

Institutions and the Resource Curse in Early Modern Spain*

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Abstract:

We examine the stagnation and decline of Castile in the Early Modern period in the light of the recent literature highlighting the interaction between natural resource abundance and institutional quality. Our conclusion is that Castile suffered from becoming too rich too fast. American treasure overwhelmed the country's institutional setup, resulting in a fully fledged "resource curse" that affected the economy, domestic and foreign policy, and the structure of client networks. We also explore the question of whether the resource windfall further weakened Spanish institutions, thus further hampering economic growth in the long run.

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Our Spain has set her eyes so strongly on the business of the Indies, from where she obtains gold and silver, that she has forsaken the care of her own kingdoms; and if she could indeed command all the gold and silver that her nationals keep discovering in the New World, this would not render her as rich and powerful as she would have otherwise been.

Martín González de Cellorigo, 1600

I. Introduction

Reflecting upon the economic, social and institutional decay that afflicted Castile at the turn of the seventeenth century, the pamphleteer González de Cellorigo pointed his finger at what he saw as the main culprit of his country's woes. By placing the blame for the incipient "Castilian crisis of the seventeenth century" (Thompson and Yun Casalilla 1994) on the fabulous amounts of precious metals that Spaniards extracted from their American colonies, Cellorigo became one of the first proponents of the idea known in modern economics as the "resource curse." In his view, the very gold and silver that had allowed Spain to build the most powerful empire of its time were slowly eroding its institutional foundations and economic prowess.

In the sixteenth century, Castile rose from peripheral state to the first rank of global powers. By the mid-seventeenth century it was experiencing rapid decline; since then, and despite short-lived episodes of recovery, Spain remained an economic underperformer until late in the twentieth century.¹ We draw from the recent literature on

¹ The decline of Spain in the seventeenth century has continued to attract scholarly attention at a steady pace. For three recent examples see Kamen (2003), Marcos Martín (2000), and Yun Casalilla (2004). Allen

the interaction between institutions and resource abundance to argue that Cellorigo's argument was largely correct: Castile suffered, essentially, from becoming too rich too fast. Before the silver windfall Castilian institutions had evolved in the direction of limiting government. Rent seeking was successfully contained through repeated bargaining between the Crown and the centers of economic activity, to the detriment of the traditional nobility and the clerical establishment. The ascendancy of the merchant classes could have well placed Castile on a path reminiscent of the English one, with a grand constitutional bargain in the end (North and Weingast 1989). Instead, Castilian institutions proved inadequate in limiting the king's powers, and in preventing the negative economic outcomes and political mismanagement often associated with concentrated resource rents. There is growing evidence that the resource windfall had a negative effect on Spanish industry (Drelichman 2005a); here we argue that the silver boom also gave rise to institutions that allowed the Crown to set policy unchecked by other stakeholders in the political game. Those institutions persisted long after the resource rents dwindled, hindering Castilian economic growth for a long time.

American silver strongly influenced much of Castilian, and indeed European, economic life in the second half of the sixteenth century. Philip II, on whose domains the sun never set, used the large inflows of American silver to run up unprecedented amounts of debt. The funds thus obtained were spent on building monumental monasteries and pursuing a string of wars all over Europe. In the new world, adventurous explorers risked (and often lost) their lives in the quest for ever richer mines. Dutch merchants and Genoese bankers, whose business depended on the liquidity created by silver, regularly bribed ship captains

(2001) provides a long-run comparative analysis of the economic performance of several European economies, including Spain.

to learn the true amount – legal and otherwise – being imported (Morineau 1985). Long distance traders made fortunes by shipping silver to China, where its relative price was much higher than in Europe, returning with luxury goods. The Spanish “piece of eight” – a coin modeled after the German *thaler* and eventually known as “dollar” – became the international currency of the age.² Yet, given all the wealth flowing through its borders, Castile did not become as rich as one might have expected. When the decline in dynamism occurred – in the late sixteenth century already, or only in the later decades of the seventeenth – is now subject to debate (Alvarez Nogal and Prados de la Escosura 2007). Yet compared to the dynamism that characterized Spain until the 1530s, the loss of momentum was staggering. After expanding for most of the sixteenth century, the population shrank markedly at the beginning of the seventeenth (Nadal i Oller 1984); traditional export markets were lost to competitors; the Crown defaulted time and again on its debts; and despite lavish military expenditure, most campaigns ended in fruitless victories or outright disasters. Internal fragmentation reversed many of the state-building efforts of the early sixteenth century. By 1700 the Spanish Crown and its European territories had become a prize to be contested by foreign powers in the War of the Spanish Succession.

We proceed as follows: section II reviews the literature on the resource curse and its interaction with the institutional environment. Section III discusses the initial conditions of the Castilian economy at the beginning of the sixteenth century and the transformations it underwent prior to the silver boom. Section IV describes the nature of the silver windfall, placing it in perspective with relation to the economic environment of

² Spanish silver fueled the first truly global trade, flowing from mines in Mexico and Peru to Seville, continuing on to European commercial centers, and often ending up in the far East, where Chinese demand for monetary uses kept its price high. See Flynn and Giráldez (2004) for further discussion.

Early Modern Europe and comparing it to those experienced by modern-day resource rich economies. Section V explores the different effects of the silver boom on Castilian economic development with particular emphasis on the interaction between institutions and resource revenues. Section VI concludes.

II. Institutions and the Resource Curse

Tracing back its roots to the 1950s dependency theory of Prebisch and Singer, the “resource curse” is a loose term used to describe a variety of undesirable economic outcomes associated with natural resource abundance. The association between resource abundance and poor economic performance is extensively documented in several empirical studies (e.g. Sachs and Warner 1995; Auty 2001). The resource curse literature first emphasized the deterioration in the terms of trade and the reduction in size and scope of the manufacturing sector that normally follows a discovery or increase in the price of a natural resource (Corden and Neary 1982). This phenomenon, known as the Dutch Disease, was indeed present in Castile and Aragon between 1550 and 1580 as a result of the silver boom (Drelichman 2005a). Yet this rise in the terms of trade is an optimal response: A country that becomes richer will increase its consumption; in the face of a relatively inelastic supply of domestic factors of production, this can only be accomplished through increased imports of traded goods and a corresponding deterioration in the terms of trade. This situation is reversed if the resource abundance disappears; the Dutch disease hence cannot account for long-term economic decline. To explain it, the literature has departed from the standard neoclassical setup in a number of ways. Rodríguez and Sachs (1999) have explored the consequences of limited access to capital markets, showing how resource-abundant countries that cannot invest abroad will

