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Bounded Leviathan: or why North and Weingast are only right on the right half

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‘Bounded Leviathan: or why North & Weingast are only right on the right half’

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ABSTRACT

The great merit of North’s and Weingast’s insight into the importance of a ruler’s credible commitment to protecting property rights is that it is both parsimonious and it lends itself beautifully to generalizations. It has e.g. inspired the economic literature on the importance of legal origins” (LaPorta et al., 1998, 2008), which seemed to vindicate the notion that post-Glorious Revolution English institutions were particularly conducive to economic growth. More recently economists have acknowledged that growth in fact depends on state capacity. This encompasses not only investor protection (legal capacity) but also the ability of the state to finance itself, fiscal capacity. (Besley and Persson, 2009, 2010) show that the protection of private property rights and that of public property rights to taxation are linked and most likely co-evolutionary. However, the precise relation between the two is anything but clear. This paper argues that North’s and Weingast’s models one-sided focus on state coercion that threatened subject’ property rights has obscured the relation between coercion used in revenue collection and total revenue role of fiscal capacity. We suggest a very simple model to show that this relationship between state fiscal capacity and legal capacity is not linear, especially in the phase of nation state building. Before 1800 states faced one of two very different central challenges. 1) States that already exhibited high levels of coercion had to try to keep in check the ruler’s potential for predation as North and Weingast argued. 2) States that used very low levels of coercion faced a coordination problem instead of a predation issue. The case of Spain provides empirical evidence for the existence of states where an increase in coercion would have improved fiscal capacity, but high levels of legal capacity paradoxically prevented the ruler from adopting this path. Finally, we use financial market developments to show the serious welfare implications that resulted from such a lack of coordination and integration.

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Introduction

One of the great merits of North's and Weingast's insight into the importance of a ruler's credible commitment to protecting property rights is that it is both parsimonious and it lends itself beautifully to generalizations. These features explain its runaway success with economists, political scientists, development economists and policy advisors. In the last two decades the study of "governance" has exhibited an unbroken tendency to return time and again to the basic NIE insight that in the long run (economist-speak for 'historically') what matters is that governments protect citizens' life and property; and that citizens have ways to protect their livelihood from governments (North and Weingast, 1989).

By contrast, much of the criticisms of the ideas that emanated out of "Constitutions and Commitment" have been more narrowly based. Economic historians have put North's and Weingast's data and interpretation of English fiscal and financial history to the test by exploring alternative explanations for the fall in English sovereign interest rates, by challenging the supposed link between public and private interest rates, by stressing the role of usury rates, and finally by wondering if sovereign interest rates reacted at all to institutional changes (Epstein, 2000, Sussman and Yafeh, 2006, Clark, 1996, Temin and Voth, 2005). This body of literature has – at least in the mind of many economic historians – seriously undermined the narrative of the Glorious Revolution as the origin of English fiscal, financial and eventually economic growth. However, it has done little to lessen the faith of economists, political scientists and development specialists that predatory states are the single largest obstacle to long-term growth.

The economics literature bases this conviction mostly on indirect evidence derived from large cross country data sets, which suggest that what has been termed "English legal origins", led to better judicial protection of investors' rights, or put more simply to a legal regime that protected them against private theft and public predation (LaPorta et al., 1998, La Porta et al., 2008). English common law as used in Britain and her former colonies is contrasted with German, Scandinavian or French civil law systems. Amongst the latter the French tradition is usually singled out for particularly weak investor protection. Thus (North and Weingast, 1989) seemed vindicated in principle with regard to the growth implications of institutions in post-Glorious Revolution Britain even if the historical account of its fiscal and financial development was found to be less convincing. However, a number of recent papers bring the economics debate back more closely to that amongst economic historians. They acknowledge that growth in fact depends on "state capacity" more generally. This encompasses not only the narrowly defined protection of investors but also the ability of the state to finance itself, that is, fiscal capacity. Besley and Persson for example shows that common law countries might have been

better at investor protection – that is, legal capacity - but they were less efficient in creating a fiscal state than most civil law countries, notably those of German and Scandinavian origin (Besley and Persson, 2009).

What this literature shows is that the protection of private property rights and that of public property rights to taxation are linked and most likely co-evolutionary (Besley and Persson, 2009, Besley and Persson, 2010). However, the precise relation between the two is anything but clear. In this paper we will argue that at least part of the problem is that the original North and Weingast model contained a fundamental assumption that has been questioned too little. By arguing that the ability of rulers to commit credibly to protecting subjects' or citizens' property rights distinguished fast growing European countries from the laggards, the model laid the foundation to the belief that state predation was the most important political threat to economic growth in early modern Europe. We will argue that this basic assumption in fact cannot be generalised because the relationship between state fiscal capacity and legal capacity is *not* linear. This is especially true in the phase of European nation state building. We thus shift attention away from the more narrowly defined historical accuracy – or otherwise - of the model within English fiscal and financial history. Instead we will focus on the much more general claim that underpins the original North and Weingast model and a whole literature in its wake.

Section one will develop a very simple model of the relation between revenue and the coercive effort of the state that explains *why* the assumption of the predatory state should not be generalised carelessly. Instead we posit that during the phase of European state building (at least to 1800) depending on their *Verfasstheit* (the way states were constituted rather than their constitution in the narrow Anglophone sense) states faced one of two very different central challenges. On the one hand, states' main challenge could be to keep in check the ruler's potential for predation just as North and Weingast posited. On the other hand, they were just as likely to mainly face a coordination problem instead of a predation issue. Section two provides empirical evidence to illustrate and further develop this argument, namely that in some early modern European states, notably Spain, predation was never a central issue but coordination and integration was. Section three elaborates further the consequences of the bounded sovereignty that is the coordination problem, zooming in on financial markets as an example for the potentially serious welfare problems that resulted from not solving the coordination problem. Section four concludes.

I

Through all ages rulers had to use some degree of coercion in order to collect taxes. The most benevolent ruler, who does not appropriate any of the revenue for her own purposes and who miraculously decides to provide exactly the amount of public goods her subjects wish for, will be able to reduce the need for enforcement through bargaining and persuasion by, in Levi's words, increasing "quasi-voluntary compliance". But she will not be able to do away with the need for enforcement altogether (Levi, 1988). A purely voluntarist political organisation or a pure form of anarchy will always founder in the face of overwhelming incentives for individuals to free-ride on the contributions of others. Indeed, as (Olson, 2000) has shown an entirely voluntary agreement to defray the costs of public goods is impossible to establish. The threat of punishment is thus the selective (negative) incentive needed to establish collective organisation. Coercion is a *conditio sine qua non* for state capacity.

However, we argue that the relationship between revenues collected and the state's coercive effort is not linear but shaped like an inverted U. The basic notion underlying this relationship (depicted in Figure 1) is simple. Initially more coercive effort, say more tax collectors and a more complex administration, will increase the opportunity cost of tax evasion and avoidance for subjects. When an attempt to shirk taxes becomes likely to be discovered and prosecuted, the risk of not paying up will become too much for many subjects. However, more coercive effort at some point runs into decreasing returns, that is the marginal return in terms of net revenue of an additional tax collector (to stay within our example) will decrease once most of the territory is covered by a basic tax collecting structure. This relationship is represented in Figure 1 by the movement from the origin to point A, that is, by the ascending part of the inverted U. Arguably this kind of slow movement towards improved state coercive capacity was what European state-building in the late medieval and early modern period was all about.

