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Abstract

Why did the countries which first benefitted from access to the New World - Castile and Portugal - decline relative to their followers, especially England and the Netherlands? The dominant narrative is that worse initial institutions at the time of the opening of Atlantic trade explain Iberian divergence. In this paper, we build a new dataset which allows for a comparison of institutional quality over time. We consider the frequency and nature of parliamentary meetings, the frequency and intensity of extraordinary taxation and coin debasement, and real interest spreads for public debt. We find no evidence that the political institutions of Iberia were worse until at least the English Civil War.

JEL Codes: N13, N23, O10, P14, P16

Keywords: Atlantic Traders, New Institutional Economics, The Little Divergence

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1. Introduction

A venerable historical tradition places political institutions at the root of the European divergence.[1] For this tradition, diverging paths within Europe were already being trodden as far back as the Middle Ages and continued to be so during the early modern period, before accelerating in the nineteenth century. According to Douglas North, "... we can learn as much from the dead-end path pursued by Spain and Portugal, with respect to institutional evolution, as we can from the successful paths to evolving more efficient institutions pursued by the Netherlands and England" (North, 1990, p.36). In this spirit, Acemoglu et al. (2005, p.563, 568-9) classify Portugal and Spain around 1500 as absolutist monarchies, which they contrast with the much more constrained institutions of England and the Netherlands. These authors argue that the executive power being less constrained in Portugal and Spain around the turn of the sixteenth century led to subsequent institutional and economic divergence relative to England and the Netherlands. The latter countries' initial (around 1500) institutions would have been beyond a critical threshold which allowed a virtuous circle of economic growth and positive institutional change to take place in interaction with the Atlantic trade. By contrast, the economic and institutional development of Portugal and Spain were supposedly held back by extractive institutions already in place before 1500. The viewpoint that the English monarchy was more limited finds support in much English-language historical literature.[2] Some authors even argue that the political divergence can be traced as far back as the Magna Carta.[3] In a recent book, Hough and Grier (2015) place the start of political divergence between Spain and England as far back as the 1260s, writing that "Castile and England were not that different in their political systems in the mid-1250s ... By 1485, however, England had become far more effectively governed than Castile and economically more advanced" (p.98).[4]

In this paper we show, using a new dataset, that English institutional divergence relative to the Iberian kingdoms started in the mid-seventeenth century, but not before. Iberian rulers were not more despotic than others, at least until halfway into the sev-

[1] Broadberry (2013) calls the economic divergence which took place within Europe "little divergence", in contrast to the "great divergence" of Europe vis-à-vis China and other parts of the world.

[2] According to (Kishlansky, 1997, p.36), for instance, English law and customs "considerably limited the king's ability to suspend the operation of the law, to tax without consent, or to imprison without cause. Over the centuries, through the operation of common law and the accreditation of statute, the English monarchy ... as sometimes described as a 'mixed monarchy' to distinguish it from Continental forms of absolutism that were labelled tyranny". For a historical criticism of this view, see McKenna (1979).

[3] For a critical perspective on the myth of parliamentary sovereignty and its relationship with the Magna Carta, see Ormrod (1999, p.19) or McKenna (1979).

[4] Bates (2017) similarly argues that England's institutions became superior during the Middle Ages, though the comparison is made with respect to France.

enteenth century, when their national parliaments muted, and when the institutions of England improved. We do not find support for the viewpoint of North and Weingast (1989) that the Glorious Revolution was the single decisive moment for England – though we find that in the margin, it helped to drive forward a process that had been under way. Instead, the timing of the institutional divergence of England relative to the Iberian nations coincides approximately with the former's Civil War.[5] Our argument that the mid seventeenth-century is when English political divergence truly began gains support from the fact that this is also when English GDP per capita started to grow persistently, structural change began, and fiscal capacity took off in comparative terms (Broadberry et al., 2015; Wallis et al., 2018; Humphries and Weisdorf, 2019; O'Brien, 1988).

The idea that Iberian political institutions at the start of the sixteenth century (or even earlier) were more absolutist than those in England and the Netherlands does not stand up to close historical scrutiny. No ruler at that time was in a position to freely impose his or her will and be literally "absolutist". However dominant and fickle they appear to contemporary witnesses, monarchs had to deal with an array of traditional property rights, contracts, and established freedoms. Also, privileges and installed interests further limited their capacity to enforce plans, good or bad (Rosenthal, 1990; Grafe, 2012). Ruling was more about careful negotiation than plain imposition, the proclamation of the divine rights of kings by the Stuarts notwithstanding (Elton, 1982, pp.1-2); (Burgess, 1992, pp.837-860). So, it is too simplistic to see cross-country institutional variation under a duality of "extractive" versus "inclusive" institutions (Irigoin and Grafe, 2008, 2013; Grafe and Irigoin, 2006, 2012; Summerhill, 2015; Sardone, 2018; Ogilvie and Carus, 2014; Abad and van Zanden, 2016).[6]

Measuring economic and political freedom is fraught with difficulties, even for modern economies (Prados de la Escosura, 2016). For premodern economies, data limitations are severe, but in this paper we have settled on three quantitative indicators which allow for international comparisons. First, we track the number of years during which parliament met. In this we follow van Zanden et al. (2011), but while they count the number of parliaments and only display the total number of meetings by century, we count the years with at least one parliamentary meeting, and we show the results by each quarter century.

[5]Coffman (2013, p.76) writes that "parliamentary control over public finances, transparency in public accounts, accountability via creditor action, and ... deep secondary markets ... were in place under the Long Parliament and Commonwealth regimes".

[6]Even in eighteenth century England, less than a quarter of the adult male population had the right to vote, and not only was absenteeism among MPs common but it was also the case that "far from all seats were polled, with a nadir reached in the general election of 1761 when only 19 percent of seats were formally contested ... while a rising proportion of seats, reaching two-thirds after 1750, was under a reasonable degree of control of peers, great landowners, and executive government" (Hoppit, 2017, p.21-22).

We hence obtain a clearer picture of their evolution over time, in particular around the turn of the sixteenth century. Furthermore, we consider the motives for convening a parliament: was it summoned to solve a dynastic issue? Or was it called to enact the laws and reforms demanded by the subjects? Or was it because taxes were needed for war? If the motive was war, then was it a necessary, defensive conflict, or an offensive one? With our new dataset, it is possible to identify the parliaments effectively acting as constraints on the executive. Additionally, our measurements enable us to determine how many times monarchs imposed "extraordinary" taxes, which in years of peace (or offensive war) can be considered a form of expropriation. Overall, our parliamentary measures show that Portugal and Spain did not perform worse than England until the mid-seventeenth century.

Second, we discuss the depreciation of coinage over time. Sometimes there were good reasons for the state to debase the coinage (i.e. "defensive" debasements; see Munro, 2010). At other times debasements were fiscally motivated, like the "Great Debasement" of Henry VIII's. The relative frequency, and the magnitude, of these events across countries, provides an independent measure of state predation. During the sixteenth century, both England and the Dutch Republic perform significantly worse than Spain and Portugal according to this measure, and it is not until the seventeenth century that the Spainish monarchy started to perform badly.

Third, we look at the evolution of the real interest rate paid on government debt over time. We consider first issues of public debt in the form of perpetuities. When comparing nominal interest rates, Epstein (2000, p.19-23) notices that England and the Netherlands were not paying lower rates than their Southern rivals until late in the early modern period. We improve here on his analysis in two ways: we present additional observations, including countries and periods absent from his data, and we control for the inflation rate through the Fisher equation, hence being able to calculate real interest rates.

This paper is the first systematic quantification of institutional quality over the early modern period. We focus on the comparison of England – a notable case of eventual institutional success – with Iberia, represented here by the politically leading part of Spain (Castile, about 3/4 of Spain) plus Portugal.[7] Our main conclusion is that while

[7]It is important to clarify the polities studied here. Wales became formally united to England in 1536, which in turn was in a personal union with Scotland since 1603. The two realms continued to have separate institutions, including parliaments until the Acts of Union of 1707, which resulted in the creation of the Parliament of Great Britain. Castile was in a personal union with Aragon since 1516, when Charles I, a grandson of the Catholic Kings became the king of the two realms. Although under a common monarch, Castile, Aragon, and (since 1512) Navarre all retained their separate administrative and political institutions, including a parliament for the whole of the realm of Aragon as well as parliaments (*Corts*,

1500 is too early for any difference in institutional quality to be noticeable, the Glorious Revolution of 1688-9 is too late. The divergence in political institutions had two aspects to it. First, Iberian checks on royal prerogatives deteriorated gradually. By the end of the seventeenth century, parliaments for practical purposes ceased to meet, and during most of the eighteenth century monarchs regarded their power as unconstrained by law – let alone by representative assemblies. Second, English institutions improved from the mid-seventeenth century onwards, and in the beginning of the following century parliament became permanent. At that point, English institutions were clearly superior to those of Iberia, and that divergence was to persist into the future.

2. Historical Background

In the last decade, economic historians have produced GDP estimates for early modern Europe (see Jong and Palma, 2018 for a review of the methodologies and Palma, 2020, forthcoming for the sources). It is hence possible to explore the timing of economic divergence in much more detail and greater precision than was possible by relying on Bairoch et al. 1988's urbanization rates as a proxy for income in the early modern period, as older studies have done. Also, the size of a city might not reflect the efficiency-enhancing advances in the division of labor but the fact that urban elites were making use of their political ascendancy over the countryside for extracting rents.[8]. This implies that it can be misleading to employ Bairoch et al. 1988's urbanization data as a proxy for per capita income, despite its widespread use in economics.[9] While urbanization was an understandable choice as an outcome variable when Acemoglu et al. (2005) wrote their paper, we now have actual per capita real income growth data.

It is hence now possible to test directly whether "the more rapid economic growth took place in societies with relatively non-absolutist initial institutions, most notably in Britain and the Netherlands. In contrast, countries where the monarchy was highly absolutist, such as Spain and Portugal, experienced only limited growth in the subsequent centuries" (Acemoglu et al., 2005, p.547).[10]. As far as economic outcomes are concerned,

rather than *Cortes*) for Catalonia, Valencia, and two executive bodies for these two kingdoms called *generalitats*. In 1715 the new Bourbon dynasty overran these differences and the parliaments were united and became the *Cortes de los Reinos*, which followed the Castilian model. Also, Portugal was in a personal union with Castile between 1580 and 1640 but kept its institutions and empire. For these two countries, GDP data relate to the present-day borders, as usual in the literature.

[8]This has been demonstrated for both Tuscan cities and Czech lands (Epstein, 1991; Klein and Ogilvie, 2016; Felice, 2018)

[9]This type of urbanization data based on an absolute threshold deciding what counts as a city (e.g. having a population over 5,000) also suffers from the rarely-noticed problem that it is not independent of scale: population growth over time will create more "cities". A "city" of 6,000 might be large in the context of the Middle Ages, but small in the nineteenth century.

[10]This consensus in the literature that Northwestern Europe must have performed better since an early

the data fails to support this statement (Table 1).[11] As the table shows, England only started growing after 1650. Figure 1 shows that for these countries, the different economic performances of Table 1 were not due to catching-up growth, as there was no noticeable divergence in levels until the seventeenth century – with Spain then starting to diverge relative to England earlier than Portugal.[12]

We argue that the economic divergence which does take place after about 1650 cannot be explained by a supposed original sin of "absolutist" institutions in Iberia already present in the Middle Ages. If by absolutism we mean a political system in which the executive is not limited by property rights, contracts or laws, then *circa* 1500 Tudor England was more absolutist than the two realms that shared the Iberian Peninsula. [13] The fact that English property was unprotected from confiscation on behalf of the state at that period is illustrated by the Great Debasement, the Dissolution of the Monasteries, the Court of Wards, and the Star Chamber.[14]

By contrast, Iberian monarchies had to negotiate and align their interests and goals with the representatives of the realm and the owners of property rights, not to mention an independent episcopate. They could not rely on the arbitrary redistributions of resources imposed by kings endowed with divine right, like the Tudors and early Stuarts, who were also the heads of the Anglican Church from Henry VIII onwards. As Epstein noted, individual liberties are not necessary conditions for economic growth. States that restrict personal freedoms – in matters of religion, conscience, *habeas corpus* or free speech –

period is also present in Hough and Grier (2015), who assume a large early modern "difference in English and Spanish economic growth" (p. 68).

[11] Hough and Grier (2015) argue for a negative institutional spillover effect from Spain to Latin America, in particular Mexico. But the view that Mexico was poorer than the USA since colonial times is also contradicted by recent evidence by Abad and van Zanden 2016

[12] Due to the nature of historical national account reconstructions, there is more uncertainty about levels than growth rates (Jong and Palma, 2018). Using the alternative early 19th century income benchmarks proposed by Prados de la Escosura (2000) would imply that Spain and Portugal were richer than England until the second half of the seventeenth century (Palma and Santiago-Caballero, forthcoming).

[13] While insisting that English institutions were already superior by 1500, Acemoglu et al. (2005) correctly recognize that the reign of Henry VIII had been relatively autocratic, and that the civil wars mattered (p. 559-60). They argue nevertheless that there was already a noticeable difference in the early sixteenth century. As for the Netherlands they argue institutions were clearly superior since at least the late Middle Ages. In turn, Hough and Grier (2015)'s argument that England's early political development relative to Spain was caused by the smaller size of its territory (p. 99) is difficult to confront with the case of Portugal, which was smaller than England and an early centralized nation-state. For a detailed discussion of the constitutional strength of the monarchy in England and in the Iberian kingdoms, see our Appendix, sections A3 and A4.

[14] Compare the case of the Court of Wards' extortion of the orphans' property in the sixteenth-century (North and Weingast, 1989, p.811-2) with the balanced decisions of the Portuguese Juizo dos Orfãos Machado (2010, p. 41). The Star Chamber was abolished in the 1640s. The Cavalier Parliaments of the 1660s and 1670s retained the excise (which would become a central piece of English state capacity) and abolished the court of Wards (Coffman, 2013, p.81)

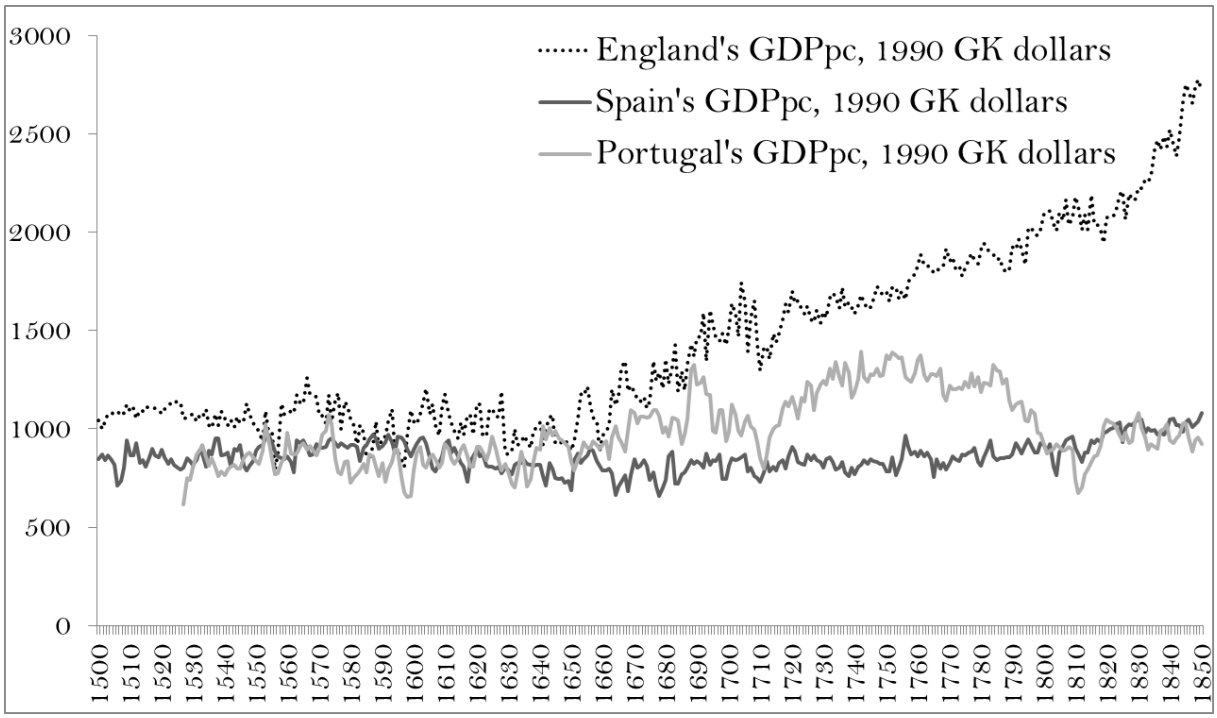
are not necessarily equally predatory with property rights and neglect competitive and coordinated markets (Epstein, 2000, p.8). At some point, liberties and economic freedom *coincided* in England and Netherlands, but this is not the result of some path-dependence already in place before 1500.

Table 1: Average annual per capita real growth 1530-1800.

	Annual real p.c. growth 1530-1650	Annual real p.c. growth, 1530-1700	Annual real p.c. growth, 1530-1750	Annual real p.c. growth, 1530-1800
England	−0.16%	0.20%	0.20%	0.24%
Spain	−0.14%	0.00%	−0.02%	0.04%
Portugal	0.03%	0.12%	0.24%	0.05%
Holland	0.20%	0.00%	0.05%	0.08%
Poland	−0.05%	0.01%	0.05%	−0.01%
France	0.06%	0.08%	0.05%	−0.04%
Sweden	0.00%	0.19%	0.00%	−0.04%
Italy	0.00%	0.03%	0.04%	−0.01%

For England, Broadberry et al. (2015); for Holland, van Zanden and Van Leeuwen (2012); for Spain, Álvarez-Nogal and Prados de la Escosura (2013); for Portugal, Palma and Reis (2019); for France, Ridolfi (2017); for Italy, Malanima (2011); for Poland, Malinowski and van Zanden (2017); for Sweden, Krantz (2017) and Schön and Krantz (2012). Annualized growth rates were calculated using the familiar compound growth formula. As per the available data, for France dates are not until 1800 but 1790; For Poland they are not until 1800 but until 1795. According to data availability, modern borders are used except for England where they correspond to England until 1700 and Great Britain afterwards, and Italy, where they correspond to North and Central Italy only.

Figure 1: GDP per capita in constant, 1990 "international" Geary-Khamis dollars.



Sources: as in Table 1. Note: What mainly needs to be noticed here are changes in growth rates over time, not small differences in income levels, because, as explained in the text, small changes in nineteenth benchmarks can lead to any series as a whole shifting up or down.

If institutions determined economic performance, then the late surge of England and late petering out of Portuguese growth suggests that institutional divergence was not medieval, having occurred during the early modern period.[15] The initial institutions which Acemoglu et al. (2005) consider are measured by constraints on executive power and protection of merchant capital and interests. As Polity IV does not supply codes prior to 1800, in order to classify nations by the quality of their institutions these authors use their own coding method whereby descriptive statements are converted, in ad hoc fashion, into quantities. The procedures they used give rise to serious weaknesses in their resulting dataset. First, their findings are based on formal rules and ignore actual historical events and practices. Second, even these are not analyzed in a systematic matter, which brings a high degree of subjectivity and leverage to the entire exercise. Third, rather than a

[15]In this paper, we build three new measures. In section A1 of the Appendix, we also consider an additional, fourth indicator: empirical measures of state capacity. While this does not capture checks on executive power, and hence deserves a separate treatment (see our companion paper, Costa et al.), it is an indicator of whether these states had the resources to provide public goods and foster and protect the growth of coordinated and competitive markets, along the line of research introduced by Epstein (2000, p.8). This is one area where the historical evolution of England and the Netherlands went ahead of other European countries, in particular failed states such as Poland, or failing empires such as the Ottoman and Chinese. Nevertheless, in 1500 Portugal and Spain had higher fiscal capacity than the northwestern European countries (Costa et al.). England only acquired a commensurate level of per capita revenue in the second half of the seventeenth century.

detailed comparative analysis of sources, the main source used is a reference work of a summary encyclopedic nature for "world history", which covers Iberian history in sparse detail (Langer, 1972). Together, these matters severely limit the empirical robustness of the resulting dataset.[16] Acemoglu et al. (2005, p.62) accept, not surprisingly, that "precise values" are difficult to obtain in this way, but insist, without satisfactory evidence for it, that "the general level of constraint on the executive does not appear to be controversial".