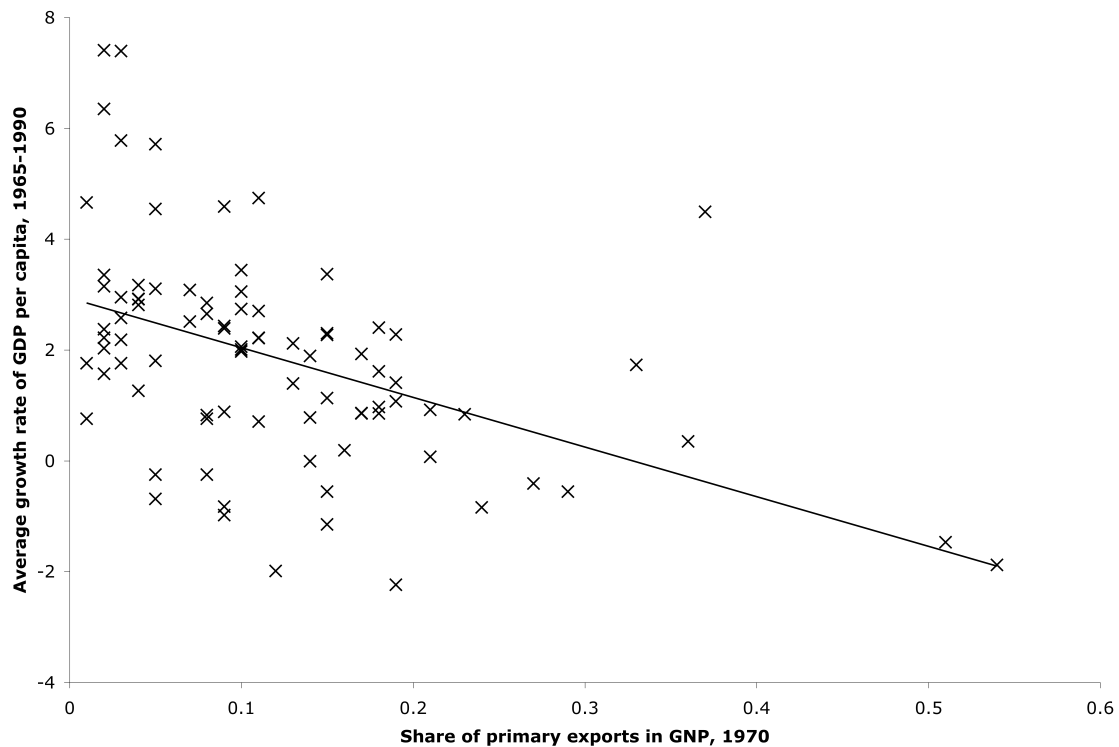
experience a temporary boom in consumption and then grow at slower rates. A second approach concentrates channels excluded from the agents' utility function when solving the decentralized optimization problem. In this vein Wijnbergen (1984) and Krugman (1987) introduced learning-by-doing in the traded goods sector, which erodes the comparative advantage of an economy that experiences a resource boom, and Asea and Lahiri (1999) emphasized the detrimental effects of sectoral re-allocation on human capital accumulation decisions. A third strand in the literature considers the externalities that arise because of misaligned objectives between agents and governments. Among its exponents, Baland and Francois (2000) and Torvik (2002) focused on the increased incentives for rent seeking generated by resource abundance, while Tornell and Lane (1999) explored the distortions those incentives introduce in government policies. These contributions emphasize "low growth traps" into which countries fall because of their reliance on natural resources; Drelichman (2005b) examines how American silver created such a problem in Early Modern Spain.

A more recent literature has sought to provide a comprehensive framework to explain why resources spell a curse for some countries but not for others. Mehlum, Moene and Torvik (2006) introduce institutional quality as the central factor in determining whether a rent-seeking equilibrium, and hence a low growth scenario, will arise or not. Robinson, Torvik and Verdier (2006) explicitly model the incentives of politicians, as shaped by institutions, as a conduit for the resource curse.

Figure 1 shows the relationship between primary exports as a percentage of GDP and average GDP per capita growth rate between 1965 and 1990 using a sample of 87

countries from Sachs and Warner (1997)³. The correlation remains negative and statistically significant after controlling for a standard vector of covariates.

Figure 1: The Resource Curse



While the inverse correlation between resource abundance and economic growth is strong, several resource-rich countries, such as Norway, Canada and Malaysia, have nonetheless managed to escape the resource curse. Melhum, Moene and Torvik (2006) show that the initial institutional environment is a key determinant of the response of a country's economic performance to a resource boom. Figure 2 reproduces their decomposition of Sachs and Warner's data into countries with low and high institutional quality. Countries are divided according to the institutional quality score from Knack and Keefer (1995), which averages five indicators from *Political Risk Services* reflecting

³ The full dataset is available from <http://www.cid.harvard.edu/ciddata/ciddata.html>

bureaucratic quality, prevalence of the rule of law, government corruption, risk of expropriation, and the likelihood of repudiation of contracts by the government.

Countries with a score of .67 and above are considered to have institutions of high quality.

Figure 2: Resources and GDP growth by country institutional quality

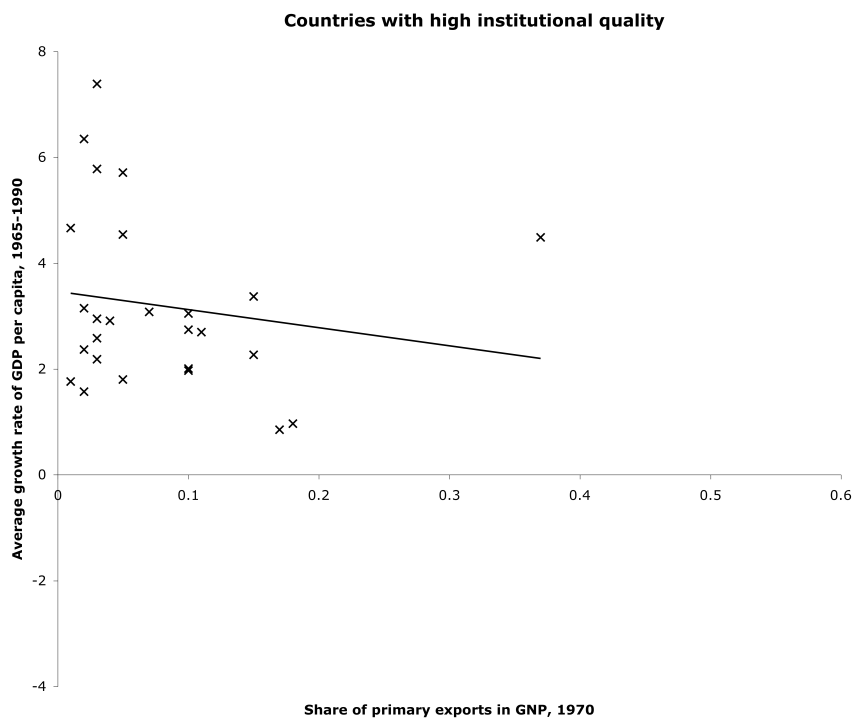
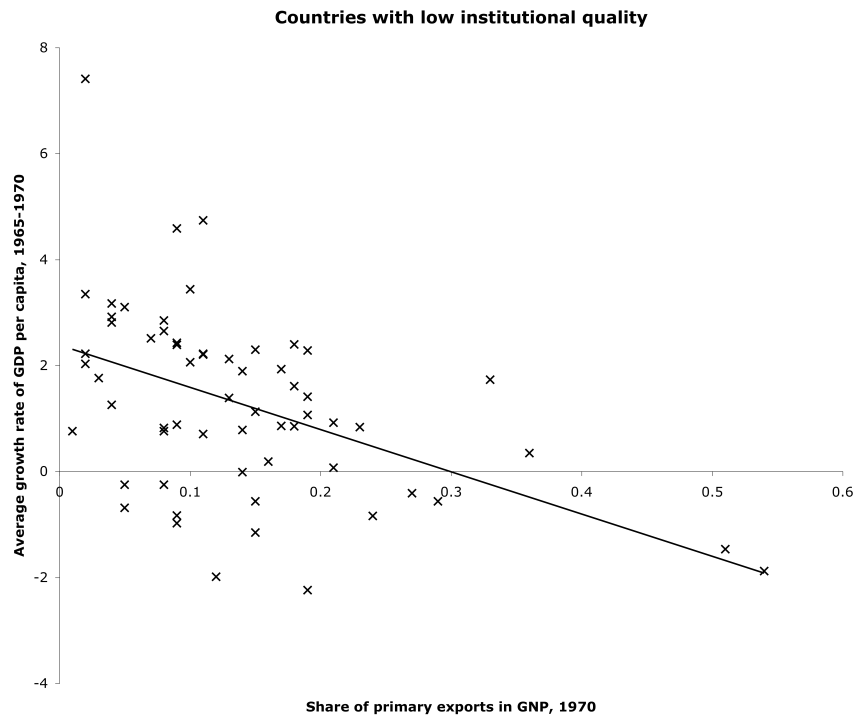