Beyond point A, however, investment in coercion in fact becomes counterproductive in terms of net revenue. The intuition here, too, is easy to see. Two effects are likely to appear. First, coercion is obviously costly and since the marginal return to coercion in terms of additional revenue is decreasing, at some point the cost of the additional tax collector (to stay again with the simplistic example) exceeds the increase in revenue he will be able to collect. This is little more than a generalisation of Levi's model, in which a ruler's net-revenue is reduced because she is powerful but has weak monitoring structures and thus her agents pocket most of the revenue (Levi, 1988). But even if agents do not cheat on the ruler, increased coercion will result

in lower net revenue because of decreasing returns to coercion. Second, once the coercive effort becomes overbearing subjects are likely to engage in more sophisticated or coordinated ways of cheating on the tax man and simply reduce cooperation with the ruler. As resistance, open or more clandestine, increases, collection will actually fall and collection costs rise further. At its most extreme the legitimacy of the tax raising ruler might be entirely lost and revenue fall precipitously. Every early modern European ruler knew the cost of tax riots. They not only required a paid force to repress, but often wiped out the revenue of an entire town or region for a protracted period. This part of the relationship is depicted on the right hand side of figure 1. **(See Figure 1)**

It is important to note that in this - admittedly - very simplistic rendition of the relationship between net revenue and the coercive investment of the ruler we have abstracted from tax rates and design. While much thought has been given to these, the relationship we describe holds even if tax rates remained fixed and the only change was to the level of coercion applied to collect them. It is thus different from the Laffer curve of the same shape. The latter posits that as tax *rates* increase so initially does net revenue. However, as the tax burden on the economy rises people increasingly choose not to invest, work and engage in taxed transactions and thus net revenue falls because of the negative welfare effects of high tax rates. (Thus the Laffer curve charts the revenue on the y-axis and tax rates on the x-axis). If we assume that coercive effort on the one hand, and tax rates and the arbitrariness of impositions on the other hand are positively correlated, as would seem sensible, the effect we describe would be just enhanced. However, the most important point for the debate that follows is that *ceteris paribus* the relationship between coercive effort employed in raising taxes and the net revenue is non-linear regardless of tax rates.

Let us (imperfectly) transplant the idea of "Credible Commitment" into this simple figure. North and Weingast's argument was that England previous to the Glorious Revolution was somewhere around point E. The Stuarts employed high levels of coercion not just in the form of tax farmers but more importantly through forced loans, monopolies and similar measures all of which carried very high enforcement costs and reduced compliance. Since the ruler's power to coerce, or in the preferred terminology of political economy, predate, was unconstrained, the ruler turned into the main threat to economic activity. Not surprisingly net revenue was modest.

After the Glorious Revolution by contrast, Parliament could impose enough control over the Crown's tax raising and spending that tax compliance improved, more favourable loans could be obtained, and they could be serviced more regularly and more cheaply. In short, net

revenue increased while the level of coercion necessary to collect taxes decreased as the legitimacy of the fiscal system increased. England had moved closer to point E' in our figure, that is more revenue with less coercion.[1] In the "credible commitment" view of European economic history, England had achieved a fiscally more sustainable and financially more beneficial position that fostered economic growth. More legal capacity apparently went hand in hand with more fiscal capacity.

By contrast, its unconstrained competitors, most importantly absolutist France, but by extension also Spain and the remaining European 'absolutists', struggled along for the next century and a half somewhere around point F in our Figure 1, in a place where high coercive investment rendered mediocre fiscal returns. These were states that predated on subjects' property without being able to improve their fiscal performance and in the process hamstrung their economies. The reason was that their coercive potential was not constrained by any constitutional guarantee and both legal capacity and fiscal capacity suffered.

A second look at Figure 1 however reveals a serious issue. The story of the coercive power of the state that needed to be restrained by parliamentary representation makes sense as long as we assume that all early modern European states were placed somewhere to the right of point A in our graph. Here the combination of decreasing returns to coercion, increasing tax payer resistance and misappropriation of revenue by rulers' agents as we move towards the right meant that less coercion (read predation) was associated with more revenue. Here a predatory ruler was indeed in all likelihood the main problem. The trouble is that much of the literature simply ignores the possibility that early modern states – and empires?- might have been located to the left of point A.

Economists, political scientists and economic historians have assumed *ex ante* that all rulers are a threat to their subjects'/citizens' property because they need to maximise their disposable income (Brennan and Buchanan, 1980, Brennan and Buchanan, 1985). In Levi's words, all "[r]ulers are predatory in that they always try to […] maximize their personal objectives, which, I argue, require them to maximize state revenue" (Levi, 1988). Or as North and Weingast argue (citing McNeill and Tullock), "if rulers did not maintain a comparative advantage in coercion, they soon failed to be rulers" (North and Weingast, 1989). The basis of

[1] In the longer term English tax rates of course rose very fast. However, for the purpose of North's and Weingast original argument this was in fact not necessary. They assumed that the positive effects of a more reliable and equitable tax system on growth would allow revenue to grow even if the rates had not increased. Thus the dynamic part of their model came out of lower financing costs and higher rates of economic growth not higher tax rates.

this claim relies on Tilly's analysis of European state competition, which in turn argues that the exogenous variable that compelled European states to compete for revenue were the technological and strategic innovations of the military revolution (Tilly, 1975, Tilly, 1990). With that basic assumption in mind it would seem that there really is only the right hand side of our little graph. The difference is simply if a ruler is closer to E, that is s/he is an unconstrained predator, or to E', that is s/he is a constrained predator. Nothing else mattered and it would seem justified to generalize the notion that "credible commitment" is the central political economy issue facing early modern European economies.

Alas, as scholars also note, rulers did and do not maximise revenue, but rule. Their ultimate constraint domestically was to stay in power and their main objective internationally was arguably to extend their power (Lane, 1958).[2] Revenue was a *means* to an *end*; coercion was but one means to collect revenue. However, our figure 1 suggests that whether more coercion was productive or counterproductive in terms of increasing revenue depended crucially on whether a ruler found herself to the left or the right of our point of optimal levels of coercion at A. Revenue maximisation was not the only game in town and the example of Spanish fiscal and financial history can explain why.

II

Early modern Spain was nowhere near to points E (pre-Glorious Revolution England) or F (absolutist France), that is the spot NIE has reserved for European absolutists. Instead, we argue it was somewhere around point S. It combined low coercion effort with reasonable revenue collection. In other words, it was in territory that simply does not exist in much of the conventional NIE theory. The implications of this hypothesis are potentially far reaching. If we are correct in our assessment of the relation between coercion and revenues in the case of Spain, the central assumption that underpins the generalisation of the model of "constitutional commitment" is simply incorrect: not all rulers maximised revenue and therefore the simple equation that has allowed us to test rule by proxying it with revenue has to be rethought.

This is a bold assertion and it asks for at least three empirical tests to prove it. First, we should be able to show that in terms of its revenue raising Spain was broadly comparable to France but less successful than (post-Glorious Revolution) England. Second, we need to show

[2] Interestingly Levi thought that this only applied to states that were run by a larger group of "top management" (military and police) but not to monarchies. For a contrasting view see La Manna, M. & Stomp, G. 1994. 'Leviathan; revenue maximiser or glory seeker?' *Constitutional Political Economy,* 5**,** 159-172.

that Spain was not afflicted by what North and Weingast identified as the key characteristic of the unconstrained predatory ruler in early modern Europe, that is high sovereign interest rates. In the logic of the model a revenue maximising ruler with absolute power would be expected to predate on subjects' property. The prime target was lenders' property, which could be expropriated by simply repudiating loans, by unilateral alterations of the terms of contract or through currency manipulations. Thus, lenders naturally would require high ex-ante interest rates. Third, we need to demonstrate that coercion costs were low.

