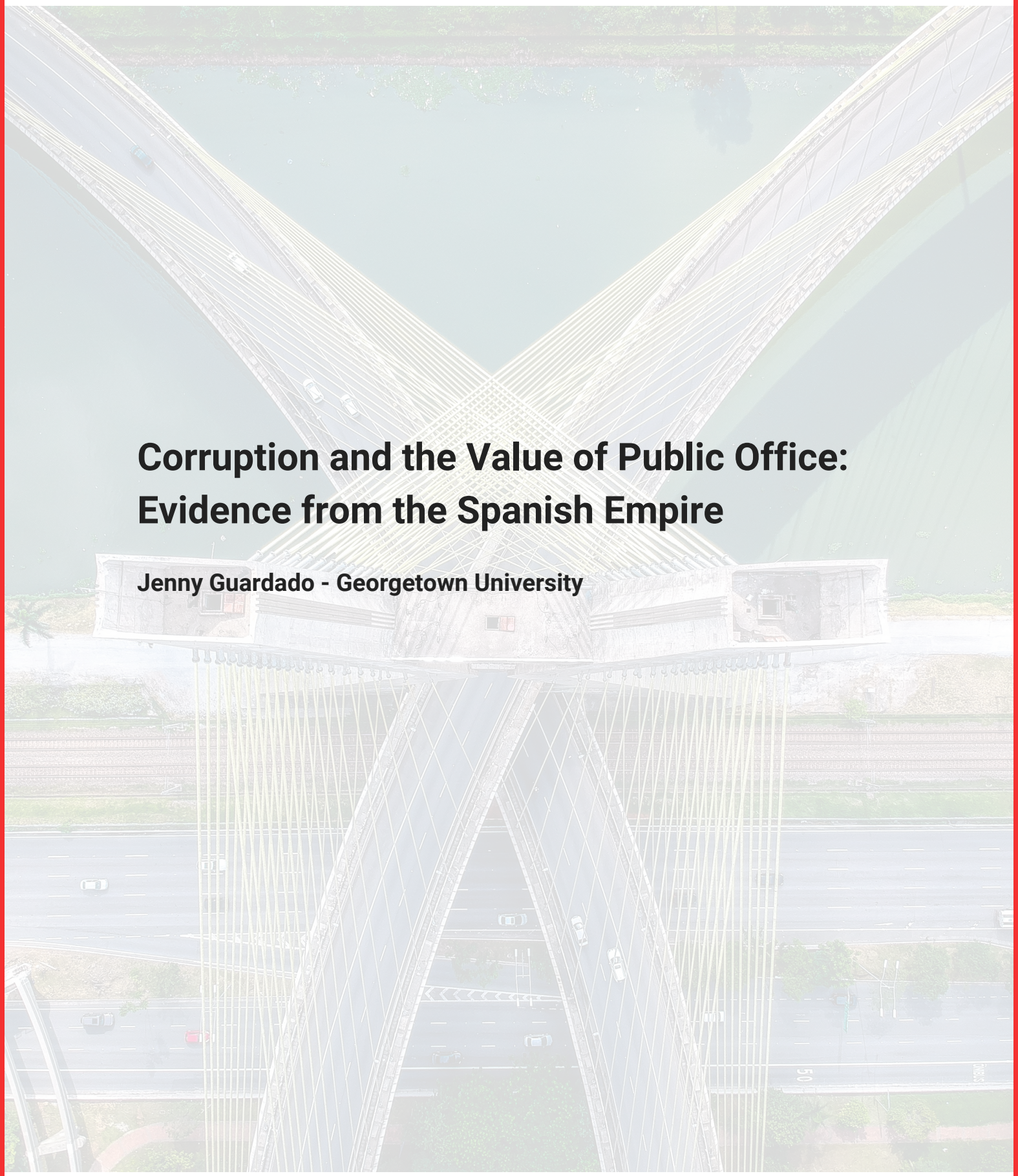

Corruption and the Value of Public Office: Evidence from the Spanish Empire

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Abstract

This paper uses the prices at which the Spanish Crown sold colonial positions in the 17th-18th century Spanish Empire to examine how the opportunities for corruption impacts the value of public office. Exploiting exogenous variation in the composition of governing councils (*audiencias*) overseeing the performance of colonial officials, I first show that when the *audiencia* is less able to constrain the extractive activities of colonial officials, the the willingness to pay for office is significantly higher. Such a lower ability to constrain colonial officials is likely driven by council members with lower human capital and greater conflicts of interest. These findings are consistent with prospective colonial officials placing a higher value on positions in jurisdictions with low quality oversight and greater scope for corruption.

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1 Introduction

Understanding why individuals value public office is of utmost importance for the proper functioning of government. Ideally, prospective officials seek a position because they are intrinsically motivated, attracted by the non-pecuniary benefits such as prestige, or by the legal earnings from their positions. More often than not, public officials are drawn by the illicit returns to be obtained while in office, particularly (but not exclusively) in the developing world. Because appointing one type of official involves a much higher social cost than the other, it is important to look at the institutional traits best able to constrain their behavior while in office and promote the selection of those best suited.

In this paper, I examine how the institutional environment shapes the value of public offices in the context of the Spanish Empire. During periods of dire fiscal need, the Spanish Crown routinely sold colonial provincial positions (governorships and mayorships)[1] based on an individuals willingness and ability to pay. These officeholders served important functions in their provinces, such as judicial and tax-collection activities. Focusing on this episode, I hand-collected a unique dataset of the prices at which these positions were sold between 1674 and 1751 in all the territories of the Spanish Empire in the Americas and Asia (Philippines) at the time. The key aspect of office prices is that they reveal the perceived returns to holding office, informing us of where and when officials expect higher returns versus others.

In theory, purchasing a colonial position need not lead to corrupt or poorly performing officials. Individuals may seek colonial positions for legitimate reasons such as advancing their career, for prestige, or simply to earn a wage. However, given Spanish colonial officials had significant opportunities to engage in extractive activities – ranging from overtaxing to forced labor — this may attract high paying but corrupt individuals to the position.[2]

[1]These positions were called "corregidores" in the viceroyalty of Peru (roughly Spanish South America), and "alcaldes mayores" in the viceroyalty of New Spain (roughly Mexico, the Philippines, and Central America).

[2]For instance, Guardado (2018) shows empirically this is the case for governorship sales for the case of Peru. Weaver (2018) also shows theoretically this result use a contemporary case.

To better elicit the motivations for seeking office, the paper exploits temporal changes in the quality of oversight colonial governors' face in their jurisdiction or *audiencia*[3]. Given all governors and mayors were overseen by one of the eleven governing councils across the Empire, changes in the type of individuals serving in the *audiencia* impacted the scope of governors and mayors to engage in corruption over time. These within-province shocks allows me to compare how changes in the composition of the *audiencia* affected the willingness to pay for the same position, holding constant time-invariant provincial traits. If institutional oversight were not an important consideration when buying a position, there should be no difference in the willingness to pay for the same province when oversight is high versus when it is low.

To measure the quality of oversight, I leverage biographical data of *audiencia* members to proxy their type and likely performance based on traits such as their mode of entry into the *audiencia* (by purchase or by merit "careerists"), levels of education, and other traits creates conflict of interests, for example, whether they owned property in the territory they ruled. I also coded the place of birth of council members — whether born in Spain (*peninsular*) or in the colonies (creoles, *criollos*) since it served as a good measure of whether a minister entered office via purchase or merit: discrimination and distrust from the Crown towards those born in the colonies meant they were less likely to be appointed by merit but rather had to buy their positions to enter office. The key idea is that the *audiencia* is best able to oversee governors and mayors in their jurisdiction when it has a greater share of individuals whose promotion was tied to performance (careerists).

The main empirical challenge to examine the effect of oversight in the *audiencia* on the

[3]The word *audiencia* refers both to the administrative territory as well as to the councils ruing it. Audiencias roughly correspond to current countries: Audiencia of Manila (Philippines), Audiencia of Mexico (southern Mexico), Guadalajara (northern Mexico) Guatemala (which includes current countries of El Salvador, Nicaragua, and Costa Rica), Audiencia of Panama, Audiencia of Bogota (which includes Colombia and Venezuela), Audiencia of Quito (Ecuador), Audiencia of Lima (Peru), Audiencia of Charcas (Bolivia), Audiencia of Chile, Audiencia of Santo Domingo (which includes Cuba and the Dominican Republic) as well as areas now part of the United States (Florida). Paraguay was part of the Audiencia of Chile, while Argentina (and Uruguay) were not separate Audiencias at this time, therefore not included in this study.

willingness to pay for offices under their watch is that the composition of the *audiencia* is not random. It may be that *audiencias* with a higher share of careerists exhibit other traits affecting the attractiveness of holding offices there. For example, certain *audiencias* have better (worse) living conditions making some positions more (less) attractive than others leading to higher (lower) prices. It is also possible that the relationship runs from office prices to the composition of the *audiencia* and not the other way around. Careerists may opt-out of councils with high demand for governor and mayorships to avoid dealing with those purchasing provincial offices, among other explanations.

To address these concerns, the paper exploits changes in the composition of the audiencia driven by the natural or accidental death of some of their members. Because *audiencia* members were appointed for life or until a promotion came along, its members could potentially die while in office — and often did so. Since the timing of the *audiencia* member death is essentially random and not driven by other underlying economic or political conditions, they can capture changes in the composition of the *audiencia* orthogonal to other drivers of office prices. Further checks show that the timing of these deaths is not correlated with other forms of exit from office (retirement, promotion, or removal) or reflecting changes in the economic fundamentals of the *audiencia* they take place. Furthermore, the main predictor of death is age and not necessarily other individual traits.

Results using this empirical strategy show that officials paid consistently higher prices for positions in jurisdictions where careerists or Spanish born officials were a lower share of the *audiencia*. The magnitude of these effects is quite sizeable: namely, a 10% increase in the share of Spanish careerists in the *audiencia* is associated with a 18% average reduction in office prices. These findings are not driven by common year, fixed-office traits, or *audiencia* specific time trends. Alternative explanations based on changes in economic fundamentals in the colonies or in Spain do not account for this pattern of results either. Rather, this finding is consistent with prospective colonial officials placing a higher value on positions in jurisdictions with low quality oversight and greater scope for corruption.

