War and the Rise of Parliaments

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Abstract

We study European political institutions between 1350 and 1700 AD. Our model links i) the calling of parliament and ii) the transition to Rule by Parliament with the risks associated with wars and battles, and with the underlying economic relationship between monarchs and the commercial elites. We compile a dataset for England, Castile, France, and Portugal that includes yearly parliamentary activity, battles, war years, and measures of economic activity. In support of the model, parliaments are more likely to be called when a) the country suffers a territorial defeat; and b) agriculture output is relatively low. The causal relation between a territorial defeat and parliament being called is supported by an event-study comparing the impact of defeat relative to a win. We find evidence of a short-term (one year) impact, but no long-term effects. Transition to Rule by Parliament require specific goldilocks parameters according to the model (moderate military strength and moderate alignment between monarch and the commercial elites) and are only feasible during a window of opportunity, i.e., while a sitting monarch is facing an existential threat.

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Even though we are the crowned King and all France is under our rule, we have but the strength of a man, and without you we can achieve nothing. A prince, as powerful as he may be, will not reign peacefully without the love of his subjects. It is for this reason, lords, that we wish to order nothing within our realm that is against your will. Charles V at the opening of the French Parliament in 1370. (Bordonove (2014) p. 1; self-translation from French)

1 Introduction

There is a wide consensus that wars had a profound influence in shaping Western European nation states and their institutions (e.g. Tilly (1990)), and indeed, well into the 18^{th} century, the main business of government was to finance and wage wars.[1] The objective of this paper is to demonstrate how these wars, and the manner in which they were financed, influenced the constitutional history of Western Europe. To do this, we focus on four countries: England, Castile, France, and Portugal during the late medieval period – a point at which all four countries had well-established parliaments – up to the end of the 17^{th} century – a point at which clear differences in constitutional structure had emerged.[2] By then, England had a sovereign parliament that held annual sessions, whereas Castile, France, and Portugal saw a drastic reduction in their parliamentary activity and could be categorized as absolutist regimes (Figure 1).

We introduce a model that explains the underlying factors that lead a monarch to call parliament and shows how the same factors, in some extreme cases, may lead to a full-blown political transition to a system in which parliament, not the monarch, is in charge. Importantly, this model provides us with testable predictions that we take to the data.

In particular, our model assumes that: a) foreign policy is in the hands of the Monarch, and b) the outcome of direct conflict is dependent on the amount of resources invested in them. As a result, a Monarch may find herself having to raise war funds from an Elite, who, in turn, may not agree with the Monarch's foreign policy. These foreign policies will either turn out to be *low-risk* or *high-risk*. Should the confrontation be lost, high-risk policies will have even higher costs for both the Monarch and the Elite. Our model predicts that parliaments are more likely to be called when: a Nation faces an unexpected *high-risk*, rather than a *low-risk* period, and when resources that are easily available to the Monarch become limited.

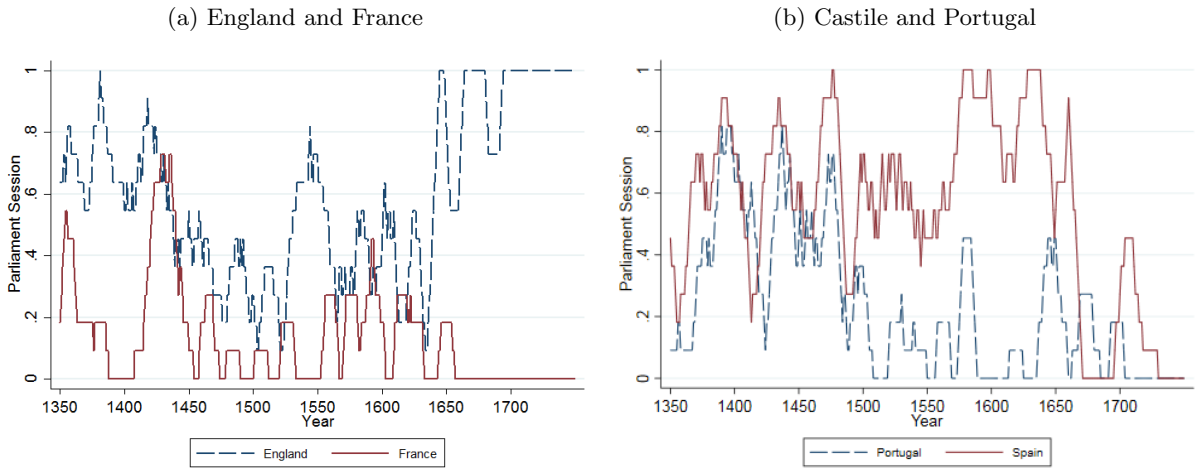
These same factors, we argue, are also crucial in determining the possibility of constitutional change. In our setting, we contrast 'Absolutism', where the Monarch has complete control of foreign policy with 'Rule by Parliament' where it is parliament that has this control.[3] A

[1] In 19^{th} century England, between 74% and 85% of government revenue was dedicated to warfare (Brewer (1989)). For similar data on France and Castile, see Bonney and Bonney (1993) and Thompson (1994).

[2] There is a long standing literature that has underlined the importance of warfare for the *birth* of parliaments in the preceding period, i.e., the 12^{th} and 13^{th} century (e.g., Bisson (1966), Procter (1980), Maddicott (2010), and De Mesquita (2022)).

[3] As we will discuss in more detail below, under what we call Absolutism in the model, there cannot be full commitment to future transfers from the Monarch. Rule by Parliament is the solution to this problem.

Figure 1: Parliament activity in England, Castile, France, and Portugal – 1350-1700



Note: 11-year moving averages. A value of 1 indicates that a parliament was summoned in the past five years, the current year, and the future five years. Data compiled by authors. Sources are described in Section 4.1.

transition from Absolutism to Rule by Parliament might occur in rare, *extreme-risk* periods in which the ruling Monarch risks being removed from power. In such situations, the Monarch is in a weak bargaining position, and two conditions are necessary for the Elite to credibly withhold resources. First, that the replacement Monarch must be preferred by the Elite (e.g., the replacement Monarch may be militarily stronger or more aligned with the Elite's interests). Second, the Elite must control a large share of the country's resources. Once the leverage of these two factors is sufficient, the Monarch may promise the Elite benefits in future periods, and the only credible way of doing so it to transfer decision-making power regarding foreign policy over to parliament. In such instances, there is a window of opportunity for transition to Rule by Parliament: the Elite either accepts the bargain or welcomes the alternative invading Monarch.[4]

Parliament in the model is the mechanism through which the Monarch bargains with the commercial Elite. The calling of parliament itself implies that the Monarch is prepared to make concessions. Historical evidence for this in England is discussed in detail in Angelucci et al. (2017). They show how the Monarch must make concessions when bargaining for taxes with self-governed English commercial towns. One clear example from France is the Parliament of 1356, where Etienne Marcel, leader of the third-estate demands from the king that a council including representatives of the commercial elites be formed and that the king make no decision without the council's participation. In exchange, Etienne Marcel offers an army of 30,000 men (Boulle (1845), pp 45-50; extract available in the on-line appendix C). The Parliament of 1370

[4]Brückner and Ciccone (2011) and Aidt and Leon (2016) discuss the concept of a 'democratic window of opportunity' relating weather shocks to riots and democratic reforms in modern day Africa.

offers another clear example with the words of Charles V already quoted above the introduction.

The main empirical contribution involves linking annual parliamentary activity with detailed information about battles and economic variables for the period 1350-1700.[5] Our work is the first to provide a complete theoretical and empirical framework linking economic variables and battle outcomes, not just wars, with the calling of parliament and the development of political institutions. No previous research on parliamentary activity during this period, i.e., Van Zanden et al. (2012), Stasavage (2010), and Abramson and Boix (2019), has explained the annual variance of parliamentary activity, nor has the literature investigated the link between annual parliamentary activity and annual battle data.[6] This finer level of analysis is crucial to being able to test our model, where parliament and the Monarch are misaligned, so that parliament is only called when the war turns in such a way to constitute a threat for the Monarch. This is in contrast with a more simplistic view of the relationship between parliaments and warfare according to which parliaments exist as a way of funding wars, a view that disregards the possible misalignment over foreign policy between the Monarch and the Elite.