We will discuss these three issues in turn using some data from our recent research on Spain and her territories in the Americas. The data presented here are certainly subject to limitation in terms of geographical and temporal reach. However, it should be remembered that we are not trying to prove that the Spanish case represents an alternative *universal* model. Instead, we are trying to disprove the claim of universality that has been attached to the model of "Constitutions and Commitment".

Revenue per capita

How successful was Spain at raising revenue relative to its direct European competitors? Figure 2 offers some data on the per capita revenue collection of Britain, France and Spain for the late eighteenth century. The choice of period allows us to include the Spanish territories in the Americas in our discussion. Economists and historians have long worked on the assumption that the predatory nature of Spanish governance was more pronounced in the Spanish Indies than in the peninsula. Hence, an inclusion of newly available estimates for the Spanish Americas can help to discuss this notion. The data reflect the well-studied fact that the British state by the late eighteenth century was the most formidable fiscal apparatus in Europe (Braddick, 1996, Brewer, 1989, O'Brien, 2010). Its fiscal capacity outdid that of pre-revolutionary France and peninsular Spain by a factor of two to three. This then was the culmination of a history that had begun with the introduction of the fiscal reforms under Cromwell and was pushed strongly by the excise reforms of the 1720s and 30s, which successively increased the fiscal gap between Britain and her continental neighbours (Ashworth, 2003). **(See Figure 2.)**

The figure also confirms our claim that Spanish and French revenue raising capacities were similar in per capita terms. Spanish fiscal capacity would be somewhat superior if we were to include the Crown's American subjects in the equation. Yet, we do not aggregate these figures since these were separate fiscal units and aggregations would suggest a unity that did not exist. Disaggregation also biases the results against our hypothesis. In any case, in the

Americas revenue per capita was higher than in the peninsula, though closer to the peninsular Spanish or French range than to British figures. In other words, as we have argued elsewhere the notion of massive extraction of revenue in the trans-Atlantic territories is not borne out by Spanish fiscal data (Grafe and Irigoín, 2006, Irigoín and Grafe, 2008, Grafe and Irigoín, 2012). Per capita revenue in New Spain (today's Mexico) in particular was notably higher. Yet, this was also by far the richest of Spain's territories. In sum, this suggests that with regard to revenue collection, that is the y-axis of our simple Figure 1, Spain should indeed be located closer to France than England by the eighteenth century. On this most defenders of the NIE thesis would surely agree.

Interest Rates

The more important question is however, if this similarity in per capita revenue reflects more general similarities as the supposed dichotomy between parliamentary and absolutist regimes in early modern Europe implied. Was eighteenth century Spain indeed in a situation comparable to that of France, that is at a point where investors distrusted it and the credit markets demanded much higher interest rates on French sovereign debt than on British sovereign debt? Within the NIE paradigm the answer should lie in the interest rates. Series of sovereign interest rates for Spain especially in the eighteenth century have been hard to construct. In part, this is the result of Spain's rather perplexing fiscal behaviour in this period. Throughout the sixteenth and much of the seventeenth century Spain had famously contracted sovereign debt through both, loans and annuities. Large loans (*asientos*) had been provided by the German banking houses in the sixteenth century, and in the seventeenth century they were syndicated by Genoese investors (Ehrenberg, 1896, Drelichman and Voth, 2011a, Drelichman and Voth, 2011b). Annuities were issued in the form of the *juros* throughout the sixteenth centuries and until the 1670s. However, between the late seventeenth century and the late eighteenth century the Spanish central hacienda neither issued new *juros*, nor did it take up large loans nationally or internationally.

This led to two features of Spanish public finances that set them apart from their European neighbours throughout much of the eighteenth century. On the one hand, the share of Spanish expenditure spent on debt service was minimal at a time when most European states struggled to service their debt. During the eighteenth century Britain and France spent between one third and half of their total expenditure on debt service, and the Netherlands spent between 40 and 70 percent. In peninsular Spain debt service consumed on average 7 percent over the century and even in the financially very challenging 1780s, when new debt was issued

in the form of the *vales reales*, it did not exceed 12 percent. Between 1782 and 1794 the debt of the Spanish central treasury increased five-fold. But even on the eve of the French war in 1793 Spanish per capita debt was barely 5 percent of British per capita debt (Grafe, 2012). In the American territories these numbers were even lower rising from about 2 percent on average in 1729-33 to 7 percent on average in 1796-1800 (Grafe and Irigoín, 2012).[3] On the other hand, we do not know what interest rate the Spanish central treasury would have had to pay for new debt, since there was no regular issuance. The best proxy we have is therefore the return that investors received on the old *juros*, which continued to be served and were traded in secondary markets. In addition we have some anecdotal evidence on loans taken up in Europe and the Americas in the late eighteenth century. **(See Figure 3)**

Figure 3 displays the official rate of interest of *juros* established by the Crown, which fell from 10 percent in the sixteenth century to 2.5 percent in the eighteenth century. During much of the later sixteenth and especially the seventeenth century the *juros* traded at substantial discounts on face value and thus yields were considerably higher. The series of the effective rate on royal debt constructed by Drelichman and Voth and included in Figure 1 for the late sixteenth century reflects their estimate for the real cost of borrowing for the Crown combining annuities and large loans, which exceeded 9 percent. No comparable data is available for the first half of the seventeenth century.

For the later seventeenth century and the eighteenth century a small series has been constructed on the basis of the *juros* owned by the Cathedral Chapter of Zamora. It reflects the return the Chapter realised on their *juros* that is the closest we might be able to get to yields.[4] The difficult fiscal and therefore financial situation in the later seventeenth century is clearly visible. Returns were between 7.4 and 8.6 percent. However, by the mid to later eighteenth century these had dropped back to somewhere between 4.1 and 4.3 percent on average. When Spain returned to international markets in the very late 1700s it paid 3.5 to 5 percent in the

[3] Andrien reports argues that at least in Lima debt was higher in the seventeenth century. However, it is likely that debt was concentrated in the large treasury districts and rather lower on average. Andrien, K. 1981. 'The sale of juros and the politics of reform in the viceroyalty of Peru', 1608-1695. *Journal of Latin American Studies,* 13**,** 1-19.

[4] *Juros* were redeemable and thus the Crown was able to reduce the interest rate as long as investors would be willing to hold the new annuities. Since in the case of *juros* the return (*réditos*) was generally held constant (an effective way of circumventing usury laws) technically a lowering of the interest rate was most of the time achieved through an increase (*crecimiento*) of the principal. In other words, rather than have the principal repaid, the investor agreed to top it up in order to guarantee the same future income stream. However the real return on the *juro* was also altered since the Crown began to levy taxes and surcharges on some of the older *juros* in the seventeenth century effectively reducing returns. In short, the only way to get at the yields on *juros* is via the private account books of the annuity holder which register up-to-date principal and the real return they received after all deductions.

Amsterdam market, comparable to what Britain paid at the time (Riley, 1980, Marichal, 2007). As late as 1805 Spain took up a loan in Paris at 5.5 percent (Hamnett, 1969). By then, of course, all of Europe was scrambling for funds to continue the first intercontinental war of the modern age.

In short, in the eighteenth century the interest rate on Spanish sovereign debt was surprisingly close to British rates and not at all facing the same problems that France confronted. In fact during the eighteenth century Spain had retired some of the legacy debt (*juros*), and simply not issued new debt. Yet it did not do so because it could not raise money in the face of high rates but because it *chose* not to borrow. Thus investors had to chase for old annuities in the secondary markets and were willing to lend effectively at a lower and lower rate. The Crown did of course borrow short term from suppliers and merchants and its own tax officials. Yet here too modest rates were the rule.