In terms of the mechanisms driving this results, the effect of the composition of the *audiencia* is likely driven by the presence of more human capital among careerists and significantly less conflicts of interest. Based on the traits of individual *audiencia* members, estimates show that Spanish careerist ministers in the *audiencia* are more likely to have a stronger legal education in Spain than non-Spanish, although not necessarily more likely to hold a doctorate degree. Spanish careerists were also less likely to have economic interests in the *audiencia* they ruled. These include holding property and having family members in other government positions — conditions which hindered the impartiality and quality of their rule making them less likely to enforce the Crown's regulations. These results show how an institutional environment permissive to corruption increased the value of public offices, consistent with individuals seeking positions for private gain.

Contribution. The paper contributes to the literature examining the role of institutional corruption for long-run economic development. Specifically, it documents how changes in appointment mechanisms and the bureaucratic incentives faced by key levels of the colonial government led to institutions facilitating extraction, impacting its development path in the long-run[4].

The paper also contributes to the literature on the study of corruption and its persistence. While a number of studies show that exogenous changes in the probability of being caught can reduce the incidence of corruption among existing officials (Olken 2005, 2007; Ferraz and Finan 2011, etc.), this paper shows that oversight changes impact the valuation of public office potentially deterring corrupt officials from entry. Thus implying that the effect of policy interventions designed to increase oversight may be larger and more lasting than what extant current estimates show. To the best of my knowledge this is the first study to explore the effect of exogenous changes in oversight on the valuation of government positions.

Finally, the paper also contributes to our understanding of the decline of the Spanish Empire by showing how a contingent measure born out of fiscal necessity, such as the

[4]See Engerman and Sokoloff 1997; Acemoglu et. al. 2001, 2002; Banerjee and Iyer 2005; Acemoglu et. al. 2012; Bruhn and Gallego 2012; Dell 2010; among others.

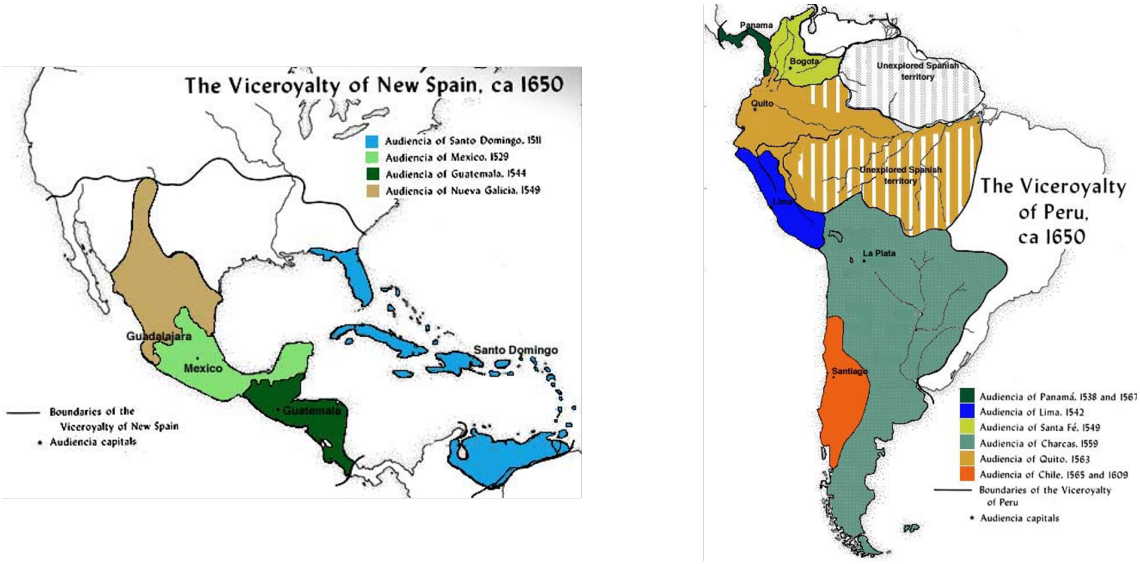
sale of local level offices in general and of council seats to creoles, set in motion broader and potential lasting institutional changes in the colonies. These changes enabled the deterioration in the quality of the *audiencias* and of the Spanish Empire more generally, consistent with other historical accounts (Burkholder and Chandler 1977; Andrien 1984; Quiroz 2006, among many others).

The remainder of the paper is organized as follows: Section 2 provides historical background on the Spanish Empire and office-selling. Section 3 presents the data and methodology. Section 4 presents the results and potential mechanisms and section 5 concludes.

2 Background

Around 1700, the majority of the Americas was part of the Spanish Empire. To rule such a vast territory, the Spanish Crown divided its territories into eleven *audiencias*, governed by a council of the same name. Figure 1 below provides a rough visualization of these *audiencias* according to the two viceroyalties they belonged to: the viceroyalty of Peru (roughly South America) or that of New Spain (roughly North and Central America, the Caribbean, and the Philippines).

Figure 1: *Audiencias* in period under study.



The Audiencia of Manila (Philippines) is the eleventh one. Source: http://faculty.smu.edu/bakewell/bakewell/period.html

Audiencias were in turn subdivided into governorships (*corregimientos*) and mayorships (*alcaldias mayores*). Although the number of governorships and provinces varied over time, there exists consistent data for around 330, covering all corners of the Empire.

2.1 Audiencias, Oversight and Governors.

A key institutional feature of the Spanish Empire is the oversight relationship between the *audiencia* and the numerous governors and mayors under their jurisdiction in three main ways: first, via a post-tenure review or *juicio de residencia*. In these evaluations, one council member would designate (together with the Viceroy) a special judge to evaluate the out-going official and establish whether the official had performed appropriately during its tenure (e.g. follow the Crown's rules, collect taxes, no mistreatment of local population, etc.). If provincial governors were found guilty of fraud, malfeasance, or illicit commerce (*repartimiento*) the ruling was turned to the *audiencia* for confirmation. Due to the broad leeway *audiencia* members had, it was possible to overturn the earlier ruling or simply not ratify it such that the procedure could end with no final ruling (Pelayo 2009:114).

The second oversight avenue of the *audiencia* was to conduct a review before the end of a governors' tenure. According to the Laws of Indies[5], it was possible to conduct an evaluation similar to the *Juicio of Residencia* if circumstances justified so. This would be the case if the population (either Spanish or indigenous) was greatly harmed by this official. Thus providing investigative powers to members of the *audiencia*.

Finally, the *audiencia* also served as the last court of appeal for all cases in the Americas, except for a limited number of cases that could be taken to the Council of Indies in Spain (Kahle 1951: 32). This meant that cases brought against governors and mayors by the population were to be decided in the *audiencia* which could potentially serve as a check to their rule. Figure 3 below depicts this hierarchical relationship within the Spanish Empire.

[5]Libro V, Titulo 15, *De las Residencias, y Jueces que las han de tomar*, Ley xviiij

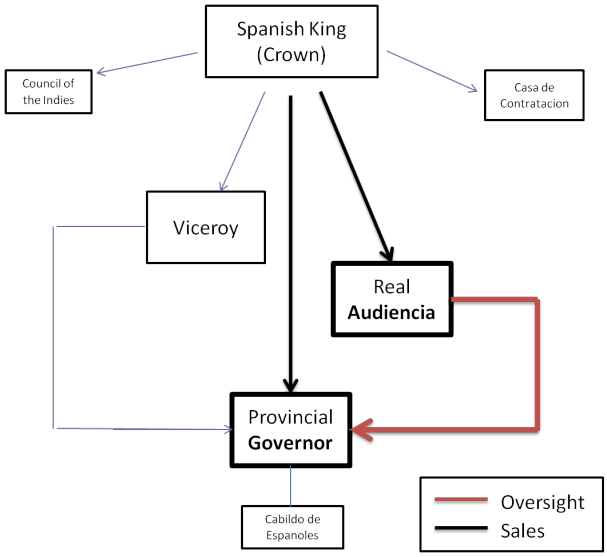


Figure 2: Spanish Colonial Organization - During sales the king appointed *corregidores* and the *Audiencia* directly with advice from the Council of Indies. The *Audiencia* had oversight powers to evaluate the performance of *corregidores* and local mayors.

Aside from the institutional link between council members and local colonial officials, there were other informal links between them. In particular, given the broad policy jurisdiction of the *audiencia*, its members were known to outright collude with governors to engage in profitable extractive activities from the local population. Historical accounts suggest governors and *audiencia* members were involved in the business of forcing the indigenous population to purchase goods at inflated prices also known as *repartimiento* (Stein 1981; Lynch 1992; Andrien 1982). A similar account appears in the Viceroy Amat y Junient memoirs describing how *audiencia* members hugely profited from illicit commercial ventures due to their closeness to merchants who provided supplies and credit to governors to finance these activities. Such connections between members of the *audiencia* and important economic agents made it unlikely that provincial governors would be credibly punished.

Yet, even if there was no outright collusion between governors and council members, it is also possible that the presence of inexperienced non-careerist ministers hindered the *ability* of the *audiencia* to properly oversee provincial governments. For instance, non-careerists purchasing positions in the *audiencia* often lacked the appropriate law degree

or were underage when serving. Sheer inefficiency may create a backlog of cases[6] such that the threat of punishing exploitative provincial officials is no longer credible. In all likelihood, both of these mechanisms played a role in determining the institutional scope for corrupt activities.

2.2 Office-Selling in the Spanish Empire.

The second key feature of the Spanish Empire was the systematic sale of governor and mayor positions during the period 1674-1751. Although office-selling was common for positions involving little political power such as notaries or tax-collectors, positions with judicial and political authority – such as *audiencia* ministers, governors and mayors – were considered off-limits under the belief that the monetary transaction aspect implicitly encouraged profiting from the position (Swart 1958). As a result, until the late 17th century, political and judicial positions were normally reserved to Spanish-born individuals, with legal credentials, a career in the Crown's bureaucracy, or as a reward for numerous year of service to the Crown.