3. New Quantitative Measures of Institutional Quality

3.1. Constitutional and Parliamentary Measures: Frequency of Meetings

In the fifteenth- to eighteenth-century European kingdoms, parliament was the main arena in which public interests confronted those of the rulers. Parliaments were noticeably different on account of different national traditions: England and Portugal kept a representation of the three estates, a trait that Castile abandoned in the reign of Charles V; the English parliament remained a court and eventually statutes enacted by the monarch in Parliament became law, whereas Portuguese and Castilian kings sometimes legislated without seeking the consent of their *Cortes*. In Castile, since the sixteenth century only 18 major cities were summoned representing ad hoc regions. In England, the "community of the realm" was represented by discrete administrative units (the counties), and privileged boroughs, whereas Portuguese assemblies convened municipalities, great and small. To the envy of the North American colonists of the 1760s and 1770s, municipalities in Portuguese America or India eventually acquired the right to participate in the *Cortes* and discuss taxation and other matters together with their European counterparts: Goa in 1645, Salvador in 1653 and São Luís do Maranhão in 1676.[17] Likewise, some Spanish American municipal governments had the right to take part in the *Cortes* of Castile, although practical considerations prevented municipalities like Santo Domingo, Lima and Mexico City to exercise that right (Cardim, 2016, p.109-10)

However, for all their diversity, these assemblies are comparable insofar as they shared key political roles. Their most obvious role was to consent to the demands of extraordinary taxation made by the ruler. As the legitimate representatives of the people, parliaments were entitled to grant the subsidies requested by the ruler. As representatives of the

[16] For a detailed critical discussion of the measures used by Acemoglu et al. (2005), see section A2 of our online Appendix, where we also build our own executive constraints Polity IV measure, which differs considerably from theirs.)

[17] The contemporary English historian John Oldmixon noticed in 1708 that: "The Portuguese have so true a notion of the Advantage of such Colonies, that to encourage them, they admit the citizens of Goa to send deputies to sit in the Assembly of Cortez: And if we were ask'd, Why our Colonies have not their Representatives? who could presently give a satisfactory Answer?" (cited in Cardim (2016, p.111, note 55).

realm, English Parliament and the *Cortes* were also summoned as arbiters in thorny succession issues and other dynastic disputes. This was an important function, but hardly a constraint on executive power. Finally, these assemblies were occasionally summoned to participate in wide reforms or important legislation which require debate in, and support of, the parliaments. Indeed, it was this role that led to the summoning of representatives of the popular estate in the 1250s in England, Portugal and Castile (the municipal proctors of León had summoned earlier, in 1188).

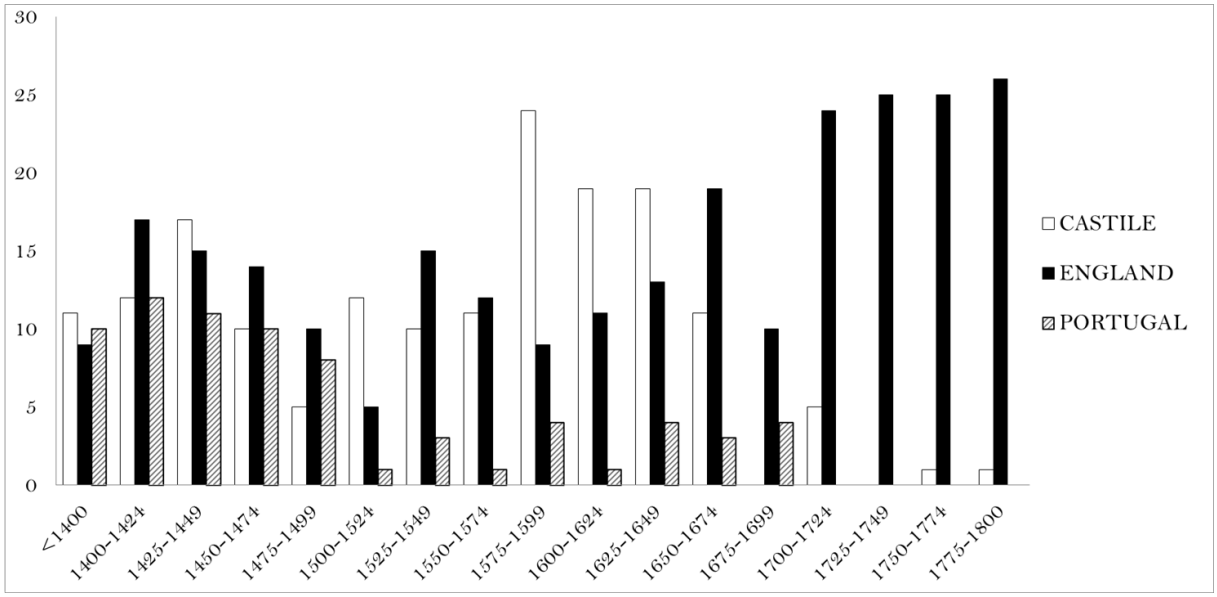
Historians have regarded the count of parliaments as an indicator of its relative strength vis-a-vis the executive (van Zanden et al., 2011). However, instead of counting the number of meetings, we chose to count the number of years in which they met, as this more adequately captures their role as checks on the executive.[18] Brief parliaments in which a tax was duly approved without negotiation or other issues discussed cannot have the same weight as an indecisive parliament that dragged for many sessions because the monarch could not easily impose his or her will. Our starting year is 1385 because this date represents a high-mark for parliamentary sovereignty in the three kingdoms. The assemblies played then a role in electing new monarchs and installing new dynasties: Enrique II in Castile (*Cortes* of Burgos/1366-7); João I in Portugal (*Cortes* of Coimbra/1385); and in England the deposition of Richard II, which started in the Wonderful Parliament of 1386 and culminated in the second session of the Parliament of Westminster/1397. Thus, we analyze an approximately simultaneous rise of a parliament-supported dynasty in all three cases (using alternative dates, 1366-7 or 1397, would not change our overall results).

Figure 2 confirms the higher intensity of parliamentary meetings in England throughout the entire period, even when ignoring the eighteenth-century when parliament was permanent. However, this higher frequency does not go back to *circa* 1500. The turn of the sixteenth century was one in which parliaments met with comparable frequency in all three cases compared. Up to the second half of the seventeenth century the difference between England and Castile is marginal. In sixteenth-century Castile, under kings Filipe II (1556-98) and III (1598-1621), the *Cortes* were meeting almost continuously. Portugal,

[18]We only counted meetings whose existence was confirmed by historical criticism (Sousa (1990); Cardim (2016); Zamora (1988); Oliveira Serrano (1986, 1988)). Some general works (Valério (2001, pp. 785-9), Calpe (1923, vol. 15, pp. 1017-9)) overstate the number of *Cortes*, as they fail to account for *Cortes* which were summoned but did not meet or whose existence is dubious. As such, we did not include two Portuguese Cortes that were summoned but did not occur (Tomar/1649 and Lisbon/1646) and six fifteenth-century Cortes (Coimbra/1387, Serra d'El-Rei/1397, Lisboa/1448, Lisboa/1474, Lisboa/1478 and Lisboa/1495), whose meeting is doubtful (Sousa 1990). Similarly, for Castile, historical criticism did not find conclusive evidence for meetings (although some might have been summoned) of the Cortes of León/1395-1397, Toro/1398, Toledo/1423 and 1439, Valladolid/1454, Cuellar/1455, Toledo/1457, Madrid/1482, Burgos/1506. Had we followed less conservative criteria, the number of years with Cortes would have increased 18 for Castile and 8 for Portugal, thus providing further support for our argument.

nonetheless, diverged earlier from England in this measure, with its *Cortes* meeting few times compared to the other two countries in the sixteenth century. Still, the timing of the decay of the Iberian parliaments clearly contrasts from that of France, whose *États Généraux* did not meet between 1615 and 1789.

Figure 2: Years with parliamentary meetings, 1385-1800.



Sources: For England, National Archives E179, History of Parliament. For Spain (Castile), Ladero Quesada (1973); Artola (1982); Colmeiro (1866); Oliveira Serrano (1986); Sánchez (2017). For Portugal, Sousa (1990) and Serrão (1975).

3.2. Motives for Summoning Parliament

Given that parliaments were summoned for different reasons, the count of years in which a parliament met is not a definitive measure. Considering that parliaments could only be summoned by the monarchs, the frequency of parliamentary meetings does not necessarily capture constraints on the rulers. One can even argue that it instead measures the capacity of the monarchy to legitimately bind the kingdom as a whole. Parliaments allowed monarchs to "unite and rule" (Henriques, 2008, p. 205) their otherwise heterogeneous and elusive polities. Thus, the frequent convocation of parliaments might simply reflect the acquiescence of the parliament to the will of the ruler. As one of the great constitutional historians wrote, "frequent parliaments were generally regarded [by the counties and boroughs] as synonyms with frequent taxation" (Stubbs, 1891, vol. II, p. 643). During the parliaments called during the Hundred Years War, consent to extraordinary taxes was little more than a formality (Ormrod, 1994). In the case of England, "Though Parliament had the right to consent, it is not clear that it had the right of refusal ... it was required

Table 2: Years with a meeting and motives which justified the summoning of parliaments.

	Years with a meeting	Dynastic issues	% of total	Extraord. tax requested by the ruler	% of total	Neither of the two	% of total
1385-1449							
Castile	40	6	(15%)	27	(68%)	10	(25%)
England	41	2	(5%)	31	(76%)	10	(24%)
Portugal	33	4	(12%)	21	(64%)	10	(30%)
1450-1499							
Castile	15	5	(33%)	9	(60%)	3	(20%)
England	24	3	(13%)	17	(71%)	5	(21%)
Portugal	18	1	(6%)	13	(72%)	4	(22%)
1500-1549							
Castile	22	1	(5%)	16	(73%)	5	(23%)
England	20	1	(5%)	10	(50%)	9	(45%)
Portugal	4	1	(25%)	4	(100%)	0	(0%)
1550-1599							
Castile	35	0	(0%)	17	(49%)	18	(51%)
England	21	2	(10%)	15	(71%)	5	(24%)
Portugal	4	2	(50%)	1	(25%)	1	(25%)
1600-1649							
Castile	38	2	(5%)	11	(29%)	26	(68%)
England	24	9	(38%)	14	(58%)	4	(17%)
Portugal	5	2	(40%)	3	(60%)	1	(20%)
1650-1699							
Castile	11	0	(0%)	2	(18%)	9	(82%)
England	29	8	(28%)	13	(45%)	10	(34%)
Portugal	7	4	(57%)	1	(14%)	3	(43%)
1700-1749							
Castile/Spain	5	5	(100%)	0	(0%)	0	(0%)
England/Britain	48	–	(–%)	–	(–%)	–	(–%)
Portugal	0	0	(–)	0	(–)	0	(–)
1750-1800							
Castile/Spain	2	2	(100%)	0	(0%)	0	(0%)
England/Britain	51	–	(–%)	–	(–%)	–	(–%)
Portugal	0	0	(–)	0	(–)	0	(–)
1385-1700							
Castile	161	21	(13%)	82	(51%)	71	(44%)
England	159	25	(16%)	101	(64%)	47	(30%)
Portugal	72	15	(21%)	43	(60%)	19	(26%)

Sources: same as in Figure 2. Note that percentages can sum to more than 100%, because some parliaments were summoned for both dynastic and tax reasons. We counted the years in which a given tax was approved (with or without a reduction) or rejected; due to the nature of the sources, in Castile and Portugal we consider the year in which an agreement was reached, while in England the year in which the tax started. From 1707, the parliament of Great Britain becomes permanent, and it is no longer the responsibility of the monarch to request for extraordinary taxes. In the case of Castile, the parliament became that of Spain from 1710, although following Castilian custom.

in time of emergency to ensure the safety of the kingdom" Kishlansky (1997, p.55-6).

Table 2 shows the relative frequencies of the relative weights of dynastic issues and taxation requests in the three countries we consider here.[19] Over the period 1450-1550, the parliament of England met during (marginally) more years than the Castilian *Cortes*, but it also consented to extraordinary taxation more often. This evidence is hardly compatible with the notion that England had more "constraints on the executive" around 1500. As Table 2 shows, overall, the Parliament met for roughly as many years as the *Cortes* of Castile, but until 1650 it was mainly summoned to grant extraordinary subsidies and taxes. As a whole, the Portuguese parliament met less frequently than the others, but it also consented far fewer extraordinary taxes. Whilst the English parliaments allowed some constituencies to pressure the ruler into redressing grievances and answering petitions, this came at a cost in the form of higher taxes and hence cannot be read as a decisive sign of the parliament's strength vis-a-vis the head of state.

As Table 2 shows, in the period up to 1500, the breakdown of parliaments summoned for dynastic issues, taxation and other reasons is similar in the three countries. The majority of meetings were summoned for consenting to taxation, whilst about one quarter of the parliaments for the three cases were neither summoned for consenting on an extraordinary tax nor because of dynastic issues. It was in such parliaments that the representatives of the people could aspire to affect the executive decisions. According to this measure the English parliament was as likely as the Portuguese or Spanish *Cortes* to be summoned for taking part in decisions.[20]

For those cases when parliament was called in the context of war, it matters whether that war was defensive or offensive. If a war was defensive, then calling parliament in order to raise taxes can be considered a check to executive power – it shows that the ruler had to ask permission even when national defense was at stake. However, when a war was offensive, the fact that the ruler was able to increase the tax burden in the name of personal or dynastic glory suggests that insufficient checks were in place.[21] Another possibility is that there was a civil war. Table 3 shows this breakdown. Overall, the evidence shows that while Spain had more wars than the others, it was also the case that

[19] "Extraordinary taxes" were, in England, the thirteenths and tenths, fifteenths and tenths, subsidies, aid and polls. In Portugal, there were the *pedidos* and *serviços*, as well as the seventeenth-century *contribuições*. In Castile, this included the fifteenth-century *servicio* or *moneda*, the *cientos* and the *millones*. We also counted as extraordinary the first granting of the *sisas* and the *décima*, both of which eventually became permanent. Similarly for Castile, the *alcabalas* were granted permanently in 1390.

[20] For a discussion on the role of the *Cortes*, see section A4 of our Appendix.

[21] Of course, there are grey areas. For instance, Habsburg Spain's wars in the Netherlands were considered defensive from a Spanish point of view.

many of these were of a defensive nature.[22]

Table 3: Number of years with offensive wars and extraordinary taxes, 1385-1700.

	Portugal	Spain	England
Offensive war together with extraordinary taxes	24	52	40
Offensive war with no extraordinary tax	116	166	107
Extraordinary tax with no offensive war	21	30	63
Extraordinary tax with civil wars	2	16	11
Extraordinary tax without any wars	18	16	62

Note that for Spain and Portugal the exercise only makes sense until c. 1700 since from then onward no parliaments met. Sources: see Figure A2 of the Appendix.

We also counted taxes granted in years of offensive wars (Table 3), as this provides an admittedly rough measure of the strength of the prerogative rule.[23] As dragging the resources of the realm to an evitable war was seldom in the interest of the community, collecting a tax for an offensive war is an indicator of a distribution of power favoring the monarchy. Although parliaments sometimes voiced support, and occasionally even enthusiasm (Ormrod, 1994) for foreign adventures, none of the monarchs in these countries could expect total malleability.[24] But when the evidence is taken as a whole, the picture which emerges indicates that England engaged much more often than Portugal (though a little less than Spain) in the practice of imposing an extraordinary tax burden to its people in order to finance offensive wars. Importantly, England was the undisputed champion of peacetime extraordinary taxation (Table 3). The considerably higher intensity of this type of taxation relative to the Iberian countries clearly suggests that the English monarchs were less constrained in their fiscal demands.

[22]The four categories in Table 5 were constructed to reflect potential fiscal effort. We define Peace as the absence of civil, offensive or defensive effort, regardless of whether it is formal or not (i.e. we include truces). Border feuds were ignored. We used the criteria Civil War only when actual military confrontation between two parties took place, with neither civil unrest nor the existence of a challenger to throne counting. Defensive War implies the defense of lands effectively held. The emphasis again is again on the military and fiscal dimensions and not on diplomatic claims; for example, the defense of English-occupied territories in France in 1400 was considered a defensive war. Offensive wars comprise expeditions organized to conquer, plunder of recover territory held by the enemy, even if they did not meet an enemy army or even if the rationale was a defensive one. The Figures A2 to A5 in the Appendix provide an overview of the military engagements of the three countries considered here.

[23]The vast majority of Portugal's offensive wars were also colonial wars against non-Christian peoples, which surely carried a higher degree of legitimacy in the minds of Portuguese subjects than many of the intra-European wars carried by England or Spain.

[24]For instance, the stubbornness about his unpopular offensive wars cost Charles I his crown and his head.

3.3. Frequency and Amount of Extraordinary Taxes

In all three countries, the monarchy resorted to parliament to secure extraordinary taxes, whose collection would take one or two years.[25] Despite their theoretical obligation to serve the realm with taxes, parliaments were often passive and merely heeded to any request from the monarch. In the words of Schofield, "as the king was bound to defend the realm, so his subjects were equally bound to assist him in this task" (Schofield, 2008, p.5-6).

Consent to taxation was a normal but not necessary outcome of a parliamentary meeting, however. Forceful rulers like Francis I of France could claim that they could extract from their subjects: "All that I need, according to my will".[26] However, in none of our cases were parliaments as obliging. By then, Francis' great European rival, Emperor Charles V had to face the refusal of the Castilian nobility assembled in the Cortes of Toledo/1538-9 to accept the levying of sales taxes (*sisas*); see (Colmeiro (1866)). Those summoned in parliament accepted that some extraordinary circumstances justified extraordinary taxes. In the words of Charles V, he would only demand taxes from the Castilian *Cortes* if he had a "fair purpose" (*justa causa*). These clearly reflected cases in which "the defense of the realm" was at stake.

The representatives sent to parliament had some voice in the method of allocating the tax burden and in all three cases we find technical discussions about the relative efficiency and fairness of the different methods. They could also obtain concessions in exchange for their consent. Also, members of parliament had the option to negotiate the demands of the monarch; consequently, partial grants were more frequent than outright refusals. As Strayer (2005, p.67) writes, "A flat denial was rare – a ruler, after all, probably had some reason for his request – but complete acceptance of government plans were rare too".