It is important to note, too, within the context of North and Weingast argument that private interest rates in peninsular Spain were even lower than sovereign ones during this period. Private mortgage backed loans, so called *censos*, were agreed between local debtors (in this case mostly farmers) and the Zamora Cathedral Chapter at just over 5 percent in the early seventeenth century and closer to 2 percent in the later eighteenth century (see Figure 2). There are good reasons to doubt that private and public interest rates where ever as closely integrated as North and Weingast implied (Clark, 1996). The only theoretical argument in favour would be that very high sovereign rates might have crowded out private investors just as usury rates (which never mattered in Spain) might have caused crowding out in Britain (Temin and Voth, 2005). Yet, a ruler that – like the Spanish Crown between the late seventeenth and the late eighteenth century - was increasing overall long term borrowing only very modestly obviously did not crowd out private investors. Increases did occur mostly because investors for technical reasons adjusted to the new lower rates by toping up the principal rather than receiving a lower interest payment (see note 4 above). Yet, since they could choose repayment instead, this was unlikely to crowd out private demand either. Only in the first decade of the nineteenth century private interest rates rose again; but by then peninsular Spain was in the midst of a Civil War caused by the Napoleonic invasion of 1808.

How different was the situation in Spanish America? Spanish America's fiscal system was run between the sixteenth and the eighteenth centuries through a network of several dozens regional treasuries that enjoyed fairly large autonomy. Transfers between these treasuries were instrumental to the workings of the system. Elsewhere we have described and analysed this

based on data for up to 72 treasuries (Grafe and Irigoín, 2006, Irigoín and Grafe, 2008). They financed the continued expansion of the Spanish state in the Americas and with it the extension of the fiscal base territorially and in terms of subject population. Yet, there was no serious long-term debt in Spanish America. The Crown initially offered *juros* in the Americas, but stopped doing so in 1639 at the behest of the Council of the Indies. While the early sales were very successful, a renewed offer of *juros* in the late seventeenth century was not taken up by the public (Andrien, 1981). Given what we know from the yields in peninsular Spain this was of course a moment of great discounts on face value and the reluctance of Spanish American investors is hardly surprising. This was, however, the last attempt to issue *juros* in the Americas. Theoretically, the Crown's American subjects could still buy peninsular *juros,* but getting the coupon paid on a local tax in peninsular Spain was a costly enterprise for a Spanish American investor.

In the absence of a funded sovereign debt in the New World, public borrowing in the Spanish Americas revolved around the activities of the regional treasuries, which incidentally meant the Crown's American subjects could monitor their investments and the local public borrower much more easily. Throughout the sixteenth to eighteenth centuries local non-religious and religious corporations gave loans and advances to their local treasuries. These could be part of civil or military purchasing, office holding or tax farming and revenue collection or be part of the system of inter-treasury transfers. From at least the early seventeenth century there were also occasionally large loans, which were usually syndicated through important local institutions such as the merchant guilds (*consulados*) or the mining guild (*tribunal de mineria*) who for a fee pooled resources offering additional security to small investors and lower transaction costs to the local treasury (Grafe and Irigoín, 2012).

Early American examples of syndicated loans reflect the generally very high interest rates in the early seventeenth century. Quiroz argues that the Lima *Consulado* paid up to 17 percent in 1627 to the investors (Quiroz, 1994). Yet, it is hard to generalise from this information, and contrary to the peninsular economy Lima was in the midst of a boom at the time. In all likelihood lucrative private business was crowding out public borrowing, not the other way round. Given the regional and local nature of public borrowing in the Americas, and the privatisation of large parts of the public finances we simply do not know how much interest (explicit and implicit) the Spanish American treasuries paid for much of the period under consideration. In the late eighteenth century more large syndicated loans appear. Where we have information, the interest rate was becoming more standardised. The syndicating institutions charged the local treasury around 5-6 percent while paying investors 4-5 percent

and keeping 1 percent as their fee. For example in 1793 the *Consulado* of Buenos Aires syndicated a loan over 100,000 pesos for 6 percent. The Crown guaranteed debt service by earmarking a number of local taxes for this purpose. The *Consulado* raised the principal from local merchants who participated with loans of different amounts and maturities between 2 and 6 years (Grieco, 2005). Similar cases are documented for Mexico and Lima (Grafe and Irigoín, 2012).

Even though there are substantial lacunae in our understanding of the financing of the Spanish state in Europe and the Americas the available information suggests that for much of the period under consideration the Spanish public finances were in better shape than once thought. Whereas 30 years ago historians simply referred to the repeated Spanish defaults of the sixteenth and seventeenth century it is now quite clear that during the sixteenth century so-called defaults were essentially re-negotiations that turned loans into long-term bonds and which reflected liquidity problems rather than insolvency (Rodríguez-Salgado, 1988, Thompson, 1994). More important (Drelichman and Voth, 2011c) demonstrate that the defaults did not change lenders' expectations; in other words they had been priced in all along. This of course explains why bankers and the public kept on investing in Spanish public debt. Rather than being strong-armed by a predatory ruler, there were profits to be made.

The picture that emerges fits poorly with the model of a lack of "credible commitment" – Spain was not expropriating its lenders even in its hours of need. However, Spain's fiscal history in the eighteenth century presents an even bigger challenge to the idea of the predatory state. After the dire straits of the early to mid-seventeenth century Spain did what Margaret Levi thought was impossible: it stopped trying to increase revenue (and borrowing) and it did so even though sovereign interest rates suggest that its subjects were keen to invest more in public debt. As (Grafe, 2012) has demonstrated the strong urban control over the Spanish fiscal system explained investors' faith to a large extent. Spanish rulers maximised rule. If that meant forgoing revenue that was a price they were willing to pay (Irigoín and Grafe, 2008).

Investing in coercion: forced loans, currency manipulations and monopolies

That Spain behaved differently from the underlying assumption of the necessarily predatory ruler becomes even clearer when we turn to our third "test", namely the states' investment in coercion. This is a very complicated issue on a comparative basis but we will present a few short examples to support our case that Spain spent relatively little on repression and was thus able to raise an amount of per capita revenue that was quite similar to the French

case (at least in the eighteenth century) with a much lower investment in coercion. Indeed, it is that lack of coercion that explains the willingness of the Crown's contractual partners to continue offering funds at low rates. Of course the possibilities of rulers to coerce their subjects into supporting them beyond the investors' will were manifold. We will just look at three often cited examples: forced loans, depreciations and the ubiquitous early modern monopolies.

The extent of confiscatory powers of the ruler is most obvious in outright expropriations of private property rights and repudiations of sovereign debts, which as North and Weingast rightly pointed out, were not unusual in early modern Europe. The most common reference is to forced loans. Republican Florence relied on them in the fifteenth century and so did the Netherlands into the seventeenth century (Martines, 1988, Gelderblom and Jonker, 2008). In the Spanish context it is often claimed that the so-called *donativos* constituted forced loans. Yet, notwithstanding their name, the level of coercion involved was at best modest. Grieco has shown beyond doubt that investors in *donativos* always expected a return (Grieco, 2005, Grafe and Irigoín, 2012). By the eighteenth century for which again more information is available the *donativos* usually paid an interest rate that was attractive enough for investors to want to put their money into them. They were religiously serviced and we found evidence that in situations in which locals were unconvinced of the investment they simply refused to pay into the "forced" loan and the ruler did absolutely nothing about it (Grafe and Irigoín, 2012). Not much predation there then.