Figure 2 illustrates how the resource curse result is driven by countries with low institutional quality. The correlation, which remains strong in the top panel, disappears among countries with institutions that limit the ability of governments to extract economic rents or expropriate businesses and individuals. In section III we document how a series of constitutional-level events in the early sixteenth century lowered the overall quality of Castilian institutions, paving the way for negative economic growth outcomes in the wake of the silver discoveries.

The literature has so far sidestepped the question of whether there might be a feedback mechanism from resources to institutions. Sachs and Warner (1995, pp. 19-20) failed to find an effect of resource abundance on an index of bureaucratic efficiency, which they used as their measure of institutional quality. This result has been accepted even by subsequent works that challenged many of the remaining claims of Sachs and Warner (e.g. Mehlum, Moene, and Torvik 2006, p. 3). While we do not aim to close this gap in the literature, we point to an important counterexample by showing that constraints on the monarch's power failed to increase as a direct result of its resource windfall.

III. Castile's endowments and institutions in the early sixteenth century.

At the end of the fifteenth century Castile was positioned to become a dominant power in Western Europe. It had emerged from the seven centuries-long "Reconquista" war as the lone victor, absorbing Arab territories and competing Christian crowns alike, and establishing its undisputed hegemony over the Iberian peninsula. Although Spain did not formally become a unified polity until the 18th century, the two major Crowns of Castile and Aragon were effectively merged under the Ferdinand and Isabella in 1474, and the remaining territories of present-day Spain followed shortly thereafter. From the sixteenth

century on the unified Crowns were usually considered a single polity and referred to as “The Spains” or “The Hispanic Monarchy.” While Aragon did maintain some degree of fiscal independence, it never came close to overshadowing Castilian hegemony. The sheer size of its territory, population and resources assured Castile a comfortable position as the center of Iberian power.

Geography

Castile’s geography was always decried as one of the major factors hindering its economic development. Large areas of Spain are rocky, mountainous, or outright barren; the country’s average altitude is 600 metres above sea level, and 45% of the territory is unfit for agriculture still today. Large mountain chains criss-cross the peninsula, making overland transport difficult, slow and expensive. Of all the places at risk of experiencing resource-led growth Castile certainly ranked at the bottom of the list.

Yet that same geography had its advantages. The rugged terrain protected Castile’s borders. In the entire second millennium very few foreign armies managed to gain a foothold on Spanish soil. Only Napoleon’s attempt in 1809 culminated in a relatively successful invasion, and even then a short-lived one. On the climatic front, the combination of mild winters in the south and cool summers in the highlands was ideal for the breeding of the Merino sheep; Castile thus had a formidable comparative advantage in fine wool, one of the premium traded commodities of the Late Middle Ages and Early Modern Period.⁴ By supplying the Dutch upscale textile manufacturing sector Castilian wool fueled one of Europe’s largest cross-border trades; the commercial networks it

⁴ The wool industry at its early sixteenth century peak counted upwards of three million sheep, compared to a population of barely over four million people. The production, processing, trading and exporting of Merino wool was the economic engine of Northern Castile, prompting scholars to refer to the industry as “Spain’s golden fleece” (Phillips and Phillips 1997).

created quite possibly contributed to the continuing prosperity of the Cantabric Coast and the Basque Country long after Spain's golden age was past (Grafe 2001).

Perhaps Castile's most significant geographical feature in terms of its potential for economic growth in Early Modern Times was its extensive Atlantic coastline. Access to the Atlantic has been identified as one of the major forces behind trade-friendly institutional reform in Western Europe; it appears to correlate with subsequent economic performance (Acemoglu, Johnson, and Robinson 2005b). While once-thriving Aragon languished as the Mediterranean trading economy lost steam, Castile was superbly positioned to take advantage of the Atlantic's dynamism.

Initial institutions

The combined strength of Castile and Aragon under the Catholic Kings (r. 1474-1516) effectively put an end to internecine warfare and, with the conquest of Granada in 1492, unified the territory of modern Spain under a single central monarchy. The joint monarchy benefited from the advantages the military revolution conferred on centralized states, as the increased scale of warfare favored larger political units endowed with widespread taxing and spending ability.⁵ Relying on the strength of their cannons and the effectiveness of their infantry, Ferdinand and Isabella quickly moved to dismantle the remnants of Medieval political organization, concentrating power in their hands and sketching the major traits of a modern nation state.

Having put an end to internecine wars, the Crown proceeded to transform itself into a strong executive through three clearly defined sets of reforms: it created a career

⁵ See Tilly (1990) and Brewer (1988) for an articulation of the relevance of taxation and military expenditure to the development of nation states. Parker (1976) discusses the military revolution of the sixteenth century at length.

bureaucracy, which reserved the key decision-making posts to competent and trusted advisors rather than to members of the noble families; it strengthened the royal judiciary, putting an end to a myriad of overlapping of jurisdictions; and it reeled in the nobility and the Church, largely neutering their influence in government affairs.