We have two main findings. Firstly, parliaments are more likely to be called when a conflict suddenly becomes *high-risk*. Our proxy for the onset of a high-risk period is a defeat in a territorial battle, i.e., a battle within the country's boundaries or its immediate vicinity. Our event-study analysis compares territorial defeats with territorial wins. The object of interest is the effect of a battle outcome given that a battle occurred. We find a clear causal relationship between a territorial defeat (as opposed to a win) on the number of parliaments within the year, but no long-term effects. We find no evidence of differential pre-trends. Moreover, we use detailed battle descriptions from Bradbury (2004) and Clodfelter (2002) to infer whether there were clear odds for either side immediately before the battle took place. For the overwhelming majority of territorial battles, odds do not seem stacked towards any side, thus suggesting that we can interpret territorial battle outcomes as quasi-random events. This assessment echoes the argument in Blainey (1988) (p. 53) that for conflict to occur both sides must have optimistic views of their winning probabilities.[7]

Secondly, we find that parliaments are less likely to be called when the Monarch has a relatively easy access to resources. We proxy this with the share of agriculture for England, agricultural consumption per capita for Castile and Portugal, and inferred rainfall data for England, France, and Castile. We interpret agricultural income as being more readily available to a Monarch than commercial income for two complementary reasons: a) the landed aristocracy is naturally aligned with the Monarch, as their own success is usually dependent on the success

[5]The sources for the data are described in detail in Section 4.1.

[6]Stasavage (2010) runs a regression linking the 50 year average frequency of parliamentary meetings with average years a country was at war, but finds no clear effect. Blank et al. (2017) study the link of regime type (but not parliamentary yearly variation) with yearly battle data. In recent work, Becker et al. (2021) use detailed battle data for German cities and characteristics of their city council (size and composition) from the period 1250-1750 to show that wars lead to more representative institutions at the city level.

[7]Slantchev (2003) summarized this view as 'the only surprise in war is that at least one side that expected to win actually lost'.

of that Monarch or dynasty,[8] and b) commercial and financial wealth is harder to tax or expropriate than agricultural wealth, simply because it is easier to hide.[9] Since agricultural output is highly dependent on weather, and as long as we focus on weather variation within the reign of a monarch, we can think of weather or agricultural output variation as exogenous to the onset of war.[10]

Our two main findings suggest three conclusions. Firstly, they provide support for our nuanced view of the relationship between warfare and political institutions, one that is based on the fundamental misalignment of interest in foreign policy between a Monarch and the Elite. Secondly, they address two alternative theories that have been put forward as explanations for the transition to Rule by Parliament: an incrementalist view (Congleton (2010), Salter (2015), and Leon (2020)) and a view that puts internal conflict front and center (e.g., Royle (2000), Ellis and Fender (2011), and Aidt and Franck (2015)). Our empirical results in this section show little support for the incrementalist approach. We do find some support for the internal conflict view, but less robust and only in the later part of our period of study. We provide further discussions of these results in Section 5.6. Finally, our theoretical model has two main sets of predictions: one that explains why a Monarch may wish to call parliament and one that explains why a full transition to Rule by Parliament may occur. The underlying trigger is essentially the same and the difference is one of degree: for Rule by Parliament to obtain, the threat faced by the Monarch must be existential, not just high-risk. Existential threats are very rare, making an empirical analysis impossible, but high-risk are not, so our empirical analysis of the causes for the calling of parliament shows that the fundamental mechanism that is linked to both the calling of parliament and to transitions to Rule by Parliament in our model is sound.

Still, in section 5 we discuss several case studies supporting our results for extreme-risk situations. In particular, we discuss the annexation of the Portuguese Crown in 1580 by Phillip II of Spain, which provides us with an example where the Elite preferred dynastic change with a much more powerful Monarch to a transition to Rule by Parliament. A further example of an elite preference for dynastic change is the acclamation in 1216 of Prince Louis of France as King of England, by invitation of the Barons who rebeled against King John, and who had negotiated the Magna Carta. Furthermore, we discuss the Glorious Revolution of 1688, that set supporters of William of Orange against supporters of James II of England, eventually leading to Rule by Parliament. This momentous constitutional transition was negotiated during a war with France and under the auspices of a territorial defeat against Jacobites in Scotland - Killiecrankie in July

[8] Dincecco et al. (2011) discuss an example of such proximity for the case of the Italian Risorgimento.

[9] While the bureaucracy handling the excise and customs taxes were around 3,000 strong in late 17^{th} century England, the land tax scarcely had an administration at all (Brewer (1989)). Ertman (1997) notes that a land tax is easier to administer because a fixed amount can be attributed to each region, which is then left to raise the resources as the local officials see fit. See also Bates and Lien (1985), Levi (1988), and Bonney (1995). Finally, Angelucci et al. (2017) emphasize how "Farm Grants", where the King delegated tax collection to boroughs in exchange for a lump sum, tended to be concentrated in those boroughs where the commercial sector was more important precisely because of the difficulties for the Crown of taxing this sector directly.

[10] Were we to take a long-term perspective, the exogeneity no longer holds. Iyigun et al. (2017) show that long-term cooling in temperatures increase the probability of the onset of conflicts.

1689 - and a major naval defeat - Beachy Head in June 1690.

We also discuss how a reduction in the Elite's leveraging power may have diminished the likelihood of a transition to Rule by Parliament in France and Castile. In the example of France, two key factors moved political institutions away from Rule by Parliament. Firstly, France became a major military force in the continent after the Hundred Years' War, making it less vulnerable to external threats. And secondly, France's economy retained a relatively small non-agricultural sector, giving the Monarch little incentive to bargain with the commercial Elite. Conversely, after the loss of the Hundred Years' War, and throughout our period of interest, England remained a power of middling military strength, and the share of agriculture in England's economy steadily declined throughout the 17^{th} century.

We place ourselves in a literature discussing the rise of parliament against autocratic rule. We follow Acemoglu and Robinson (2006)' view of constitutional change, i.e, that the implementation of Rule by Parliament is a commitment device that solves an intertemporal transfer problem. We depart from Acemoglu and Robinson (2006) as the main policy variable in our model is the decision of which wars to fight, not redistribution. Indeed, models of political transitions mostly focus on recent (19^{th} and 20^{th} century) transitions to democracy, and on a state whose main role is either to redistribute wealth to the masses, e.g., Acemoglu and Robinson (2001), Boix (2003), and Ticchi and Vindigni (2009)), or the provision of public goods, e.g., Lizzeri and Persico (2004), Llavador and Oxoby (2005), and De Mesquita and Smith (2010).

Our focus on external conflict as the main driver of institutional change is similar to that of Tilly (1990) and further departs from Acemoglu and Robinson (2006) and North et al. (2009)'s focus on internal conflict. Tilly (1990) proposes two distinct linear and continuous paths of state building towards a high-capital high-coercion stage,[11] one path is coercion-intensive (Absolutism in our model) another capital-intensive (Rule-by-Parliament). We demonstrate how war plays a further role: an extreme external threat may allow for a discontinuous jump from one path to another.

In broader terms, we also speak to a large literature in history, sociology, and political sciences that has analyzed the relationship between the economy and institutions (e.g., Lipset (1959), Moore Jr. (1966), Bates and Lien (1985), Ertman (1997), and Stasavage (2003)); and between war and institutions (e.g., Hintze (1975), Downing (1988), Tilly (1990), Kiser and Drass (1995), North et al. (2009), Stasavage (2011); Spruyt (2007) and Stasavage (2016) for a review).

In the next section we introduce the model, in section 3 we present the model's results, in section 4 we present our empirical results, and in section 5 we discuss some historical examples. Section 6 concludes and discusses some possible extensions, such as allowing for dynamics in the economic variables. The online appendix contains proofs and additional material.

[11] See Tilly (1990), Figures 2.6 and 2.7.