That is not to say Spanish rulers never performed expropriations. The possibly largest confiscations of wealth were the *temporalidades.* In 1767 Spain followed Portugal's example and expelled the Jesuits. The underlying and proximate causes for this expulsion were complex. The latter involved a large urban uprising in peninsular Spain in 1766 and conflicts with the Jesuits over their missions in territories that were contested between Portuguese Brazil and Spanish Río de la Plata. In other words, that the royal purse took over Jesuit assets was the consequence, not the aim of the expulsion. In the Americas especially the amounts involved were large. Real property was sold off and debtors to the Jesuits had to either pay off their debt or pay the local administrator of the *temporalidades* the same amount they had previously owed the Jesuits. Since the administration was local well-to-do investors made large profits in the process. Hence this accidental confiscation created a sudden cash injection to the local treasuries and a windfall for new investors who exploited the prejudice of the Order as financial intermediary. But it fits poorly the bill of fiscally driven expropriation.

Indeed, towards the end of the eighteenth century it was a sign of the times that religious institutions found themselves under ideologically based pressure to give up some of their spectacular wealth. In the 1780 the Spanish central treasury for the first time in more than a century issued new public debt, the *vales reales,* Spain's first sovereign bond. They offered a 4 percent coupon on 20 years maturity and their denominations were initially so large that they were obviously aimed at investors with deep pockets (Tedde de Lorca, 1984). The treasury earmarked revenues to pay them off and throughout the 1780s they performed well. After losing initially face value in the first two years they traded at par or above between 1783 and 1794. Earl Hamilton was famously puzzled by the trust that the public evidently had in the Crown's commitment to service them (Hamilton, 1944). After 1794 however, emissions increased exponentially and discounts returned as Spain was dragged into war with revolutionary France, although the treasury created a sinking fund based on local taxes.

A depreciated bond turned into a confiscatory act of the Crown only after 1798 in Spain when the Crown began the *desamortización* (disentailment) of religious institutions, which received *vales* in return for the forced sale of real property. In 1803 the Spanish Crown's financial situation took a dramatic turn for the worse. Desperate to avoid war with Napoleon's France, Spain agreed to pay an enormous monthly contribution directly into the French coffers. In order to restore the market for *vales* Spain continued the confiscation process to the Americas and created a consolidation fund for the bonds. Here, too, the confiscation hit pious foundations which were forced by decree to contribute to the consolidation fund. Liens, loans, and mortgages that supported these pious works had to be redeemed and the charities were forced to sell their real property (Chowning, 1989). However, once again the implementation of the decree was left to local *juntas* consisting of high local political and fiscal officials and the highest representatives of the Church in the region and a delegate of the crown.

The commissions were charged with assessing the value of the loans and importantly with the negotiations with the debtor, who now owed the Consolidation Fund rather than the pious foundation. In the process, deals were cut, interest in arrears cancelled and principals lowered and in Mexico for example the actual administration of the "expropriation" consumed 44 percent of the total yield, which remained in the local economy (Hamnett, 1969). In short, the Crown's most blatant attempt at confiscation produced a negotiated outcome that shared the spoils by reducing the outstanding private debt that was to be converted into public borrowing. Thus even under the existential threat from Napoleon the confiscatory power of the Spanish ruler went only so far as local authority would collaborate. In the end, neither the

history of the *donativos*, or the *temporalidades,* or the *vales reales,* support the notion of confiscatory power being wielded by the Spanish Crown.

Another well-established avenue for supposedly predatory rulers to change property rights unilaterally in their favour were debasements given European rulers' monopoly over currency emission. The Tudor kings of England had engaged in this practice in the 1500s and John Law's Scottish "cure" to France's debt problem after the War of Spanish Succession was the most notorious instance of that strategy. Traditionally economic history would follow (Hamilton, 1943) and add Spain's history in the seventeenth century to this list. However, this is a little disingenuous. Spain famously resorted to debasements of its small coin, the *vellon*, between the 1610s and 1686 (García de Paso, 2000). However, with a very short lived exception in 1642-43 Spain's large coin silver currency was not substantially debased over a period of almost three hundred years (Grafe, 2012). The stabilisation of the copper coin in the 1680s was in part achieved through a minor debasement of peninsular silver-coins (the *provinciales*) though American coins (the *nacionales*) remained untouched. *Provinciales* and *nacionales* were also subject to two very minor debasements in the eighteenth century but these were directed at returning the *peso* to within a band that remedied problems with bullion flows, in other words a technical monetary adjustment (Nogues-Marco, 2010). In short, there were modest adjustments to the main metropolitan silver coin and the story becomes more complex when including territories beyond Castile.

By comparison with its European peers the Spanish American peso was without a doubt the best store of value an investor could expect from any currency. No matter how uneasy North Americans grew over the credibility of the Continental dollar as they saw the US Congress print money, they never doubted the value of the coin to which supposedly entitled in return. The bills read "This Bills entitles the Bearer to receive … Spanish milled dollars, or the value thereof in Gold or Silver according to the resolution of the Congress, held in Philadelphia the 10th May 1775". The Spanish milled dollar, that is Spanish American silver *pesos,* became the basis for Alexander Hamilton's dollar since 1791. Economists comparing the trust investors had in different legal systems seem to conveniently forget that the Spanish American *peso* remained legal tender in the US until 1856 and was the basis for the establishment of the US dollar (read *peso*) (Irigoín, 2009). For most of the early modern period it was the only safe currency in Europe, Asia and the Americas. "Irresponsible" Spanish rulers could have expropriated holders of *pesos* from Madrid to Lima and from Philadelphia to Canton. They chose not to, and merchants and investors everywhere evidently thought that the Crown's commitment to the *peso* was credible.

Finally, a few words need to be said about rulers' ability to infringe on their subjects' property rights through the sale of monopolies, another of North and Weingast's key indicators for the predatory state. Again somewhat careless economic historians are in part to blame for the confusing notion that monopolies were resorted to more intensely by Spain's early modern rulers than elsewhere in Europe. Two fields are often singled out: trade with the Americas and fiscal monopolies. In the case of the commercial monopolies this is ironic, since the Spanish Indies trade was in fact no monopoly as opposed to the colonial trades of the republican minded Netherlands and England. In contrast to the monopolies controlled by the English EIC and the Dutch VOC the *Carrera de Indias* and the Manila *Galleon* were structured according to an earlier form of mercantile organisation first built around wool exports to the southern Netherlands (Phillips and Phillips, 1997) and more akin to a chartered company, that is essentially a licensing system. Those who wanted to participate had to be members of a guild (the *Casa de Contratación* or the *Ciudad y Comercio de Manila*). There were thus barriers to entry. However, the ability of the *Casa de Contratación* to exclude others from the trade was always delimited by the incentives for members to serve as a (paid) proxy for outsiders. Notwithstanding limited attempts in the eighteenth century to emulate proper English monopoly trading companies, economically speaking only a very reduced part of Spanish American trade was ever a monopoly.[5]

Fiscal monopolies were an altogether different story. The *estancos* formed an increasing share of Spanish revenue. If there was one area where one should expect the ruler's coercive and repressive hand to be clearly visible, the tax monopolies would be the place. In the eighteenth century amongst these the tobacco monopoly was the crown jewel. Indeed, Spain derived in the eighteenth century about twice the share of its total revenue from the tobacco *estanco* that France collected from its own monopoly. As Michael Kwass shows convincingly the French enforcement of the tobacco monopoly was fierce. (Kwass, forthcoming)

Spain too tried its best to solve the problems that fragmented jurisdictions in Castile, the Basque Provinces, the three Aragonese territories and in Navarre created. The story of the actual introduction of the monopoly is complex and beyond the scope of this paper. Suffice to say that it only ever became a real monopoly in Castile. But in order to achieve this, the royal treasury

[5] The exceptions were the Guipuzcoana de Caracas (created 1728) in the cocoa trade, the Compañia de La Habana (created 1740), which controlled part of the tobacco and sugar trade, the Compañia de Barcelona (1755) which tried to monopolise Catalan trade and the Compañía de Filipinas (1784) which unsuccesfuly hoped to break the grip the Galleon had on the Pacific trade. Their success was limited and they remained very controversial and contested. See Grafe, R. 2012. *Distant Tyranny. Markets, Power and Backwardness in Spain 1650-1800,* Princeton, Princeton University Press.

had accept that a) it would receive no revenue from the Basque Provinces but had to subsidise the border enforcement of the Provinces, b) it would have to become the subordinate tax farmer of the Navarrese parliament while again subsidising local administration and c) that Aragonese consumers would overwhelmingly buy smuggled tobacco (Grafe, 2012). Indeed the prized tobacco monopoly might be one of the best examples for the choices early modern states had. France chose severe repression and paid for it with a loss of legitimacy, high costs of coercion and lower per capita net revenue. Spanish rulers negotiated away constitutional and other conflicts and though smuggling was illegal, prosecutions were in no way comparable to French levels. The outcome was an uneven application of the monopoly, but also lower costs of coercion and most important, higher net revenue.