Figure 3 shows the comparative frequency of extraordinary taxes granted.[27] An impor-

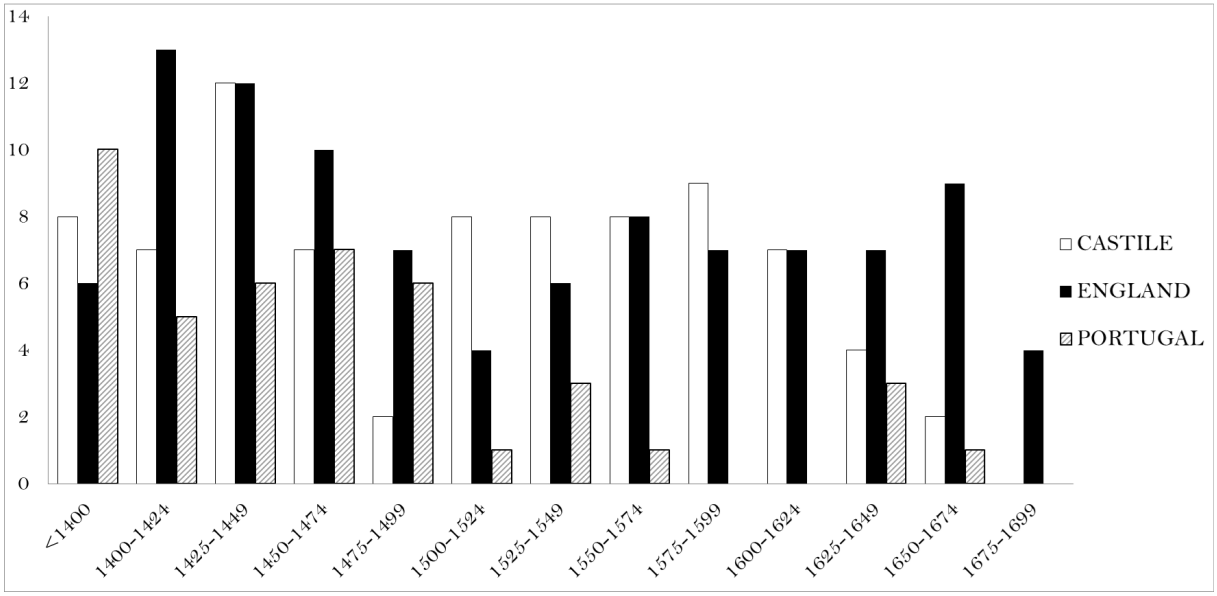
[25] Since the fourteenth-century, the English monarchy secured "fifteenths and tenths", a tax that tapped 1/15 or 1/10, depending on the location of the taxpayer and of the movable goods. However, the values paid per geographical unit became fixed since 1334. In 1625, subsidies replaced this form of apportioning the tax burden (negotiated in parliament). In Portugal, extraordinary taxes took the form of a request (*pedido*), based in assessments that changed a few times (in 1385, in 1437 and possibly in 1460). In Castile, the aids paid by the subjects were called *servicios* but technically they were a combination of two different taxes (the *pedido* and the *moneda*). Later, the *servicios* became direct taxes on property and/or income. In 1590, the new *servicios de milliones* were collected as a sales tax (*sisa*). The negotiation, in all cases, was about multiples of a given tax rate. Thus, while Castilian *Cortes* granted, in 1453, 14 *pedidos* and 2 *monedas*, the English were then collecting 1.5 fifteenth and tenths. Two years later, the Portuguese parliament consented in paying the king 2.5 *pedidos*.

[26] Our translation, from *"tout ce dont j'ai besoin, selon ma volonté"* (Guéry, 1978, p.223)

[27] This table shows the cases where some extraordinary taxes that were granted, not those where they were requested but not granted (which we discuss below).

tant fact shown in the figure is that during the second and third quarters of the sixteenth century, extraordinary taxes were much more frequent in England than in Castile or Portugal.[28] The data in this figure represents a simple count, and does not take into account population or the magnitude of different taxes.

Figure 3: Frequency of extraordinary taxes granted, 1385-1700.



Source: same as Figure 2. Note that from around 1700 this comparison is no longer relevant as the two Cortes no longer met for granting taxes to the rulers, and in England it was the parliament, not the monarchy, that held the power to tax.

In Table 4, we show the average magnitude of the taxes collected through extraordinary taxes as a percentage of nominal GDP for each country. We see again that the parliament of England usually allowed for a higher burden. We see again that the parliament of England allowed for a higher tax burden than its Iberian counterparts permitted.

[28]It is true that the nobility was exempt from more taxes in Iberia than in England. This was partly compensated by free military service expected from great and small noblemen in Portugal and Spain, which was not the case in England (Henriques, 2008, p.264-72). Additionally, the nobility (and clergy) did pay several taxes in Iberia. In Spain, the Nobility paid sales taxes (*sisas* and *alcabalas*, approved by the *Cortes*), while Church revenues were liable to pay separate taxes *cruzada* and *servicios*. Likewise in Portugal, the nobility and even the Crown were liable to pay sales taxes, and from 1641, the nobility (and clergy), paid income tax (*décima*).

Table 4: Magnitude of taxes collected through extraordinary taxes as a percentage of nominal GDP (with the number of measurable episodes in parenthesis).

	England	Portugal	Castile
1500-1550	1.7%(5)	0.4%(3)	0.6%(16)
1551-1600	1.4%(13)	0.1%(1)	0.7%(15)
1601-1650	1.1%(11)	0.9%(3)	2.9%(8)
1650-1700	3.4%(13)	0.2%(1)	2.7%(2)

Sources: for taxes, see sources at Figure 2; for Nominal GDPs, England from Broadberry et al. (2015), Portugal from a backward projection of the nominal GDP index of Palma and Reis (2019) using the 1850 nominal GDP from Reis (2002), and Spain from Álvarez-Nogal and Prados de la Escosura (2013).

3.4. Tax Refusals and Reductions

If parliaments were important as checks on the executive, then one obvious starting point is to look at how often taxes asked for by the king were refused. Table 5 shows these frequencies.[29] We see, once again, that England's parliament did not generally refuse taxes more often than those of Spain and Portugal, and in fact it performed considerably worse than Portugal until 1550. It is remarkable that in England, only once – in 1523 – did parliament refuse to consent the tax that was being demanded. All other times English rulers had their way – though after 1707, the rules changed as the parliament set a budget for the Crown.[30] In these conditions, summoning a parliament cannot be interpreted as a check *on* the executive, but more a "cheque *to* the executive", signed by the taxpayers.[31] The *Cortes* of Portugal, on the other hand, refused taxes in 1387, 1459 and 1477, the largest percentage of refused taxes for the monarch during 1385-1550. A possibility that needs to be raised is that inflexible parliaments met less often, because monarchs would avoid summoning them. It is hence possible that the Portuguese early refusals were an incentive for Portugal's future monarchs to summon parliaments more sparsely. This is also what happened in the parliaments of James I and Charles I in England, and in France, given that the *États Généraux* were intractable under the Valois and early Bourbon.

[29]Of course, the table is only suggestive since the amount asked by the ruler in the first place depended, among other factors, on how much the ruler believed it was feasible for the parliament to authorize.

[30]There were earlier crucial changes soon after the Restoration in 1660, and then with the advent of the civil list in the 1690s (Roseveare, 1991; Dickson, 1993).

[31]Kishlansky (1997, p.55-6) writes that "Before the 1620s ... Parliament existed to do the King's business ... Parliament was not an oppositional institution in the early seventeenth century because it was hardly an institution at all. This changed drastically with the Civil War"

Table 5: Percentage of cases where parliament refused a tax asked by the monarch.

	Tax Refused
England, 1385-1550	1.2%
England, 1551-1800	0%
Castile, 1385-1550	0%
Castile, 1551-1800	0%
Portugal, 1385-1550	5.5%
Portugal, 1551-1800	0%

Sources: see Figure 2

Other than the rare cases of refusal, resistance to taxation by the parliament is not easy to assess in any of the cases considered. Reductions in the sums asked were more frequent than outright refusals, but narrative and official sources are uneven for all cases considered. Typically, it is possible to know the sums granted by the parliament, but only occasionally can we learn about the sums demanded. The results are in Table 6. While the average English reductions are slightly larger, the number of episodes seems too small to warrant any useful conclusions from this measure. For example, if we excluded the reduction to the three subsidies demanded by James I, granted in 17 of May of 1606, the English average reductions would drop to 27%. Furthermore, most reductions in Castile and Portugal took place in the fifteenth century, while in England they happened later; this also suggests that medieval Iberian parliaments did constrain the executive as much, or more, than was the case in England.

Table 6: Extraordinary taxes and reductions, 1385-1700

	Extraordinary taxes approved in Parliament	Extraordinary taxes in which a reduction is documented	Extraordinary taxes in which a reduction is quantifiable	Average reduction
England	139	4	4	41%
Castile	91	3	3	32%
Portugal	44	5	2	37%

Sources: For England, the documented years in which parliament secured the reductions correspond to 1512, 1523, 1606 and 1690; see Schofield (2008) and History of Parliament; For Castile, they correspond to 1406/7, 1408 and 1451; see Oliveira Serrano (1986). For Portugal, they correspond to 1460, 1468, 1475, 1490 and 1674; see Sousa (1990) and Serrão (1975). Note: from about 1700 this comparison is no longer relevant as the two Cortes no longer met for granting taxes to the rulers, and in England it was the parliament, not the monarchy, that held the power to tax.

It is not possible to dispute that since the early eighteenth century England had a parliamentary regime which aligned the interests of the executive with that of the owners of property and provided a constitutional counterweight to the monarchy. By the same time, the *Cortes* of Spain were essentially reduced to a ceremonial role, while their Portuguese counterparts did not meet between 1698 and 1828. However, the remarkable trajectory of the English parliament cannot be projected backwards into the fifteenth or sixteenth centuries. As we have shown, the *Cortes* of Castile met for the same number of years as in England, whereas the Portuguese *Cortes* showed that they could effectively refuse subsidies to the king. Also, *circa* 1500 in these countries the *Cortes* were a platform for partnership and cooperation between the ruler and the representatives of the ruled, rather than a simple device for levying taxes.

3.5. Value of Coinage

Debasement refers to the reduction of the metallic content of the money-of-account by the issuer. Such reduction could involve the recoinage of the circulating coins or, given that coins typically did not have a facial value, simply by decrying the value of the coin in money of account (in Western Europe, coins circulated by tale, not weight). However, because prices could increase in response to the overall amount of money in circulation, reducing the intrinsic content often led to an inflation tax which amounted to an expropriation of the public by the ruler. This was an expedient way for rulers to assemble resources. As the consequences were disruptive for trade, credit and property rights, the

frequency and intensity of debasements can be seen as an indicator of despotism.[32]

The monarchs of England had absolute powers on all matters monetary, as claimed by Sir Thomas Smith in his 1562-3 survey of the English Commonwealth: "the prince useth also absolute power in crying and decreeing the money of the realm" (Elton, 1982, p.18). Interestingly, 1500 is roughly halfway between two aggressive debasements, one by Edward IV in 1464 and the famous Great Debasement of 1542-55, which led to an overall reduction of 83.1% of the intrinsic content of one penny and a price increase of 123% (Munro, 2010). In both cases, the motivation was fiscal. The ensuing mint profits were impressive, reaching roughly one-third of the total revenue for the years 1542-53 (O'Brien and Hunt, 1993).

It is difficult to imagine a similarly unhinged decision of the executive in sixteenth-century Castile, where monetary reforms were doomed without the formal assent of the people through the Cortes. The precedent for this was set in the *Cortes* of Toro-Valldolid/1442, where the representatives claimed that the issue of bullion was not a prerogative of the prince and that no change of fineness or standard could be made without the assent of the *Cortes* (Oliveira Serrano, 1986, p. 254). Until the reign of Carlos II (1665-1701) kings observed this limitation and had to negotiate with parliament in order to change the metallic content of coinage (Motomura, 1994). "In the *Cortes* of Ocaña/1469, King Enrique IV of Castile negotiated with the *Cortes* the lineaments of a wide reform of coinage that was approved with the agreement of the representatives from the *Cortes* in a statute dated from two years later (Oliveira Serrano, 1986, p.137 and 154). This statute limited the quantity of mints and the profits of seignoriage of coinage issued, charging only a small sum for the production cost (brassage). For the crown, this amounted to forgoing a useful source of revenue. The *Cortes* kept their bargaining power with the monarchy, as shown in the meetings of 1608, 1619, and 1626. In all these cases, the *Cortes* did not consent to changes in the issue of money, even if they had to pay a tax to compensate for this refusal (Motomura, 1994, p.118)."

The monetary powers of fifteenth- and sixteenth-century Portuguese kings were not shared by the *Cortes* as in Castile. After one century of enforced stability under a strict monetary constitution (1261-69), Kings Fernando I (1369-83) and João I (1385-1433) saw it as their right to change the coinage at will, and did so. The drastic debasements ordered by João I (1385-1433) for military purposes did not meet opposition from the *Cortes*, which regarded it as necessary evil in the context of the ongoing independence war (Henriques,

[32]Nevertheless, as Munro (2010) usefully remarked, concerns for an adequate money supply could also lead to debasements. We distinguish debasements to defend public interest from those that were fiscally motivated.

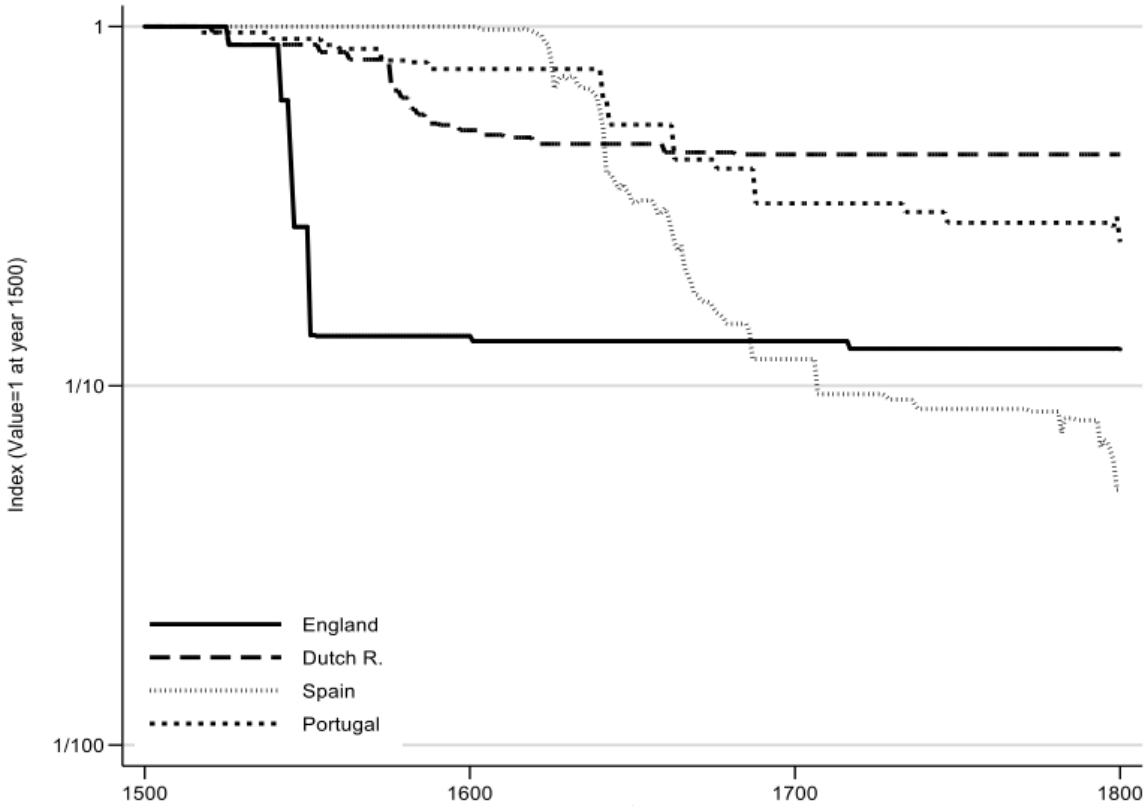
2008, p.195). Mint revenues were relatively important as a share of revenue (6% in 1401; Henriques, 2008, p.195). But from 1435 the crown did not look to the mint as a source of seigniorage revenue. Whilst the monarchs did not share their monetary prerogative with the *Cortes*, they were often reminded of their role as protectors of the currency as a public good. The Portuguese kings made several debasements in the first half of the sixteenth-century in response to two interrelated problems: the outflows of gold and silver and the scarcity of coins with small denominations. These were defensive devaluations and were even responding to complaints formulated by the *Cortes* in 1525 and 1535, as acknowledged by the king (Peres, 1957, p.27). Aggressive or fiscal debasements, absent from the first half of the fifteenth century, only resumed after 1640 when the country was in a life-or-death war with Spain.

In sum, when the English public was struggling with the Grand Debasement conjured by Henry VIII, Portuguese and Spanish monarchs did not exploit coinage as a significant source of revenue. In both countries, the monetary policy was, at least, coherent with grievances aired in the parliament about the circulation of monies. In Castile (though not in Portugal), the *Cortes* even kept a role in setting the policy.

In this respect, England and the Dutch Republic both fare worse than Iberia during the sixteenth century. The Netherlands continued to perform poorly over the seventeenth.[33] Figure 4 illustrates the trajectory of the three states considered here. English coinage only became stable in value over the second half of the sixteenth century. In the Dutch Republic, stability came even later – only during the seventeenth century. By contrast, Portuguese coinage was approximately stable from 1500 to 1800, with some adjustments along the way. Spanish coinage was stable in the sixteenth century, though it did experience considerable instability over the seventeenth (Karaman et al., 2019).

[33]Much of the Dutch Republic's poor performance with regards to monetary stability until the mid-seventeenth century can be explained in the context of fiscal pressure due to its ongoing Independence war. This is analogous to Portugal's situation during the seventeenth century.

Figure 4: Silver content of the monetary unit of account.



For England, after 1717, the index tracks the value of the monetary unit in terms of gold. Source: Karaman et al. (2019).

3.6. Interest Rates

High default chances are reflected in high interest rates charged by lenders (a risk premium).[34]. This applies particularly to sovereign borrowers, whose position relative to the lender makes contracts impossible to enforce.[35]. Hence, interest rates paid by the monarchs are an indicator of their commitment to contracts and of the security of property rights. Private lenders demand high interest rates when they perceive that the sovereign is prone to use the state's discretionary powers as in seventeenth-century France (Root, 1989), or that the political system is too unstable for credible commitment (Clark, 1996).

Circa 1500, our three states had varying degrees of involvement in the financial markets. Under Spain's Catholic Kings, Castile sold perpetuities payable from ordinary tax

[34]Government defaults were often expressed by the "turning of short-term debt into long by repeated prolongation of maturing obligations" (Ashton, 1960, p.35-36), hence lowering yields. Such forced delays were more common than outright refusals to pay

[35]As succinctly put in the 1540s by the Count of Castanheira, the most trusted advisor of the Portuguese king John III, "Merchants cannot incarcerate kings" See Cruz (2001)

revenues. Originally, these "rights" (hence, *juros*, from Latin *jus, juris*) were granted as a reward for military services or as alms for church institutions. But the reliability of the tax administration of the Crown made the acquisition of these *juros* an attractive proposition to investors; thus emerged the *juro al quitar*, a redeemable perpetuity payable on tax revenues. It became the mainstay of the Spanish public credit system. The overall sums involved in this early phase were modest and redemptions of *juros* were common in the early sixteenth century (Gálvez, 2015). When, under Charles V, Spain became entangled in European imperial wars the demand for credit soared. In 1521, Charles V had to simultaneously fight against France in three fronts (Flanders, Italy and in Spain), quell the Castilian rebellion of the *Comuneros* and pay for the expenses of his imperial election two years earlier in the German lands. All these cases demanded not only the advance of the funds in *time* (as in any credit contract) but also their transport to a *place*. The need to provide the means of payment in diverse locations in Europe led to the emergence of the *asientos*, which was a credit contract that combined currency exchange and the transport of money to a specific location (Drelichman and Voth, 2014; Álvarez-Nogal and Chamley, 2018). In this context, the *juros* were used to provide collateral to the lenders of *asientos*. In fact, these *juros* were tradable and there was a lively secondary market for these titles, both in Spain and Genoa (Álvarez-Nogal, 1997). The combination of *asientos* and *juros* was in effect an efficient risk-sharing device that gave some assurance to the external lenders to the Spanish Crown. Despite Spain's reputation as a serial defaulter, these bankruptcies were mostly orderly affairs in which the lenders agreed to convert their short-term contracts into *juros* (Drelichman and Voth, 2014). In fact, as the literature has established (Drelichman and Voth, 2014; Álvarez-Nogal, 1997), the notorious debt repudiations by Philip II, Philip III and Philip IV did not shut the credit market altogether. These renegotiations contrast with the case of England, where the ruler used his prerogative powers to extend ex-post the maturity of loans, or to even take forced loans without interest – essentially an arbitrary tax for which no parliamentary consent was given (Ashton, 1960, p.114).[36].