2 The Model

Our setting focuses on a specific country ("our country") and an infinite number of periods $t \in \{0, 1, \ldots\}$. In each period, there are two players: the (commercial) Elite (E), which represents the wealthy ruling class, and a Monarch (M).[12] The main potential for conflict between E and M in our model is the decision of which foreign policy to pursue, and so whenever it is important to distinguish between the player that has the authority to direct foreign policy and the other player, we use the superscript I to denote the former and $-I$ to denote the latter. So, under *Absolutism*, we have $I = M$ while under *Rule by Parliament*, $I = E$. In some (rare) cases, we will allow for the possibility that M is replaced by another Monarch in the future, with $\widehat{M}$ denoting the possible replacement; still, unless it is important to distinguish them, we will use M to denote a generic Monarch. In each period t, we assume that E and M own all the wealth in our country, which produces an investable income equal to 1. Investable income can be invested in wars which - if won - generate an additional return. A proportion $k \in (0, 1)$ is available to the Monarch directly, through ownership, expropriation, taxation that doesn't need negotiation, or loans.[13] The Elite's fraction $1 - k$ cannot be utilized without E's consent. The main conflict we intend to model is between the commercial Elite and the Monarch (and, possibly, the landed elite allied with the Monarch).[14] In addition to investable income, there is also non-investable income ϕ, which belongs to E and cannot be utilized or even collateralized for wars, and which we interpret as sustenance income [15] We also assume that E and Monarchs discount the future period's utility at a rate $\beta \in (0, 1)$.

In each period, I chooses foreign policy and a war occurs in which she will participate, while $-I$ chooses whether to participate or not.[16] Wars differ along two possible dimensions. The first dimension differentiates between wars that are *low-risk* for our country and wars that are *high-risk*. In low-risk wars, such as offensive campaigns, only the resources invested in war are at stake. High-risk wars, such as defensive campaigns are wars where - in case of defeat - some losses are incurred regardless of whether there is active participation in the war. The second dimension differentiates wars on the basis of the foreign policy adopted by I. This can be *aligned,* which means that it is profitable, in expectation, for both M and E, or it can be *misaligned* because it may be very profitable for M but not profitable for E (e.g. M puts egoistic or dynastic considerations above the welfare of the country). Whether a period is high-risk or

[12] We abstract from the collective-action problem and free-rider issues by treating E as an individual player.

[13] Any loans from outside the country would have to be backed up by the Monarch's resources as collateral; such loans can be thought of part of the Monarch's income. Note that k is the same in each period.

[14] Our model is also compatible with a scenario where the non-agricultural sector of the economy is negligible and the conflict is between the Monarch and the landed nobility, e.g., the Barons. Such an interpretation would be appropriate before our period of study when parliaments did not include a third estate, i.e., the commercial elites. The bargaining over the Magna Carta is a good example, which we discuss in section 5.2.

[15] Presumably, Monarchs also need a fraction of their income for expenditure besides wars, but such income will not be very significant and is therefore omitted from the model. As will become apparent below, this simplification has no substantial impact on our results.

[16] This is for simplicity: the model could be extended to allow for the possibility of periods without wars without significantly affecting our results.

low-risk is assumed to be independent of the type of foreign policy chosen: in each period, π is the probability that the period will turn out to be high-risk while a low-risk period will occur with complementary probability. In the former case, we will also allow for the possibility that the threat is so severe that the Monarch will be replaced in case of a defeat in the sense that a new monarch will take over in the following period. We will call this, an *extreme-risk* scenario.

In each period, we allow M and E to bargain over the expected returns to war, with the interpretation that I might decide to give $-I$ a sufficiently large fraction of the spoils in order to guarantee the latter's participation. This is modeled as a Nash-bargaining process with τ representing the net transfers from M to E and where the disagreement point are the players' payoffs when $-I$ does not participate.[17] Under Absolutism, whenever $\tau > 0$, we say that M is *Calling Parliament* because this captures the basic function of parliaments as vehicles for the bargaining between a Monarch and the Elite over resources available to the Crown for war.[18] These (possible) transfers between the two players have two restrictions:

- Only tangible resources can be transferred.

As we describe in detail below, a misaligned foreign policy is attractive to M because of the ego-rents it is capable of generating, but these will typically be non-tangible gains that cannot be transferred to E.

- Inter-temporal transfers are not allowed.

This is a crucial assumption and necessitates some clarification. Inter-temporal transfers are possible to the extent that the promises made by the two parties are credible, and in the particular context we are interested in, this means that rulers could make credible promises of future transfers to the commercial sector. Certainly, in reality, reputational concerns meant that rulers did keep their promises whenever it was convenient for them to do so. But there never was full commitment, especially towards the commercial sector. Indeed, there are many examples throughout the Ancient Regime of rulers choosing to break the (sometimes implicit) promises they made. Famous examples range from the outright expropriation of church property in the Dissolution of the Monasteries in England (Hoyle (1995)), to the repeated debt restructuring undertaken by the Spanish Crown (Thompson (1994)), to John Law's forced conversion of species into notes at a fixed rate in 18th century France (Norberg (1994)). Our assumption that inter-temporal transfers are not allowed, can then be seen as an extreme version of the more realistic case where such transfers are possible but not fully credible. Such transfers would be significantly

[17] Under Rule by Parliament, of course, the Elite is always involved and, as will become clear below, in our model the Monarch will always participate in wars even with Rule by Parliament. Therefore, the only interesting case is that of Absolutism and the decision to call parliament, by providing the Elite with the transfers needed to ensure participation.

[18] To a certain extent, bargaining between a ruler and its subjects has always existed but in the middle ages parliaments came into being as a formal mechanism for these negotiations. See Maddicott (2010) for a history of the beginnings of the English Parliament.

discounted so that the extreme assumption we make of full discounting makes the model more tractable but does not qualitatively affect our results. The only way, in our model, to make inter-temporal commitments for the Monarch, is to concede Rule by Parliament.

2.1 Timing

We will denote with I_t the player in charge of foreign policy in period t while $-I_t$ denotes the other player. We assume the game begins under Absolutism and so $I_0 = M$. In each period $t \geq 0$,

1. I_t decides whether to pursue an aligned or a misaligned foreign policy.
2. Nature determines whether the war is high-risk or low-risk. In the former case, Nature also determines whether there is extreme risk or not.
3. Having observed the type of war determined by Nature, if $I_t = M$, then M chooses whether to concede Rule by Parliament (RBP) - where $I_s = E$ for all $s \geq t+1$ - or stick with Absolutism. If $I_t = E$ then nothing happens.
4. Net transfers τ_t are determined through Nash Bargaining.
5. Conditional on the transfers offered, $-I_t$ decides whether to join the war or not.
6. Given the participation decision by $-I_t$, Nature determines whether the war is won or not and payoffs are realized.

If an extreme-risk war is lost in period t then Monarch $\widehat{M}$ takes over and $I_s = \widehat{M}$ for any $s \geq t+1$. We assume that extreme-risk periods are only possible when $I_t = M$ and can no longer happen otherwise. This closes the model in the simplest way possible without significantly affecting our results.

2.2 Payoffs

The returns from war in a low-risk scenario depend on the choice of foreign policy. The total expected returns available from a unit of investment from such wars are equal to

$$\varepsilon^f x_t^M + \Pr\left(x_t^E, x_t^M\right) \rho^f$$

with

$$\Pr(1,1) = \begin{cases} p & if \quad M \\ q & if \quad \widehat{M} \end{cases} \quad \Pr(0,1) = \begin{cases} pk & if \quad M \\ qk & if \quad \widehat{M} \end{cases}$$

$$\text{and } \Pr(1,0) = \begin{cases} p(1-k) & if \quad M \\ q(1-k) & if \quad \widehat{M} \end{cases}$$

$\Pr\left(x_t^E, x_t^M\right)$ captures the probability of winning the war and depends on the participation decision of the two sides. The variable $x_t^J \in \{0,1\}$ represents player I's decision to enter the war or not.[19] For a given foreign policy $f = a$ (aligned) or $-a$ (misaligned), ρ^f represents the total returns in tangible resources and ε^f the returns in non-tangible resources (ego-rents) for M, where the former can only be obtained in case of victory while the latter only requires participation. The linearity assumption for probabilities simplifies the analysis, but our results would still hold if we assumed that the probability of winning was an increasing and (weakly) concave function of the overall resources invested in war.