Starting in the late fifteenth century the Crown established collegiate advisory bodies – the Councils, – staffed them with a mix of professional bureaucrats and power brokers, and charged them with overseeing specific areas of public administration. The number of councils grew steadily during the first half of the sixteenth century; by the time Philip II ascended to the throne in 1556 they had become a veritable ministerial array with competencies in every area of government (Artola 1988).⁶ All major decisions eventually rested with the Royal Council, presided by the king himself. The council system ensured that a number of key positions would be filled with persons that had accumulated some expertise in their specific area of public administration while limiting the access to government formerly enjoyed by the hereditary nobility.

The Catholic Kings also recast the medieval Chancery into the system of Royal Chancery Courts with appellate jurisdiction over all judicial matters. This established the supremacy of the royal judiciary over a myriad of competing local, regional, ecclesiastical and special jurisdictions (Kagan 1981). Royal Chancery judges could be appointed and removed at will by the monarch; since most viewed their position as an intermediate step in the quest for a seat on a council, their actions tended to closely

⁶ Philip II could count on a Royal Council (known as the Council of Castile), and one each for Aragón and Navarre; later on he would add councils for Italy, Flanders, Borgogne, Portugal, and a separate Chamber for Castile. Foreign policy was overseen by the Councils of State and War; religious and nobility matters by the Councils of the Inquisition and Military Orders; responsibility for financial matters resided with the Councils of Finance and Crusade; and colonial affairs were in the hands of the Council of Indies.

reflect the will of the Crown (Martín Postigo and Domínguez Rodríguez 1990). To further assure the Crown's desired outcome in any litigious proceedings, the Royal Council remained the ultimate judiciary authority in the kingdom.

The Crown completed the consolidation of its power by asserting its supremacy over the nobility and the clergy, relegating them from the spheres of power whenever possible and ensuring they responded to royal wishes when not. In one of the brilliant strokes that would make him the model for Machiavelli's *Il Principe*, Ferdinand obtained from Pope Innocent VIII the right to name the bishops and control all Church activities in future conquered lands, including the southern kingdom of Granada and the still undiscovered New World. The right, known as *Patronato*, extended in practice to all of Spain, with the Pope regularly confirming the Crown's nominees to the lucrative ecclesiastical offices. In exchange for assisting the Papacy with its military and diplomatic needs in Europe, the king had become the political head of the Spanish Church. The importance of this achievement cannot possibly be understated: under the Catholic Kings the Spanish Church controlled perhaps three times as much revenue as the Crown (Elliott 1963, pp. 99-110). While in subsequent decades the state expanded by leaps and bounds, the Habsburg kings continued to rely on the rights acquired by Ferdinand to regularly tap ecclesiastical revenues in the pursuit of their fiscal, political, and military goals.

The Catholic Kings also conducted a purge of the noble ranks by revising most of the privileges granted by their predecessor and replacing noble Crown officials with advisors appointed on the basis of merit – including a few Jewish ones. Although the wealthy noble households did retain varying degrees of influence well into the Habsburg period, their participation in government was always under the close oversight of the Crown. The

Early Modern Castilian monarchy was thus remarkably free from the palace intrigues and conspiracies that had plagued its Medieval predecessors, and only during the disintegration of the Habsburg regime in the late seventeenth century did noble infighting again play a significant role in government. The middle and lower nobility stopped being a relevant force altogether in the first quarter of the sixteenth century, with their higher ranking members at best exerting some political influence at the local level (Domínguez Ortiz 1985; Drelichman 2007).

With the traditional power brokers under royal control, the one remaining check on the monarchy were the Cortes, a quasi-parliamentary body dating from the late medieval period. The original conception of the Cortes was that of the voice of the “Kingdom” in front of the king. While prior to the sixteenth century they sometimes included the participation of the nobility and the clergy as separate “estates,” by the Habsburg period only the representatives of the 18 principal cities of Castile retained full voting rights (Thompson 1994a, p. 147). The Cortes were thus well positioned to become an instrument of the urban merchant elites, the elements defending property rights and the limiting absolutist power in Britain and The Netherlands (Weber 1968; Acemoglu, Johnson, and Robinson 2005a).

Besides voicing the concerns of the Kingdom and swearing in monarchs and heirs to the throne, the original role of the Cortes was to grant their assent to new taxes or to the renewal of extraordinary ones. In their Medieval origin, this meant approving increases in the direct taxes paid by the cities (*servicios*) and, later on, voting the sales taxes known as *alcabalas*; taken together, these levies accounted for the majority of Crown income in the late Medieval period.

The centralizing drive of the late fifteenth century reduced the influence of the Cortes by bringing additional revenue under the exclusive control of the monarchy. Ecclesiastical levies, royal monopolies and the sale of royal jurisdictions were the most common devices employed by the Crown to bolster its finances without having to seek parliamentary consent; forced loans were also used on occasion. These so-called “arbitrary measures” (*arbitrios*) could go only so far in filling the royal coffers, and an ambitious foreign policy required vastly greater resources. Given the strength of the Cortes, it would have been natural for the Habsburgs to strike a quid-pro-quo bargain that would have seen rising tax revenues exchanged for greater institutional constraints on the Crown. This bargain was never struck. In the following sections we explore the dynamics of this process and the role American treasure played in it.

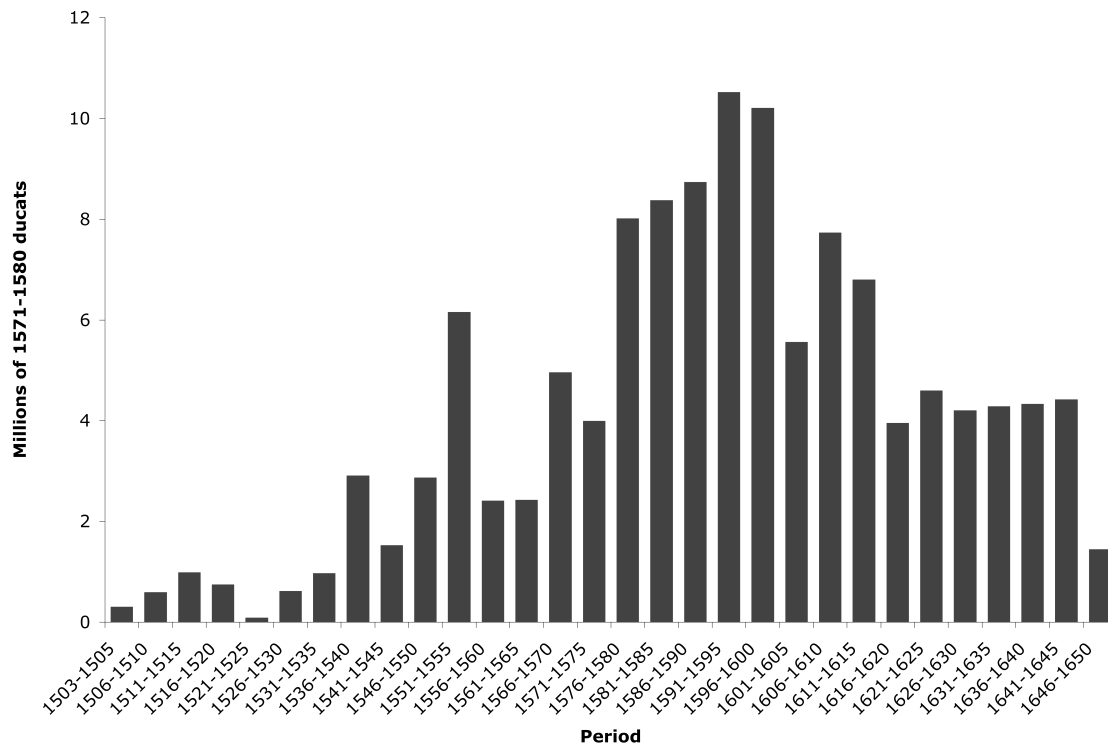
IV. The resource boom.