Portugal followed the Castilian example in selling *juros* in 1500. Like their Spanish counterparts, the Portuguese *juros* were redeemable and were assigned to the country's buoyant fiscal revenues (Henriques, 2008). Very few of these were issued until João III needed a ready source of cash to buy the Spice Islands from Charles V in 1535. A decade later, in 1544, the same monarch sought to re-finance its floating debts in Antwerp and sold a large quantity of *juros* to domestic capitalists and noblemen (Costa, 1885, p.39). The Restoration War (1640-68) and the War of the Spanish Succession led to new large-

[36]In Portugal, forced loans without interest were uncommon, and last used in 1475 (Henriques, 2008, p.214)

scale sales of *juros*, whilst the middle decades of the eighteenth-century saw redemption of the *juros* on a massive scale (Costa, 1885, p.40).

Administration is an important, but neglected, aspect of the credibility of the public debt. In Portugal, budgeting was in the hands of an office called *Vedoria da Fazenda*, which was headed by three *vedores*, who rotated in its three main functions: judging fiscal litigation, hold the auctions for the tax-farmers and budgeting. The latter task was, basically, estimating the tax-farms kingdom revenues and expenses. The king's treasury had its revenues assigned to a given source of revenue, just like any owner of a *juro* or other claim on state revenues. The *vedores* also judged cases brought by taxpayers against the crown (Cruz, 2001). Tellingly, with the Portuguese loss of independence to Spain, the *vedoria* lost its budgeting role. In Spain, the management of public debt fostered the creation of an equivalent institution: the *Consejo de Hacienda*, which had to allocate the debt service. For the reliability of their performance, the Spanish *juros* were sold on par on the secondary, an indication that they performed well (Toboso, 1987, p.91).

Despite the balance between state and private rights that these institutions suppose, the management of credit in both Portugal and Spain was not flawless. Wars, in particular, disrupted the debt service (Costa, 1885, p.46) and led to adjustments in the yield of the *juros*. In periods of crisis there were reductions of the actual yield by means of haircuts or (temporary) taxes on the interest paid. However, Holland, which provided the financial model for England, did exactly the same. Dutch history during the sixteenth century includes plenty of episodes of outright government expropriation of the public such as forced loans which were never paid back or other similar measures; see De Vries and Van der Woude (1997, 87) and Gelderblom and Jonker (2011, p.16, 22).

In contrast to their continental rivals, the Tudors and Stuarts could not count on a system of public debt. In England before the civil war, "the royal immunity from the ordinary legal processes which were open to any lender in claiming redress from a defaulting debtor undoubtedly reduced the attractiveness of royal securities as a financial investment" (Ashton, 1960, p.10). The rulers enticed merchants, goldsmiths and the city of London to lend money using a variable combination of coercion, commercial privileges and, occasionally, interests. For instance, when war with Spain broke in 1625, "Charles [I] sought to raise money without parliament by means of a forced loan. Direct pressure was applied to individuals, and those who refused to pay risked having troops billeted to them, or imprisonment" (Braddick, 2009, p.45). Forced loans were also common after the Restoration (Homer and Sylla, 2005, p.124).

In this nasty and brutish public debt market, maturities were naturally short. The lack of credibility meant that England could not organize a debt system based on long-term lending until the 1730s. In the seventeenth-century, it was unclear for how long a dynasty would last, and whether the next would default on the debts of the previous. Life annuities and perpetuities paid for crown lands were the only exception to short-term lending. A proper "national debt system" with long-term maturities and secured by revenues, like the one that existed in Portugal and Spain, only emerged with the financial experiments of the 1690s (Tables 2 and 3 of Dickson, 1993). There was an "absence of an effective market in which lenders could sell their claim on the state" (Dickson, 1993, p.36). The secondary market for English long-term debt remained "extremely illiquid" until 1720 (Sussman and Yafeh, 2006).

The link between constitutional change and the credibility of the English state as a debtor has inspired a substantial debate that is still ongoing (Stasavage, 2003; Sussman and Yafeh, 2006; Cox, 2012; Macdonald, 2013; Jha, 2015; Murrell, 2017; Dimitruk, 2018; Li, 2019). The initial thesis was that after the Glorious Revolution, the markets started to regard a debt title signed by the king as a credible commitment (North and Weingast, 1989). Clark (1996) shows, however, that private interest rates did not manifest great changes while Epstein (2000) found that nominal interest rates were not lower in England and the Netherlands than in countries with supposedly worse institutions.[37] In fact, the fall in English interest rates after the Glorious Revolution can se seen as the belated convergence to the frontier of the international financial markets ((Coffman and Neal, 2013)).[38] Macdonald (2013) argues that the break towards a modern public debt system only occurred in 1710, when the change in cabinet did not lead the incumbent party to renege on the debt.

In the present paper, we extend the existing literature, and in particular the comparative work done by Epstein (2000) in three main ways. First, we collect many more

[37]Stasavage (2011, p. 39) shows that the nominal interest rates paid by territorial states declined considerably over the early modern period. Stasavage (2011, p. 143-9) argues that Dutch and Spanish political institutions were similar, but that the greater geographical scale of Castile meant that "The Spanish monarchy paid significantly higher interest rates than the Dutch Republic on its loans". The evidence we present here supports the view that Castilian institutions were not worse (at least until the mid-seventeenth century) but our data shows that the Spanish monarchy did not usually pay higher interest rates than the Dutch republic. Our viewpoint that the deterioration of Spanish institutions can only be noticed in the seventeenth century is supported by the fact that "through the 1590s, juros traded at near par on the secondary market, but after the 1630s ... this was no longer the case" (Stasavage, 2011, p. 145); see also original research by Thompson (1984)).Stasavage (2011, p. 146) recognizes that a difference is only noticeable from the 1630s, but his argument that the key factor was the greater size of Castile relative to the Dutch Republic seems hard to square with the case of Portugal, which was also a small state.

[38]The level of interest rates have often been interpreted as a proxy for the efficiency of premodern capital markets van Zanden (2009).

observations for all countries, and we also include the case of Portugal (which was previously missing). Second, we make sure that maturities are comparable. The underlying nominal interest rates correspond to perpetuities, i.e. they have an infinite maturity (the state was usually able to redeem the principal, and often did). As such, in the three countries and in the three centuries studied we can observe the same financial instrument, the interest-bearing perpetuity (or a close equivalent). The third way in which we improve on earlier work is that we compare real instead of nominal interest rates. The Fisher equation states that $1 + i = (1 + r)(1 + \pi)$, where i corresponds to the nominal interest rate, r to the real interest rate, and π to the rate of inflation.[39] We used a 21-year moving average around the inflation rate for each year of a given nominal interest rate to obtain the corresponding real interest rate.[40] Figure 5 fits the evidence previously shown in this paper. In the sixteenth and early seventeenth centuries, Castile and Portugal appear to have enjoyed a considerable advantage relative to England and Holland in the public debt market, hinting at higher credibility and less fear of expropriation in these two countries.

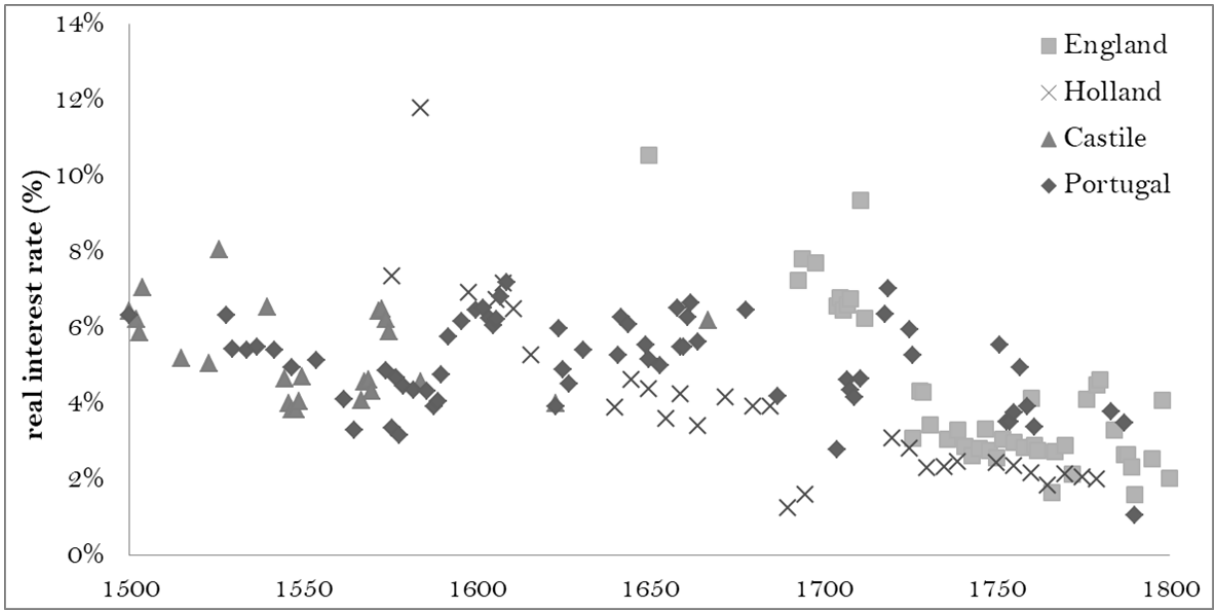
Additional data confirms these results: an alternative way of looking at the credibility of the sovereign lender is to measure the risk premium implied in the spread between private and public loans with identical maturities. Portuguese and Spanish interest rates shown here were in line with those practiced in the domestic private markets for perpetuities in the sixteenth century (Brumont (1995, p.253-5), Rodrigues (2013, p.744)). In Portugal, for example, King Manuel I (who reigned 1495-1521) simply took market rates: "We have decided to sell our debt titles (*juros*) at the price of one thousand for fourteen thousand [7.14%], because such is the common rate in our realms" (text of the first *juros* issued in 1500; see Costa, 1885, p.121). Thus, the Portuguese and Spanish monarchs were not perceived as less trustworthy than the typical domestic borrower, and the low interest rates cannot be explained by coercion exerted on the owners of capital. By contrast, until the first quarter of the eighteenth century, lending to the English monarch meant charging interest rates considerably higher than the legal maximum rate, not to mention actual private interest rates. This suggests an element of coercion; for instance, Edward VI paid 14% for a loan, although the legal rate had been set by his father at 10%, whereas Charles II agreed on loans paying 8% interest at a time when the maximum legal rate was 6% (Homer and Sylla, 2005, p.111,124,129). The reliability of the English executive improved with the Long Parliament (1640-1660) in which parliament acquired more control over the executive, in particular with regards to government borrowing, and

[39] This simplifies to the familiar formula $r = i - \pi$, for low rates of inflation, that is, when $r\pi \approx 0$.

[40] In the case of England, we used the the GDP deflator of Broadberry et al. (2015), but in Figure A7 of the Appendix we show that using the Retail Price Index (RPI) of Clark (2019) would lead to very similar results. In the case of Portugal, the price level from Palma and Reis (2019) starts in 1527, so we extrapolated the average inflation rate for 1528-38 back to 1500.

"marks an obvious break in the history of the relations between the government and the money market" (Ashton, 1960, p.46). Over the eighteenth century, Castile did not issue long-term borrowing, and by the mid-century England and Holland were paying lower interest rates than Portugal. Finally, note that the Iberian head start in terms of interest rates relative to England and Holland does not manifest in different rates paid on life annuities (we show this in Table A8 of our online Appendix). Given the much shorter maturities of annuities, this evidence suggests that the higher rates paid by England on long-term borrowing until the second half of the seventeenth century century reflected different perceptions about the long-term credibility of different regimes (which did not manifest themselves in short-term borrowing).[41]

Figure 5: Real interest rates of new issues of long-term public debt.



Maturities are infinite (perpetuities, perpetual annuities, consols, or equivalent), unless noted. Debt was redeemable, but the extent and liquidity of secondary markets varied across countries and time periods (see text). In years of multiple issues, we use the average interest rate. Holland's interest rate for 1574 (20% nominal) not shown. Sources for nominal interest rates: For Castile, Álvarez-Nogal (1997, 2009), Gálvez (2015), Toboso (1987), Andrés and Lanza. For Portugal, Costa (1885), for Holland, Van Der Ent et al. (1999), for England, Dickson (1993, tables 2, 3, 6, 22) and Clark (1996, p.566). The data for England refers to perpetuities, except for 1693 (99-year maturity), and 1711 (32-year maturity). For 1650, we used the estimated yield for a perpetuity paid on crown lands (Clark, 1996, p.566). Sources for inflation rates (21-year average around each issue): for Spain, the CPI of Álvarez-Nogal and Prados de la Escosura (2013); for Portugal, the CPI of Palma and Reis (2019), for England, the GDP deflator of Broadberry et al. (2015), and for Holland, van Zanden and Van Leeuwen (2012).

[41]In the case of Holland prior to 1600-19, and Portugal over 1640-59, the geopolitical situation (independence wars) was largely responsible for the high level of interest rates observed; but note that in Portugal in the early seventeenth century, real rates were comparable to those of Holland.

4. Conclusion

Iberia's economic divergence was not a consequence of inferior initial institutions. At least prior to the civil wars of the mid seventeenth century, England did not have more constraints on executive power or an environment more protective of property rights than Spain or Portugal. Unlike what is argued by authors such as Tilly (1994), Acemoglu et al. (2005) and Hough and Grier (2015), Iberian political institutions were not structurally worse than England. At some point England did have better institutions, but that point occured considerably later than 1500. Accordingly, explanations for the little divergence among Atlantic traders which rely on variation in the quality of "initial institutions" (in particular, constraints on executive power by 1500 or earlier), such as that by Acemoglu et al. (2005), cannot be correct.[42]

While 1500 is too early for any significant difference in institutional quality to be noticeable, 1688 is too late. With regards to England, the measures that we present in this paper confirm the views of scholars who argue that the emphasis of North and Weingast (1989) and others on the Glorious Revolution is overdone and instead emphasize earlier progress (e.g. O'Brien, 1988, 2002, 2012; Jha, 2015; Murrell, 2017). By 1688 England was already driving ahead both in terms of checks on executive power and state capacity. At the same time, Iberian institutions experienced a considerable deterioration over the late seventeenth century: the *Cortes* eventually stopped meeting, the monarchs resorted to monetary manipulations and public debt was issued less frequently and became less liquid.

Our findings also discredit the modern incarnation of the "Black Legend" (*La Leyenda Negra*), the notion that the divergent economic trajectories within Europe and the two Americas can be explained by an institutional path-dependence going back as far as the sixteenth century or earlier. As argued, when Atlantic trade developed, Portugal and Spain could not be dismissed as "highly absolutist" or extractive empires, let alone regarded as endowed with inferior institutions. The right of non-European municipalities to take part in the *Cortes* is a reminder of how these empires were built under an executive power that had to negotiate instead of simply imposing.

In this paper we have shown that the little divergence in European institutions and incomes does not lie with the *deus ex machina* of initial institutions going back to the medieval period. An implication is that they must instead be found in events taking place

[42]Palma (2019) offers an alternative explanation, which relies on events occurring during the early modern period.

during the early modern period. Another implication is that the lackluster economic performance of the Iberian empires and their successor independent states in Latin America was not the result of an institutional path-dependence defined circa 1500.

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Appendix to Henriques and Palma, "COMPARATIVE EUROPEAN INSTITUTIONS AND THE LITTLE DIVERGENCE, 1385-1800"

APPENDIX FOR ONLINE PUBLICATION ONLY

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A1. Summary of the current state-of-art regarding comparative state capacity measures

Epstein (2000) argues that state capacity is important to understand why some societies did better than others. The Epstein thesis has since been confirmed empirically in a variety of studies, some of which explicitly comparative in nature. For instance, Bogart et al. (2010, p.94) write that "More power seems to have allowed central governments to promote economic change and market integration ... [and escape the] oppressive political and economic fragmentation of Europe".[1] States needed revenues to provide public goods such as defense and courts which in turn contribute to internal stability and to the development of markets. If endowed with sufficient means, rulers of centralized states can enforce property rights, impose a uniform system of measurements, a truly public coinage and contribute to the emergence of coordinated and competitive markets in a way that failing states cannot.

In Table A1, we show empirical measures of state capacity over time. All Western European economies show a clear increase in state capacity over the early modern period, and there is a marked divergence vis-à-vis other parts of the world, including Eastern Europe (Poland), Russia, the Ottoman empire, and China (Brandt et al., 2014, p.70-71). The Netherlands and England eventually attained higher levels of fiscal capacity than the other Western European states (with the exception of tiny Venice), however this is not noticeable before the mid-seventeenth century (O'Brien, 1988).

Circa 1500, Portugal and Spain have a substantial advantage vis-à-vis England. The key difference was that Castile and Portugal were fully-fledged tax states by 1500 (Henriques, 2014). England, by contrast, had reverted under the York dynasty to the condition of a domain state (O'Brien and Hunt, 1999) and, as seen in the paper, the Tudors and Early Stuarts resorted to different expedients, some of which legitimate, to increase their revenues. In this respect, it is important to stress that the higher fiscal burdens of Portugal and Spain did not depend entirely upon their colonial revenues and monopolies. The empirical foundations for this claim, especially for Portugal, are fragile. Tilly (1994, p.21) compares early modern Portugal to today's oil-exporting countries where, thanks to colonial revenues, the leaders have much autonomy vis-à-vis the general population because they do not need broader the tax base. This wide off the mark as since the late fourteenth century the Portuguese tax state obtained three-quarters of its revenue from domestic sales taxes (Henriques, 2014). Overseas revenue seems to have mattered considerably during parts of the sixteenth century, but Lisbon customs did not exceed 15%

[1] See also Rosenthal (1990)

until the seventeenth-century (Henriques, 2008).

Table A1: Per capita government revenue in day's wages for unskilled workers.

	China	Ott. Emp.	Russia	Poland-Lithuania	Austria	Prussia	France	Venice	Spain	Engl.	Dutch Rep.	Portugal
1500-1549	-	-	-	0.8	-	-	2.6	10.4	3.0	1.5	-	-
1550-1599	-	1.7	-	0.4	-	-	3.2	9.5	4.0	2.7	-	8.9
1600-1649	-	1.4	-	0.5	-	-	3.0	7.5	7.2	2.6	12.0	8.2
1650-1699	-	1.7	-	1.3	2.6	2.0	8.0	10.6	7.7	4.2	13.6	8.0
1700-1749	2.3	2.6	4.4	0.6	6.3	6.6	6.7	12.7	4.6	8.9	24.1	15.3
1750-1799	1.3	2.0	7.6	1.7	11.3	14.1	11.4	13.2	10.0	12.6	22.8	14.8
1800-1849	1.2	5.0	6.2	-	10.2	-	14.3	-	8.6	13.5	-	13.6

Sources: For China, Brandt et al. (2014, p.69). For all other countries except Portugal, Karaman and Pamuk (2010), with 1500-1799 data presented in 50-year rather than 10-year intervals, following Brandt et al. (2014). We have updated Russia and added 1800-49 values using data kindly provided by Kivanç Karaman. For Portugal Costa et al.; in this table, Portugal's revenues include the crown's share of imperial revenues.