We distinguish between aligned and misaligned foreign policy by assuming that

$$\rho^f = \begin{cases} R & if \quad f = a \\ r & if \quad f = -a \end{cases} \quad \varepsilon^f = \begin{cases} 0 & if \quad f = a \\ \gamma & if \quad f = -a \text{ and } M \\ \zeta & if \quad f = -a \text{ and } \widehat{M} \end{cases}$$

We will also make the following assumptions.

Assumption 1 $r < \frac{1}{p} < R$

Assumption 2 $\gamma > 0$ and either $\zeta = 0$ or ζ is arbitrarily high.

Assumption 1 gives aligned foreign policy profitable returns whereas - except for ego-rents to the Monarch - misaligned foreign policy does not have profitable returns ($pr < 1$). Note that we do not put restrictions on q for misaligned wars which allows for the possibility that the new Monarch $\widehat{M}$ brings a sufficiently high(er) probability of winning such that $qr \geq 1$ is possible. Assumption 2 allows us to focus - when we look at extreme-risk scenarios - on the most interesting cases: either the new Monarch $\widehat{M}$ has no ego-rents, or very high ego-rents.

We embed the Nash Bargaining assumption directly in our payoffs. Let $\tau_t^f\left(x_t^E, x_t^M\right)$ represent the net transfers from M to E given the participation decisions.[20] If one of the two sides does not participate in the war, then it gets its reservation income while the participating side gets all the returns from war.

We can now describe per-period payoffs for low-risk, high-risk and extreme-risk periods:

- In a *low-risk* period, M's expected utility given participation decisions will be

$$u_t^{M,f}\left(x_t^E, x_t^M\right) = \begin{cases} \varepsilon^f + pk\rho^f - \tau_t^f(0,1) & if \quad \left(x_t^E, x_t^M\right) = (0,1) \\ \varepsilon^f + p\rho^f - \tau_t^f(1,1) & if \quad \left(x_t^E, x_t^M\right) = (1,1) \\ k - \tau_t^f(1,0) & if \quad \left(x_t^E, x_t^M\right) = (1,0) \end{cases}$$

[19] Given our assumption that the agent who decides on foreign policy has to participate in the war, we must have that $x_t^M = 1$ under Absolutism and $x_t^E = 1$ under RBP. Clearly, if we have a new Monarch, then x_t^M should be replaced with $x_t^{\widehat{M}}$.

[20] By modeling τ_t^f as net transfers from M to E we are of course allowing for the possibility that such transfers are negative.

and the corresponding expected returns for E are

$$u_t^{E,f}\left(x_t^E, x_t^M\right) = \begin{cases} p\left(1-k\right)\rho^f + \phi + \tau_t^f\left(1,0\right) & if \quad \left(x_t^E, x_t^M\right) = (1,0) \\ \phi + \tau_t^f\left(1,1\right) & if \quad \left(x_t^E, x_t^M\right) = (1,1) \\ \left(1-k\right) + \phi + \tau_t^f\left(0,1\right) & if \quad \left(x_t^E, x_t^M\right) = (0,1) \end{cases}$$

- In a *high-risk* period, the difference is that if a given side does not participate in a high-risk war, but the war is lost, then that side will still incur losses: l for E and L for M respectively. We assume, for consistency, that $l \leq 1-k+\phi$ and $L \leq k$. Thus,

$$U_t^{M,f}\left(x_t^E, x_t^M\right) = \begin{cases} u_t^{M,f}\left(x_t^E, x_t^M\right) & if \quad \left(x_t^E, x_t^M\right) = (1,1) \text{ or } (0,1) \\ u_t^{M,f}\left(1,0\right) - \left(1-p\left(1-k\right)\right)L & if \quad \left(x_t^E, x_t^M\right) = (1,0) \end{cases}$$

while

$$U_t^{E,f}\left(x_t^E, x_t^M\right) = \begin{cases} u_t^{E,f}\left(x_t^E, x_t^M\right) - \left(1-p\right)l & if \quad \left(x_t^E, x_t^M\right) = (1,1) \\ u_t^{E,f}\left(x_t^E, x_t^M\right) - \left(1-p\left(1-k\right)\right)l & if \quad \left(x_t^E, x_t^M\right) = (1,0) \\ u_t^{E,f}\left(0,1\right) - \left(1-pk\right)l & if \quad \left(x_t^E, x_t^M\right) = (0,1) \end{cases}$$

- In a *extreme-risk* period, in case of a defeat, M will be replaced in the following period by $\widehat{M}$ while E will lose all her resources, including ϕ, but just for the current period. Thus,

$$\widetilde{U}_t^{M,f}\left(x_t^E, x_t^M\right) = U_t^{M,f}\left(x_t^E, x_t^M\right)$$

while

$$\widetilde{U}_t^{E,f}\left(x_t^E, x_t^M\right) = \begin{cases} p\left(1-k\right)\left[1-k+\phi\right] + \tau_t^f\left(1,0\right) & if \quad \left(x_t^E, x_t^M\right) = (1,0) \\ p\phi + \tau_t^f\left(1,1\right) & if \quad \left(x_t^E, x_t^M\right) = (1,1) \\ pk\left[1-k+\phi\right] + \tau_t^f\left(0,1\right) & if \quad \left(x_t^E, x_t^M\right) = (0,1) \end{cases}$$

As for RBP, our time-line assumes that if it is conceded in any period, it will be enforced in the future as long an extreme-risk war is not lost in the same period.

Finally, we can describe payoffs for the infinite horizon. To do so, we assume that from both M's and E's perspective the probability of extreme-risk periods is zero. Then, the total expected utility for $J \in \{E, M\}$ in the game is

$$\sum_{t=0}^{\infty} \beta^t \left[\left(1-\pi\right)u_t^{J,f_t} + \pi U_t^{J,f_t}\right],$$

The assumption that extreme risks are negligible, guarantees that when choosing foreign policy in a given period, both the Elite and the Monarch never see the risk of devastating effects as a possibility. This assumption considerably simplifies the analysis and fits with the idea that

foreign policies that could lead to extreme risks would never be undertaken if the probability of such risks was significant.[21] Another way to interpret this would be that monarchs are more optimistic (or reckless) than they should be and systematically underestimate the probability of finding themselves in a position where they could be losing it all. Hoffman and Rosenthal (2000) suggest that such occurrences are indeed very rare, but not impossible.

Regardless of the interpretation, in case of a defeat by the Monarch M in an extreme-risk scenario, a new Monarch will take her place. Crucially, the new Monarch *does not* lead to a change in k. This follows from our interpretation that k is an inherent feature of our country's economy and thus independent of the Monarch in power. Monarchs may be able to implement policies that change the underlying structure of the economy, but our assumption is that even in these cases, the effects are too far into the future for the Monarch or the Elite to take them into consideration. To simplify notation, we abuse it slightly by using p and γ to represent the generic Monarch's probability of winning and her ego-rents while using ζ and q only when we wish to emphasize we are discussing the new Monarch.

Three final comments regarding the model set-up. First, we build on Jackson and Morelli (2007)'s modeling of wars. But instead of studying the impact of various motivations for war between Monarch and Elite, we simply assume that wars happen, and thereafter both Monarch and Elite may differ over which of those wars they should fight. For example, unnecessarily costly dynastic wars, or wars led by the Catholic Monarch of Protestant subjects against another Protestant country, can be interpreted as 'misaligned'. Commercial or colonial wars can be interpreted as 'aligned'. Hoffman and Rosenthal (2000), Ticchi and Vindigni (2009), and Arias (2013) use wars to model political transitions, but war is an exogenous threat with a costly, fixed payoff.[22]

Second, a key difference between our setup and Acemoglu and Robinson (2001) regards the implicit collective-action problem associated with revolutions.[23] As noted by Tullock (1971), in a revolution, each individual citizen has an incentive to free-ride on the revolutionary efforts of others in order to avoid the individual costs.[24] In our model, individual elite members are not required to coordinate in order to realize the threat of not assisting the Monarch during a defensive war; if anything, the collective-action problem arises if they wish to assist the Monarch.

Third, our model is dynamic only in a limited sense because we do not allow any of our parameters to evolve over time. A fully-fledged dynamic model would also allow, for example, for k to increase or decrease depending on the foreign policy decisions by the Monarch and the

[21] Our results would still hold if it was common knowledge that $\chi > 0$, as long as this was sufficiently small, but as mentioned in the main text, this would significantly complicate the analysis.