As the age of exploration started in earnest, Castile quickly traded its golden fleece for a silver spoon. The initial contacts with Mesoamerican cultures convinced Spaniards that the American continent held large deposits of precious metals. While the Crown moved to create a colonial trading monopoly centered on the city of Seville, it also adopted a laissez-faire approach to exploration and exploitation of the New World. Private entrepreneurs could set up their own extractive operations as long as they traded exclusively through Seville and paid a flat 20% tax on their production – the “Royal fifth.” This created powerful incentives that fueled half a century of epic explorations and tragic warfare. While gold proved to be disappointingly scarce, by the mid-sixteenth century industrial scale exploitation of the largest silver reserves in the world at Potosí, in present-day Bolivia, was under way. A chemical smelting method suited to their

particular ore was quickly developed and a system of treasure fleets was devised to carry the metal across the Atlantic. The size of the convoys swelled to over 100 ships at their peak, becoming the largest long-distance trading operation of the time. It turned out to be remarkably well-protected against both pirates and natural disasters. Its success guaranteed the effectiveness of Seville’s trading monopoly.

Figure 3, based on the classic reconstruction of treasure imports by Earl Hamilton (Hamilton 1934), shows the Crown’s portion of the bullion reaching Spain in constant terms, between 1500 and 1650, by five year periods.⁷

Figure 3: Crown treasure, 1500-1650.



Source: Hamilton (1934), Drelichman (2005a).

⁷ The nominal figures are deflated by the silver price index in Hamilton (1934).

Hamilton obtained his figures from the records of the *Casa de la Contratación*, the body charged with overseeing all trade with the Indies. His figures were often criticized for relying on official statistics, and hence not taking smuggling into account (e.g. Morineau 1985). Since we are interested only in the Crown's share of treasure, his methodology turns out to be ideal for our purposes.

For comparison, cost estimates of the entire "enterprise of England," which ended with the disaster of the Invincible Armada, are pegged at around 10 million ducats (Parker 1998, p. 269); yearly Crown revenues at the end of the sixteenth century were also in the neighborhood of 10 million ducats. According to Hoyle (1995), Henry VIII's sales of confiscated Church lands yielded 375,000 pounds over six years. Even using the conversion rates that prevailed prior to the Henrician debasements this sum cannot exceed 4 million ducats, an amount dwarfed by the Habsburgs' quinquennial silver revenues.

Silver quickly became a very substantial component of the Crown's income. Figure 4 shows the share of revenue accounted for by colonial sources (composed almost exclusively by silver taxes and mining) hovered in the neighborhood of 15% in the third quarter of the sixteenth century. It later climbed to between 20% and 25%, even as total Crown revenue more than trebled during the same period.

Figure 4: Revenue from colonies in America (Indies) as percentage of total Crown revenue (4-year moving average).



Source: Ulloa (1977) , Drelichman and Voth (2007).

Table 1 offers some further perspective on the magnitude of the revenues the Spanish Crown derived from silver mining by presenting an asynchronous comparison with modern resource-rich economies. The left panel ranks hydrocarbon-rich economies by hydrocarbon-derived revenues as percentage of total government revenues; the right panel does the same for mining-rich economies. All magnitudes for modern economies are 2000-2003 averages; those for Castile are measured at the 1587-89 peak.

Table 1: Government revenues from hydrocarbon and mineral sources in selected resource-rich countries, as percentage of total fiscal revenue

Hydrocarbon-rich countries	Hydrocarbon revenue as % of total fiscal revenue (2000-2003 average)	Mineral-rich countries	Mineral resources	Mineral revenue as % of total fiscal revenue (2000-2003 average)
Colombia	9.0	Sierra Leone	Diamonds, bauxite, rutile	0.5
Kazakhstan	21.0	Jordan	Phosphates, potash	1.6
Norway	24.4	Chile	Copper	3.9
Ecuador	26.4	Kyrgyz Republic	Gold	4.1
Cameroon	26.6	Mongolia	Copper, gold	6.1
Trinidad and Tobago	27.4	Namibia	Diamonds	10.0
Castile 1587-89	29.0	Mauritania	Iron ore	10.6
Indonesia	31.3	Papua New Guinea	Gold	16.1
Vietnam	31.8	Guinea	Bauxite/alumina	18.3
Mexico	32.2	Castile 1587-9	Silver	29.0
Russia	39.7	Botswana	Diamonds	56.2
Venezuela	52.7			
Iraq	58.4			
Iran	59.3			
Bahrain	71.2			
Qatar	71.3			
Libya	72.5			
United Arab Emirates	76.1			
Nigeria	77.2			
Saudi Arabia	81.6			
Equatorial Guinea	84.0			
Brunei Darussalam	85.8			

Source: IMF Guide on Resource Revenue Transparency, June 2005.

At the apogee of the silver boom Castile derived 29% of its total fiscal revenue from the taxation of colonial silver imports. When compared to modern mining-rich economies this would place her only second to Botswana and its diamond revenue, and well above other mining giants. Although no Early Modern economy could possibly approach the scope of a modern petro-state, the size of the silver windfall would also have been large enough to propel Castile above the 20% threshold used by the IMF to classify an economy as hydrocarbon-rich. In that category, the share of natural resources in Castilian

revenues would exceed those of Norway and Kazakhstan, and fall slightly short of those of Indonesia and Mexico, with Russia not much further away.

The silver windfall had an enormous impact on the economy of Castile, Europe, and indeed the whole world. The silver price differentials between Europe and the Far East fueled a vibrant long distance trade, bringing large quantities of oriental luxury goods to Europe and prompting some scholars to identify in it the “birth of globalization” (Flynn and Giraldez 2004). The bullion that was retained in Europe roughly doubled the monetary stock in the course of a century; the ensuing “price revolution,” a sustained increase in the price level of virtually all European economies, had wide-ranging effects on fiscal systems, trading arrangements, and monetary institutions (Hamilton 1934; Flynn 1978; Fisher 1989). The strongest effects of the resource windfall were naturally felt in Castile itself. Silver was perhaps the most perfectly tradable commodity of the time. The large increase in its supply, coupled with the new sources of demand from the Far East and the expectation of future mineral discoveries prompted factors of production to be diverted from export industries, such as fine wool and manufactures, and into the extraction and service industries associated with the silver trade. This classic case of Dutch disease afflicted Castile for much of the second half of the sixteenth century (Forsyth and Nicholas 1983; Drelichman 2005a); in the following section we argue the resource boom had costs in terms of economic and political development that went far beyond allocative and balance of payments effects.⁸

⁸ Drelichman (2005a) thoroughly documents how Castile sharply increased consumption following the silver discoveries, and later reduced it when the remittances failed to live up to the original expectations.