The discussion offered here is hardly exhaustive. However, the evidence strongly suggests that Spain was indeed combining an ability to collect per capita revenue that at least matched that of France with a regime of low coercive and predatory effort. This is consistent with the moderate interest rates presented above, a proven ability to borrow, and a treasury that on the whole paid for its debts. It is also confirmed by a political regime that defended the early modern world's foremost currency and managed to organise its most important fiscal monopoly in such a way that it became a real revenue spinner at a relatively low coercive cost. To return to Figure 1: Spain was on the left of point A. This means that the generalised assumption that underpins the North and Weingast framework, and practically all of the NIE literature, namely that all rulers are predators because they must maximise revenue is simply incorrect. To put it another way: In Spain fiscal capacity might have been lower than in Britain but was certainly equal to France. However, that was not the consequence or even corollary of lower legal capacity resulting in higher levels of coercion. That means we enter political *terra incognita* in those states, like early modern Spain, where predation was never the most important political economy issue. What then were the largest political economy challenges for growth in countries like ancien regime Spain?

III

There were obviously deep constitutional roots (again in the sense of its broader *Verfasstheit*) why in states like Spain the ruler did not become a predator in the early modern period, which can only very summarily be dealt with here but are discussed in more detail in (Grafe, 2012, Irigoín and Grafe, 2008). In the Spains (tellingly, contemporaries would have used the plural) and the Spanish kingdoms in the New World historic territories and especially towns retained most of the control over revenue and expenditure, meaning that local representation

was powerful. The Crown's role was that of a mediator of regional and local authorities, not that of a mandating central force. Spanish kings had never had divine rights over which the *cortes* could have tried to gain supremacy (as the English Parliament did), or which could have been attacked by revolutionary citizens (as they did in France). The Spains lacked a repressive apparatus in the peninsula and even more so in the Americas, where before the 1760s they did not even have a standing army to speak of but relied almost entirely on local militias (Grafe and Irigoín, 2012).

The state in the Hispanic world was never autonomous or as North and Weingast would have called it "vertically integrated" (North and Weingast, 1989). Power between local, regional and supra-regional administrative units remained largely shared and negotiated, rather than hierarchically ordered. Decentralisation delivered governance that was perceived as legitimate: Spanish kings kept their heads on their shoulders and independence – in Spain and the Americas alike - was triggered by the fact that the French removed (imprisoned) the Spanish king after their invasion of the metropolis and imposed their rule by a French king. It started as a movement in the name of the legitimate king not as a rebellion against the crown. Frankly, none of the major events, trends and structures of early modern Spanish history fit the pervasive notion of an unconstrained ruler hell-bend on centralisation and revenue and willing to ride rough shot over his subjects, 'colonies', and lenders' property rights that still appears in the pages of economics journals.

This political regime thus generally did not threaten the economy with predation, and its costs were not primarily a distortion of incentives for investment. Instead, the lack of vertical integration manifested itself in poorly coordinated and integrated markets. Devolved state autonomy resulted in lower fiscal capacity in spite of high levels of legal capacity. Local control and representation was good for legitimacy and legal capacity but hampered the widening and therefore deepening of markets. English historians like William Ashworth have recently begun to investigate how the application of a *national* excise not only flushed more revenue into Parliament's coffers but also served to standardise productive processes in such areas as brewing. Weights and measures had to be unified for the excise man to do his duty, and the actual production technology involving alcohol degree and equipment became more standardised too. Compare this to Spanish fiscality, which incidentally relied even more on indirect trade and consumption taxes than England.[6] Each town and district in the kingdoms of

[6] Fiscal historians have long claimed that part of the English fiscal revolution was a strong reliance on indirect taxation rather than direct taxes such as land taxes. Compared to France that is true. Compared to Spain (and of course the Netherlands) England was a latecomer to indirect taxation and only matched Spanish levels in the eighteenth century.

Spain created its own tax structure, even if notionally certain consumption taxes such as the *alcabala* or trade taxes like the *almojarifazgos* should have been standardised. They were not and their specific rates determined everything from the size of the wine barrel in town to the length of the silk cloth, or the subject who was liable to –or exempt from- it. Thus local representation not only did *not* encourage the standardisation that could lower transaction costs and thus support larger and deeper markets. Instead it made any harmonisation of weights and measures or production processes or product types virtually impossible (Grafe, 2012, Irigoín & Grafe 2008).

What was true for goods markets also held for financial markets even if the mechanism in this sector was slightly different. The example is interesting because it addresses a puzzle that emerges directly out of the discussion of Spanish public finances offered above. Spanish and even more so Spanish American economic historians have always struggled to explain the contradiction that is so obvious in the data presented above. On the one hand, interest rates in Spain and Spanish America seem to have been relatively low by international comparison, which would suggest that there was no shortage of capital even though historians of Spanish America have persistently claimed that "money" was scarce. On the other hand, it is a well-known fact that financial institutions developed very late in the Spanish territories and the entire banking sector, if it could be called that, was institutionally lagging behind all other western European countries. So what was the problem if potential banking entrepreneurs had little predation to fear for from the ruler?

The common feature of credit markets in Spain and Spanish America was that they were largely localised. This is not surprising given that they responded to the needs and demands of a private *and* a public sector that were in turn very local. Before the creation of the *vales* in the 1780s there was no "national" or even imperial debt. Even if the *juros* were raised in the name of the ruler, they were secured against local tax income, which served to pay the interest. Their payment most likely involved a private notarial contract between the local tax farmer of a specific urban consumption tax and the equally local holder of the *juro.* That these annuities were backed by local revenue streams was precisely what made them so trustworthy in investors' eyes. In Spanish America most of the public debt was extended at a local or regional level to the regional treasury offices as mentioned above. In short, demand was at most regional and so was supply. This had benefits. Monitoring local borrowers, public and private, was easy and enforcement costs were reduced. Information costs were low and moral hazard issues limited in a market where everyone knew the reputation of other lenders and borrowers.

If there were no banks, who was lending? The sophisticated and well developed culture of notarised contracts in the Hispanic world made it relatively easy to set up private debt obligations under the protection of the law and to enforce them in court (Burns, 2010). However, it appears that by far the largest source of credit were religious institutions and charities, followed by merchant guilds (*consulados*), which began to syndicate large loans for the public purse, and a few other institutions such as the trust funds of indigenous communities and the Madrid *Cinco Gremios*, which had evolved out of five different traders' guilds but moved into insurance and banking in due course (Capella Martínez and Matilla Tascon, 1957). Monasteries, convents, religious orders, confraternities, schools, cathedral chapters, and pious foundations all lent at interest and in entirely commercial ways. With a strong interest in guaranteeing a regular income stream and the collateral and funds to offer a large loan volume they were ideally placed to offer everything from small loans to peasants to substantial amounts to merchants, officials, local treasuries and noble estates. At the same time they also took loans offering individuals safe investment opportunities. The most commonly employed debt instrument was the *censo*, a collateralised loan, whereby there was little limitation as to what sort of asset could be used as collateral.