[22] In Hoffman and Rosenthal (2000), the King and the Elite each control a section of a country's economy. A country can attain higher revenues by unifying resources, either through parliamentary rule or an autocratic system. This aspect of the model, where the Elite and the King control different parts of the economy, is similar to our own.

[23] The collective-action problem is implicit because both in Acemoglu and Robinson (2001) and here, individual citizens (elite members in our model) act as one agent by assumption.

[24] Acemoglu and Robinson (2006) discuss in detail the potential solutions for the collective-action problem such as ideology, pecuniary incentives, or the exclusion from the benefits of revolution.

participation decisions by the Elite. Still, it would be very difficult to extend the model in this way and hope to come up with definitive answers. Geographical and technological factors would certainly have a significant impact on how the fractions of resources available to the Monarch and the Elite evolves over time.[25]

3 Model analysis

We will consider, as is standard, stationary Markov equilibria of our game. This means that strategies must constitute subgame-perfect equilibria of the game and only depend on previous history through the constitutional state I_t (If I_t is the Monarch, Absolutism, whereas if I_t is the Elite, Rule by Parliament) and the risk state (low, high or extreme). In particular,

- In each period t, the choice of aligned or misaligned foreign policy, can only be conditional on the constitutional state
- In each period t in which we have Absolutism, the choice of determining whether to concede RBP, can only be conditional on I_t, on the risk state and on the previous choice of foreign policy for the current period.
- Finally, in each period t, net transfers τ_t and the decision by $-I_t$ whether to participate in the war can only be conditional on I_t, on the risk state, on the previous choice of foreign policy for the current period and (under Absolutism) on the decision whether to concede RBP or not.

As discussed, we will use the generic notation (p, γ) to denote the generic Monarch's idiosyncratic parameters.[26]

3.1 Normal periods

Recall our assumption that, from both E and M's perspective, extreme-risk periods have a negligible probability of occurring. This means that when deciding on which foreign policy to undertake, both M (under Absolutism) and E (under RBP) neglect this possibility. We describe, therefore, behavior in low-risk and high-risk periods, assuming a given foreign policy. We then characterize foreign policy choices and ask whether, under Absolutism, M would want to concede RBP.

If we consider aligned wars first, the large amount of transferable resources available imply that both E and M will want to participate in both low-risk and high-risk periods. In the case

[25]For example, the discovery of extensive silver deposits in Spanish America certainly had a crucial impact on the ratio k for Castile. We will discuss this more extensively in our empirical section.

[26]The results of our paper would not significantly change if we allowed for history-dependent equilibria. The set of parameter value for which M chooses a misaligned foreign policy would be smaller, but our comparative statics described in observations 1 and 2, which drive our empirical predictions, would be unchanged. See Acemoglu and Robinson (2006) and Powell (2004) for a discussion of these issues.

of misaligned wars things are more complicated as the Monarch gets ego-rents from such wars which E does not get, but the former will still benefit from the additional probability of winning that E's participation guarantees. In particular, Assumption 1 implies that $pr < 1$ so that E will not participate unless appropriate transfers are given.[27] The key question is whether the transfers needed to get E to participate are sufficiently low to be worth paying from the Monarch's perspective. Under Assumption 1, the answer is negative in low-risk periods as opposed to high-risk periods where the answer is positive, as long as the damage (l) to E from losing a high-risk war is large enough. So, parliament is only called in high-risk periods and, even then, we need E to have enough at stake from a loss.

Given the participation decisions described above, the foreign policy decisions follow. Under RBP, E will choose an aligned foreign policy whereas under Absolutism M will choose misaligned foreign policies unless ego-rents γ from such policies are small enough. We can also study whether a Monarch in a low- or high-risk period will ever concede RBP. Obviously, a Monarch who chooses an aligned foreign policy need not concede RBP, since she is choosing the foreign policy E wants anyway. A Monarch who prefers a misaligned foreign policy will only concede RBP, and therefore commit to aligned foreign policies for all future periods – if i) her preference for misaligned foreign policies is not too strong and ii) she heavily discounts the future so that getting help today is very important. Thus, RBP is virtually impossible in low- or high-risk periods if the Monarch cares enough about the future.

We summarize this discussion in the following proposition:

Proposition 1 *In any non-extreme period (high or low risk):*

1. *Under RBP, the Elite will always choose an aligned foreign policy. Under Absolutism the Monarch will select a misaligned policy whenever $\gamma \geq \gamma^*$ and an aligned foreign policy otherwise.*[28]
2. *Under Absolutism, the range of parameter values under which RBP can obtain vanishes as $\beta \to 1$.*
3. *E and M will always participate in any aligned wars. M will always participate in any misaligned wars, whereas, under Assumption 1, E will never participate in low-risk misaligned wars and only participate in high-risk misaligned wars iff*

$$l \geq l^* = \frac{1 - pr}{p}$$

If $qr \geq 1$ then E will always participate in misaligned wars.[29]

In the Appendix, we also show that γ^* is an increasing function of R, k, π and l and a decreasing function of r. By their very nature, ego-rents are virtually impossible to measure so

[27] If $qr \geq 1$ then E will participate voluntarily in misaligned wars if ruled by $\widehat{M}$.
[28] The threshold γ^* is described in the Appendix.
[29] The proof of Proposition 1 is in the Appendix.

these comparative statics on γ^* can at best be useful in the discussion of anecdotal evidence. However, our results yield testable predictions for Calling Parliament. Our analysis shows that E's participation in misaligned wars and the accompanying Nash bargaining is easier to obtain in high-risk periods than in low-risk periods. In addition, l^* is obviously a decreasing function of r and p. Finally, recall also that $l \leq 1 - k + \phi$ which means that higher values of k and lower values of ϕ make it harder for an l that satisfies both this constraint and $l \geq l^*$ to exist. All of this means:

Observation 1 *In an Absolutist regime, parliaments are more likely to be called when:*

1. *The Elite has more non-investable resources or high-risk period losses are more destructive.*
2. *The probability of winning wars - when both sides participate - is larger.*
3. *The level of misalignment is reduced.*
4. *High-risk periods occurs.*
5. *A Monarch has a lower share of investable resources.*

The first observations are immediately intuitive: anything that directly gives E greater incentives to join a high-risk war will increase the likelihood of successful negotiations for E's participation. Also, since participation is impossible in low-risk periods and possible in high-risk periods, we are more likely to observe the calling of parliament when high-risk periods occur. The most interesting, albeit intuitive, comparative static result is the one with respect to k: E has more at stake for small k and therefore has a greater incentive to join the war. Again, in the empirical section, we will proxy for the share of resources between M and E in various ways and study the consequences for the likelihood of parliament being called.

3.2 Extreme-risk periods

The previous section shows that in our model RBP cannot happen in low- or high-risk periods if M and E value the future enough. In this section, we show that RBP can happen even when M and E care about the future, but only if they find themselves in the unlikely event of an extreme-risk period. For E, the choice is now between helping the current Monarch, against the possible gain in future periods from a new Monarch, who may be more aligned and/or more powerful. For M, instead, the trade-off is between the possible need of committing to a future aligned foreign policy - by instituting RBP - and the decision to go it alone, increasing the risk of a defeat that will remove her and her dynasty altogether. Proposition 1 shows that M will only choose a misaligned foreign policy if $\gamma \geq \gamma^*$ so that the concession of RBP only makes sense if this is the case, otherwise the current Monarch will already be voluntarily be choosing an aligned

foreign policy in future periods. So, we begin our discussion by assuming that our country is in a situation where $\gamma \geq \gamma^*$.[30]

If agents are patient enough, then, the crucial difference between extreme-risk and normal periods is that now agents trade-off the impact of their decisions on what happens in the future, not on the outcome in the current period. Thus, a first consideration is what the new Monarch can offer E: the more attractive the new Monarch is, the less likely that there is scope for M and E to come to an agreement that involves participation. This also means that there is scope for E to refuse participation even if the current Monarch does concede RBP as it is possible the replacement Monarch will provide even better outcomes.