V. The interaction between resources and institutions: a political resource curse.

Starting in the early years of the exploration of Spanish America and at least until the end of the sixteenth century precious metals were indissolubly tied to the financing of the monarchy. As early as 1519, in an episode emblematic of what was to follow, Charles V used the first gold plundered from the Aztec empire to pay for the expenses of the fleet that carried him to claim the imperial crown. Although the Cortes had voted to authorize the voyage, the cities disavowed their representatives amidst allegations of vote buying and heavy-handedness by the king. The ensuing revolt, known as the *Comunidades*, was led by the wealthy urban elites and petty nobles in an ultimately doomed attempt to stall the centralizing drive of the monarchy. Although the revolt prevented the collection of the special levy to fund the voyage, the king nonetheless forged ahead using the Mexican loot (Parker 1999, p. 135). As the mines of Potosí and Zacatecas entered production in the late 1540s, American silver became the cornerstone of a financial system that allowed the Spanish Crown to project its power across the known world without the need to bargain with its subjects for additional resources.

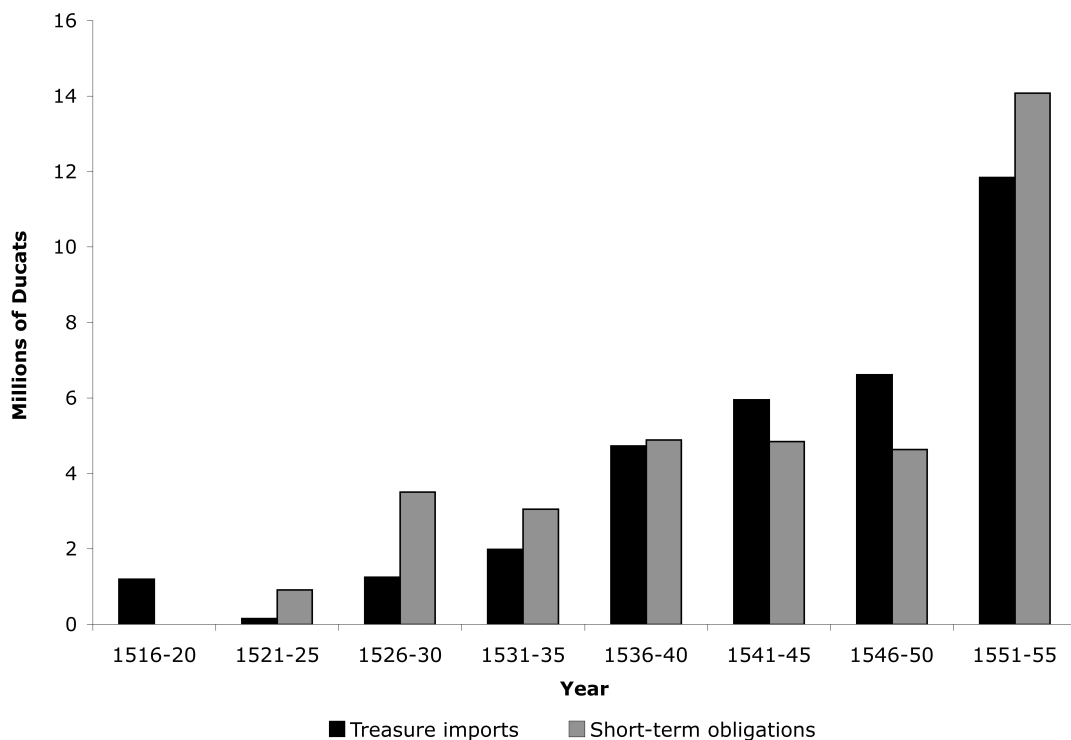
Silver and Crown financing

Under Charles V, the Crown's main financial instrument were short term loans, called *asientos*, contracted mainly with the Fugger and Welser banking families. Charles' first used a Fugger loan to bribe the Grand Electors that elevated him to the throne of the Holy Roman Empire over the aspirations of Francis I of France.⁹ Subsequent *asientos* were contracted all over Europe, and used to pay for the armies and fleets that attempted, with mixed success, to establish the Habsburg Empire as the hegemonic power of the time.

⁹ See Cohn(2001) for further details on Charles' use of short-term loans to secure the imperial crown.

Charles' *asientos* were uncollateralized; his credit rested exclusively on his reputation and on his repayment capacity.¹⁰ The Golden Bull, the constitutional document of the Holy Roman Empire, severely limited his ability to use imperial revenues, and altogether prevented him from spending them outside the Empire's borders.¹¹ Charles was not bound by any such constraints with regards to Castilian silver, which he leveraged to finance his geopolitical designs. Figure 5 shows how short term borrowing and treasure imports grew in almost complete lockstep during his reign.

Figure 5: Treasure imports and short term borrowing, 1516-1555



Source: Drelichman (2005b)

A similar pattern arose during the reign of Philip II, who succeeded Charles in 1556.

Philip's accession to the throne was soon followed by the first suspension of payments on