The fiscal capacity shown by the peninsular states is perfectly compatible with the results of the measures of institutional quality presented in the main text. When kings need to establish a long-term operational fiscal system, they have to negotiate with the taxpayers and their representatives. If they require a credit system, monarchs need to show some level of commitment and respect for contracts in order not to alienate their lenders. Tudor exploits like the Great Debasement, the Dissolution of the monasteries or arbitrary fines on wealthy noblemen or orphans were short-gap measures. Portugal and Spain built tax-states and had financial support from creditors. This required long-term commitments and negotiated institutions. Since the later fourteenth-century Portuguese and Castilian/Spanish monarchs were vying for improving their geopolitical position, either in the Peninsula, in the Atlantic and (for Spain only) in Europe. The *damnosa hereditas* bequeathed to Spain by the Habsburg dynasty was especially demanding in terms of resources, and sent Charles V and his successors to the negotiations table with other economic agents. Habsburg geopolitical goals could not simply be met by ad hoc solutions. Likewise, the complexities of the Portuguese empire and the country's precarious position in Europe's geopolitical balance demanded resources, which in turn demanded long-term solutions and pacts with the tax-payers of the kingdom and the creditors. By contrast, up to the mid seventeenth century, the English monarchy settled for temporary solutions for obtaining resources commensurate to the moderate geopolitical challenges of

her insular position.

When Spain's European dominance bid weakened, fiscal pressure and demand for credit diminished. As Spain's institutions dwindled, interest rates stagnated, fiscally-motivated coinage manipulations became frequent, and the *Cortes* became a ceremonial institution. For Portugal, whose geopolitical position remained precarious given the border with Spain as well as the struggle with Netherlands in Africa, Brazil and the East, this decline is not so evident. In sum, the quality of the institutions is sensitive to the geopolitical challenges. As these demand long-term resources, the monarchies need to obtain them in an effective form, which implies a partnership with the representatives rather than simple confiscation. Thus, the institutional measures drawn in the main text can be reconciled with the high fiscal capacity of the Iberian kingdoms.

A2. A detailed critical discussion of the Acemoglu-Johnson-Robinson measures

According to (Acemoglu et al., 2005, p.563), "Political institutions [in England and the Netherlands] at the beginning of the sixteenth century ... [were] not as absolutist as in Spain and Portugal ... after the War of the Roses, Britain was never as absolutist as France, Portugal, and Spain". Similarly: "[The] absolutist regimes of France, Portugal, and Spain clearly had much less constraint on the executive [than England or the Netherlands]" (Acemoglu et al., 2005, p.568-9). These statements are built upon a quantitative analysis of these countries' institutions. Acemoglu et al. (2005, p.563) claim to have looked for "the formal rules that constraint the executive in a way that matches the Polity criteria" (Acemoglu et al., 2002, p.59). As shown in Table A2 these authors attributed higher scores to England (and the Netherlands) than to Portugal and Spain. Also, they considered that by 1500 the two Iberian monarchies exerted "unlimited authority" (score 1), which is plainly wrong from an empirical standpoint. Acemoglu et al. (2005) only discuss their coding of institutions in detail in the working paper version of their article (Acemoglu et al., 2002, p.59-61). As the Polity IV database does not cover the period prior to 1800, these authors chose instead to code the most relevant of the component variables of the Polity index: "executive constraints" for the years 1500, 1600, 1700, 1800. This variable captures the accountability of the executive vis-à-vis an external group (such as the legislature or the party in a single-party system) and it is coded in a seven-category scale, which goes from 1 (Unlimited authority) to 7 (Executive Parity or Subordination). In the former, "there are no regular limitations on the executive's actions" whereas in the latter "accountability groups have effective authority equal to or

greater than the executive in most activity." A value of 3 means that "there are some real but limited restraints on the executive," while a value of 5 indicates that "the executive has more effective authority than any accountability group, but [it] is subject to substantial constraints by them." Scores of 2, 4, and 6 are used for intermediate situations (Marshall et al., 2002, p.65)

Table A2: Acemoglu-Johnson-Robinson main "constraint on the executive" Polity IV classification.

	England	Netherlands	Spain	Portugal	France	Italy	Poland
1500	2	3	1	1	2	3	3
1600	3	5	1	2	1	2	3
1700	5	5	1	2	1	1	3
1800	7	4	2	2	4	1	1

Source: Acemoglu et al. (2002, p.86)

Acemoglu et al. (2005) write:[2]

> "The main source for this exercise was William L. Langer (1972), a classic historical encyclopedia, written with a focus on constitutional events. We supplemented this work with the more recent edition by Peter N. Stearns ... While there may be disagreement about the precise values used in particular years, the general level of constraint on the executive does not appear to be controversial. For example, the absolutist regimes of France, Portugal, and Spain clearly had much less constraint on the executive than did the Netherlands after independence or England after the Civil War"

This is evidently an exercise with weak empirical foundations. As long as criteria are clear and objective and the empirical foundations are sound, the coding of historical regimes using Polity IV's "executive constraints" is a useful exercise. It should be noted that Polity IV was designed to capture year-to-year variations in formal rules, which is very different from coding only a few dates, whose exact coverage was left unexplained (do they correspond to midpoints? concrete years? centuries as a whole?). For the

[2]They additionally claim that the "main difference in coding between following the Polity rules and using De Long and Shleifer (1993) is that the Polity coding rules imply feudal regimes had a weak constraint on the executive" (Acemoglu et al., 2002, p.60)

present purposes, the benchmark years chosen by AJR are too rough to capture the most important changes, so we use 50-year benchmarks, which represented the end point of the changes in the half century before the date. So, for instance, our code for "1500" reflects the constitutional rules in place during 1450-1500 period. We now show, in Table A3, our own Polity IV classification, which unlike that of Acemoglu et al. (2005) is closely based on historical sources. Then in the paragraphs that follow, we present a detailed justification for our choice of scores.

Table A3: Our "constraint on the executive" Polity IV classification.

	England	Spain	Portugal
1500	4	4	4
1550	3	3	4
1600	3	3	2
1650	4	3	3
1700	5	2	3
1750	5	1	2
1800	7	1	1

Sources: our estimates (see text).

By 1500, England, Portugal and Spain had broadly similar constitutions. Following the Polity IV criteria for "Executive Constraints", the three monarchies had an "accountability group" in the shape of the representative assemblies, which all had formally some powers over the executive branch (represented by the monarchs, their ministers and councils). The Iberian *Cortes* and the Parliament firmly held the keys to extraordinary taxes and, hence, to the military plans envisaged by the executive. Also, the representative institutions had won de facto roles in consenting to administrative reform, laws and changes in coinage and, in the case of England, the Parliament also doubled as a court. The three monarchies thus developed a representative assembly with formal prerogatives in contrast to, say, contemporary France where historians see "a failure (...) to develop adequate system of representation" (Lewis, 1962, p.3). As such, the relationship between the respective monarchs and parliaments cannot be lower than 3 ("real but limited restraints on the executive"). The issue is whether by 1500 the three parliaments considered did or did not exert "substantial constraints" over the executive power and hence can reach the score of 5. Taking 1500 as representative of the 1450-1500 period, the answer is negative for all three. Whilst parliaments held a fiscal role, in none of the three countries could they, as they aspired to, control the expenditure (Keir, 1973, p.39). Nevertheless, the political role of the parliaments in the previous period shows that it could block some military

initiatives and its counsel and consent were sought after when it came to legislate, reform and issue coinage. As such, we have settled for the intermediate value between 5 and 3. In Castile, the period is divided between the Trastamara dynasty under which the *Cortes* had a major political role and ambitions, and the reign of Ferdinand and Isabella, which managed to bypass the Castilian *Cortes* between 1480 and 1498, and denied the *Cortes* its legislative and political ambitions that built up under the Trastamara Kings (Zamora, 1988, p.52-6). Nevertheless, outside of Castile the monarchy remained tied to written constitutional "pacts" and had to share administrative and judicial powers with the *Generalitats* of Catalonia and Valencia. In Portugal, the king was more formally constrained than in Castile. The strength of the Cortes is that it gathered the representatives freely chosen by hundreds of the municipalities within the kingdom, sometimes with elections. Also, the finances of the monarchy were bound by the *vedoria da fazenda*, which was not related to the *Cortes*. In both Iberian countries the king was free to legislate outside parliament but the laws issued "in the *Cortes*" could not be overruled by the king without consent of the same body (Hespanha, 1982, p.374).

By 1550, the position of the executive vis-à-vis the branch strengthened in Castile but not in Portugal. In the former, the right to sit at the assembly was restricted to seventeen great municipalities which in turn were increasingly represented in the Cortes by municipal rulers (*regidors*) appointed by the monarchy (Domínguez Ortiz, 1978, 196-8). This did somewhat decrease the independence of the *Cortes* vis-à-vis the monarchy. In Portugal, the *Cortes*, although meeting infrequently, kept their formal powers, and the municipalities secured a major formal concession from the monarchy when the administration of the sales taxes was devolved to the municipalities in the *Cortes* of Torres Novas/1525. Together with this long-term ambition, the *Cortes* also secured in 1525 the promise from King João III that they would meet every ten years. In England, the Tudors "debased" the legislative role of the parliament (Keir, 1973, p.99) and exerted more royal control over the representatives (Keir, 1973, p.139).

By 1600, the Portuguese *Cortes* did not exert constitutional checks given the loss of independence and the emergence of an institution called the *Consejo de Portugal* directly ran by the monarchy in Madrid. Although the Portuguese Cortes were not abolished during the dynastic union and the foreign kings occasionally summoned them, they did not play a political role. Nevertheless, the existence of the *Constituição de Tomar* limited the role of royal prerogative and, consequently, the score of 1 is too low. In Castile, no major changes are observable. The "bias towards absolutism" was also felt in England where constitutional historians speak of an "ascendancy of the Crown in government", although the fiscal and legal competences of the parliament were not affected (Keir, 1973,

p.155-6).

By 1650, the recovery of independence of Portugal in 1640 and the subsequent war with Spain led to renewed meetings of the *Cortes* and intense fiscal bargaining that culminated in the managing of taxes and other fiscal revenues by the *Junta dos Três Estados* in 1643, an institution whose members were appointed by the three estates present in *Cortes*. In England, unlike Castile, the parliament successfully opposed royal tampering in the elections of the representatives to the Commons (Keir, 1973, p.174-7). The stark opposition of the parliament against the unpopular foreign policy of Charles I clearly created many "substantial" constrains on the executive. While Stuart parliaments had a similar formal role to earlier periods, they clearly became vociferous during the second half of the century.

In 1700, England was under the "parliamentary monarchy" which emerged in the 1660s. The sovereigns "could not legislate nor tax outside of parliament", though the monarch retains the executive powers and has a veto over the parliament (Keir, 1973, p.231). This warrants a score of 5. As for Spain, a royal decree in 1655 stripped the *Cortes* of their fiscal role. Accordingly, 11 kingdom-wide taxes (*Servicios*) were imposed outside the *Cortes* between 1667 and 1785 (Artola (1982, p.175)). In Portugal, parliament met only infrequently but its fiscal role was not challenged and the *Junta* continued to exist until 1791.

Between 1700 and 1750, Spain under the Bourbon dynasty became more centralized and the *Cortes* were by then essentially ceremonial. The *Cortes* were reformed so as to represent the whole of Spain (except Navarre) but they did not recover their fiscal powers and kingdom-wide servicios were raised without their consent in 1703, 1710 and 1716; Artola (1982, p.475)). While not formally abolished, the near absence of reunions means that their impact on the executive branch was null. In Portugal, the *Cortes* also did not meet (and were also not abolished). As constitutionally, the *Cortes* retained the keys to extraordinary taxation, they still exerted some influence on the executive decisions, as shown in the discussions about the pros and cons of summoning them for obtaining funds in the 1710s and 1720s (Almeida, 1995). By contrast, during this period England was under the "Classical Age of the Constitution" in which "parliamentary encroachment" was successfully resisted by the Crown, which kept the veto on Parliament, although in fact it did not use it (Keir, 1973, 297-9).

Between 1750 and 1800, the formal constraints on the executive Iberian monarchies were very weak. In Portugal, the Cortes did not meet and the very principle of parlia-

mentary consent to extraordinary taxes was denied in the second half of the eighteenth century (Albuquerque, 2012, p.303). In Spain, the situation was essentially the same as in the previous half century. In Britain, by contrast, the second half of the eighteenth century saw the emergence of a parliament-appointed cabinet which was a "coherent entity independent of the Crown" and of a prime-minister who was the substitute of the king (Keir, 1973, p.379-381). Finally, with the Act of 1797, the parliament formally would not be dissolved by the death of the person of the king (Keir, 1973, p.375). As such, we agree with the scores of 1 (to Portugal and Spain) and 7 (to England) given by Polity IV.

Unlike for earlier periods, Polity IV attributes numbers for 1800: 7 to England, and 1 to both Spain and Portugal (Marshall et al., 2002). But since there were no formal changes to the formal institutions of Spain and Portugal over the 1750-1800 period, we continue to attribute 2 to them, while we accept the value of 7 for England. In Britain, the great changes that led to the score of 7 in 1800 given by Polity IV occurred in the second half of the eighteenth century. It was then that a parliament-appointed Cabinet emerged as a "coherent entity independent of the Crown", as well as a prime-minister which was the substitute of the king (Keir, 1973, p.379-381). Finally, since the Act of 1797, the parliaments would not be dissolved by the death of the person of the king (Keir, 1973, p.375).

The previous paragraphs conclude our discussion of the Polity IV classification. As a comparison of Table A2 and Table A3 shows, our measures diverge significantly: we have shown that there was no noticable political divergence before the seventeenth century. Acemoglu et al. (2005) to have a second measure, "protection for capital", claimed to be calculated independently (Acemoglu et al., 2002, p.60).[3] We show this second measure in Table A4.

[3]They write that: "limitations on the arbitrary use of power by the executive ... [are] presumably correlated with the security of property rights for merchants and the control over the monopoly of overseas trade" (Acemoglu et al., 2005, p.569). These authors recognize in passing that additional constraints on the executive are not necessarily better as they could occur as a consequence of the nobility having more power, and in a footnote acknowledge that "a number of significant constraints on monarchs were imposed by the nobles and did not necessarily serve to protect the rights of merchants".

Table A4: Acemoglu-Johnson-Robinson main "protection for capital" measure.

	England	Netherlands	Spain	Portugal	France	Italy	Poland
1500	2	3	1	1	1	3	1
1600	3	5	1	2	1	2	1
1700	5	5	1	2	1	1	1
1800	7	4	2	2	5	1	1

Source: Acemoglu et al. (2002, p.86)

It cannot be established, however, that this leaves the matter satisfactorily settled given the doubts raised in the main text. Another solution would be a related index of the "protection of capital", also proposed by Acemoglu et al. (2005) on the grounds that the two measures are "presumably correlated" (p.569). For the four main Atlantic traders, they do in fact match almost perfectly across both tables, there being less than 10 cases out of 300 in which the "protection of capital" does not coincide with the "constraints on the executive" (Acemoglu et al., 2002, p.85-91).[4] The problems of subjectivity and empirical fragility remain, however, and are probably compounded given that the two procedures involved are practically the same. The results are close to those in Table A2, which is perhaps not surprising given that they suffer from similar construction defects.

To circumvent the above flaws, van Zanden et al. (2011) have brought forward a new methodology to evaluate institutional quality. These authors count the number of years in which the parliament in any country met during each century and thus measure directly the extent of "executive constraint". The rationale seems intuitive. Parliament was the natural locus of the forces in the country which might be capable and inclined in these times to oppose the will of the monarch. This measure enjoys significant advantages over its predecessor: it is exempt from subjectivism, and it does not suffer from the formalism that plagues the Acemoglu-Johnson-Robinson method. Table A5 compiles the activity indexes of the parliaments of the Atlantic traders during the period 1400-1600, using the dataset by (van Zanden et al., 2011, p.7-8). Note that it is not clear how to interpret "initial institutions" in this context – that is those existing around 1500, so we also add a column with the average meetings of parliaments in the fifeteenth and sixteenth centuries, although this is a less than satisfactory solution.

[4]Transatlantic trade would have been a better description because by 1492, Atlantic trade had been going on for decades. What started then was the 'trans-Atlantic trade'. Nevertheless, for convenience we bow to convention and use the term "Atlantic trade".

Table A5: Activity index of parliaments.

	15th century	16th century	15th to 16th c. average
Spain	38	32	35
Portugal	48	12	30
England	62	58	60
Netherlands	20	80	50

Source: (van Zanden et al., 2011, p.7-8)

Acemoglu et al. (2005) recognize that the early modern institutions of England and then Netherlands were in many ways not modern; for instance, the franchise was very limited. The van Zanden et al. (2011) index seems to support Acemoglu et al. (2005)'s view that initial institutions in England and the Netherlands were somewhat "better" than those of Iberia – but not by much as far as the 15th century is concerned. This small initial difference makes the view that Portugal and Spain were below a "critical institutional quality" threshold tautological.[5] But it is also the case that to reach that conclusion, two logical leaps are required.

First, that a higher frequency of parliamentary meetings necessary means higher constraints on the executive. Is it really the case that meeting more often means "better" institutions or additional checks on royal authority? In order to reach a conclusion we must consider the reasons why parliaments met. At times of war, for instance, fiscal needs became more stringent and parliaments naturally met more often. Meetings often had nothing at all to do with constraints on the executive, instead being related to dynastic crises or the practical aspects of dealing with other emergencies, such as war. The frequent summoning of an acquiescent assembly that granted subsidies for foreign wars cannot be construed as a constraint on the executive.

Second, even if we could make the interpretation that the frequency of meetings meant higher constraints on the executive, it is important to discuss in detail whether a more "absolutist" state is necessarily worse for the economic performance of pre-modern economies. Even in times of peace, too much division in authority itself could reinforce the privilege of elites and be simply self-defeating, as Poland found out (Malinowski, 2019; Ogilvie and Carus, 2014).[6]

[5]Furthermore, presenting the distribution by century obscures what is happening around 1500. It thus makes it difficult to assess Acemoglu et al. (2005)'s claim that "initial" Iberian institutions were already worse around the time of the opening of the Atlantic trade.

[6]Ogilvie and Carus (2014) write that "The second serfdom was typically less restrictive in those

Are more constraints on executive power unambiguously good for the economic development of pre-modern economies? The key reference here is Epstein (2000), who successfully demonstrated that the vision which holds that more centralized, "absolutist" governments were necessarily more predatory than more representative systems ignores the fact that the former also had much more power to implement aggregate welfare-enhancing policies. This could happen in a Pareto-improving fashion, by successfully compensating losers through redistribution of the gains from implementing growth-enhancing policies, but in some cases, Pareto-efficiency is too strong a notion because there is no way to credibly compensate political losers (Acemoglu, 2003).