By the end of the 17th century, however, the dire financial situation of the Spanish Crown led it to reverse its policy and start selling political positions in the colonies to anyone willing to pay. The decision was framed as "necessary" to avoid military defeat in Europe and subsequent disintegration of the Spanish Empire. The first political positions to be sold were those of provincial governors and mayorships (*corregidores* and *alcaldes mayores*) in 1674 followed by *audiencia* seats in 1687.

***Audiencia* Positions.** Although both provincial and *audiencia* offices were for sale, the Crown was more reluctant to sell *audiencia* seats given their broad jurisdiction on matters as diverse as taxation, mining rights, civil and penal lawsuits, military defense, among others. In addition, selling *audiencia* seats inevitably disrupted the system of

[6]This was the case in the colonial treasury, where the sale of treasury and accounting positions to unqualified individuals led to an increase in uncollected debts and poor accounting in the Peruvian treasury (Andrien 1984)

promotions and rotations whereby ministers served five years in one *audiencia* before rotating to another. The purpose of the rotation system was to ensure the loyalty of *audiencia* members to Madrid and prevent them from establishing local connections. Purchasing seats "ahead of the queue" would lead to delays in promotion among those who have followed the proper path.

Yet, the dire fiscal situation of the Crown rendered these concerns moot and opened the door for anyone, including those born in the colonies (creoles), to purchase these seats. Under normal circumstances, the Crown preferred *audiencia* ministers to be of Spanish origin with a legal education. This was driven by the belief that those born in the colonies (*creoles*[7]) were less loyal to Madrid and more likely to favor local interests instead of those of the Crown. This differential appointment policy meant that creoles rarely held positions of political importance, even if highly educated. For this reason, purchasing *Audiencia* seats became an opportunity for these settler elites (creoles) to access political power previously denied or severely restricted.

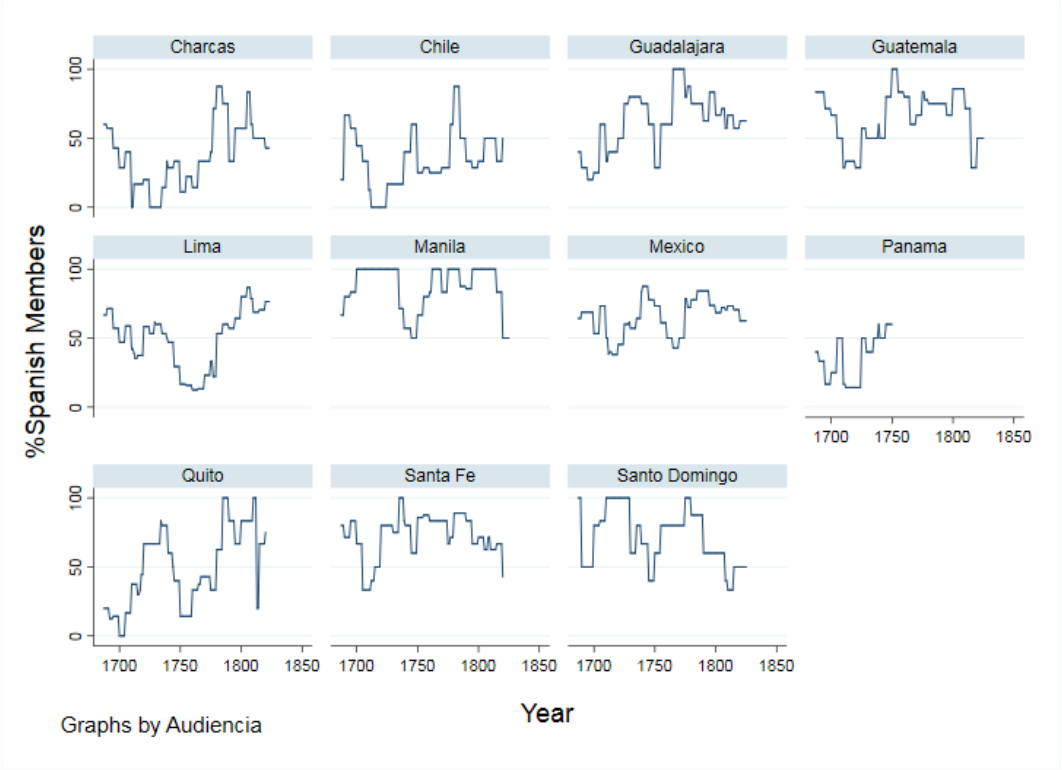
The policy of denying positions to settler elites seems corroborated with historical data. According to Burkholder and Chandler (1977), of all new *audiencia* members entering office between 1687 and 1751 (313), 122 or 40% did so via purchase while the rest was appointed (191, 60%). But of those purchasing positions, 90% (109) were bought by Creoles, suggesting that they would not have entered office by normal (appointment) channels. Put another way: of the 138 Creole new ministers entering office, 80% (109) did so because they have bought their seat while the rest was appointed. These simple statistics show how the mode of appointment to the *audiencias* is (almost) perfectly correlated with the place of birth.

As expected, allowing seats to be purchased in the council had an immediate effect on the share of Spanish versus Creoles in the American *audiencias*. Figure 4 below presents the share of Spanish careerists throughout the period. Some *audiencias*, like Manila (Philippines) and Santo Domingo (Dominican Republic) had consistently high levels of Spanish presence over time. Yet other *audiencias* like Charcas (Bolivia) had very little

[7]Creoles were individuals born in the Americas from Spanish parents.

Spanish presence. Other territories saw important fluctuations in these shares over time.

Figure 3: % Spanish members in *Audiencias*. Source: Burkholder and Chandler 1977.



In addition to allowing *audiencia* seats to be sold, the Crown also undermined other measures designed to insulate its *audiencias* from local interests. For example, ministers normally served in an *audiencia* on a rotational basis (5 years) to prevent forging close alliances with local elites. Yet, during periods of fiscal crises, ministers could have their transfer waived in exchange for a fee. Similarly, ministers were normally banned from marrying local women or having family ties to other government officials. They were also forbidden from acquiring property in the *audiencia* they ruled to guarantee greater impartiality and loyalty to the Crown. Yet, exemptions to this rule could be granted in exchange for a payment to the Crown. The same applied to underage individuals and those without proper law degrees who were allowed to serve as *audiencia* judges provided they have bought an exemption along with their position. These "waivers" served as a source of revenue for the Crown and signaled major departures from the ideal public official of the time.

Governors and Mayors. Parallel to *audiencia* sales, the Crown also sold numerous governor and mayor positions across the Empire. Unlike *audiencia* members – whose positions were granted for a lifetime or until a job promotion came along – governors only served in office for a period of five years. The majority of these positions were acquired by Spanish born individuals living in the Peninsula (Sanz Tapia 2009: 89), this is surprising given the relatively short term, and the scarce career benefits it brought about. Yet, unlike lifetime seats in an *audiencia*, governorships promised a quick fortune if serving in places susceptible to extraction (Andrien 1982; Guardado 2018). In fact, governors had a number of instruments available to obtain rents, such as overtaxing; forcing sales on the local population; or mobilizing labor for their own use. Through these and other means, a successful governor could raise around 30 to 150 times their salary (Andrien 1982: 13) which was well below the price they would often pay to access the position in the first place.[8] Given these potential sources of profit, the price paid serves as a revealed valuation of the expected returns for the same colonial office at different points in time.

How Sales Take Place. The most common way positions were purchased was through a single monetary offer to the Crown who would then accept or reject the buyer. This mode of purchasing office did not require the position to be vacated as offices could be bought as a *future*. Those interested in the position would send sealed letters with a brief description of their qualifications (including social status and services to the Crown) and the price offered. Higher prices increased the probability of their offer being accepted.

[8] Andrien (1982) notes that *corregidores* in Peru could earn up to 30,000 pesos a year or 150,000 pesos for the five year term. Since the average salary is 1,000 pesos, this was a substantial gain. Moreover, the average price paid for offices was around 4,000 pesos at the time. Half a peso is equivalent to a day's work for a laborer at the time.

3 Data and Empirical Strategy

3.1 Data

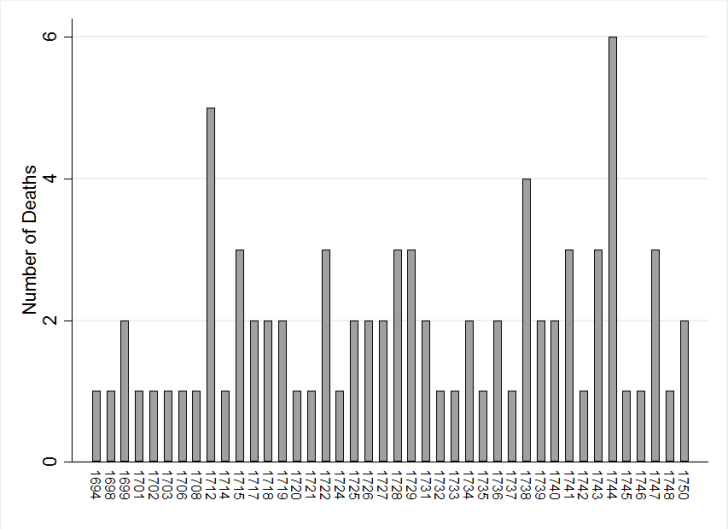
Office prices. To measure the value of colonial governorships I use the time series of the prices paid for all governor positions sold in the Spanish Empire ($OfficePrice_{it}$). This information was collected from the Spanish colonial archives (*Archivo General de Indias*) and consists of approximately 2,000 transactions from 330 provinces or sub-national units distributed across 11 territories or *audiencias*, now countries. Such information was based on the titles for governor issued for each of these provincial officials containing information on their payment and appointment details. The data was cross-checked with accounting records from the Spanish Crown providing the name of the buyer, position sold, price paid, and year of sale for all territories in the Spanish Empire. The period under study runs from 1674 until 1751 when the last recorded sale was made. All prices account for yearly inflation as given by silver prices in Arroyo-Abad (2012).