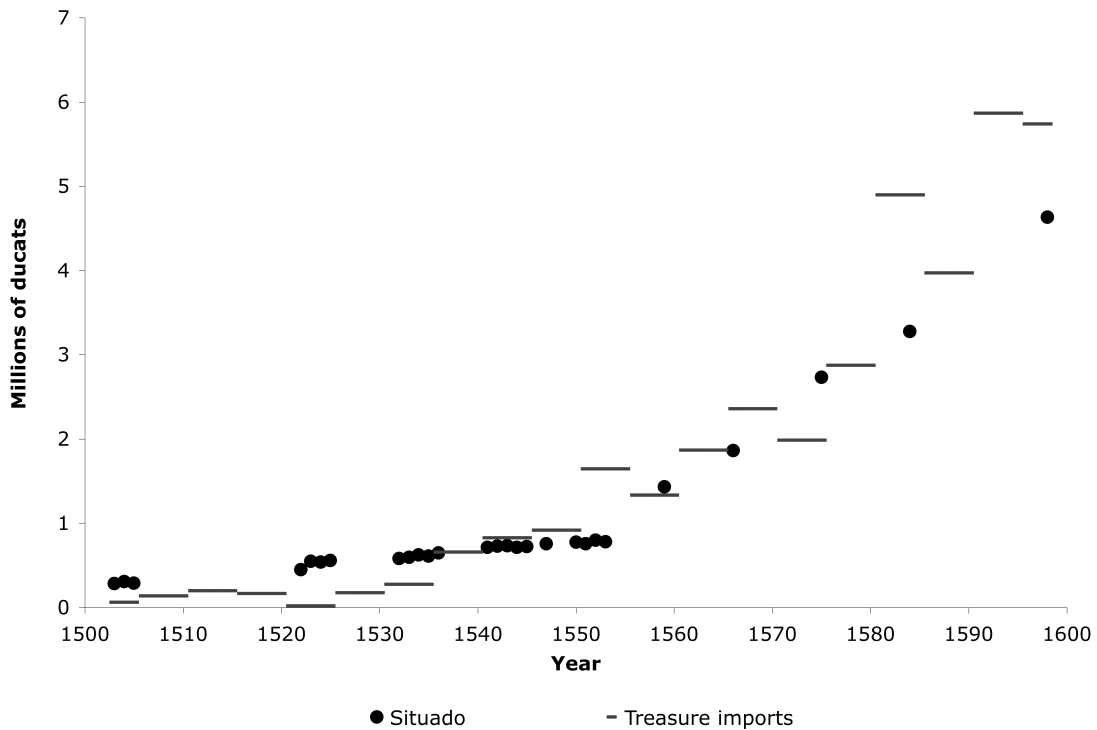
¹⁰ The standard reference on Charles' bank loans is Carande (1987).

¹¹ An discussion of the Golden Bull, together english translation of the Latin text, can be found in Henderson (1910). Chapters IX and X limit the authority of the emperor in matters of taxation and expenditure. The Bull was staunchly enforced by the German princes.

short term debt, a result of the enormous expenses incurred by the Emperor in the Franco-Habsburg wars. Although the default interrupted lending for almost a decade, the rapid increase in the growth rate of American remittances around the same time allowed Philip to regain access to capital markets and engineer a new system of government finance that relied as little as possible on the consent of the Cortes. In the new scheme, devised by several Genoese banking families, short term loans were collateralized by perpetual bonds, known as *juros*. The bankers typically had the right to sell the bonds among the Castilian rentier classes, thus effectively acting as the financial intermediaries of the Crown. Service of *juros* was guaranteed by existing tax revenues, while the revolving payments on short term *asientos* were met out of silver revenues.¹² The system allowed the Crown to pursue ever more expensive projects: the War of the Holy League, the construction of the Escorial monastery, the Dutch War of Independence and the Invincible Armada were all financed during periods of heavy borrowing through *asientos*.

¹² For a detailed description of the sovereign lending system of Philip II see Ruíz Martín (1965).

Figure 6: Treasure imports and long term debt, 1500-1600



Source: Drelichman (2005b)

Figure 6 plots the yearly interest payment on *juros*, known as the *situado*, and the annualized amount of silver revenue received by the Crown. The correlation between the two series leaves no doubt as to the role of American treasure in anchoring the financial system of the monarchy.

Silver revenue allowed Philip to contract unprecedented amounts of debt. Artola's (1982) data for 1598 show the value of outstanding *juros* was seven times annual Crown revenue. In comparison, the debt incurred by Henry VIII's debt in the wake of the Dissolution of the Monasteries was only twice his annual revenues, a ratio from which England did not significantly depart until the Glorious Revolution (Hoyle 1995). In absolute terms, the magnitude of Henrician debt was somewhere in the order of one sixth of what Charles V managed to borrow, and a mere one sixteenth of what Philip II

eventually owed. Since Castile had roughly one and half times the population of England, the gap is very large even in per capita terms. If we accept Yun's estimate putting Castilian fiscal pressure at 9% of GDP by 1600 (Yun Casalilla 2002, pp. 79-80), the long term debt of turn of the century Castile would have exceeded 60% of GDP. Measurement error and the relative usefulness of the concept of GDP in the Early Modern period preclude the use of these figures in comparisons with present day economies. The fact remains that this was a magnitude no contemporary ruler could remotely approach, and that not even England and its investor-friendly institutional reforms could match until the end of the eighteenth century.

The Crown and the Cortes

Silver remittances could not cover all the expenses of the Crown; in fact, even at the peak of extraction, they never exceeded one third of total Crown revenue. What silver did, however, was to allow the Crown to spend freely using borrowed funds and present the Cortes with the bill after the fact.

In the second half of the sixteenth century, the Crown resorted twice to the same "hard-ball" bargaining. The large costs of warfare under the Habsburg kings were financed with German or Genoese credit. Those loans were collateralized with *juros*, the service of which was guaranteed by Castilian tax streams. None of these maneuvers required the approval of the Cortes. Once the outstanding debt outstripped the servicing capacity afforded by the existing tax base and the flow of silver, the Crown declared a suspension of payments and urged the Cortes to approve an increase in indirect taxation. Long delays or outright refusals to approve the requested tax increases would have resulted in a rapid deterioration of the military situation, a political cost the Cortes were seldom prepared to

shoulder. Also, debt holders in the cities – many of them of elevated social status – were affected by the default, and probably saw a tax rise as a much smaller evil than a continued moratorium.

The first such episode was triggered by the suspension of payments of 1575.¹³ The proximate cause of the spiraling debt was the flare up of the Dutch Revolt, as the heavy-handed tactics of the Duke of Alba resulted in both an increase in military costs and a loss of tax revenue to the rebels. Philip convened the Cortes and requested a threefold increase in the value of the *alcabalas*, a sales tax that was normally farmed out to city governments in exchange for fixed annual payments.¹⁴ While the negotiations dragged on, several regiments of the Army of Flanders, not having been paid for over a year, decided to sack the loyal city of Antwerp in an episode known as the “Spanish Fury.” The sack of Antwerp cost the Spaniards the support of the Flemish population in their war against the Dutch, and caused the revolt to spread. In its wake the Cortes yielded to most of the king’s requests, granting a doubling of the *alcabalas*, with an additional extraordinary levy to be disbursed in the first two years. Although they had tried their best to forestall the king’s demands, in the end the Cortes walked away with few concessions and no additional control over the Crown’s expenditures.

One might ask whether silver was instrumental in this outcome. The Cortes were ultimately forced to grant a tax increase and the Crown managed to collect it, pointing to some slack in Castile’s fiscal capacity before 1577. Couldn’t Philip II have borrowed

¹³ For a discussion of the dynamics of the 1575 bankruptcy and the 1577 settlement see Lovett(1980) and Lovett(1982).