The Acemoglu et al. (2005) position is influenced by North and Weingast (1989), which Clark successfully criticized, showing that secure private property rights existed in England "since at least as early as 1600, and probably much earlier" (Clark, 1996, p.565).[7] At the same time, the emerging consensus view on Spain's early modern decline is not that it resulted from crown absolutism but quite the opposite: early modern Spain was a "weak state" (Grafe, 2012), where the centralized government had to deal with a multitude of local power-bases and interests, with consequences for low fiscal capacity and market integration.

Finally, the van Zanden et al. (2011) data suggests that in the sixteenth century the comparative frequency of parliamentary meetings in England or the Netherlands was higher than in Spain and Portugal.[8]. We show in the main text that this was true for

societies in which the ruler had more power relative to the parliament, since this enabled the ruler to resist extremes of rent-seeking by noble landowners who were primarily represented in parliaments in those countries ... Those Eastern European societies, such as Poland or Mecklenburg, which had very strong parliamentary organs representing the interests of wealth holders, were also those in which the second serfdom was most oppressive and economic growth most stifled". Ogilvie and Carus (2014) argue that parliament's capture by the special interests of wealth holders is not specific to them being landholders. These authors give as an example the German state of Württemberg, where there were strong parliamentary constraints over the executive and most members of parliament were "bourgeois wealth-holders drawn primarily from industrial and commercial occupations". These used their parliamentary power to give privileges to themselves, which "contributed to the stagnation of the Württemberg economy throughout the early modern period". A similar situation happened in the Dutch Republic after c. 1670. By contrast, with Württemberg or the Dutch Republic, in the more autocratic Prussia, "by the early 19th century the executive arm of government ... became strong enough to withstand much more of the rent-seeking pressure exerted by parliaments manned by representative wealth-holders".

[7]See, however, the response by Robinson (1998), who argues the adjustment in response to crown default risk was done by rationing credit rather than through interest rate increases. The rationing hypothesis loses weight, however, in light of Drelichman and Voth (2014)'s evidence that lenders kept doing business with Phillip II despite repeated defaults by the monarch.

[8]By focusing on the sixteenth century as the "initial moment", we are putting the weight of the evidence against us. This is because the relative frequency of meetings is much more favorable for Iberia in the fifteenth century, which, unlike suggested by Acemoglu et al. (2005), is in fact when Atlantic trade truly began (the colonization of Madeira by Portugal started in 1418 and that of the Canaries by Spain

Portugal but not Spain. Only by the last quarter of the sixteenth century is there a small but noticable difference. Furthermore, many of the meetings may have had nothing to do with useful checks on executive constraints.[9] At the same time, the baseline counting criteria we use is slightly different from that of van Zanden et al. (2011): they count the number of parliaments, while we count the number of years with a parliament. These can evidently differ in some circumstances; England's "Long Parliament" of 1640 to 1660, for instance, only counts as a single meeting in the former criteria. As a robustness check, and in order to have a measure directly comparable to that of van Zanden et al. (2011), we now show the total number of meetings (where each parliament only counts once). While this table shows the relative frequencies of the different reasons for summoning parliaments in the three countries, the overall conclusions under this criteria are the same as those of the main text. We also list, for reference, all of the parliaments which we counted and the time over which each was active. This documents what we have used to construct both this table and the analogous one in the main text.

A3. Historical discussion: on Tudor despotism

Economic historians of earlier generations had no hesitations in talking about "Tudor despotism" (Fisher, 1957). In fact, following the Tudor centralization of power under Henry VII and, especially, Henry VIII – including massive expropriation of property belonging to the monasteries – it is hard to believe that royal rule was less forceful in England than in Spain or Portugal.[10] Despite long held assumptions by some historians that the monarch had less power compared to elsewhere since the days of the Magna Carta, we need to consider that in 1500 England was witnessing the rise of the Tudor dynasty. A recent biographer of Henry VII, for instance, notices on how the Venetian ambassador was shocked at the ease with which the king was able to change laws to his pleasure with no respect for the "traditional English laws" (Penn, 2012) and comments extensively on Henry VII's increasingly personal rule.[11] In subsequent pages, Penn describes how Henry

began following its conquest beginning in 1402).

[9] Below, we also consider Tudor despotism, and "pactism": the idea of negotiated contract between the crown and the ruler, with each part assuming concrete responsibilities (sections A2 and A3).

[10] Under Henry VIII, it prevailed "the old idea that sovereignty was primarily the right to give final decisions in justice, as evidenced by the famous preamble to Henry VIII's Act in Restraint of Appeals which allows the king "plenary, whole and entire power ... to render and yield justice and final determination to all matter of folk residents or subjects within his realm" (Strayer, 2005, p.102)

[11] "There was ... a constant undertone of friction between the city [of London] which jealously guarded its political and economic liberties and a crown which sought to control and manipulate them. Cracking down on ... economic crimes indulged by the city's merchants and financiers, Henry had made examples of prominent Londoners with a series of swinging fines .... Henry's embargo on trade with the Low Countries had wrecked London's economy; with merchants unable to export goods to the great commercial centers of Bruges and Antwerp, a ban reinforced by sporadic harassment and intimidation by Royal

Table A6: Total summons of parliaments and motives which justified them.

	Total summons	Dynastic issues	% of total	Extraord. tax	% of total	Neither of the two	% of total
1385-1449							
Castile	42	6	(14%)	33	(79%)	6	(14%)
England	44	2	(5%)	31	(70%)	13	(30%)
Portugal	38	4	(11%)	20	(53%)	16	(42%)
1450-1499							
Castile	15	6	(40%)	9	(60%)	2	(13%)
England	18	5	(28%)	11	(61%)	2	(11%)
Portugal	19	1	(5%)	13	(68%)	5	(26%)
1500-1549							
Castile	21	1	(5%)	17	(81%)	14	(18%)
England	11	2	(18%)	6	(55%)	3	(27%)
Portugal	4	1	(25%)	4	(100%)	0	(0%)
1550-1599							
Castile	15	0	(0%)	15	(100%)	0	(0%)
England	15	1	(7%)	12	(80%)	3	(20%)
Portugal	5	3	(60%)	1	(20%)	1	(20%)
1600-1649							
Castile	11	1	(9%)	9	(82%)	1	(9%)
England	10	0	(0%)	9	(90%)	1	(10%)
Portugal	4	1	(25%)	3	(75%)	0	(0%)
1650-1699							
Castile	2	0	(0%)	2	(100%)	0	(0%)
England	30	5	(17%)	12	(40%)	15	(50%)
Portugal	5	5	(100%)	1	(20%)	0	(0%)
1700-1749							
Castile/Spain	4	4	(100%)	0	(0%)	0	(0%)
England	4	0	0%	1	25%	3	75%
Portugal	0	0	(−)	0	(−)	0	(−)
1750-1800							
Castile/Spain	2	2	(100%)	0	(0%)	0	(0%)
England	–	–	–	–	–	–	–
Portugal	0	0	(−)	0	(−)	0	(−)
1385-1700							
Castile/Spain	106	20	(19%)	85	(80%)	12	(11%)
England	128	15	(12%)	82	(64%)	40	(31%)
Portugal	75	15	(20%)	42	(56%)	22	(29%)

Sources: same as in Figure 2 of the main text. Notes: percentages can sum to more than 100%, because some parliaments were summoned for both dynastic and tax reasons. Since we are counting parliamentary summons in this table, the exercise no longer applies to the Parliament of Britain once it becomes permanent (1707). The category political and dynastic issues includes dealing with dynastic crises as well pledging the allegiance of the Cortes to the heir to the throne.

VII continued to tighten his grip over London's merchants: "[crown officials] would tell the city what to do and when ... they were being treated as a sub-department of the royal household, and would be required to foot a huge bill for the privilege" (Penn, 2012).

Table A7: Full list of parliaments, with motives indicated

Castile/Spain	England/Britain	Portugal
Valladolid/1385, Dynastic	WonderfulParl/1386, Dynastic, Tax	Coimbra/1385, Dynastic, Tax
Segovia/1386, Tax	Westminster/1388, Dynastic, Tax	Porto/1387
Briviesca/1387, Tax	Cambridge/1388, Tax	Braga/1387, Tax
Palencia/1388, Tax	Westminster/1390A	Lisboa/1389, Tax
Segovia/1389, Tax	Westminster/1390B	Coimbra/1390, Tax
Guadalajara/1390, Tax	Westminster/1391, Tax	Évora/1390-1
Madrid/1391, Dynastic	Westminster/1393, Tax	Viseu/1391, Tax
Burgos/1392, Tax	Westminster/1394	Coimbra/1394, Tax
Madrid/1393, Tax	Westminster/1395, Tax	Santarém/1396, Tax
Segovia/1396	Westminster/1397	Coimbra/1397, Tax
Madrid/1399, Tax	Westminster-Shrewsbury/1397, Tax	Coimbra/1398, Tax
Tordesillas/1401, Tax	1stHenIV/1399	Porto/1398, Tax
Toledo/1402	2ndHenIV/1401, Tax	Lisboa/1399, Tax
Toledo-Segovia/1406-7, Tax	3rdHenIV/1402, Tax	Coimbra/1400
Guadalajara/1408, Tax	Westminster/1404, Tax	Guimarães/1401
Valladolid/1409, Dynastic, Tax	Conventry/1404, Tax	Montemor-o-Novo/1402
Córdoba-Segovia/1410, Tax	Westminster/1406, Tax	Santarém/1402
Valladolid/1411, Tax	Gloucester/1407, Tax	Lisboa/1404, Tax
Guadalajara/1412, Tax	Westminster/1410, Tax	Santarém/1406
Madrid-Valladolid-Tordesillas/1419, Tax	Westminster/1411	Évora/1408
Valladolid/1420, Tax	Westminster/1413, Tax	Lisboa/1410
Ávila-Ocaña/1420-22	Westminster/1414, Tax	Lisboa/1412
Valladolid/1425	Westminster/1415, Tax	Lisboa/1413
Palenzuela/1425, Tax	Westminster/1416, Tax	Estremoz/1416
Toro/1426	9thHenV/1420	Lisboa/1417
Zamora/1427, Dynastic	10thHenV/1421	Santarém/1418, Tax

officials. To the consternation of the city guilds, when trade officially restarted in 1496 Henry himself decreed the appointment of the new governor of the English merchant adventurers in Bruges, a privilege previously reserved to the city" (Penn, 2012, Chapter 2).

Valladolid/1429, Tax
Burgos/1429, Tax
Medina-del-Campo/1430, Tax
Salamanca/1430, Tax
Palencia/1431
Medina-del-Campo/1431, Tax
Zamora/1432, Tax
Madrid/1433, Tax
Madrid/1434-5, Tax
Alcalá-Madrid-Toledo/1435-6, Tax
Madrigal/1438, Tax
Valladolid/1439-40, Tax
Valldolid/1442, Dynastic, Tax
Burgos/1444, Tax
Olmedo/1445, Dynastic, Tax
Valladolid/1447, Tax
Valladolid/1451, Tax
Burgos-Portillo/1453, Tax
Córdoba/1455, Tax
Madrid/1457-8, Tax
Madrid-Toledo/1462, Dynastic, Tax
Salamanca/1465, Tax
Madrid-Ocana/1469, Dynastic
Santa-Maria-de-la-Nieva/1473, Tax
Segovia/1474, Dynastic
Medina-del-Campo/1475, Dynastic, Tax
Madrigal/1476
Toledo/1480
Toledo/1489, Dynastic
Ocana/1499, Dynastic
Sevilla/1499, Tax
Sevilla/1500-1, Tax
Toledo-Madrid-Alcala/1502-3, Tax
Toro/1505, Dynastic
Salamanca-Valladolid/1506, Tax
Madrid/1510, Tax
Burgos/1511
Burgos/1512, Tax

11thHenV/1421, Tax
1stHenVI/1422
2ndHenVI/1423
3rdHenVI/1425
4thHenVI/1426
5thHenVI/1427
6thHenVI/1429, Tax
7thHenVI/1431, Tax
8thHenVI/1432, Tax
9thHenVI/1433, Tax
10thHenVI/1435, Tax
11thHenVI/1437, Tax
12thHenVI/1439-40, Tax
13thHenVI/1442, Tax
14thHenVI/1445, Tax
15thHenVI/1447, Tax
16thHenVI/1449, Tax
17thHenVI/1449-50, Tax
18thHenVI/1450-1
19thHenVI/1453-4, Tax
20thHenVI/1455
21stHenVI/1459
1stEdwIV/1461-2, Dynastic
2ndEdwIV/1462-3, Tax
3rdEdwIV/1467, Tax
22ndHenrVI/1470, Tax
4thEdw/1472-5, Tax
5thEdw/1478
6thEdw/1483, Tax
1stRicIII/1484, Tax
1stHenVII/1485, Dynastic
2ndHenVII/1487, Tax
3rdHenVII/1489, Tax
4thHenVII/1491, Tax
5thHenVII/1495
6thHenVII/1497 , Tax
7thHenVII/1504, Tax
1stHenVIII/1510

Lisboa/1427, Tax
Santarém/1430, Tax
Leiria-Santarém/1433
Évora/1436, Tax
Leiria/1438
Torres-Novas/1438
Lisboa/1439
Torres-Velhas/1441, Dynastic, Tax
Évora/1442
Évora/1444, Tax
Lisboa/1446, Dynastic
Évora/1447, Tax
Santarém/1451, Tax
Lisboa/1455, Tax
Lisboa/1456, Tax
Lisboa/1459
Évora/1460, Tax
Guarda/1465, Tax
Santarém/1468, Tax
Santarém/1471
Coimbra-Évora/1472-3
Lisboa/1473, Tax
Évora/1475, Tax
Montemor-o-Novo/1477, Tax
Santarém-Lisboa/1477, Tax
Lisboa/1478, Tax
Évora-Viana/1481-2
Santarém/1482, Tax
Évora/1490, Tax
Lisboa/1498
Lisboa/1499
Lisboa/1502, Tax
Torres-Novas/1525, Tax
Évora/1535, Tax
Almeirim/1544, Tax
Lisboa/1562, Tax
Lisboa/1579, Dynastic
Almeirim/1580, Dynastic

Burgos/1515, Tax
Valladolid/1518, Tax
Santiago-Coruna/1520
Valladolid/1523, Tax
Toledo/1525, Tax
Valladolid/1527
Madrid/1528, Tax
Segovia/1532, Tax
Madrid/1534, Tax
Valladolid/1537, Tax
Toledo/1538
Valladolid/1542, Tax
Valladolid/1544, Tax
Valladolid/1548, Tax
Madrid/1551, Tax
Valladolid/1555, Tax
Valladolid/1558, Tax
Toledo/1559, Tax
Madrid/1563, Tax
Madrid/1566-1567, Tax
Cordoba/1570, Tax
Madrid/1573-1575, Tax
Madrid/1576-1578, Tax
Madrid/1579-1582, Tax
Madrid/1583-5, Tax
Madrid/1586-8, Tax
Madrid/1588-90, Tax
Madrid/1592-98 , Tax
Madrid/1598-1601, Tax
Valladolid/1602-4
Madrid/1607-11, Tax
Madrid/1611-2, Dynastic
Madrid/1615
Madrid/1617-20, Tax
Madrid/1621, Tax
Madrid/ 1623-1629, Tax
Madrid/ 1632-1636, Tax
Madrid/ 1638-1643, Tax

2ndHenVIII/1512, Tax
3rdHenVIII/1515, Tax
4thHenVIII/1523-4, Tax
5thHenVIII/1529-36, Dynastic
6thHenVIII/1536, Dynastic
7thHenVIII/1539-40
8thHenVIII/1541-2
9thHenVIII/1545, Tax
1stEdw/1547-52, Tax
2ndEdwVI/1553, Tax
1stMary/1553
2ndMary/1554
3rdMary/1554-5, Tax
4thMary/1555
5thMary/1557-8 , Dynastic, Tax
1stElizl/1559, Tax
2ndElizl/1563, Tax
3rdElizl/1571, Tax
4thElizl/1572-83, Tax
5thElizl/1584, Tax
6thElizl/1587, Tax
7thElizl/1589, Tax
8thElizl/1593, Tax
9thElizl/1597-8, Tax
10thElizI/1601, Tax
1stJam/1604-10
2ndJam/1614, Tax
3rdJam/1621, Tax
4thJam/1624, Tax
1stChar/1625, Tax
2ndChar/1626, Tax
3rdChar/1628-9 , Tax
4thChar/1640, Tax
LongParl/1640-53, Tax
Barebones/1653, Dynastic
1stProtec/1654, Tax
2ndProtec/1658, Dynastic
3rdProtec/1659, Dynastic

Tomar/1581, Dynastic
Lisboa/1583
Lisboa/1619, Dynastic
Lisboa/1641, Tax
Lisboa/1642, Tax
Lisboa/1645-6, Tax
Lisboa/1653, Dynastic
Lisboa/1668, Dynastic
Lisboa/1674, Dynastic
Lisboa/1679-80, Dynastic
Lisboa/1697-8, Dynastic

Madrid/ 1646-1647, Tax	Convention/1660, Dynastic, Tax
Madrid/ 1649-1651, Tax	Cavalier1/1661-2, Tax
Madrid/ 1655-1658, Tax	Cavalier2/1663, Tax
Madrid/ 1660-1664, Tax	Cavalier3/1664
Madrid/ 1701, Dynastic	Cavalier4/1665
Madrid/ 1709, Dynastic	Cavalier5/1665, Tax
Madrid/1712-1713, Dynastic	Cavalier6/1667, Tax
Madrid/ 1724, Dynastic	Cavalier7/1668
Madrid/ 1760, Dynastic	Cavalier8/1669
Madrid/ 1789, Dynastic	Cavalier9/1671, Tax
	Cavalier10/1673, Tax
	Cavalier11/1673
	Cavalier12/1674
	Cavalier13/1675
	Cavalier14/1675
	Cavalier15/1678
	Cavalier16/1678
	Cavalier17/1678
	3rdCharII/1679, Tax
	4thCharII/1680-1
	5thCharII/1681
	1stJamII/1685
	1stWilliam/1689, Dynastic, Tax
	2ndWilliam/1690
	3rdWilliam/1695
	4thWilliam/1698, Tax
	5thWilliam/1700, Tax
	6thWilliam/1701
	1stAnne/1702
	2ndAnne/1705

Notes: In the early eighteenth century, the parliament of England became that of Britain and the Cortes began representing Spain (except Navarra), hence the denominations England/Britain and Castile/Spain in the columns. The motives indicated in this table follow those of Table 2 of the main text, with "dynastic" standing for dynastic issues and "tax" standing for extraordinary tax requested by the ruler. If nothing is indicated, then "neither of the two" applies. Sources: same as in Figure 2 of the main text.

Other books emphasize the brutal methods through which state centralization was achieved. A well-known Tudor historian, for instance, writes that "Fifteenth-century En-

glish rulers had been content to be partners of the nobility. For Henry VII, in comparison, the goal was a monarchy in which the nobility served the king" (Guy, 2000, p.12). He goes on to argue that "Henry VIII managed in an absurdly short space of time to erect a network of financial and administrative checks and blueprints, the records of which never left the hands of himself and the selected few and the methods of which were equally of their own devising ... these vital matters were dealt with only by the king and his inner ring. It was a system that owed nothing to Parliament ... it owed everything to the king himself, whose vigilance and attention to detail were invincible" (Guy, 2000, p.14).