Besides the relative advantages of the new versus the current Monarch, a second factor in determining the possibility of RBP are ego-rents. As γ increases, M and E become more and more misaligned, in the sense that if E demands RBP in exchange for participation, M's incentives to concede RBP decrease. The final factor is the fraction of investable resources k. If k increases, the importance of E's participation to the war decreases and so does M's willingness to concede RBP. Also, for large values of k, the relative difference between foreign policies is reduced and E is relatively more concerned on protecting her non-investable resources ϕ. This means that E is less willing to refuse participation, and hence trigger the possibility of RBP. These intuitions lead to the following result:

Proposition 2 *Suppose $\gamma > \gamma^*$ and $\beta \simeq 1$. Then M will choose a misaligned foreign policy in an extreme-risk scenario and there exist a $\widehat{\gamma} > \gamma^*$ and a $\widehat{k}$ such that whenever $\gamma > \widehat{\gamma}$ or $k > \widehat{k}$ then RBP cannot obtain. Conversely, if $\gamma \leq \widehat{\gamma}$ and $k \leq \widehat{k}$ then we can define two further values k_Γ and k_Δ, with $k_\Delta \geq k_\Gamma$ such that*

- *If $k_\Gamma > 0$ then RBP will obtain for all $k \in \left[k_\Gamma, \min\left(k_\Delta, \widehat{k}\right)\right]$*
- *If $k_\Gamma \leq 0$ but $k_\Delta > 0$ then RBP will obtain for all $k \in \left[0, \min\left(k_\Delta, \widehat{k}\right)\right]$*
- *If $k_\Delta \leq 0$ then RBP will not obtain.*[31]

The first important observation is that while RBP cannot happen for large values of k, it need not happen for low values of k either, even if γ is small enough. If k is very low, then E deeply cares about the returns on investable resources and if the new Monarch brings a significantly better probability of winning (that is, better diplomacy or simply better ability to utilize war resources) then not helping the incumbent, even if RBP is offered, might be worthwhile. This is possible even if the new Monarch is not aligned, compensating with her higher probability of winning future conflicts for the misaligned choice of foreign policy. The most important consequence of Proposition 2 for our purposes, however, is that it confirms that the relative bargaining power E has against M is in inverse relation with k. The fewer resources the Monarch

[30] In the proof of Proposition 2, in the Appendix, we nevertheless allow for $\gamma < \gamma^*$ too.

[31] The proof is in the appendix, where $\widehat{\gamma}$, $\widehat{k}$, k_Γ and k_Δ are all explicitly defined.

has, the more willing it will be to make concessions to E while at the same time E will be more willing to extract concessions from the Monarch. These two effects will lead to more RBP except for the case when k is so small and the potential new Monarch so attractive to E that nothing the current Monarch can do will ensure E's cooperation. In such cases, E actively wishes to bring in a foreign Monarch. One historical example of this in our period of interest is Portugal in 1580, where a large section of the elites supported being ruled by the much stronger Spanish Crown rather than a native dynasty, see section 5.1. Another example took place before our period of study: the invasion of England by Prince Louis of France in 1216, who was invited by the same Barons who bargained for the Magna Carta, see section 5.2. Medieval Genoa, with its multiple invitations of foreign rules, constitutes yet another example (see De Magalhães (2013)).

We can summarize our results in the following observation:

Observation 2 *Absolutist regimes will only concede RBP when under direct threat of being replaced, which happens rarely. Even in such cases, however, such regimes will only do this when their misalignment is not extreme and when they have a relatively small share of the country's resources. If the Monarch's share of such resources is particularly low and the replacement Monarch is particularly attractive to the Elite, the latter can go as far as trying to remove the incumbent even if RBP is offered.*

4 Empirical Analysis

4.1 Data

Our data covers the period from 1350 to 1700 AD and the following countries: England, Castile, France, and Portugal. By 1350 the plague, which arrived in Western Europe in 1348, had run its course (Jedwab et al. (2022)) and this common shock to our four countries helps to level their initial conditions regarding the economy, labor market, and feudal institutions (Voigtländer and Voth (2012), Acemoglu and Robinson (2013), and Scheidel (2017)). Moreover, by 1350 all four countries had parliaments with an established third estate that had a clear say on taxation, a necessary assumption in our model. The third estate was composed mostly by representatives of the towns and can be thought of as the commercial Elite described in the model. Earlier parliaments would often only include the first and second estates, respectively the nobility and the clergy.

In England, the requirement that parliament should always include representatives of the counties and towns (burgesses) was introduced in 1327 and Edward III formally renounced the right to raise levies without parliament's consent in 1340 (Marongiu (1968), pp. 90-91).[32] In France, Marongiu (1968) (p. 99) describes the parliament of 1302 as the first Estates General (i.e., with the third estate present), but notes that only in the 1340s did assemblies begin to

[32]In 1362 a statute established that parliament must approve all taxation. See https://www.parliament.uk/about/living-heritage/, origins of parliament.

have powers beyond a plebiscitary nature, i.e., to only acclaim decisions by the monarch without modifying them. In Portugal, the 1331 Cortes were the first to give the third estate a separate status (Duarte (2003)). In Castile during the first half of the 14^{th} century, the King often met each estate separately instead of calling the entire Cortes (O'Callaghan (1989) pp. 36-39). With the death of King Alfonso XI in 1350 due to the plague, this practice became less common and the full Cortes took precedence.

We chose 1700 as the last year in our sample because by then a clear diversion in parliamentary activity had occurred. In England, parliament starts to meet every year; in Portugal, there are no meetings in the 18^{th} century at all whereas in Castile there are 6 meetings before 1789 (52 years during the 17^{th} century had a parliament). Finally, in France, parliament is last summoned by Louis XIV in 1649 and 1651, but in both occasions the King canceled the summons before Parliament actually convened. There are no further meetings of the three estates until 1789. By that point, the threat of revolution by ordinary citizens starts to play a more important role in explaining political transitions than the threat of war (Acemoglu and Robinson (2000), Acemoglu and Robinson (2006), Aidt and Jensen (2014), and Aidt and Franck (2015)). Moreover, from around 1650 another mechanism starts to become prominent: the building of state capacity. Dincecco (2009) suggests that the degree of centralization played an important role from the 18^{th} century onwards and by the 19^{th} century wars have an important effect on state capacity (Besley and Persson (2008) and Queralt (2019)).[33]

The four countries in our study provide a benchmark for comparing how institutionally similar countries at the start of our period diverged so much by the end of the 17^{th} century. All four are in Western Europe with access to the Atlantic and participated actively in trade and colonization (Acemoglu et al. (2005)). Parliaments developed independently in these four countries, but all around the same time. For most of the period, all four countries were Catholic and had to acknowledge Papal influence. Further, the pair England-France can be considered dynastic rivals. They begin the period with ruling houses with similar origins, a shared language, and competing claims for each other's throne. For most of our period, they fought over the same territory and their aristocracy owned land in both countries.[34] The pair Portugal-Castile are the other dynastic rivals. They shared a common origin, a similar language, and a similar foundation

[33]Dincecco (2009) shows that per capita revenues are more or less constant for most of the 17^{th} century in England. Growth starts in 1688 with the Glorious Revolution. In France, growth in per capita revenues only picks up after the French Revolution. Johnson and Koyama (2014) discuss the different tax collection systems in England and France in detail. They differed little before the 1600s. During the 17^{th} both countries started to move away from private and towards public collection. D'Arcy and Nistotskaya (2018) shows that France and England had similar taxation state capacity – measured with the use of land cadasters – during our period of study.

[34]The English held Calais until 1558. With its loss and the end of the Tudor dynasty, the English claim to the French throne becomes inoperative – even though the Queens and Kings of England continue to nominally claim the title of Queen and King of France throughout our period of study. French claims to the English throne continued to be operative for longer. Mary Stuart married the heir to the French throne in 1558 thus giving the new couple a claim to the French, English, and Scottish thrones. While the Stuarts were in power in England (1603-1646 and 1660-1688), France's claim subsided. However, the threat reappears during the exile of Charles II 1646-1660 in France under the protection of his first cousin Louis XIV, and again after the exile of James II in 1688. The Jacobite threat – with its French support – persists until the battle of Culloden in 1746.

based on reconquering lost territory from a common opponent. Their royal houses were closely related with good claims on each other's throne throughout the period. This is highlighted by Phillip II of Spain having one of three viable claims to the Portuguese throne during the 1580 succession crisis.