Hispanic financial markets are poorly studied if only because it has simply not occurred to financial historians to study the very extensive loan books of religious institutions and most religious historians are uninterested in banking practices, although there are a few notable exceptions (Lavrín, 1966, Chowning, 1989, von Wobeser, 2010, Quiroz, 1993, Greenow, 1983). But for all we know this credit sector provided efficient access to capital in rural and urban markets at least from the sixteenth to the eighteenth centuries. As we saw in Figure 2 in rural Extremadura (peninsular Spain) the average rate of interest fell to just over 2 percent in the eighteenth century. In Spanish America most of the evidence suggests a nominal interest rate of 5 percent on *censos* even in the eighteenth century. Too little is known but given the well-known higher inflation rates in Spanish America the real interest rate might have been closer to peninsular levels than it appears. In any case, it is clear that the volumes involved in these credit transactions were simply staggering.

Still at present it is almost impossible to assess if credit rationing occurred. As much as monasteries and other religious institutions served as a functioning, reliable and cheap local lender, they were multi-functional institutions. Their core business was religion and their banking activities were a means to the end of financing their religious activities and maintaining their cadres. There was little room for learning and institutional innovation. Monks were not chosen for their financial aptitude though arguably congregations that managed their

businesses well attracted more donations and novices. Indeed, for a Peruvian merchant of the seventeenth century the best way to guarantee that he would have regular access to credit was to send his daughter with a nice dowry to one of the richer convents in his town (Burns, 1999, Gibbs, 1989). Yet, competition between religious institutions was always muted and there were few economies of scale. Convents that grew very large tended to simply open another sister convent nearby limiting both spatial and vertical integration.

The local embeddedness of this credit sector allowed it to be close to the customer and lowered monitoring costs. That the lender stood between the borrower and God probably further lowered the risk of shirking. Religious institutions had sufficient funds to ride out debt defaults caused by a bad harvest or a smaller commercial downturn and to allow their customers to get over a bad moment. After the earthquake and tsunami in Lima in 1746 interest rates were lowered from 4 to 3 per cent. Yet, like all small local banks they were susceptible to larger shocks to the local economy. Their lack of spatial integration could become a serious liability and would potentially depress lending pro-cyclically if the local economy was hit by a serious crisis. Also, as multi-purpose institutions their ability to lend was subject to factors that responded in no way to the credit market. An expensive new chapel could well mean no agrarian credit in a rural monastery's district for a couple of years.

Worse, when their core activity, that is, religion, came under attack in the later eighteenth century the credit sector became collateral damage. The expulsion of the Jesuits seriously limited credit in the 1760s but it is likely that other institutions took over their activities. However, disentailment in Spain and the consolidation of the *vales* in Spanish America effectively shut down large parts of the credit market. The ideological changes of the time, which demanded the state would take property away from the *mortmain* ironically created severe interruptions in lending, mainly because the "dead hand" had been very much alive and active in banking. Religious institutions had to call in existing loans and stopped lending. Estimates for the investment of capital from ecclesiastical sources range from 44 to 59 million pesos in Mexico alone (Hamnett, 1969), about 1,100-1450 tons of silver. Even though in the end much of this was renegotiated and the consolidation was called off before it affected smaller borrowers the dislocation of credit markets was severe and new lending much reduced.

For all we know the peculiar locally based credit market in the Hispanic world thus served the economy reasonably well for much of the sixteenth to eighteenth centuries. Financial historians trained to search for something called a "bank" simply missed the fact that in the Hispanic world religious institutions accounted for much of the banking business. Nor was that

unusual: Islamic *waqf* probably fulfilled a similar function. However, the latter were far more limited in terms of the design of financial contracts (Kuran, 2010) than Spanish religious institutions, which faced no formal restrictions at all. In short, in the Hispanic world capital was clearly available, interest rates moderate and so far there is little evidence that credit rationing was a major issue. That is not to say that everywhere and at all times would-be investors had easy access to loans. The local nature of the market meant that abundance in one town might well combine with scarcity in another. However, the insufficient institutional development of a specialised banking sector had little to do with a predatory state and a lot with the persistently small scope and scale of credit markets in which a rich convent might be better at offering credit than a specialised individual merchant banker. Ironically, a combination of strong contractual law available absolutely everywhere in the Hispanic world through the apprenticed notary and the fact that the search for stable income streams of religious institutions created simple but well-functioning local credit market would seem to have seriously delayed the development of specialised banking activities. Worse still, the Christian moneylenders were in trouble when the ideological shift of the late eighteenth and early nineteenth century began to attack their main trade, that is religion.

IV

The elegance and simplicity of North's and Weingast's model of "credible commitment" has turned it into one the pillars underpinning modern political economy, even though economic historians have steadily chipped away at their narrative of England's political, fiscal, financial and growth trajectories. Rather than focusing on that story itself we have challenged in this paper the claim to universality that underpins it. We have offered a number of theoretical considerations, why the common assumption that rulers need to maximise revenue, and therefore will predate unless a constitution stops them from doing so, does not hold true. During the early modern period some states might have had the degree of vertical integration (that is hierarchy and centralisation) that afforded a ruler confiscatory powers. However, some, maybe many states followed a different constitutional path.

Our empirical discussion confirms that in the terms of our Figure 1 Spain was throughout the early modern period on the left half of the graph, where states combined reasonable revenue collection capacity with low degrees of investment in coercion. We would argue that the Netherlands in the sixteenth century were in a similar position. However, as Dutch historians have pointed out, under the pressure of the 80 years war power in the Netherlands became more hierarchically ordered, the fiscal system moved from being town based to being mostly

administered at the provincial level and even some national taxes made an appearance (a move to NL') (Fritschy, 2009). In other words, the Netherlands solved at least some of the fundamental coordination problems that rulers faced on the left hand side of our graph.

Spain, by contrast, on the whole did not solve these problems (nor did China, either). Our crude sketch of financial market development starts to chart some of the consequences of this failure. Local control over fiscality and markets was good for representation and the legitimacy of governance. It was compatible with, and relied on, very high levels of legal capacity, but by its very nature it limited fiscal capacity. It is not clear, however, that these fiscal limits were the most important problem. In our view the main unintended consequence of this system was that it hamstrung the widening and deepening of financial and goods markets and affected growth negatively. In trying to explain economic development in the Hispanic world (and probably in quite a number of other early modern states and empires) the predatory ruler is a red herring. The problems were of an altogether different nature.