***Audiencia* Composition.** The time series for the composition of the 11 *Audiencia* bodies is provided by Burkholder and Chandler (1977). The authors coded the yearly distribution of members according to their place of birth – useful to distinguish careerists from others — whether they bought their position, and their date of departure from the *Audiencia*. With such information, I construct $\%Spanish_{jt}$, which is the proportion of members of Spanish origin in *audiencia* j at year t. Since individuals of Spanish origin overwhelmingly entered *audiencia* positions by appointment, the variable thus captures the presence of members belonging to the royal bureaucracy with close ties to Madrid and not to the colonial territories. The counterpart of this measure is $\%Creole_{jt}$, or the proportion of members of Creole origin.

***Audiencia* Members Deaths and Traits.** In addition to composition, I also identify the individual circumstances under which each *audiencia* member left office based on Burkholder and Chandler's historical biographical dictionaries (1982). From these

dictionaries I code the timing of Spanish careerists death ($SpDeath_{jt}$). Since the lives of these ministers are recorded in detail, I am able to rule out that these deaths are driven by events such as epidemics or wars that would correlate with the attractiveness of holding provincial governorships. Figure 4 shows the distribution over time of the 81 deaths recorded in the *audiencias*. In no given year there were more than six deaths across all eleven *audiencias*.

Figure 4: Audiencia Minister Deaths by Year. Source: Burkholder and Chandler (1977; 1982).



One limitation of this data is that the information is only available for new *audiencia* appointments after 1687. Yet, this will only have implications for the strength of the instrument, which will be better able to predict changes in the composition of the *audiencia* in years towards the end of the sample relative to the earlier years.

To further examine the mechanisms driving the results, I coded the education background of *audiencia* ministers depending on whether they had studied in Spain or not. ($SpUniv_{jt}$) and their law degree (doctorate=3, bachelor=2, or lawyer=1). In addition, to capturing potential conflicts of interest among *audiencia* members, I coded the number and type of provisions the Crown overlooked by allowing them to access office. In general, *audiencia* ministers were not allowed to have family ties to other colonial government members ($Shfamilytie_{jt}$) or hold property in their *audiencia* ($Shholdprop_{jt}$) to guarantee impartial rulings on key matters such as land rights, oversight of local governorships, taxation, and all civil and criminal cases.

Other Variables. The paper also includes *audiencia* specific provincial traits, given prices may follow different patterns across *audiencias* due to reasons unrelated to the composition of the council. In addition, to corroborate that the timing of *audiencia* deaths are not correlated with other economic factors that might be driving higher prices paid for governorships, I collected data such as inflation, silver output, and agricultural tithes (as a proxy for production) from the different *audiencias*. Similarly, I use the time-series of the Spanish Crown's revenue (Dincecco 2009), expenditure (Jurado-Sanchez 2006), exchange rate, and inflation (Hamilton 1969), as well as local wages to further examine their relationship to the timing of deaths.

Table A in the Appendix presents the main descriptive statistics of the baseline sample.

3.2 Empirical Approach

To examine whether oversight affects office prices, one could in theory simply compare prices paid when the share of Spanish careerists in the *audiencia* is higher to times when they are low. This would be appropriate if the composition of the *audiencias* were randomly assigned. Unfortunately this is not the case. The composition of the *audiencia* may be driven by underlying economic conditions, or strategic considerations by the Crown, or of *audiencia* ministers themselves.

To clarify the direction of the relationship I rely on an instrument for the change in the share of Spanish careerists based on the natural or accidental death of some of its members. Because *audiencia* members were appointed for life – they only left the *audiencia* due to retirement, promotion, or removal – its members often died in office.

Table 1 below presents basic statistics describing the mode of exit from the last *audiencia* they served and their place of birth. Based on this information, between 1687 and 1751 53% of ministers left the *audiencia* due to death (83), 25% due to retirement (40), 5% were promoted (8) and 16% were removed for disciplinary reasons (e.g. corruption).

These removals often came after special envoys from Spain (*visitadores*) were able to uncover instances of corruption in the *audiencia*. Interestingly, the share of Creole ministers removed from office due to disciplinary reasons is almost double that of Spanish careerists. Table B in the Appendix provides more details (e.g. name, date of entry, year of death) for each *audiencia* minister in the sample.

Table 1: Mode of Exit of Audiencia Ministers 1687-1751

	Promotion	**Death**	**Removed**	**Retired**	**Total**
Both	8	**81**	26	40	155
Spanish ("Careerist")	8	**44**	9	21	82
Creoles ("Non Careerist")	0	**37**	17	19	73

These deaths inevitably lead to changes in the composition of the *audiencia*. In particular, the death of a Spanish careerist could either bring another careerist in place — leading to no change in the overall composition — or to a Creole — hence reducing the overall share of Spanish. Therefore, the death of a Spanish careerist leads to a reduction in the share of Spanish members in the *audiencia*, *on average*. The opposite logic is true for the share of Creoles. These deaths thus provide an opportunity to examine how orthogonal changes in the composition of the *audiencia* influenced the perceived expected returns to local colonial officials.

The key assumption of the identification strategy is that the timing of these natural or accidental deaths is unrelated to the prices paid for local offices, except through the effect it has on the composition of the *audiencia* (exclusion restriction).

One condition under which this assumption does not hold is if deaths are correlated with changes in the economic fundamentals of the colonies or in Spain. These economic conditions would likely affect office price valuations potentially confounding the estimates. Economic fundamentals such as silver output, agricultural production, or inflation may increase (decrease) the attractiveness of local offices. Yet, Table 2 below shows there is no relationship between the timing of death of careerists in the *audiencia* and a key economic

fundamental which is silver production. Although data availability for these variables is uneven, the most important series (silver output, column 1 to 4) does include the *audiencias* with most governorships (Charcas, Lima, Guadalajara, Guatemala, Guadalajara, Santa Fe and Mexico). Note that the observations are *audiencia*-year, which is the level of variation of the treatment. In addition Columns 5 to 8 uses a different measure of silver production but only for Peru and Mexico. Because of potential trends in the dependent variable, I estimate this relationship in first differences.

Table 2: *Audiencia* Deaths and Economic Fundamentals: Silver Production

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
DV:	$LSilver_t - LSilver_{t-1}$				$LSilver_t - LSilver_{t-1}$			
$Death_{jt} - Death_{jt-1}$	0.023		0.018		-0.000		-0.013	
	(0.038)		(0.046)		(0.041)		(0.067)	
$SpDeath_{jt} - SpDeath_{jt-1}$		0.010		-0.001		-0.006		-0.005
		(0.054)		(0.063)		(0.057)		(0.093)
Observations	338	338	338	338	128	128	128	128
Audiencia FE			Y	Y			Y	Y
Year FE			Y	Y			Y	Y

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Furthermore, Table C in the appendix shows that the timing of deaths is not related to other conditions in the *audiencias* such as agricultural tithes and inflation indexes. Although this data is limited to only Peru and Mexico, these are the largest *audiencias* in the Empire with more positions sold. A visible correlation between deaths in these *audiencias* and inflation or tithes would suggest a violation of the exclusion restriction. Finally, the timing of these deaths are also unrelated to other economic fundamentals in Spain such as revenue, GDP per capita, exchange rates, and inflation, which would roughly capture the outside option of those seeking to purchase positions. This suggests that these deaths are unrelated to bad economic conditions in Spain. Results are shown in Table D of the Appendix.

A more serious concern is whether the timing of deaths is correlated with the timing of governorship sales. Although the Crown's decision to sell local offices in the first place is driven by other considerations (e.g. mostly fiscal need due to its involvement in European wars), it is important to rule out that the Crown strategically decides to sell positions (e.g. increase supply) when *audiencia* ministers die. Yet, Table 3 below shows that the timing of death and the decision to sell a local position in that *audiencia* are not statistically related. The result is the same in levels with year and *audiencia* fixed effects or in first-differences to account for potential trends.

Table 3: Timing of *Audiencia* Deaths and *Corregimiento* Sales: OLS

	(1)	(2)	(3)	(4)
DV:	$Sale_{ijt}$			
$Death_{ijt}$	-0.001	-0.007		
	(0.006)	(0.006)		
$SpDeath_{ijt}$			-0.005	-0.008
			(0.009)	(0.009)
Observations	15,904	15,904	15,904	15,904
Province FE	N	Y	N	Y
Year FE	Y	Y	Y	Y

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

Finally, it is important to show that *audiencia* members' death is mainly driven by natural (or accidental) reasons so that they are not disproportionately Creoles (Spanish), or more (less) educated, etc. Failing to rule out these concerns would raise concerns about the randomness of the instrument. Table 4 below shows the main individual determinants of dying in a particular year. As shown consistently across all specifications, age (or year of birth) is the most important predictor of death. Other factors such as whether the member is of Spanish origin, with a degree in Spain, or its nobility status did not play a significant role in predicting death. Finally, a column (7) includes a year indicator, suggesting that the findings are not driving by a particular one. Only date of birth is (naturally) related to the probability of dying.

