root. Ng and Perron tests were conducted and they rejected unit root at a 5% level with 5 lags.
Thus, the equation of interest is the following one:

\[
\text{intensity}_t = \gamma f(t) + \beta \text{wars}_t + \lambda \text{wars}_t^2 + \alpha \text{droughts}_t + \delta X_t \\
+ \theta \text{Spillover}_{t-1} + \psi \text{D}_{jt} + u_t
\] (2)

The main objective is to determine if this mechanism of social control was more important in some districts and, then, try to explain why this is the case.

7. RESULTS

Table 2 shows the results for Panel Data Analysis of the effects of army size on the Spanish Inquisition activity. We can observe how the inverse-U relationship between army size and inquisitorial intensity is significant across all specifications. These robust results confirm predictions three and four of the theoretical framework. Thus, the inverse-U relationship seems robust to the inclusion of adverse weather shocks, spillover effects, and Jewish and moriscos expulsion dummies. This result also holds if we include Inquisitors Fixed Effects (columns 6 and 7) or if, instead of the cubic time trend, we include inquisitorial periods fixed effects. These two alternative specifications want to capture possible different inquisitorial behaviors depending on the General Inquisitor or the historical period of the Inquisition.
Table 2. Panel Data. Army size and inquisitorial intensity (trials per thousand inhabitants)

<table>
<thead>
<tr>
<th>(1) intensity</th>
<th>(2) intensity</th>
<th>(3) intensity</th>
<th>(4) intensity</th>
<th>(5) intensity</th>
<th>(6) intensity</th>
<th>(7) intensity</th>
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</thead>
<tbody>
<tr>
<td>Army Size</td>
<td>0.00112***</td>
<td>0.00123***</td>
<td>0.00114**</td>
<td>0.00119*</td>
<td>0.000693*</td>
<td>0.000409**</td>
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<td></td>
<td>(0.00423)</td>
<td>(0.00461)</td>
<td>(0.00489)</td>
<td>(0.00678)</td>
<td>(0.00361)</td>
<td>(0.00116)</td>
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<td>Army Size Squared</td>
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<td>-1.00e-05**</td>
<td>-9.66e-06**</td>
<td>-1.01e-05*</td>
<td>-5.12e-06**</td>
<td>-6.03e-06***</td>
</tr>
<tr>
<td></td>
<td>(3.70e-06)</td>
<td>(4.09e-06)</td>
<td>(4.01e-06)</td>
<td>(5.17e-06)</td>
<td>(2.69e-06)</td>
<td>(1.74e-06)</td>
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<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<tr>
<td>District FE</td>
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<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Droughts</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<td>Jewish expulsion</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<td>yes</td>
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<td>Moriscs expulsion</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>French Rev.</td>
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<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<tr>
<td>Spillover</td>
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<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<tr>
<td>Lagged intensity</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<tr>
<td>Inquisitor FE</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<td>0.0202</td>
<td>0.0548</td>
<td>0.131</td>
<td>0.0494</td>
<td>0.000720</td>
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</table>

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

In order to study if there is any inquisitorial district that is driving this effect, I repeat the analysis using time series for each district. Table 3 shows the results of these time series regressions. Barcelona and Granada seem to drive the results I found in my Panel Data Analysis and the Spanish time series analysis (first column). This result is not surprising, since these two regions were the ones that carried out most of the revolts against the Spanish Crown during the period under analysis. Moreover, the Kings were especially worried about these regions because they were historically more belligerent to them than the rest of the regions. Granada was the source of Muslim discontent and Barcelona was the source of the Catalan discontent (two of the most important revolts were carried out in order to obtain Catalan independence).
Table 3. Time Series. Army size and inquisitorial intensity (trials per thousand inhabitants)

<table>
<thead>
<tr>
<th>District level regressions. Effect of army size on inquisitorial intensity</th>
<th>(1) Spain</th>
<th>(2) Cordoba</th>
<th>(3) Granada</th>
<th>(4) Cuenca</th>
<th>(5) Murcia</th>
<th>(6) Valencia</th>
<th>(7) Barcelona</th>
</tr>
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<td>Army Size</td>
<td>0.000594*</td>
<td>0.000514</td>
<td>0.00225**</td>
<td>-0.000170</td>
<td>-0.000541</td>
<td>0.00203*</td>
<td>0.00141**</td>
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<td>(0.000317)</td>
<td>(0.000737)</td>
<td>(0.000942)</td>
<td>(0.000554)</td>
<td>(0.00123)</td>
<td>(0.00110)</td>
<td>(0.000692)</td>
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<tr>
<td>Army Size Squared</td>
<td>-4.50e-06*</td>
<td>-4.94e-06</td>
<td>-2.11e-05***</td>
<td>1.12e-06</td>
<td>5.48e-06</td>
<td>-1.72e-05**</td>
<td>-1.17e-05**</td>
</tr>
<tr>
<td>(2.43e-06)</td>
<td>(5.60e-06)</td>
<td>(7.23e-06)</td>
<td>(4.23e-06)</td>
<td>(9.43e-06)</td>
<td>(8.24e-06)</td>
<td>(5.21e-06)</td>
<td></td>
</tr>
<tr>
<td>Cubic time trend</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Droughts</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<tr>
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<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<td>Lagged intensity</td>
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<td>yes</td>
<td>yes</td>
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<td>263</td>
<td>263</td>
<td>263</td>
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<td>191</td>
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<tr>
<td>R-squared</td>
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<td>0.608</td>
<td>0.307</td>
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<td>0.213</td>
<td>2.258</td>
<td>2.577</td>
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<td>Prob&gt;F</td>
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<td>0.635</td>
<td>0.00982</td>
<td>0.952</td>
<td>0.808</td>
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Standard errors in parentheses
** * p<0.01, * * p<0.05, * * * p<0.1