Other Western European countries such as Denmark, Sweden, and Austria, developed parliaments later and these parliaments were considerably less active than those we study (Van Zanden et al. (2012)). An analysis of these parliaments would also require modeling the emergence of parliaments, which is outside the scope of this paper. The Netherlands had a highly active parliament, but only gained independence in 1581 and then as a Republic, a different institutional setup. Germany and Italy did not exist as fully fledged polities, even though there was parliamentary activity in some of their regions (Van Zanden et al. (2012)).

We manually coded yearly parliamentary activity by creating the variable $Parliament_{it}$, which takes value 1 if a parliament was summoned in country i in year t. For England we use Given-Wilson et al. (2005) for parliaments between 1350 and 1504, and Houses of Parliament online resources for parliaments after 1504.[35] For France we use Marongiu (1968) and Boulle (1845) for parliaments before 1421 and Major (1960) for parliaments thereafter. We restrict our coding to French national assemblies, the Estates General. During the period of the One Hundred Years' War we follow the classification by Major (1960) and also code a parliament session as taken place if our sources indicated that the Estates of Langue d'oïl were called (7 extra cases).[36] Otherwise, years with only provincial assemblies are coded as zero. For Portugal we use Valério (2001). For Castile, we use the appendix of the Enciclopedia Universal Ilustrada. In addition to the Cortes of Castile-Leon, we add the Cortes of Aragon from 1469 as a robustness exercise.[37] As an alternative coding of parliament activity we use the data compiled for Portugal and Castile by Henriques and Palma (2019).[38]

We also manually coded from printed sources all 337 battles in Bradbury (2004) and Clodfelter (2002) involving any of our four countries according to their location, characteristics, and outcome (England: 131 battles, France: 99, Portugal: 38, and Castile-Leon: 69).[39] Battles are defined as *territorial* if they took place within the country or in a neighboring country with a shared land border.[40] Hence the variable $Territorial\ battles_{it}$ takes value 1 if there was a territorial battle

[35] http://www.histparl.ac.uk/research/parliaments.

[36] Langue d'oïl is the region that includes Paris and covers approximately the northern half of France. Major (1960) classifies the Langue d'oïl parliament as one of two 'larger assemblies'(p.39), the other was the Estates General.

[37] Our sources for England are different from Van Zanden et al. (2012) as they are more detailed. We have added Boulle (1845) as a source for France on top of those in Van Zanden et al. (2012). For both Portugal and Spain, we use the same sources as Van Zanden et al. (2012) but our coding was done independently.

[38] They use similar sources to ours but only count meetings of the Cortes in Portugal and Castile that can be confirmed by historical criticism.

[39] Bradbury (2004) is the source for the period before 1500 and Clodfelter (2002) for the period after 1500.

[40] We provide a robustness check using a strict definition that only defines as territorial battles within the country's borders. Results are robust to both specifications. In both definitions, battles in French territory during the One Hundred Years War are coded as territorial for England.

in country i in year t.[41] A battle is defined as *naval* if it took place in European waters but did not engage directly with the coast of country i. Thus, $Naval\ battles_{it}$ takes value 1 if there were such battle involving country i in year t or 0 otherwise. Similarly, $European\ battles_{it}$ takes value one if it is a land battle involving country i but taking place somewhere in Europe away from i. $Colonial\ battles_{it}$ are either naval, ground battles, or revolts involving country i in year t but taking place in another continent. We also code battles as *internal* if they were described as part of civil wars, wars of succession, or revolts (e.g. the War of the Roses, the English Civil War, the Huguenot Rebelion, the Peasants' Revolt), i.e., wars that only involved one national parliament. $Battles\ internal_{it}$ takes value 1 if these events took place in country i in year t. Finally, we use the same sources to construct two variables that describe whether a country was at war against another European country in that period.[42] The first is *War vs Rival*, which takes value 1 for England and France in a given year if they were at war with each other (e.g., the Hundred Years War and the War of the Grand Alliance), value 1 for Portugal and Castile if they were at war with each other (e.g., War of Castilian Succession, Spanish-Portuguese Wars), and zero otherwise. The second is *War not Rival*, which takes value 1 for a given country-year if that country is involved in war that does not imply fighting their dynastic rival.

Data on GDP per-capita and the share of agriculture in England's economy was made available by Broadberry et al. (2015). Álvarez-Nogal and De La Escosura (2013) constructs yearly agricultural consumption and GDP per capita for Castile (index with baseline 100 at year 1850).[43] Henriques and Palma (2019) constructs yearly agricultural and GDP per capita for Portugal (index with baseline 100 at 1850), but starting in the year 1527. All these data are based on yearly historical figures – particularly for agriculture – and display high year-to-year variation.[44]

Besides direct measures of economic activity we also use reconstructed weather data as a proxy for agricultural output. Yearly agricultural output has been shown to be dependent on weather variation (see Titow (1960) and Ljungqvist et al. (2021)) and Brückner and Ciccone (2011) have shown how weather shocks can directly affect democratic change in modern Africa. For France, the country for which we do not have yearly economic data, we must rely on reconstructed weather data. Labuhn et al. (2016) use oxygen isotope ratios in oak tree rings in Fontainebleau and Angouleme from 1326 to 2000 to estimate yearly variation in rainfall for France. For England, Wilson et al. (2013) reconstruct rainfall with ring-width data measured from oak trees in southern

[41] We considered coding weights for each battle according to its importance. However, there is a multitude of possible indicators: implications for succession, territorial gain and loss, number of armies involved, number of ground troupes (available in Clodfelter (2002) but not in Bradbury (2004)), expenses, and others. For this reason our coding simply takes value 1 if mentioned in our sources and 0 otherwise.

[42] War years a clearly defined in Clodfelter (2002) and for those before 1500 we use the battles described in Bradbury (2004) as a starting point to look a multiple sources to identify the war period relating to each battle.

[43] Álvarez-Nogal and De La Escosura (2013) also have estimates of the share in agriculture for Castile but this data – according to the authors – consists of averages over longer periods and, therefore, are not suitable for our regressions based on yearly observations. Nevertheless, we display the long-term averages in Table 1.

[44] Ridolfi (2017) reconstructs a data set with yearly entries for agricultural GDP in France for the entire period. However, the model reconstruction does not allow for yearly variation. There is no change in the estimates between two consecutive years in 77% of yearly transitions during our period of study. Thus, we refrain from using this data in the regressions. Nevertheless, we display the long term averages in Table 1.

England from 663 to 1925. For Castile, Romero-Viana et al. (2011) use Lake La Cruz's (between Madrid and Valencia) calcite lamination thickness from 1579 to reconstruct rainfall. For Castile, before this period and for Portugal for its entirety we use Guiot et al. (2005)'s Europe-wide historical temperature reconstructions based on present day climate models together with rainfall and temperature indicators from different locations in Europe (none in the countries we study). For the pooled sample of our countries we create the variable 'Weather unusual' that takes value 1 if the reconstructed weather for that country is beyond 1 standard deviation of the period mean, and 0 otherwise.

Table 1: Parliament, Battles, and Agriculture in Western Europe (1350-1700) - 100 years averages

	England		France		Portugal		Castile	
Percent of years with	pre-1500	post-1500	pre-1500	post-1500	pre-1500	post-1500	pre-1500	post-1500
Parliament	56	53	21	10	44	13	53	56
Parliament median duration (years)	1	3	1	2	1	1	1	3
Territorial battles	12	3	12	8	1	3	2	2
Naval battles	1	7	1	2	0	0.5	1	5
European battles	2	3	3	6	0	0	1	12
Colonial battles	0	6	1	4	1	13	0	5
Internal battles	9	8	3	7	0	0	1	3
War vs. Rival	68	10	68	10	5	12	5	12
War not Rival	3	25	5	42	0	0	18	62
Weather unusual(1sd)	29	30	14	07	20	45	20	37
Agriculture (% GDP)	45	38	64	62	-	-	57	56
Number of observations	151	200	151	200	151	200	151	199

Sources:Parliament: England (Given-Wilson et al. (2005), www.histparl.ac.uk); France (Marongiu (1968), Boulle (1845), and Major (1960)); Portugal (Valério (2001)), Castile (the appendix of the Enciclopedia Universal Ilustrada – parliaments of Leon-Castile and Catalonia from 1469). Battles and War years (Bradbury (2004) and Clodfelter (2002)). Unusual European-wide temperature reconstruction (Guiot et al. (2005)). Share of agriculture: Broadberry et al. (2015) for England, Ridolfi (2017) for France, and Álvarez-Nogal and De La Escosura (2013) for Castile.