Table 4: Likelihood of *Audiencia* Deaths and Individual Traits: OLS

DV:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
				$Death_{it}$			
Age_{ijt}	0.006***	0.005*	0.005*	0.005*	0.005*	0.005*	0.007*
	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)
$Spanish_{ijt}$		0.055	0.075	0.068	0.056	0.045	0.146
		(0.099)	(0.151)	(0.154)	(0.160)	(0.159)	(0.200)
$Creole_{ijt}$		0.038	0.032	0.018	-0.012	-0.012	-0.162
		(0.084)	(0.090)	(0.102)	(0.145)	(0.145)	(0.199)
$SpanishEduc_{ijt}$			-0.029	-0.029	-0.022	0.013	-0.032
			(0.166)	(0.167)	(0.169)	(0.171)	(0.196)
$DocDegree_{ijt}$				0.034	0.034	0.026	0.066
				(0.114)	(0.114)	(0.114)	(0.146)
$PurchasePost_{ijt}$					0.038	0.048	0.154
					(0.133)	(0.133)	(0.172)
$Nobility_{ijt}$						-0.167	-0.175
						(0.122)	(0.136)
Observations	134	134	134	134	134	134	134
Year FE	N	N	N	N	N	N	Y

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

3.3 Estimation

Given the timing of deaths appears to be orthogonal to potential factors affecting office prices, I estimate the following equation for the first-stage of the 2SLS IV strategy:

$$\%Sp_{j,t} - \%Sp_{j,t-n_i} = \alpha_j + \gamma_t + \beta_1 \sum_{k=1}^{n_i} \#SpDeath_{j,t-n_i+k} + w_{ijt} + x_{jt} + e_{jt} \quad (1)$$

Or, if weighting the number of deaths by the total number of members in the *audiencia*, I estimate the following:

$$\%Sp_{j,t} - \%Sp_{j,t-n_i} = \alpha_i + \gamma_t + \beta_1 \sum_{k=1}^{n_i} \frac{\#SpDeath_{j,t-n_i+k}}{NumAud_{j,t-n_i+k}} + w_{ijt} + x_{jt} + e_{jt}$$

Where $\#SpDeath_{j,t-n_i+k}$ is the number of Spanish deaths occurring in *audiencia* j, summed over the years $(t - n_i + k)$, which is when province i was sold. $NumAud_{j,t-n_i+k}$

is the number of members of the *audiencia* at the time of death. $\%Sp_{j,t} - \%Sp_{j,t-n_i}$ is the difference in the share of Spanish careerists of *audiencia* j between year t and the last time that province was sold $t - n_i$. α_i and γ_t represent province and year fixed effects, respectively. w_{ijt} accounts for the number of years between office sales and x_{jt} is an *audiencia* specific time-trend to account for differential trends across *audiencias*. The second stage regression for the IV strategy is the following:

$$y_{i,j,t} - y_{i,j,t-n_i} = \alpha_i + \gamma_t + \beta(\widehat{\%Sp_{j,t} - \%Sp_{j,t-n_i}}) + x_{ijt} + e_{ijt} \tag{2}$$

Where $y_{i,j,t} - y_{i,j,t-n_i}$ is the difference in office prices (in levels) or the growth rate for province i between sales at between year t and year $t - n_i$, as specified. All other controls are the same from the first-stage. Note that because the estimation is in first differences, it already accounts for fixed traits influencing prices across positions as well as the average share of careerists in the *audiencia*. It should also be noted that since the treatment varies at the *audiencia*-level (j), minister deaths influences the level of oversight all governors under their jurisdiction face. All standard errors are clustered at the province level, unless otherwise specified.

I estimate the baseline results in a sample of transactions occurring in the short to medium-term ($n_i \leq$11 years which accounts for 75% of all sales). The logic behind this sample is that the time between sales is not even across provinces, some can have as many as fifty years between sales. Yet, the longer the period between sales, the less likely it is that *audiencia* deaths are random, since the simple passing of time makes it likely that all or many members die. In this sense, the longer the period, the more likely it is that the instrument is picking up other factors. Moreover, since there are bounds on the relative composition of the *audiencia* (the maximum is 100%), a very large number of deaths due to a long period between sales could lead to an implausible linear prediction of the composition of the *audiencia*. Nonetheless, I show the results in different samples with the caveat that the longer the time period between transactions, the less likely is that these deaths can be considered as-if random.

Figure 5 below provides evidence of the relationship between the cumulative number of Spanish careerist members dying between sales and their share of in the *audiencia*. As hypothesized, the higher the number of deaths, the lower is the share of Spanish members in the *audiencia*. Thus suggesting that deceased members are a good instrument of changes in *audiencia* composition.

Figure 5: First-Stage Relationship

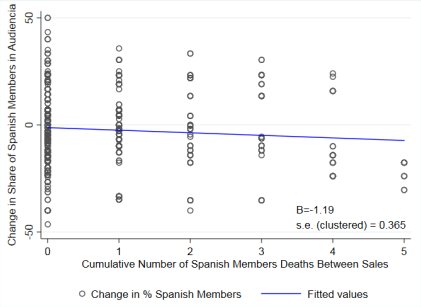
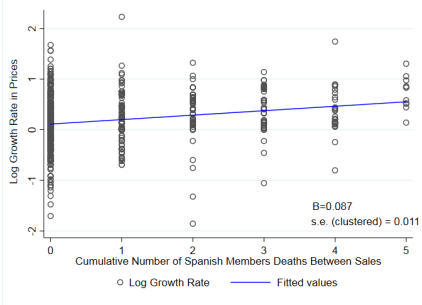


Figure 6: Reduced Form (Log Growth Rate)



In addition, Figure 6 provides graphical evidence of the reduced form relationship between careerist members dying in office and the log growth rate of office prices. As illustrated, in places where more Spanish careerists in the *audiencia* deceased, the price of local offices tended to increase thus supporting the hypothesis and the relevance of the instruments. Table E in the Appendix presents the full econometric analysis of the reduced form relationship.

4 Offices Prices and *Audiencia* Composition

Figure 7 below provides some graphical evidence of the hypothesized relationship. Specifically, it graphs the average change in office prices and *audiencia* share of Spanish born members per year[9]. As noted, office prices tend to increase when the share of Spanish ministers in the colonial *audiencia* wanes, particularly post 1740 and around 1710. In contrast, the sharp increase in the number of Spanish ministers around 1720's is accom-

[9]Namely, it plots the average log growth rate of office prices $Log(Price)_{i,j,t} - Log(Price)_{i,j,t-n_i}$ and the difference in the share of Spanish careerists in j between year t and the time that province was last sold $t - n_i$ or $\%Sp_{j,t} - \%Sp_{j,t-n_i}$ in a given year

panied by a decline in the average log change in office prices, on average. However, Table 5 below presents a more rigorous test of this relationship.

Figure 7: Two-year mean log growth of prices and difference in % Spanish members

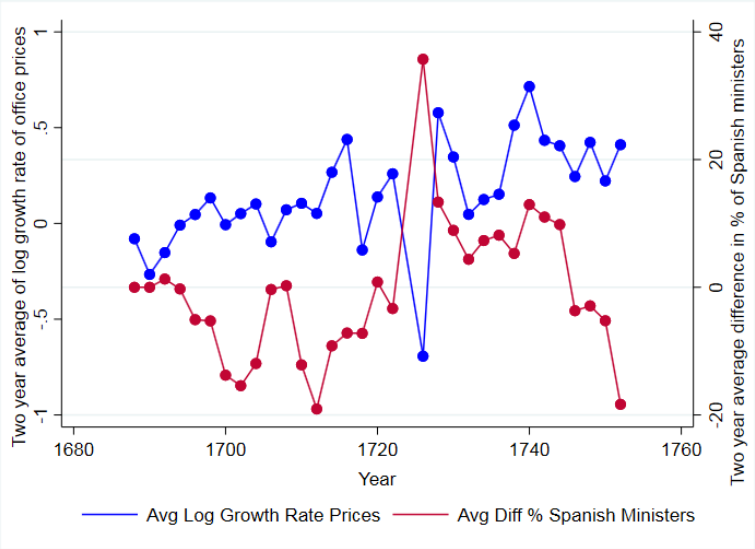


Table 5 Panel A presents the estimation results for Equation (2) (second stage) using as instrument the total number of Spanish deaths between sales, while Panel B uses instead the weighted number of deaths, effectively the cumulative share of deaths. As shown across all specifications of Panel A, an increase in the share of Spanish careerists in the *audiencia* is associated with a decrease in either the difference in the level of prices from one sale to another as well as with a decreased growth rates in the prices paid for positions overseen by it.

In terms of magnitude, the coefficient in Column 1 suggests that the average reduction in (real) office prices in response to a 1% increase in the share of Spanish members is around 100 pesos (99.3) which is half the yearly salary of a military captain at the time. In terms of growth rates, the coefficient of -0.018 represents a 1.8% reduction in prices for every one percentage point increase in the share of Spanish in the *audiencia*. Results are similar if instead I look at growth rates (columns 3). Additional results in the Appendix (Table F) show that estimates are largely in line (albeit less precise) when using only sales with a small difference among them (less than 5 years). Table F also shows that

when focusing on a larger window, the instrument is no longer a strong one (as expected).

Table 5: *Audiencia* Composition and Governorship Prices: IV Estimates

	(1)	(2)	(3)
	Second-Stage		
DV:	Level Differences	Log Growth Rate	Growth Rate
	Panel A: Unweighted Estimates		
$\widehat{\%Sp_{j,t} - \%Sp_{j,t-n_i}}$	-99.3**	-0.018***	-0.027**
	(49.6)	(0.0065)	(0.011)
		First-Stage	
$\#SpDeath_{j,t-n_i+k}$	-3.78***	-3.78***	-3.78***
	(0.524)	(0.524)	(0.524)
F-Stat	51.97	51.97	51.94
	Panel B: Weighted Estimates		
$\widehat{\%Sp_{j,t} - \%Sp_{j,t-n_i}}$	-109*	-0.019**	-0.032**
	(62.0)	(0.0084)	(0.014)
		First-Stage	
$\#SpDeath_{j,t-n_i+k}$	-45.18***	-45.18***	-45.18***
	(9.78)	(9.78)	(9.78)
F-Stat	21.34	21.34	21.34
Observations	1,153	1,153	1,153
Province FE & Year FE	Y	Y	Y
Number of Clusters (positions)	208	208	208
	Panel C: OLS Estimates		
$\%Sp_{j,t} - \%Sp_{j,t-n_i}$	-2.01	0.002	0.0018
	(6.85)	(0.002)	(0.001)
	[0.84]	[0.14]	[0.234]
Observations	1,192	1,192	1,192
Province FE & Year FE	Y	Y	Y
Number of Clusters (positions)	247	247	247

Robust standard errors clustered at the province level in parentheses for Panels A and B. Panels C present robust standard errors in parentheses and p-values using wild cluster bootstrap t-statistics in brackets. Panel A's instrument is the cumulative number of Spanish deaths between sales; Panel B's instrument is the cumulative number of Spanish deaths weighted by the number of *Audiencia* members. All specifications include an *audiencia* specific linear time trend; a control for the distance in years between sales; and a fixed effect for the type of position (governorship or mayor). *** p<0.01, ** p<0.05, * p<0.1

Panels A and B also present the results from estimating the first-stage, in both cases, the cumulative number of deaths is a strong predictor of changes in the composition of the *audiencia* as the F-Statistic and exhibits the hypothesized sign: more deaths of Spanish careerists reduce, on average, its relative share in the *audiencia*. This relationship is clearer when examining the first stage estimates in Panel B: a coefficient in the first stage

closer to one suggests that Spanish careerists were frequently replaced with a non-Spanish (creole), while a coefficient closer to zero suggests that they were mostly replaced by other Spanish careerists. As shown, the coefficient of -45 (or 0.45) suggests Spanish ministers were more frequently replaced by other Spanish ministers as it is (slightly) closer to zero.