¹⁴ The king founded his request in his legal right to collect sales taxes on every transaction in the kingdom at a 10% rate, while the payments contracted with the cities implied a rate of between 2 and 3%. Should the Cortes refuse to comply, the king’s threat was not to renew the tax farms and collect the tax at its full 10% rate. The cities representatives, knowing that the king lacked the administrative structure to follow on his threat, refused to budge and the negotiations dragged on (Jago 1985).

against these future tax revenues, use the proceeds to lead Castile into the same expensive campaigns, and confront the Cortes for money down the road? We argue that the nature of the Early Modern sovereign debt markets ruled out such a scenario. Sixteenth-century monarchs who wanted to venture into the international credit markets had two options. The first one was to hand over control over the revenue sources that guaranteed repayment, in the style of a tax farm. This usually happened in the framework of a multi-year arrangement and secured the lowest interest rates. Castilian *juros* were usually issued under such arrangements. The alternative was uncollateralized borrowing, which commanded much higher interest rates and hence was generally used for short term loans. Monarchs that tried this route found that bankers held them to a fairly stringent credit ceiling – Henry VIII never managed to borrow more than twice his annual revenues in this fashion, nor did Charles V before silver started pouring in.¹⁵ American bullion backed the promises of Castilian kings with a large and reliable source of revenue. By increasing the resources that accrued directly to the Crown, it decreased the perceived risk of lending to it on an uncollateralized basis. Genoese bankers would not have lent to Philip II on the chance that he might later convince the Cortes to pay up; they took a calculated gamble in lending to him because the steady silver flows meant that the Crown would be liquid enough to repay a good part of the loans. These operations were still considered very risky. The interest rates of some *asientos* reached well above 20% in times of uncertainty, and the bankruptcies attest that repayment was far from guaranteed. But silver allowed borrowing to take place, war to be declared, and Philip to lead Castile

¹⁵ We only consider “true” sovereign borrowing, in which the king has no ability to exert violence over the lenders – although he may default if he so wishes. Early Modern monarchs often resorted to forced loans, which amounted to confiscation of a part of the interest and, on occasion, of the entire capital as well. Since this type of lending was not voluntary, we consider it as a form of prerogative taxation rather than a freely contracted financial obligation, and hence exclude it from our analysis of lending.

into military adventures that left the Cortes little choice but to grant the additional taxes required to shore up the situation. Had silver never been found, it is hard to conceive how Castile could have funded its ambitious military ventures unless the Cortes had granted prior consent. The resistance the Cortes exhibited to royal requests even in the most dire of times suggests that it was very unlikely that such consent would have been lightly.

As the session of the Cortes was winding down, the 1577 treasure fleet brought the largest amount of bullion in a single shipment up to that time, starting the run up to the peak of the 1590s. The additional silver and the extraordinary levy provided the king with the resources to settle the defaulted debt with his bankers, while the doubling of the *alcabalas* provided him with unencumbered tax streams he could use as collateral for new *juros* issues. Lending resumed as early as 1578, infusing renewed vigor into the military campaign in the Dutch provinces.

Nothing seemed to change in the second half of Philip's reign. The Crown continued to spend enormous sums in building the Royal Monastery of El Escorial, fighting the Dutch rebels, and outfitting the Invincible Armada. Its defeat in 1588 cost Castile a full year's worth of revenue, and prompted Philip to again convene the Cortes and ask for an emergency tax to protect Castile from the imminent threat of a British invasion.¹⁶ The *millones*, as the new excises were collectively called, departed from the previous tradition in that the Cortes succeeded, at least in principle, in attaching strings to their renewal (Jago 1981). The *millones* scheme consisted of multi-year agreements negotiated between the Crown and the Cortes. The new taxes were collected at the local level, and were transferred to the Crown provided that the conditions in the previous agreement had been

¹⁶ Estimates of the cost of Philip's military campaigns can be found in Parker(1998).

met. In theory, the cities retained administrative control over the funds, and the compliance with the conditions was overseen by an independent commission dominated by representatives of the cities.

The revival of parliamentary authority took place mainly on paper, and did not make itself felt in the Crown's coffers. Although the *millones* commission repeatedly sought instruments to control the destiny of the funds that fell under its oversight, it never gained the ability to restrain the Crown from diverting them to its preferred uses. Starting in the 1620s the king managed to gradually pack the commission with his own representatives. As the Crown declared its sixth bankruptcy in 1647, the commission was absorbed by the Council of Finance (Jago 1981), under the direct control of the Crown. The following year the Treaty of Westphalia would mark the end of Castile's imperial adventures and usher in a period of internal strife and disintegration of state institutions. The Cortes never recovered the lost influence, and after 1663 they were only convened on ceremonial occasions.

VI. Conclusion

At the dawn of the Early Modern age Castile had developed all the major traits of a nation state, second perhaps only to Britain. The monarchy had been able to use its newfound military might to concentrate power in its hands, largely containing or eliminating the influence of the Medieval "estates" of the clergy and the Church. The one Medieval institution to emerge with its attributes largely unaltered was the Cortes. Composed by representatives of the merchant and urban elites, it was also the one that harbored the best prospects for becoming a meaningful check on the power of the Crown.

The relationship between the Crown and the Cortes was always a tense one, as the two competed for the power to raise revenues and the prerogative of deciding their uses. What might have been the outcome of this political game had Castile not stumbled upon the mines of Potosí is a counterfactual that defies analysis. We have nonetheless illustrated how the silver windfall allowed the Crown to skirt the issue altogether, resorting to the Cortes only in emergency situations and forcing them to deal with a *fait accompli*.

We interpret the political evolution of sixteenth century Castile as the effect of a large natural resource windfall in the context of an institutional environment that, while advanced for its time, was not designed to handle a shock of the magnitude of American silver. Although the prerogatives of the Cortes were well established in regards to the traditional Medieval taxes, the constitutional structure of Castile did not contemplate the possibility of large expansions of the revenue base. Silver revenues thus fell under the exclusive control of the Crown, which leveraged them to pursue its imperial program unchecked by the representatives of its kingdom.

The development of Castilian institutions was in many ways the exact opposite to that in Britain and the Netherlands, whose constitutional arrangements emerged from the need to grapple with scarcity. British and Dutch economic growth and financial development were a consequence of institutions that limited the power of the monarch (North and Weingast 1989); Castilian financial sophistication and recklessness arose from a natural resource windfall that handed unprecedented spending power to the Crown. With the exception of the six years surrounding the Dissolution of the Monasteries, Henry VIII's warring instincts were constantly reined in by the state of his finances (Hoyle 1995);

Charles V and Philip II's belligerence, on the other hand, was encouraged by the sheer size of the financial resources at their disposal.

Castile acquired a global empire riding the wave of its silver boom, but subsequently failed to find permanent sources of income to sustain its ambitions. As silver revenue dwindled in the early seventeenth century the Castilian tax base was stretched to its limits, further harming development and growth. Despite the crushing level of taxation, the demise of Spanish dominance could not be postponed for long. The burghers in the major Castilian cities failed to push through reforms that would have established some degree of control over expenditures, while continuous warfare undermined any chance of fiscal consolidation. This equilibrium persisted even in the face of growing external threats and internal strife. American silver paid for Castile's heady days of glory and power; through its effect on institutions, the windfall may have also sentenced it to long centuries of decline.

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