Henry VII "launched direct attacks on the local, territorial powers of the nobles, if he felt that those powers had been exercised in defiance of perceived royal interests. Such attacks normally took one of two forms, either that of prosecutions and fines at law for misfeasance, or the more drastic resort of attainder and forfeiture" (Guy, 2000, p.15-16). Both punishments were forms of outright confiscation. As Guy emphasizes, fined nobles would usually plead guilty, as it was cheaper – they would surely be declared guilty anyway, which informs us about the lack of impartiality of the judiciary. Attainder and forfeiture, which were parliamentary statures proclaiming the victim a traitor, always led to both execution and the total confiscation of the victim's lands, though some, but by no means all, were usually later restored to the legal heirs. Tudor policy was especially harsh in this regard, and Henry VII realized he could abuse this power to augment the Crown's absolute and relative power and income (Guy, 2000, p.17-18). Henry VII ostensibly forced the nobility to place penal bonds of considerable sums – these could range between £100 and £1,000[12] – "to enforce what he considered to be acceptable behavior on his subjects. These bonds aimed to hold the political nation, especially the nobility, at the king's mercy, and to short-circuit due process of common law in the case of offence by the victims. If anyone was deemed to have misbehaved, he would simply be sued for debt on his bond – it was not possible to litigate over the nature or extent of the alleged offense. In other words, Henry VII used bonds to defeat the law" (Guy, 2000, p.18).

But for no other period was the "absolutism" of the English king so clear than for Henry VIII, which we may be reminded, achieved the remarkable feat of being able to expropriate church (monastic) property on a large scale. Under a series of legal and administrative rulings between 1536 and 1541 – the authority for which parliament gave him though the Act of Supremacy of 1534 which made him Supreme Head of the Church in England and eventually severed all ties to Papal authority – Henry VIII disbanded monasteries, priories, convents and friaries in England, Wales and Ireland, while appropriating

[12] £1000 in 1500 is worth £750,800 in 2015 prices (using a retail price index; see Officer and Williamson, 2018).

their assets and incomes in the process. Yet Henry's greed over Church property did not end here. As one authority puts it, further emphasizing the instrumentalization of calling parliament to start with: "In 1547, Somerset reissued Cromwell's iconoclastic injunctions to the clergy ... He summoned parliament four months later ... [and] the chantries were dissolved. These minor foundations existed to sing masses for the souls of their benefactors; as such, they encouraged beliefs in purgatory and the merits of requiems, doctrines which Protestants denied. Somerset justified their abolition on religious grounds, but it is plain that he coveted their property even more to finance his Scottish campaigns ... Shrines, and the jewels and plates inside them, were promptly seized by the Crown" (Guy, 2000, p.48). This episode provides a sober warning about interpretations of parliamentary meetings as a means of achieving checks to executive power.

After the short reign of Edward VI, in which protestant reforms in the spirit of his father continued, it followed the shorter reign of Mary Tudor (r. 1553-1558). All but the first year was of joint rule with Philip of Spain, who was already the regent of this country and would succeed Charles V as Philip II in 1556, inheriting as well the Habsburg lands in the Netherlands, Italy and the New World. While Mary's intention to backtrack Protestant reforms meant that her rule was possibly the most constrained of all the Tudors, one authority, while recognizing at times she had to make concessions, still takes no issue in writing that "she was sufficiently strong a ruler to get her own way" (Guy 2000, p. 53).

It may also seem hard to believe that Philip II of Spain was willing to compromise, given that Acemoglu et al (2005) mark him as totally unconstrained in Spain, and he was never willing to compromise in a significant manner in the Northern Netherlands, as evidenced by the fact that the Twelve Year's truce was only signed in the years following his death. Yet in England, Mary's attitude was often uncompromising. Shortly after marrying Mary Tudor "Philip was soon acting as king and sovereign on his own account" (Guy 2000, p. 54). So in England, at Mary Tudor's request, parliament "repealed Henrician and Edwardian religious legislation almost without comment, and re-enacted the heresy laws – all the time the sole condition was that the Church lands taken since 1536 should not be restored" (Guy 2000, p. 61). That status quo was respected because parliamentary members had benefitted from the redistribution of those lands. The situations in which parliament did pursue executive checks, in particular in blocking Mary's intent to return Church property, were those in which their own lands were directly or indirectly at stake. The goal was not to protect private property in abstract, but instead "Parliament expanded its political horizons in defense of what it saw as the interests of the landowning establishment" (Guy 2000, p. 62, 29). This is why parliament's program of attempting

to limit Philip's power as well as protect Elizabeth's claim to the crown was one and the same. Yet if we take a narrow North-Weingast view on executive checks, the parliament's success was mild at best: for example, they were unable to prevent, in 1557, Philip's wish that England enter into war against France. As it was, Elizabeth "took a high view of her Royal prerogative, and held as robust a belief in the divine right of kings as her father and successor" (Guy 2000, p. 97). Her successor James I later emphasized the same, as we mention in the main text. As Sir Thomas Smith wrote in his 1565 *Republica Anglorum*, the English monarchs "hath absolutely in his power the authority of war and peace" (cit in. Elton 1982, p. 18).

This narrative overview confirms that the seventeenth century was the century of great constitutional change for England (Hoppit 2017, p. 18). Critical changes were already under-way by the mid-seventeenth century (as argued on a fiscal level by O'Brien 1988), but 1688-9 unquestionably represented a further break, measured, for instance, by the volume of legislative output (Hoppit 2017, p. 43).

Finally, a few words on religion. Regardless of the actions of the Inquisition in Spain and Portugal, in England Catholics were frequently persecuted from the Reformation onwards, until religious tolerance increased over the second half of the 17th century. Furthermore, it is well known the Catholic Monarchs of Spain (Isabella I of Castile and Ferdinand II of Aragon) ordered the expulsion of the Jews from their kingdoms in 1492 (and a few years later Portugal did the same, under Spanish pressure). But this cannot be considered a mark of relative intolerance, at least by comparison with England. In England, King Edward I had expelled the Jews centuries earlier, in 1290, in the culmination of centuries of persecution, which contrasted with the relative Iberian tolerance at the same time. It was only Oliver Cromwell who permitted their return to England – in exchange for a generous payment – in 1657.

A4. Historical discussion: pacts and partnerships

Did Iberia commit the original sin of absolutism? *Circa* 1500, Portugal and Spain were two polities on their way to became large world empires. However, regardless of their grandiose imperial visions, the rule of these two monarchies in their home countries was restricted by principles and institutions. As the contemporary chronicler Hernando Del Pulgar wrote, the Catholic kings of Spain earned the support of the peasants by giving them the royal liberty [*libertad real*] (cited in Elliot, 1966). In the polities that constituted the Crown of Aragón, Isabella resented what she termed as the "arrogance" of their parliament, the *Cortes*. The united Aragonese realms had permanent political institutions with

which the monarchs were forced to devolve executive power: the *Generalitats* of Barcelona and Valencia. This sharing of powers between the monarchy and the people gave origin to the notion that peninsular political institutions were marked by the cooperation and mutual assistance between the two parts, what Spanish historians call *pactismo*. *Pactismo*, like its polar opposite "absolutism", is a historian's term that was minted in the 1950s to describe a limited monarchy, bound to respect the privileges and laws of its subjects (Baydal Sala, 2015). Naturally, under such a monarchy, the people were bound to obey the crown and provide it with the required resources. This theory matched well-known scholastic authorities like Aquinas, who claimed that the power belonged to the people which transferred it then to the monarch. However, this transmission was conditional and the people could reassume it if the otherwise just power of the king decayed into tyranny. These political doctrines continued to be cited throughout the period studied here and in the seventeenth century inspired Portugal's recovery of independence against Spain in 1640 (following 60 years of dynastic union), as well the resistance to the encroachment of privileges by the Habsburg monarchy. As mentioned, in the Crown of Castile, the prerogative powers of the monarchy were far more concentrated than in Aragón. Nevertheless, political life in Castile circa 1500 has been described as the unresolved tension between absolutism and *pactismo* (Álvarez Palenzuela, 1991, p.81, Elliot, 1966).

In this setting, the parliaments (called *Cortes* in Castile and Portugal) saw their role as one of partnership to the kings in government. The late fourteenth century in Portugal and Castile saw the ascent of bastard kings to both thrones. The Avis and Trastamara dynasties ruled with the support of the *Cortes*. João I of Portugal (regnavit 1385-1433) was elected by the *Cortes* of Coimbra/1385, whereas Enrique II of Castile (regnavit 1367-1379) summoned the *Cortes* of Burgos/1366 immediately after being proclaimed king by his faction. By doing so, he expected to legitimate before the proctors reunited in parliament that his seizure was justified as a fight against a tyrant (Henriques, 2019). The Catholic Kings, likewise, regarded themselves as the embodiment of the interest of the community of the realm, against the feudal misrule that affected Castile under their predecessors. Accordingly, throughout the fifteenth and sixteenth centuries, in Spain and Portugal, the *Cortes* were often summoned as the arbiter of some thorny dynastic issues and called to support reforms instigated by the monarch but debated in the *Cortes* (in Portugal, *Cortes* of Évora-Viana/1481-2).

Also, the *Cortes* acquired legislative influence in the fifteenth century. For instance, laws were enacted in *Cortes* in response to grievances and problems presented by the municipalities (*povos*). Monarchs could also dictate laws of their own (*pragmaticas*), while in England, all laws had to be assented by parliament (Elton, 1982). Nonetheless,

as elsewhere in Europe, Portuguese and Castilian *Cortes* were keen to remember that extraordinary taxation had to be granted by the parliaments to the monarch. In the *Cortes* de Leiria-Santarém/1433, the representatives claimed that *pedidos* could only be made in case of 'great necessity and consent of the people', a claim that the king did not challenge (Sousa, 1990, vol.2, p.314). This idea is also repeated often in the Castilian *Cortes*.

In Portugal, the *Cortes* drove a harder bargain than Spain. In Castile, only twenty major municipalities were effectively represented in the *Cortes* and the considerable costs of their meetings were defrayed by the king. In Portugal, small towns with a few hundreds were also present. Consensus was harder, in theory. Consent to taxation, indeed, was not automatic and there are examples of refusal to the demands of the monarchy (Lisbon in 1459 and Santarém/Lisbon in 1477). The Portuguese *Cortes* also regarded that their role as the representatives of the realm meant that they could not be reformed according to the will of the king. The representatives, for instance resisted King João II's attempt to reform the *Cortes* and create a permanent commission united with the clergy and nobility. This attempt to "unite and rule" (Henriques, 2008) floundered in the said *Cortes* of Santarém/Lisbon in 1477. The result was that the Portuguese Cortes became less pliable than those of Castile. However, their relative obstinacy likely led to their being summoned less frequently in the sixteenth century and, possibly led them to lose some of their power over the executive.

In the early seventeenth-century the Castilian parliament checked several fiscal reforms. In the words of Thompson, the *Cortes* were able to "determine what would be taxed, how, and at what rates, leaving certain discretionary powers available to the towns to accommodate local circumstances" (Thompson, 1982, p.36). Even under the forceful rule of the Count-Duke of Olivares (1621-43), when new political tracts were claiming that external wars justified taxation without consent, the *Cortes* were able to hold to their preferred taxation method (the *millones*) (Jago, 1981, p.320). In the early seventeenth-century the Castilian parliament checked several fiscal reforms. In the words of Thompson, the *Cortes* were able to "determine what would be taxed, how, and at what rates, leaving certain discretionary powers available to the towns to accommodate local circumstances" (Thompson, 1982, p.36).

In both fifteenth-century Castile and Portugal, monetary reforms sought the formal assent of the people throughout the *Cortes*. In Castile, the precedent for this was set in the *Cortes* of Toro-Valldolid in 1442, where the representatives claimed, against time-honored Castilian legal doctrine, that the issue bullion was not a prerogative of the prince

and that no change of fineness or standard could be made with the assent of the *Cortes*, a function that the future *Cortes* and kings observed (Oliveira Serrano, 1988, p.254). We do not find similar claims in Portugal, but clearly the monarchs sought to discuss monetary matters and make important decisions on matters of coinage in the *Cortes*, a move that provided added legitimacy to their policies. This contrasts starkly with the absolute power that the monarchs of England had on all matters monetary, as claimed by Sir Thomas Smith in his survey of the English Laws: *the prince useth also absolute power in crying and decreeing the money of the realm* (Elton, 1982, p.18).

Another area in which the personal will of the king's prerogatives were checked is state finances. In this period, finances were indeed "public", in the sense that their management was secured by an entity independent of the king: the (*vedores da Fazenda*). Portuguese budgets, or *estados de Fazenda*, were produced by this set of three officials, who assigned the standing payments to individuals and the monarch to the sources of revenue. These officials also acted as judges in all fiscal litigation between tax collectors, tax-farmers and taxpayers. In Castile, the *Consejo de Hacienda* had a similar profile. Thus, by 1500, budgeting was to some extent independent from the executive power of the monarchy, unlike the intense personal intervention of Henry VIII of England (Schofield, 2008, p.207).

A5. Data on annuities

Life annuities played a minor role in the sovereign credit of the countries compared here. Still, their like-to-like maturity provides a comparable indicator of the state's commitment to debt service. These were initially sold in many European countries using the 14.25% (or 1:7) rate that was advised by the canonists and in use in Venice since the fifteenth century. As some numerate observers realized when analyzing mortality tables (Turnbull, 2017), this rate was very rewarding for investors. As such, the rates fell almost everywhere in Europe, a trend that is only belatedly observable in England. The interest rates charged by the government of Holland were on pair with Castile in 1580-1599 and slightly above those of Portugal in 1600-19, but performed better after that period.

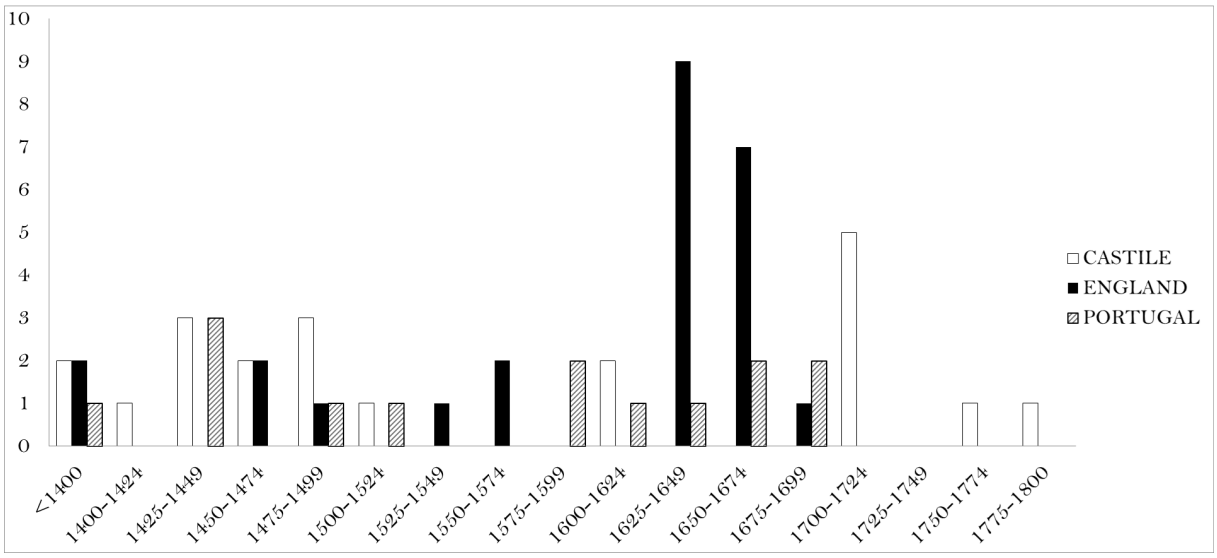
Table A8: Nominal and real interest rates paid on public lifetime annuities.

	Holland, nominal	Holland, real	Portugal, nominal	Portugal, real	Castile, nominal	Castile, real	England, nominal	England, real
1540-59	13%	11%	-	-	-	-	14%	10%
1560-79	-	-	-	-	14%	12%	-	-
1580-99	14%	12%	-	-	14%	12%	-	-
1600-19	11%	11%	10%	11%	13%	12%	-	-
1620-39	9%	8%	-	-	13%	12%	-	-
1640-59	-	-	14%	14%	-	-	-	-
1660-79	9%	9%	-	-	-	-	-	-
1680-99	9%	9%	-	-	-	-	12%	12%
1700-19	9%	10%	-	-	-	-	-	-
1720-39	-	-	-	-	-	-	-	-
1740-59	-	-	-	-	-	-	13%	13%

Sources: For Holland, Homer and Sylla (2005, p.116), Gelderblom and Jonker (2011), Bovers (2009, p.36, 57, 68); for Portugal, Costa (1885, p.45-46); for Castile, Álvarez-Nogal (2010); for England, Dickson (1993), Turnbull (2017). Inflation corrected as in Figure 5 of the main text. Approximations: Midpoints were used for the nominal interest rate of Holland 1660-79, which varied between 7.14 to 10%, Castile 1560-79 and 1580-99 which varied between 14 and 14.3%, and England 1680-99 which varied between 10 and 14%.