For comparison purposes, Panel C presents the OLS estimates, which are much smaller in magnitude – practically zero – and not always of the expected sign. One reason for this divergence could be measurement error in coding the year to year composition of the *audiencia*. Since the Burkholder and Chandler (1977) data is based on records as viewed from Madrid, if these had a lag or differ from the actual composition in the colonies, it may be measured with error and lead to attenuation bias in the OLS estimates. Similarly, it is possible that the effect of Spanish *audiencia* members on prices is larger in places with more deaths of Spanish members than in the whole sample. Because the more drastic changes in *audiencia* composition comes from changes due to the death of their members, their effect on prices may be larger than the effect of the composition of the *audiencia* in the whole sample. A final possibility is a violation of the exclusion restriction, yet, this is unlikely since the instrument appears to be clearly uncorrelated with key economic traits that would likely influence the willingness to pay for office (Table 2).

An additional exercise shows that the precision of the estimates are not sensitive to clustering at a higher level of aggregation (by *audiencia*). Given the number of clusters is limited (only 11) Table F in the Appendix shows the estimates using block bootstrapping the t-statistic (Bertrand et. al. 2004). That is, I randomly draw groups (equivalent to the number of *audiencia*-years) with replacement and computer the t-statistic and compare it to the original one (t).[10] Only if the bootstrapped t-statistic is larger than the original estimate at a 95 percent confidence level can we reject the hypothesis that $\beta = 0$. Results from the bootstrap exercise for each of the baseline specifications are presented Table F. As shown, for all cases, we can reject the null hypothesis of no effect given that at least 95 percent of the time t_{boot} is smaller than the original t-statistic.

[10]Essentially $t_{boot} = abs(\hat{\beta}_{boot} - \hat{\beta})/SE(\hat{\beta}_{boot})$. As stated in Bertrand et. al. (2004: 265) "The difference between this distribution and the sampling distribution of t becomes small as N goes to infinity, even in the presence of arbitrary autocorrelation within states and heteroskedasticity."

A different concern raised by these results is that of left-censoring in the dependent variable, or that only those positions that will command a high price are ever sold. While this is a possibility, this will only run against the hypothesized effect thus driving down the estimated coefficient. Moreover, even if this were the case, because the timing of deaths is random they are unrelated to the timing in which specific provinces are sold. Finally, Figure A in the Appendix shows that the results are robust to eliminating one province at the time.

To further strengthen the causal interpretation of these estimates, Table 6 below presents the baseline results in a different sub-sample. Since some *audiencias* were considered key in terms of military and security importance, some of its members were more likely to be directly appointed from Madrid following the highest selection criteria. For instance, the Philippines were considered particularly susceptible to attacks, due to its closeness to Dutch territories. Similarly, the key ports of Acapulco and Veracruz with direct access to the Caribbean in the *audiencia* of Mexico were strategic locations. Finally, for the same reason all of the Caribbean basin was considered vulnerable to piracy and attacks from foreign powers (mainly the French, British, and Dutch) due to its easy access from Europe.[11] Given these different security concerns, we should observe that results are larger in *audiencias* where there are less military and security concerns, compared to the others. Estimates from Table 6 below show how estimates are stronger among *audiencias* less threatened by foreign powers and where the Crown was likely less concerned about the quality of their governing bodies.

[11] This would include the *audiencia* of Santa Fe (now Colombia and Venezuela); and Panama, which was frequently raided by pirates and buccaneers as late as the 18th century.

Table 6: *Audiencia* Composition, Office Prices and Security Concerns

	(1)	(2)	(3)	(4)	(5)	(6)
	Second-Stage					
DV:	Level Diff	Log(Growth Rate)	Growth Rate	Levels	Log(Growth Rate)	Growth Rate
	Under Security Threat			No Security Threat		
$\%Sp_{j,t} - \widehat{\%Sp}_{j,t-n_i}$	-236**	-0.035***	-0.056***	54.8	0.001	0.008
	(114)	(0.013)	(0.021)	(36.7)	(0.007)	(0.013)
	First-Stage					
$\#SpDeath_{j,t-n_i+k}$	-3.07***	-3.07***	-3.07***	-5.37***	-5.37***	-5.37***
	(0.866)	(0.866)	(0.866)	(1.23)	(1.23)	(1.238)
F-Stat	12.56	12.56	12.53	19.00	19.00	18.86
Observations	575	575	575	578	578	578
Number of Provinces	97	97	97	111	111	111

Robust standard errors clustered at the province level in parentheses for Panels A and B. Panels C present robust standard errors in parentheses. Panel A's instrument is the cumulative number of Spanish deaths between sales; Panel B's instrument is the cumulative number of Spanish deaths weighted by the number of *Audiencia* members. All specifications include an *audiencia* specific linear time trend; a control for the distance in years between sales; and a fixed effect for the type of position (governorship or mayor). *** p<0.01, ** p<0.05, * p<0.1

Overall, the results presented above are consistent with the idea that prices are higher at times in which the *audiencia*'s ability to properly oversee the performance of local officials is lower, particularly in places where the crown is not particularly concerned about the quality of its officials.

5 Mechanisms

The remaining question is, why the composition of the *audiencia* impacts office prices under their jurisdiction? If the valuations of provincial offices are driven by differences in the quality of *audiencia* oversight, then there are likely observable differences in the characteristics of Spanish careerists versus others in the *audiencia*. For instance, Spanish careerists may exhibit systematically higher human capital which improves their *ability* to oversee colonial officials. Or, they may be subject to less blatant conflict of interests that allows them to uphold the Crown's policies in the *audiencia* often at the expense of those of the local elite. The idea is that these traits may lead to a lower performance among council members providing greater opportunities for corruption.

The measures of member quality first focus on indicators for human capital, such as the share of members educated in Spanish universities (e.g. Salamanca, Seville, Barcelona,

etc.) versus those educated in the Americas as well their specific law degree (doctoral, bachelor, or just lawyer). Low human capital may limit oversight due to sheer incompetence or inefficiency. As a second proxy of human capital, I examine the share of ministers who entered as a minor (usually via purchase). Underage ministers had little work experience and were obviously limited in their ability to exercise the law. The only reason they were allowed a seat is if the family had paid a hefty sum to the Crown to waive the age requirement.[12]

The second group of variables measures potential conflicts of interest such as (i) having a local spouse or children; (ii) having family members serving in other government positions; or (iii) holding property in the *audiencia*. These rules were intended at the time to prevent corruption and guarantee good governance. The idea was that *audiencia* ministers with *less* local connections would uphold the Crown's interests when ruling on sensitive matters such as taxation, land rights, and local governance, among many others.

For this exercise, the first-stage is still represented by Equation (1) while the second-stage is now given by:

$$\%AudTrait_{,j,t} - \%AudTrait_{i,j,t-n_i} = \alpha_i + \gamma_t + \beta(\%\widehat{Sp_{j,t} - \%Sp_{j,t-n_i}}) + x_{ijt} + e_{ijt} \quad (3)$$

Where $\%AudTrait_{,j,t} - \%AudTrait_{i,j,t-n_i}$ captures the difference in the share of members exhibiting different traits in year t relative to the year in which province i was previously sold $t - n_i$. All other variables are the same as those included in Equation (1). In addition to serving as a proxy for oversight, these variables also help distinguish the importance of competence or human capital factors (measured by education and work experience) relative to traits capturing potential conflicts of interest (measured by whether they own property or their marriage ties).

[12]Because *audiencia* seats were appointed for life, these positions served as a placeholder and the expectation was that these members would eventually gain experience to properly serve as government officials.

Table 7 below presents the results from estimating equation (3) using the IV strategy outlined above. Estimates from column (1) show that the presence of Spanish careerists in the *audiencia* are associated with a lower share of members who have purchased their seat. This finding is largely expected and consistent with the historical accounts of overt distrust of American born creoles. More importantly, results from column (2) suggests that while Spanish careerists are more likely to be educated in Spain, they are not necessarily more likely than non-Spanish to hold a doctorate degree in Law. This suggests that non-careerists are likely to hold law degrees even if not necessarily form a university in Spain. Finally, as expected, careerists are much less likely to be underage.

In terms of potential conflict of interests, Spanish careerists are less likely to have family in other branches of the colonial government and less likely to own property in the *audiencia*. Interestingly, they are not more or less likely to have children but often had a local spouse, suggesting that Spanish careerists might also have some family connection to the *audiencia* even if not necessarily owning property that would make them part of the local economic elite.

Table 7: *Audiencia* Composition and *Audiencia* Quality: IV Estimates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Appointment	Human Capital			Conflicts of Interest			
DV: Difference in % of...	Positions Sold	Spanish University	Law Doctorates	Underage	Local Children	Local Spouse	Family Connections	Local Property
$\%Sp_{j,t} - \widehat{\%Sp_{j,t-n_i}}$	-0.30**	1.17***	-0.12	-0.23***	0.022	0.33***	-0.087	-0.25***
	(0.14)	(0.17)	(0.100)	(0.036)	(0.053)	(0.11)	(0.13)	(0.082)
First Stage Coefficient					-3.86***			
First Stage s.e.					(0.527)			
First Stage F-Stat					53.92			
Observations	1,077	1,077	1,077	1,077	1,077	1,077	1,077	1,077
Number of provcode	202	202	202	202	202	202	202	202

*** p<0.01, ** p<0.05, * p<0.1

Although Table 7 onlyshows how changes in the share of Spanish careerists impact the share of different traits in the *audiencia*, Table H in the Appendix show how these actually negatively impact office prices. Instrumenting these traits with the cumulative number of deaths, shows that: first, a greater share of members with a law degree from a Spanish University is negatively associated with prices. Second, a greater share of members underage or owning local property leads to a greater willingness to pay for office. Although the instrument is not a good predictor for all traits, for those cases in which it is, estimates are consistent with the idea that these traits directly impact office valuations.