That result support the hypothesis of social control tool explained before. When more resources are diverged from internal control, the likelihood of an internal revolt increases and, thus, the Inquisition would increase its intensity to prevent it. However, when too many resources are diverged, not even a high level of inquisitorial intensity would stop a revolt and, thus, the Inquisition drops its intensity.

To summarize, we observe 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 the number of wars is not too high. However, when wars reach a certain threshold inquisitorial intensity decreases. This would correspond to the predictions of the theoretical framework, emphasizing the role of the Inquisition as a social control tool of the Spanish Crown.

Evidence of alternative hypotheses

Tables 4 and 5 show the correlations between army size, trials and inquisitorial finances variables. We observe how neither the army size nor the trials are related to an increase of the inquisitorial revenues. In fact, it seems the relation goes in the opposite direction. The more trials and intensity of the war the less revenues are obtained by the Inquisition.
These simple correlations suggest two things. First, the Inquisition did not increase its activity in order to obtain an increase of its revenues. Therefore, inquisitorial trials do not seem to be income motivated, as Llorente proposed. Second, army size did not increase inquisitorial revenues. Thus, it does not seem that the Inquisition increased its revenues in order to pay for the wars that the Spanish Crown was fighting. This excludes a possible argument that could suggest that the Inquisition increased its activity in order to finance Spanish wars. In fact, what we can observe is the opposite was happening. When the intensity of wars increased the Inquisition experienced a decrease in its revenues.

These results suggest that the Inquisition was not motivated by the extraction of wealth from the citizens, either to increase its own income or to pay the Spanish Crown’s wars. Actually, they emphasize the role of the Inquisition as a social control tool of the government.
8. CONCLUSIONS AND DISCUSSION

This paper reexamines the literature of the motivations of the Inquisition activity. In particular, it focuses its analysis on the social control hypothesis. First I develop a simple theoretical framework to understand one mechanism through which social control could happen. The idea is that the government’s “demand” for social control was greater during periods of war. Spanish cities were more likely to revolt when the Crown was at war, because war diverted King’s attention from internal control. To minimize the threat of rebellion, the Inquisition conducted more trials when Spain was at war than when she was at peace. This theoretical framework provides four predictions. First, the King will decide to create the Inquisition if the number of wars is not very low or very high. Second, once the Inquisition is created, the King will always delegate internal control. Third, inquisitorial activity is increasing with the number of wars if the optimal activity cannot prevent insurrections. Fourth, if the number of wars is too high, inquisitorial activity will drop and the cities would be very likely to revolt.

My results show empirical evidence of an inverse-U relationship between wars and inquisitorial activity, which corresponds to the predictions of my framework. Moreover, I am able to show that the Spanish Crown created the Inquisition when the amount of wars was not extremely low or high and from that point onwards they delegated internal control until the Inquisition was abolished with the victory of Napoleon in 1808.

The importance of explaining the motivations behind inquisitorial activity relies on the capability to shed light on the mechanisms through which a repressive institution affects long run economic performance. If the Inquisition had a negative impact in the long run, it is important to discern what kind of institution it was to explain how it affected economic development. For instance, if the Inquisition were just an extractive institution it would have caused a lack of security of property rights, which would have harmed economic performance. Instead, if the Inquisition were a social control tool, as I propose in this paper, the effect on economic performance would have been through entrepreneurship incentives and lack of new technology adoption given the repression of
any idea or ideology that differed from the Spanish Crown’s one. The possible effect of the Inquisition on Spanish long run economic performance does not mean that other institutions or shocks did not play an important role on it. For example, Drelichman (2005) suggested that American silver inflow and an increasing rent seeking society also affected long run development.

REFERENCES


Blázquez Miguel, Juan. *Catálogo de los procesos inquisitoriales del Santo Oficio de Barcelona*.

Blázquez Miguel, Juan. *Catálogo de los procesos inquisitoriales del Santo Oficio de Murcia*.