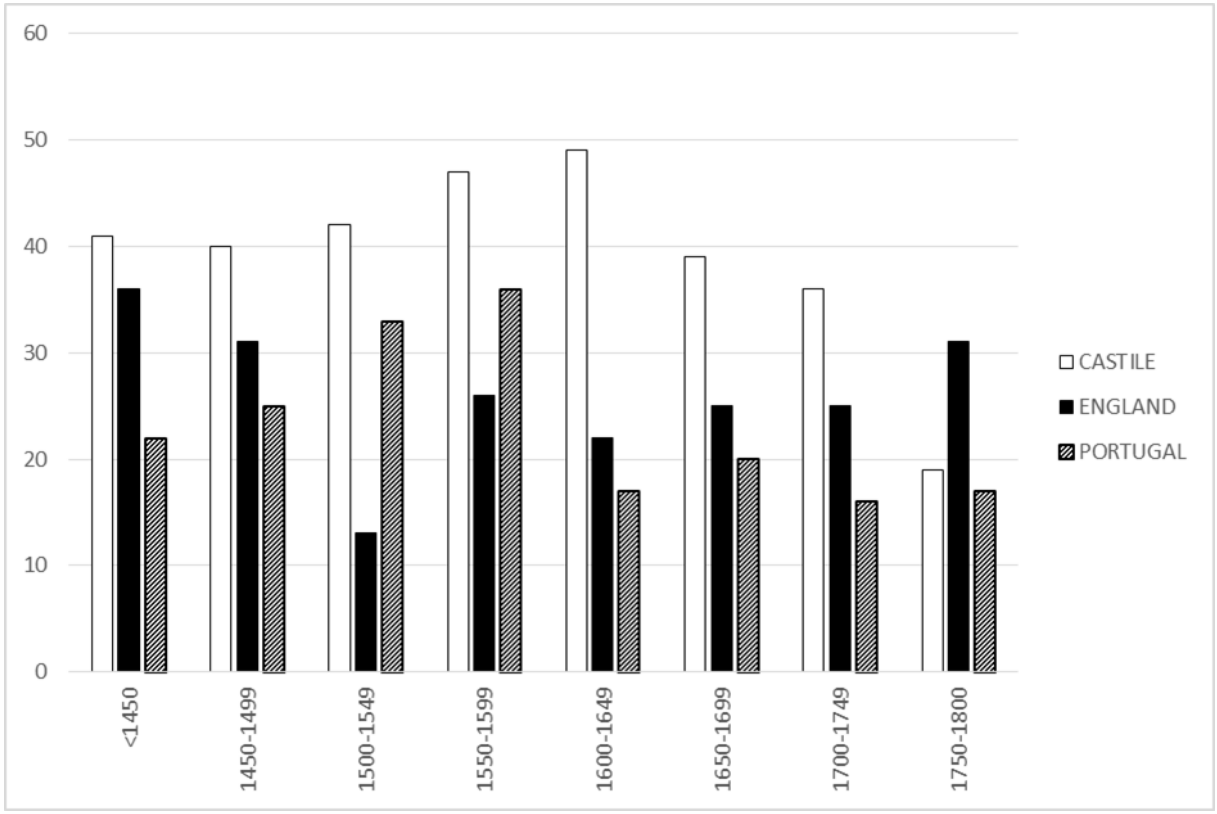
A6. Additional figures

Figure A1: Years with parliaments dealing with dynastic issues, 1385-1800



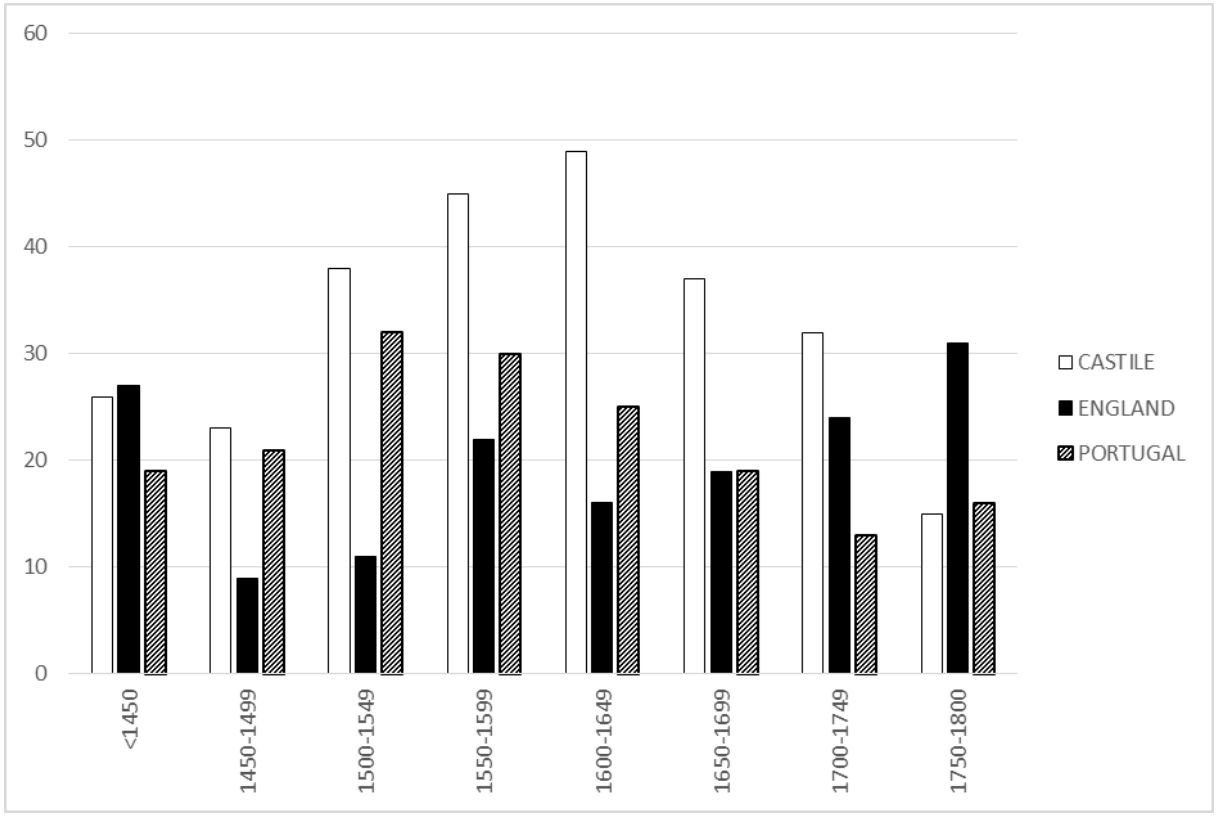
Sources: as in Figure 2

Figure A2: Total number of wars.



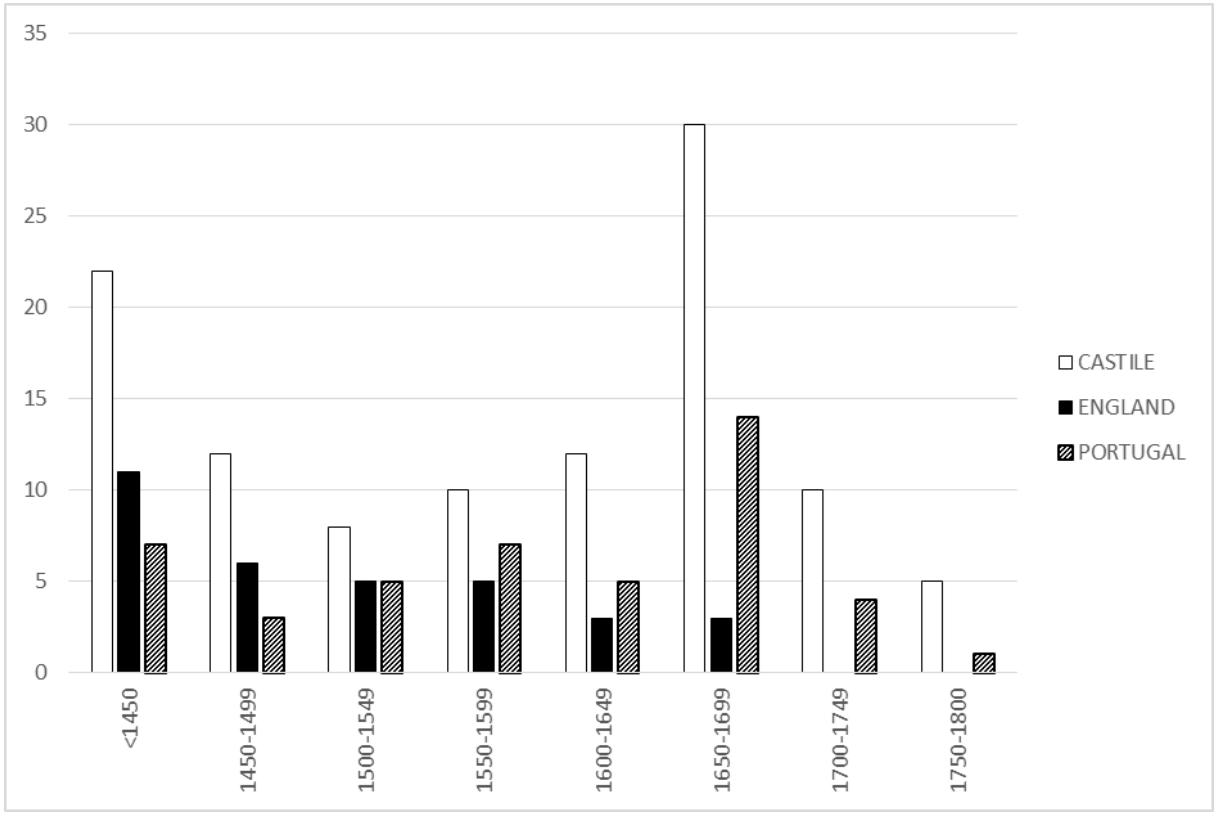
Sources: Henriques (2008), Rodger (1997), Rodger (2005), García Hernán (2017), Barata and Teixeira (2004), BCW.

Figure A3: Offensive wars.



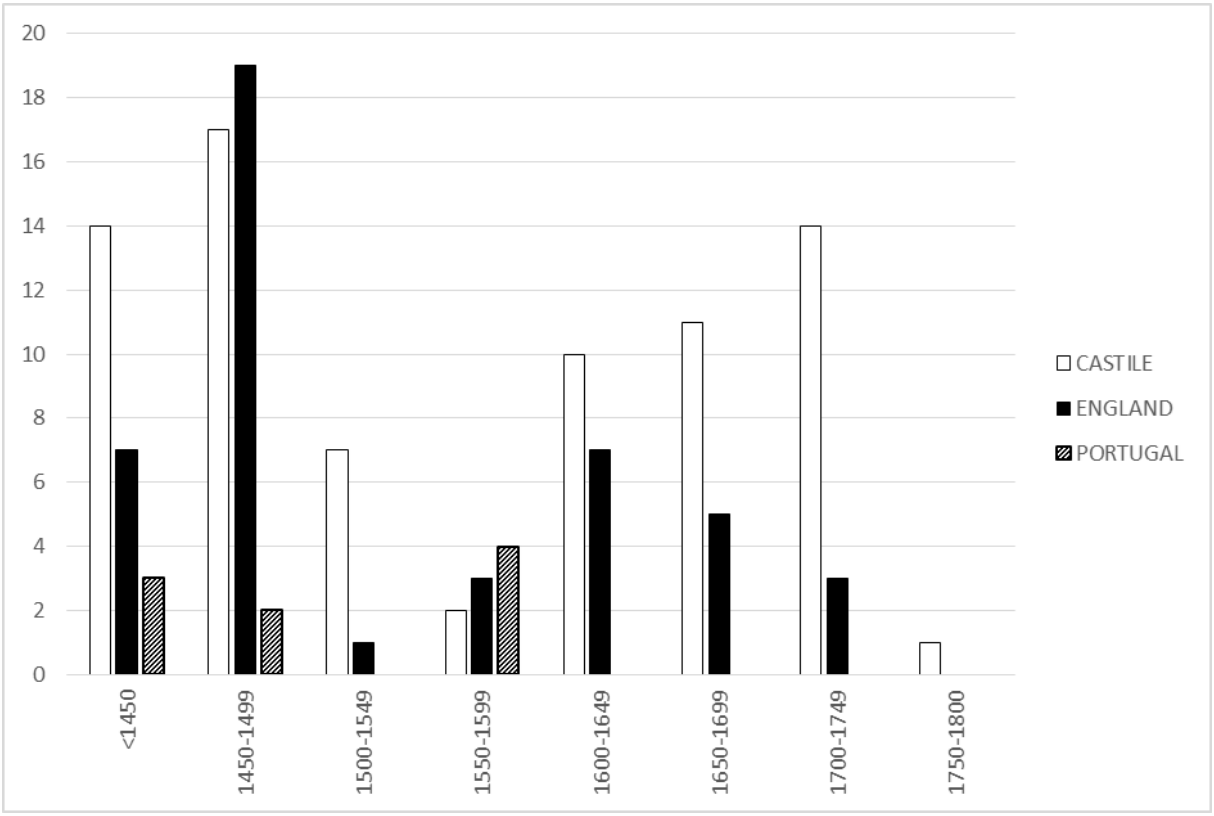
Sources: as in Figure A2.

Figure A4: Defensive wars.



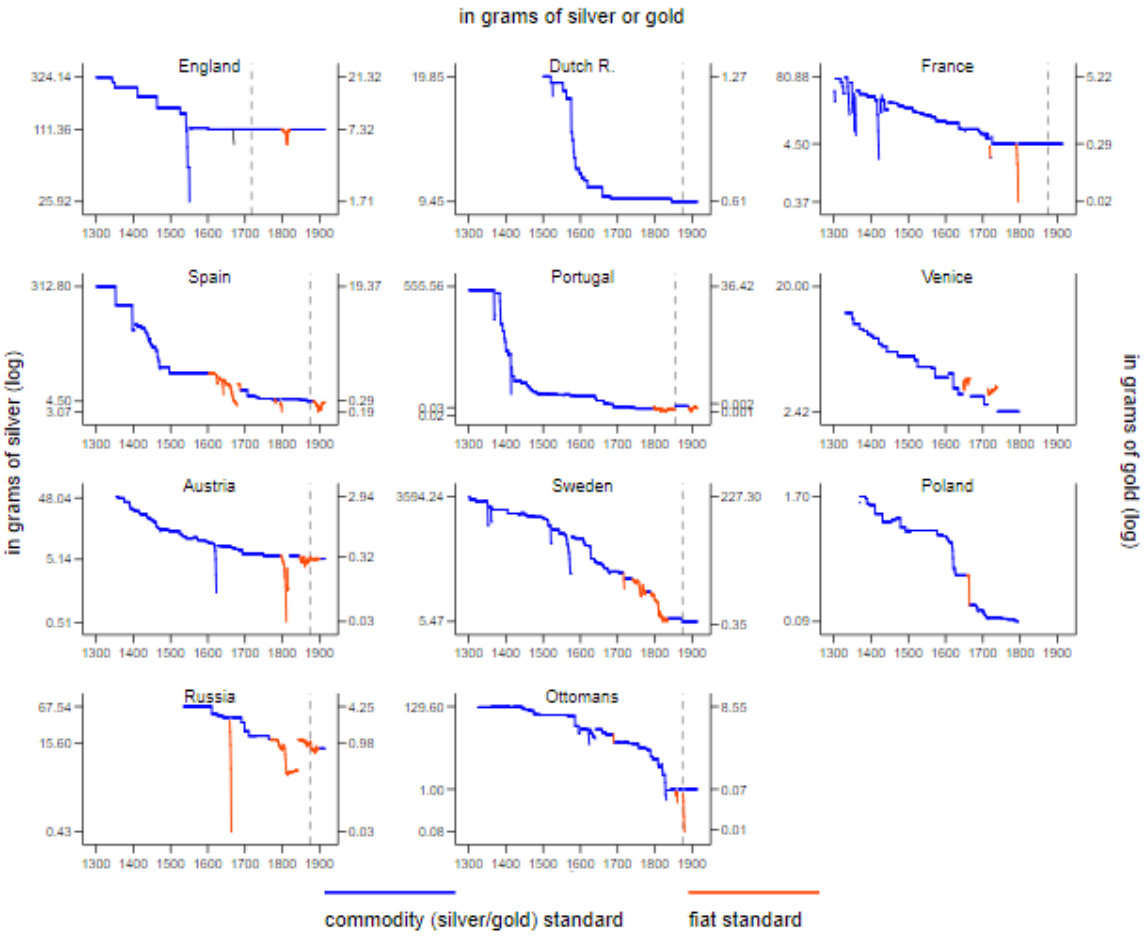
Sources: as in Figure A2.

Figure A5: Civil wars.



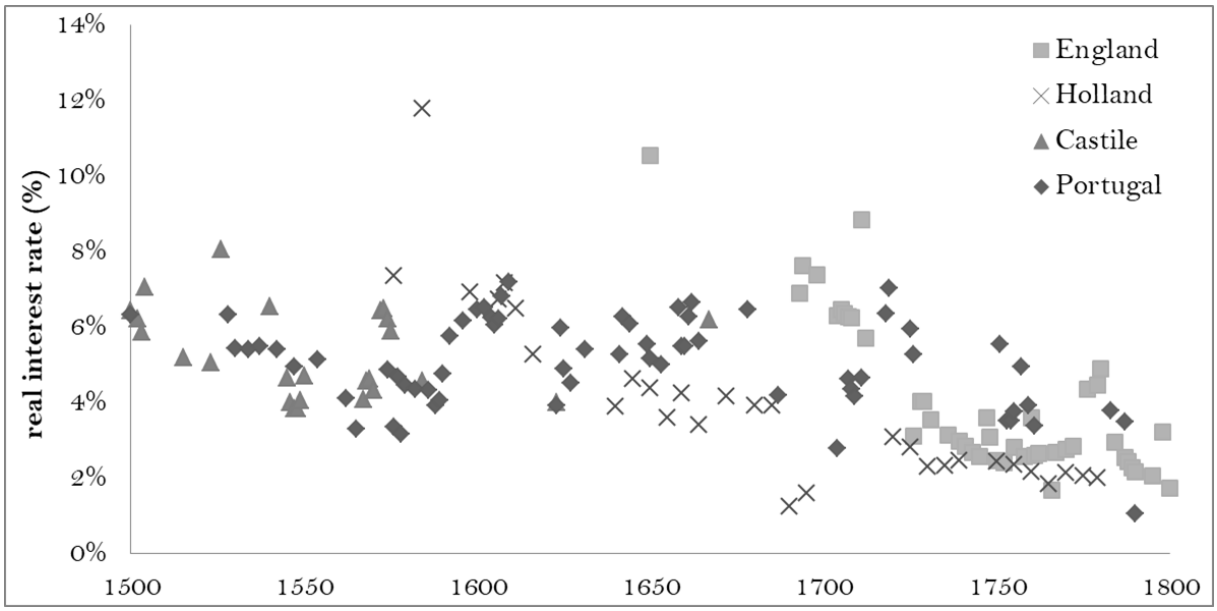
Sources: as in Figure A2.

Figure A6: Full set of monetary stability series.



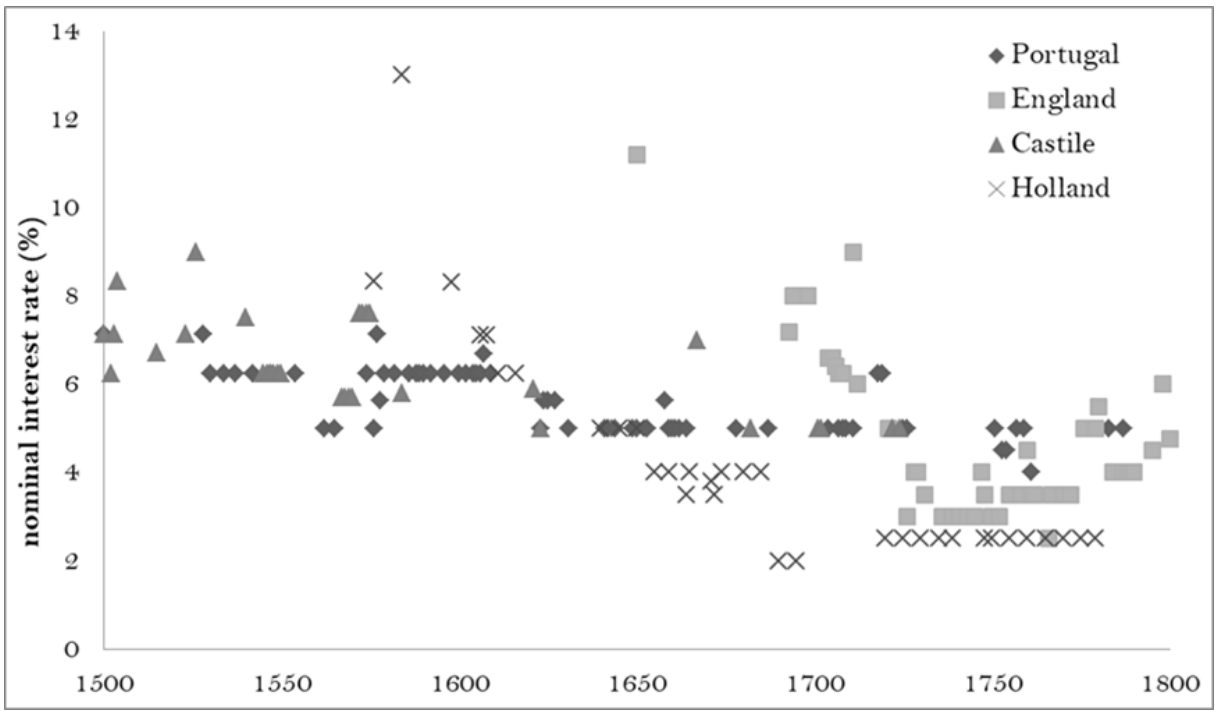
Source: Karaman et al. (2019)

Figure A7: Real interest rates of new issues of long-term public debt



Sources: same as Figure 5 from the main text, with the exception of the inflation series for England, here based on Clark (2019). As in the main text, we exclude here Holland's 20 per cent nominal interest rate corresponding to 1574.

Figure A8: Nominal interest rates of new issues of long-term public debt



Sources: same as Figure 5 from the main text. Holland's 20 per cent interest rate from 1574 not shown.

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