Overall, these results suggest that the arrival of non-careerists, mostly settler elites (creoles) with undesirable traits — as viewed at the time — may have facilitated both collusion and inefficiency in the colonial government (Stein 1981; Lynch 1992). These, in turn, made provincial offices more attractive to potential purchasers as they provided greater opportunities to profit from their colonial position.

6 Conclusions

The paper provides evidence on how the institutional ability to oversee local levels officials impacts the value of public. Using the historical case of the Spanish Empire, the paper shows how the presence of more careerists in bodies in charge of overseeing officials (*audiencias*) is associated with a reduction in the willingness to pay for office. IV estimates exploiting the timing of death of *audiencia* members show a systematic reduction in the willingness to pay for positions overseen by bodies dominated by members loyal to the Spanish Crown and with less conflict of interests in the territory. Alternative explanations based on economic fundamentals in the colonies (silver output, inflation, and agricultural production) that may be correlated with the timing of deaths are not supported in the data. The presence of *audiencia* specific time-trends impacting office prices are not driving office prices either.

Then, what may explain differences in the valuation for local governorships? According to historical accounts, *audiencias* were key in determining the level of oversight local officials would face. *Audiencias* with highly inexperienced members or with members following a profit motive provided greater leeway for lower level officials to benefit from office. Indeed, estimates show that *audiencias* with higher education and less conflict of interests lead to lower valuations for office. This is consistent with previous work showing how profit was a major consideration when purchasing positions (Guardado 2018) and with a number of scholars highlighting how greater institutional quality deters extractive activities. Overall, these results suggest that persistent changes in the oversight environment not only impacts the behavior of those already in place but also the calculus of prospective public officials.

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8 Appendix

Table A: Descriptive Statistics

Variable	Mean	Std. Dev.	Min.	Max.	N
Year	1718.443	19.942	1687	1751	1851
% Spanish	53.479	20.577	0	100	1851
% Creole	231.443	141.602	0	711.111	1851
Year Between Sales	7.655	6.992	1	53	1524
Difference in % Spanish between Sales	-0.918	16.948	-57.143	67.5	1524
Difference in % Creole between Sales	13.611	119.15	-420	400	1524
Cumulative Deaths	1.593	2.773	0	17	1851
Cumulative Spanish Deaths	0.797	1.586	0	10	1851
Cumulative Creole Deaths	0.795	1.356	0	10	1851
Coastal Provinces	0.207	0.406	0	1	1851
Mining Provinces	0.137	0.344	0	1	1851
Price (pesos)	4184.548	5129.702	98.129	52782.563	1851
Log Price (pesos)	7.877	0.940	4.586	10.874	1851
Difference in Prices (levels)	991.2	3110.5	-16745.6	35193.4	1524
Log Growth Rate	0.204	0.469	-1.855	2.229	1524
Growth Rate	0.376	0.764	-0.844	8.295	1524
Audiencia Members Traits					
% Bought Positions	27.43	16.661	0	90.909	1762
% Spain Educated	14.084	15.498	0	120	1762
% Doctoral Degree	14.313	12.05	0	55.556	1762
% Underage	0.42	2.074	0	20	1762
% Local Spouse	20.802	14.852	0	72.727	1762
% Family Connections	23.86	15.238	0	66.667	1762
% Local Property	1.747	6.43	0	40	1762
Difference in % bought positions between sales	1.493	16.527	-69.481	84.659	1440
Difference in % spain educated between sales	2.151	13.808	-40	120	1440
Difference in % doctoral degree between sales	1.749	9.428	-40.26	48.295	1440
Difference in % underage between sales	0.13	1.645	-20	16.667	1440
Difference in % local spouse between sales	3.232	10.723	-33.333	66.477	1440
Difference in % family connections between sales	3.854	11.293	-33.333	50	1440
Difference in % local property between sales	1.225	5.115	-16.667	40	1440

Table 1: **Audiencia Ministers Deaths**

Year	Name	Cr	Sp	Aud	Death
1688	BERNARDO DE QUIROS, Alvaro		Yes	Lima	1734
1688	LAYA BOLIVAR, Juan de	Yes		Panama	1698
1689	LADRON DE GUEVARA, Francisco de	Yes		Santo Domingo	1694
1689	RIVAS, Fernando Jos de		Yes	Quito	1699
1690	OVIEDO Y BAOS, Diego Antonio de	Yes		Mexico	1722
1690	CALDERON DE LA BARCA, Juan Fernando		Yes	Mexico	1718
1691	DUARDO, Juan Jernimo		Yes	Guatemala	1717
1693	PEREZ DE URQUIZU, Juan de	Yes		Lima	1728
1693	SANTIAGO CONCHA, Jos de	Yes		Lima	1741
1693	SANTIAGO DE CESPEDES Y CAVERO, Juan	Yes		Charcas	1708
1693	TOVAR, Baltazar de		Yes	Mexico	1712
1694	PAREDES Y ARMENDARIZ, Nicols de	Yes		Lima	1712
1695	MARIN Y MUOZ, Pedro de		Yes	Santo Domingo	1699
1695	GRILLO Y RANGEL, Bartolom	Yes		Santa Fe	1712
1695	CORRAL CALVO DE LA BANDA, Juan del	Yes		Chile	1737
1695	PAVON, Jos Antonio		Yes	Manila	1729
1696	MESTRES Y BARRES, Jos de		Yes	Manila	1701
1699	CARRILLO ESCUDERO, Gregorio		Yes	Mexico	1727
1699	VZQUEZ DE VELASCO, Pedro	Yes		Chile	1744
1699	NUEZ DE ROJAS, Gregorio	Yes		Lima	1747
1699	ROJAS Y ACEVEDO, Francisco de	Yes		Lima	1717
1700	LOSADA SOTOMAYOR, Luis Antonio de		Yes	Santa Fe	1719
1700	ANGUITA SANDOVAL, Francisco de	Yes		Mexico	1703
1700	CHIRINO VANDEVAL, Nicols	Yes		Mexico	1722
1701	FERNANDEZ MOLINILLO, Nicols		Yes	Santo Domingo	1702
1702	URIBE CASTEJON, Jos Joaqun		Yes	Mexico	1738
1704	BARRIENTOS Y RIVERA, Agustn Miguel de		Yes	Manila	1715
1704	PERALTA Y SANABRIA, Juan	Yes		Lima	1706
1704	ORUETA Y IRUXTA, Juan Bautista de		Yes	Lima	1720
1705	PICADO PACHECO Y MONTERO, Juan		Yes	Santo Domingo	1740
1705	CASA ALVARADO, Antonio de		Yes	Manila	1718
1705	SORIA VELASQUEZ, Gernimo	Yes		Mexico	1740
1706	MALO DE VILLAVICENCIO, Pedro de		Yes	Mexico	1744
1706	CASA ALVARADO, Francisco		Yes	Mexico	1715
1707	SOLIS VANGO, Juan Prospero de	Yes		Chile	1743
1707	VALDES, Juan de	Yes		Mexico	1715
1707	VILLAREAL Y FLORENCIA, Cristbal de	Yes		Mexico	1714
1707	OLIVAN REBOLLEDO, Juan Manuel de	Yes		Mexico	1738
1708	PEREZ BUELTA, Gaspar		Yes	Lima	1744
1709	OLAIS Y AROCHE, Esteban	Yes		Quito	1750
1709	ALZAMORA URSINO, Jos de	Yes		Panama	1725
1709	CLAVIJO Y MEDINA, Diego	Yes		Panama	1733
1709	FAJARDO, Felipe Nicols		Yes	Lima	1722
1710	ECHAVE Y ROJAS, Pedro Antonio	Yes		Lima	1728

Continued on next page

Table 1 – *continued from previous page*

Year	Name	Cr	Sp	Aud	Death
1710	LUGO CORONADO, Felipe Antonio	Yes		Mexico	1724
1710	REAL Y QUESADA, Antonio	Yes		Guadalajara	1725
1710	CAVERO, Pablo		Yes	Santo Domingo	1712
1710	PEREZ DELGADO, Bartolom Patricio		Yes	Manila	1712
1710	SANCHEZ DE LA BARREDA, Francisco	Yes		Chile	1738
1710	VEQUENILLA Y SANDOVAL, Juan de la	Yes		Mexico	1736
1711	BARBADILLO VICTORIA, Francisco de		Yes	Mexico	1727
1711	CAVERO DE FRANCIA, Alvaro	Yes		Lima	1739
1711	SANTAELLA Y MELGAREJO, Ambrosio Toms de	Yes		Mexico	1741
1711	GOMENDIO URRUTIA, Domingo de		Yes	Chile	1735
1712	GUTIERREZ DE ARCE, Juan		Yes	Lima	1747
1715	COBIAN Y VALDES, Antonio de		Yes	Santa Fe	1721
1718	FLORES Y GUZMAN, Juan de		Yes	Santo Domingo	1719
1720	CASTILLA Y LISPERGUER, Jos Ventura de	Yes		Santa Fe	1734
1720	CEBALLOS GUERRA, Jos Damian		Yes	Lima	1744
1720	MARTINEZ, Francisco de		Yes	Manila	1731
1720	MARTINEZ MALO, Jos Joaquin		Yes	Santa Fe	1741
1721	SALAZAR Y CASTEJON, Francisco Xavier de		Yes	Lima	1744
1721	SALAZAR, Toms de	Yes		Lima	1738
1721	ZARATE Y ALARCON, Diego Francisco de	Yes		Quito	1731
1721	LOPEZ DE EZEYZA, Isidro	Yes		Guatemala	1739
1722	OSILIA Y RAYO, Juan Gernimo de		Yes	Mexico	1729
1722	GARCIA CATALAN, Sebastin		Yes	Panama	1726
1722	FERNANDEZ DE MADRID, Luis Manuel		Yes	Mexico	1750
1723	BARCENA Y MIER, Miguel de la		Yes	Lima	1726
1723	BRUN, Toms		Yes	Lima	1728
1723	ZARATE, Manuel de		Yes	Panama	1732
1724	GRANADO CATALAN, Francisco de		Yes	Santo Domingo	1729
1725	GUERRERO Y GALVEZ, Juan Manuel		Yes	Santa Fe	1736
1728	FERNANDEZ DE VILLANUEVA, Jos		Yes	Mexico	1743
1730	ORTIZ AVILES Y GUZMAN, Jos Ignacio de		Yes	Lima	1745
1730	CAMPO Y ZARATE, Clemente del	Yes		Mexico	1748
1731	GARCIA DE QUESADA, Silvestre		Yes	Santa Fe	1743
1733	FEIJOO CENTELLAS, Juan Manuel	Yes		Panama	1744
1734	PEREZ DE ARROYO, Cristbal		Yes	Manila	1742
1735	COSTILLA BORROTO, Francisco	Yes		Manila	1746
1737	CHINCHILLA Y HENESTROSA, Manuel		Yes	Mexico	1747