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Figure 1: The relationship between revenue and states coercive effort

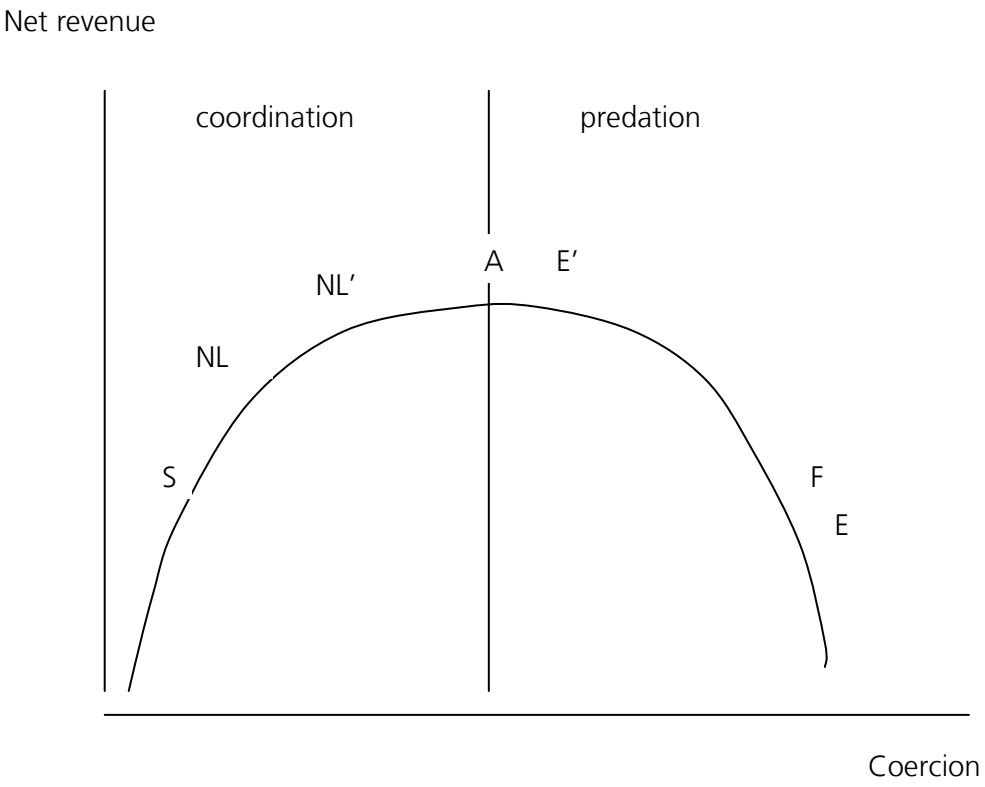
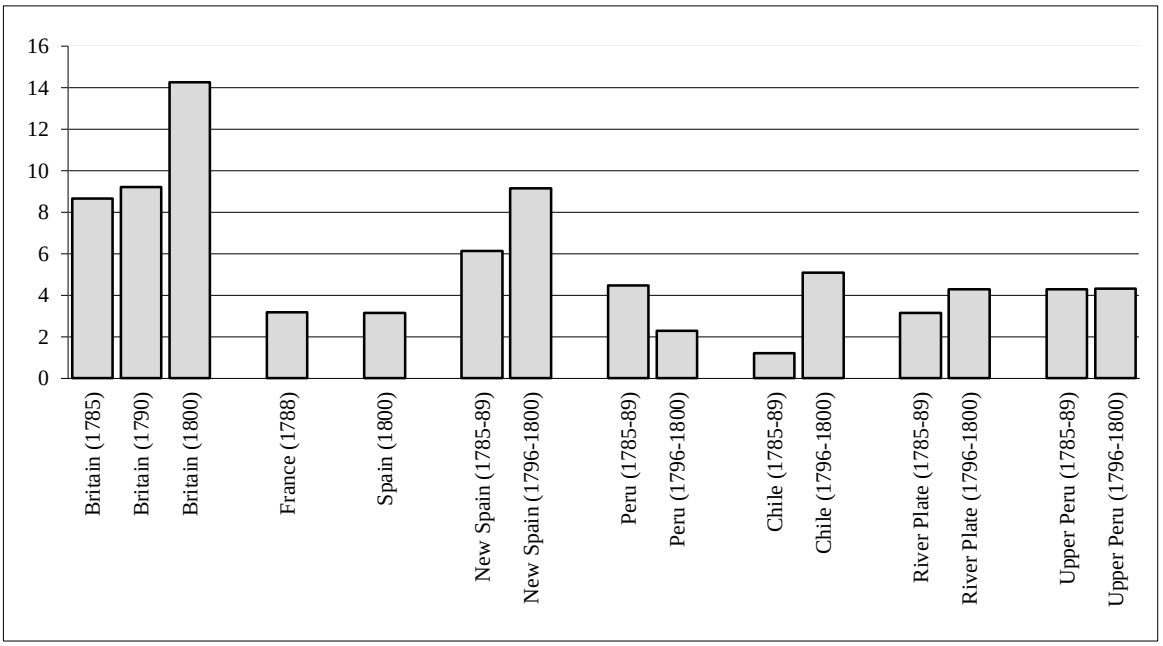
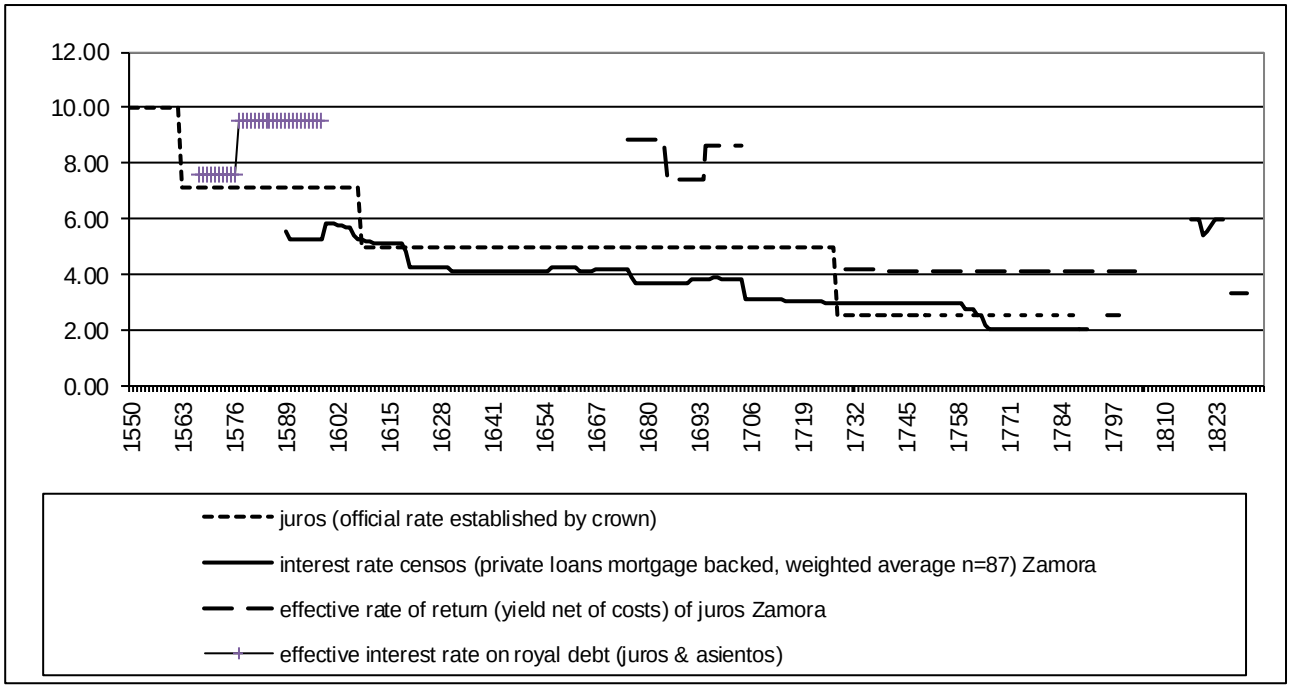


Figure 2: Net Revenue per capita in European Countries and Spanish territories in the Americas (1785-1800) (in Spanish American pesos)



Source: for a complete list see Grafe and Irigoin (2012)

Figure 3: Public and private interest rates in Spain (1550-1830)



Sources: for a complete list of sources see Grafe (2012)

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