Table C: *Audiencia* Deaths and Economic Fundamentals: Inflation Indexes and Agricultural Tithes

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
	$Index_{jt} - Index_{jt-1}$				$Tithe_{jt} - Tithe_{jt-1}$	
$Death_{jt} - Death_{jt-1}$	-8.165**		-6.060		-8,532	
	(3.499)		(5.179)		(9,947)	
$SpDeath_{jt} - SpDeath_{jt-1}$				-2.164		-15,852
				(7.543)		(14,302)
Observations	126	126	126	126	64	64
Audiencia FE			Yes	Yes		
Year FE			Yes	Yes		

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table D: *Audiencia* Deaths and Economic Fundamentals in Spain: Revenue, GDP, Exchange Rates and Inflation

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VARIABLES	$Rev_t - Rev_{jt-1}$		$GDP_t - GDP_{jt-1}$		$ExchRate_t - ExchRate_{jt-1}$		$Inflation_t - Inflation_{jt-1}$	
$Death_t - Death_{t-1}$	-0.003		0.000		-0.000		-0.031	
	(0.003)		(0.000)		(0.000)		(0.025)	
$SpDeath_t - SpDeath_{t-1}$		-0.002		0.000		-0.000		-0.043
		(0.004)		(0.000)		(0.000)		(0.036)
Observations	48	48	64	64	64	64	64	64
Province FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table E: *Audiencia* Deaths and Governorship Prices: Reduced Form Estimates

	(1)	(2)	(3)
DV:	Level Differences	Log Growth Rate	Growth Rate
	Panel A: Unweighted Estimates		
$\sum_{k=1}^{n_i} \#SpDeath_{j,t-n_i+k}$	376***	0.067***	0.10***
	(110)	(0.018)	(0.037)
	[0.046]	[0.066]	[0.012]
Observations	1,192	1,192	1,192
R-squared	0.344	0.376	0.352
Number of provcode	247	247	247
Province FE & Year FE	Y	Y	Y

Clustered robust standard errors in parentheses. p-values using wild cluster bootstrap t-statistics in brackets. All specifications include an *audiencia* specific linear time trend; a control for the distance in years between sales; and a fixed effect for the type of position (governorship or mayor). *** p<0.01, ** p<0.05, * p<0.1

Table G: *Audiencia* Composition and Office Prices: Different Samples

	(1)	(2)	(3)
	Second-Stage		
DV:	Level Differences	Log Growth Rate	Growth Rate
	Panel A: $\leq$ 5 years between sales, 50th pct		
$\widehat{\%Sp_{j,t} - \%Sp_{j,t-n_i}}$	-70.7	-0.011	-0.019*
	(43.6)	(0.007)	(0.011)
Observations	770	770	770
Number of provinces	180	180	180
First Stage Coeff	-4.87***	-4.87***	-4.89***
First Stage s.e.	0.814	0.814	0.815
First Stage F-Stat	35.89	35.89	36.02
	Panel B: $\leq$ 11 years between sales, 75th pct		
$\widehat{\%Sp_{j,t} - \%Sp_{j,t-n_i}}$	-99.3**	-0.018***	-0.027**
	(49.6)	(0.007)	(0.011)
Observations	1,153	1,153	1,153
Number of provinces	208	208	208
First Stage Coeff	-3.64***	-4.87***	-4.89***
First Stage s.e.	0.457	0.814	0.815
First Stage F-Stat	63.29	35.89	36.02
	Panel C: $\leq$ 17 years between sales, 90th pct		
$\widehat{\%Sp_{j,t} - \%Sp_{j,t-n_i}}$	-438	-0.063	-0.11
	(285)	(0.039)	(0.066)
Observations	1,344	1,344	1,344
Number of provinces	217	217	217
First Stage Coeff	-0.831*	-0.831*	-0.815
First Stage s.e.	0.497	0.497	0.496
First Stage F-Stat	2.79	2.79	2.70

Clustered robust standard errors in parentheses. The instrument is the cumulative number of Spanish deaths between sales. All specifications include an *audiencia* specific linear time trend; a control for the distance in years between sales; and a fixed effect for the type of position (governorship or mayor). *** p<0.01, ** p<0.05, * p<0.1

Table G: *Audiencia* Composition and Governorship Prices: Block Bootstrapped SE

	(1)	(2)	(3)
	Second-Stage		
DV:	Level Differences	Log Growth Rate	Growth Rate
	Panel A: Unweighted Estimates		
$\widehat{\%Sp_{j,t} - \%Sp_{j,t-n_i}}$	-99.3**	-0.018***	-0.027**
	(49.6)	(0.0065)	(0.011)
Block Bootstrapped 95% CI	[-0.008, -0.045]	[-0.007, -0.028]	[-0.008, -0.045]
Observations	1,153	1,153	1,153
Province FE & Year FE	Y	Y	Y
Number of Clusters (positions)	208	208	208

Block bootstrapped 95% CI from 500 draws in brackets. Clustered robust standard errors in parentheses. The instrument is the cumulative number of Spanish deaths between sales. All specifications include an *audiencia* specific linear time trend; a control for the distance in years between sales; and a fixed effect for the type of position (governorship or mayor). *** p<0.01, ** p<0.05, * p<0.1

β coefficient and T-statistics from leaving out one province at time

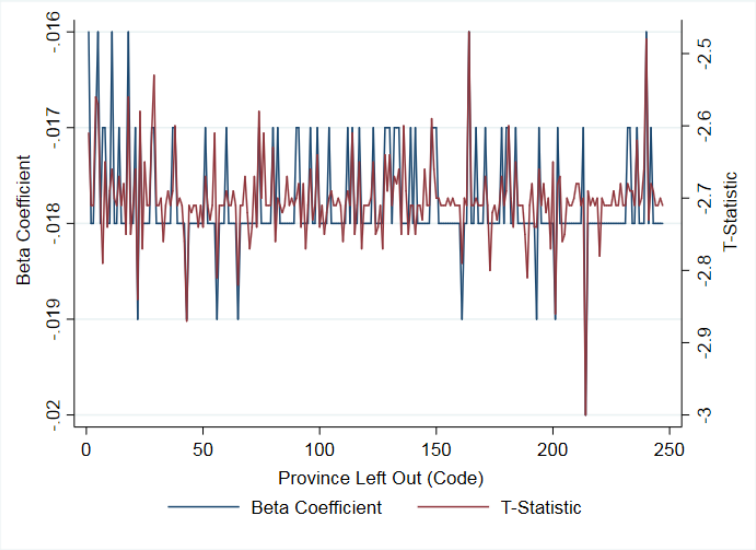

Table H: *Audiencia* Quality and Office Prices: IV Estimates

DV:	(1) Level Differences	(2) Log Growth Rate	(3) Growth Rate
$\%SoldMembers_{j,t} - \widehat{\%SoldMembers_{j,t-n_i}}$	346**	0.062**	0.091**
	(174)	(0.029)	(0.046)
		First-Stage	
Coeff		1.16**	
s.e.		0.540	
F-Stat		4.62	
$\%SpEduc_{j,t} - \widehat{\%SpEduc_{j,t-n_i}}$	-88.9**	-0.016***	-0.023***
	(42.7)	(0.0054)	(0.0089)
		First-Stage	
Coeff		-4.53***	
s.e.		0.567	
F-Stat		63.69	
$\%DrLaw_{j,t} - \widehat{\%DrLaw_{j,t-n_i}}$	834	0.15	0.22
	(588)	(0.11)	(0.17)
		First-Stage	
Coeff		0.482	
s.e.		0.388	
F-Stat		1.55	
$\%Underage_{j,t} - \widehat{\%Underage_{j,t-n_i}}$	463**	0.082***	0.12***
	(205)	(0.026)	(0.044)
		First-Stage	
Coeff		0.870***	
s.e.		0.105	
F-Stat		68.38	
$\%LocalMarry_{j,t} - \widehat{\%LocalMarry_{j,t-n_i}}$	-317	-0.056**	-0.083**
	(194)	(0.027)	(0.042)
		First-Stage	
Coeff		-1.269***	
s.e.		0.456	
F-Stat		7.74	
$\%FamConnected_{j,t} - \widehat{\%FamConnected_{j,t-n_i}}$	1,202	0.21	0.32
	(1,729)	(0.32)	(0.47)
		First-Stage	
Coeff		0.335	
s.e.		0.515	
F-Stat		0.42	
$\%LocalProperty_{j,t} - \widehat{\%LocalProperty_{j,t-n_i}}$	409**	0.073***	0.11**
	(173)	(0.026)	(0.043)
		First-Stage	
Coeff		0.985***	
s.e.		0.282	
F-Stat		12.16	
Observations	1,077	1,077	1,077
Number of Provcode	202	202	202

*** p<0.01, ** p<0.05, * p<0.1