In Table 1, we present summary statistics for our data. For each country, we provide one column for the period 1350-1500 and one column for the period 1501-1700. England and Castile call parliament the most often, with above 50% of the years having a parliament in both periods. France and Portugal see a clear decrease in parliamentary activity between the two periods, respectively from 20% to 10% and from 44% to 13%. In the period pre-1500 most parliaments lasted for two to three months. Post-1500 the same parliament would last for more than a year, but would still only seat for a couple of months each year. Territorial battles (in the country or close to its border) are more common in England and France (respectively 7% and 9% of the years for the entire period) than in Portugal and Castile (2%). Naval battles occur less frequently – no higher than 7% of the years for England in the post-1500 period. European battles (that is, not within the country nor in its immediate borders) are more frequent in periods in which countries are relatively richer than its neighbors, 6% of years for France post-1500 and 12% for

Castile post-1500 but no higher than 3% in other instances. Internal battles (in the context of civil wars or revolts) are frequent in England (8% across the period), followed by France (5%) but are rare in Portugal and Castile. England and France were at war with each other 68% of the years before 1500 and only 10% after. Castile and Portugal were at war with each other 5% of the years before 1500 and 12% after (rows 7 and 8). Finally, the share of agriculture decreases in England when comparing the two periods (45% to 38%), but stays relatively constant and at a higher level in France and Castile.

4.2 Empirical results - OLS

We estimate with OLS the following linear probability model:

$$Parliament_{it} = \beta' X_{it} + \epsilon_{it},$$

where $Parliament_{it}$ is our dependent variable that takes value 1 if parliament in country i convened in year t and 0 otherwise. The matrix X_{it} includes, dependent on the specification: the variables listed in Table 1, the lag dependent variable, $Parliament_{it-1}$, century and monarch fixed effects, and an indicator variable taking value 1 in a year of succession.[45] All other variation in the outcome is left in the stochastic error term ϵ_{it}. To account for heteroskedasticity and autocorrelation, we cluster standard errors at the monarch level (59 cluster).[46]

We have two key explanatory variables. The first is *territorial defeat*. This is our proxy for a transition from low-risk to high-risk as described in the model and should have a clear effect on the calling of parliament. The second is our proxy for agricultural output. In the pooled regression this is *Weather unusual (1sd)*. From the perspective of the model, no other battle is expected to affect the calling of parliament. *Internal* battles could be seen as testing an alternative model for calling parliament, one that is close to the idea of a threat of revolution.

The most robust and novel result is a positive statistically significant contemporaneous correlation between a parliament being called and there being a territorial defeat in that year.[47] In Table 2, column 1, we can see that the baseline probability of a parliament being called – when pooling all four countries for the entire period 1350-1700 – is 34% in a given year. This probability nearly doubles in a year with a territorial defeat. The probability of parliament being called increases by one-third in years with unusual weather, thus suggesting that when the agricultural sector is adversely affected parliament is more likely to be called.[48] These results are robust to

[45] Succession is an important alternative reason to summon parliament (Møller (2017)). A succession crisis may also be associated with high-risk periods (Kokkonen and Sundell (2017)).

[46] We take the view that there is autocorrelation within errors by monarchs but not between monarchs. Within the period we study it is the monarchs' prerogative to call parliaments and monarch identities vary considerably even within dynasty (e.g., the Tudors). In Table B2 in the on-line appendix we show that the results are robust to an alternative specification for the error term: a two-way cluster for pair of rival monarchs.

[47] This is exclusively a contemporaneous correlation (Appendix, Table B1). The results is robust to a strict definition of territorial, i.e., as having occurred strictly in national territory (Appendix, Table B2, column 4)

[48] There could be collinearity between the occurrence of a battle in a given year and whether that year had unusual weather (Burke et al. (2015)), but we note that in our sample the correlation between both variables is

including all other battle variables in column 2. Internal battles also help explain the calling of parliament, but with a smaller impact than territorial defeats. Other battle variables are not robust across specifications and sub-samples. These results are also robust to including century and monarch fixed effects in column 3.[49] Monarch fixed effects mitigate concerns that there may be differential development of state capacity across countries and different ruler-specific characteristics such as being a Queen or a King (Dube and Harish (2020)). Century fixed effects control for across-country variation such as the development of warfare technology. The result regarding territorial defeats is also robust to splitting the sample in pre and post 1500 (columns 4 and 5), which is important for two reasons. First, the year 1500 is often used to delineate the start of the modern era and when a military revolution starts to take place in Europe (Raymond (2007)). Second, we use two different sources for battles, one for pre 1500 (Bradbury (2004)) and one for post 1500 (Clodfelter (2002)). Results for 'Unusual Weather' are only statistically significant in the pre-1500 sample.

We add a lag dependent variable and other variables of interest in column 6 of Table 2. In the pooled sample there seems to be some persistence in the calling of parliaments. A parliament in the previous year increases the probability of a parliament in the current year by 9 percentage points.[50] Column 6 also shows that parliaments are more likely to be called in years of war. The point estimate and robustness across specification is higher for the variable identifying wars between countries that are dynastic rivals (either England vs. France or Castile vs. Portugal), then other wars. Another reason to call parliament is the need to settle succession issues; parliament is 16 percentage points more likely to be called in years in which a new monarch ascends the throne. Finally, parliaments are more likely to be called (by 6 percentage points) in years with unusual weather (temperature or rainfall).[51]

In Table 3 we show that most results in the main specification (Table 2, column 6) are robust to alternative definitions of a territorial battle and to alternative coding of parliaments. In columns 2 and 3 we redefine a territorial battle to be strictly within a country's territory. In columns 3 and 4 we use yearly parliamentary activity as coded by Henriques and Palma (2019), where they restrict Portuguese and Castilian parliaments that can be confirmed by historical criticism (Cardim (2016), Olivera Serrano (1986), Olivera Serrano (1988), Sousa (1990), Zamora (1988)). In columns 5 and 6, we use the coding by Henriques and Palma (2019) on whether a parliament can be shown to have discussed tax or dynastic issues. This is restricted to England, Castile, and Portugal. It is reassuring that territorial defeats are highly correlated with parliaments that have discussed taxation and the effect is three times larger than that on parliaments discussing dynastic issues.

-0.03 and not statistically different from zero.

[49] Country fixed effects are redundant as monarchs are country specific. The only ambiguous case is the period Portugal was under the Spanish Crown, which we interpret as having a different monarch for each country.

[50] Our large time dimension suggests we do not have to worry about the incidental parameter problem or the Nickell bias (Baltagi (2008)).

[51] In Table B2 in the Appendix we show that these results are robust to probit and logit specifications and to an alternative specification for the error term: a two-way cluster for pair of rival monarchs.

Table 2: Battles, Weather, and the calling of Parliament

Dependent Variable: Parliament held in a given year: 1350-1700						
				pre-1500	post-1500	
Lag1 Parliament	-	-	-	-	-	0.09
	-	-	-	-	-	(0.05)*
Territorial win	-0.02	-0.05	-0.05	-0.07	- 0.02	-0.12
	(0.09)	(0.10)	(0.04)	(0.06)	(0.06)	(0.04)***
Territorial defeat	0.29	0.31	0.28	0.31	0.24	0.30
	(0.09)***	(0.10)***	(0.05)***	(0.07)***	(0.08)***	(0.06)***
Unusual Weather (1sd)	0.10	0.10	0.05	0.13	-0.01	0.06
	(0.04)***	(0.04)***	(0.03)	(0.06)**	(0.04)	(0.03)*
Naval	-	0.19	0.03	-0.41	0.11	-0.02
	-	(0.11)*	(0.07)	(0.24)*	(0.05)**	(0.08)
Naval defeat	-	0.20	0.20	0.55	0.13	0.16
	-	(0.14)	(0.12)*	(0.26)**	(0.11)	(0.10)
Abroad Europe	-	0.04	0.03	-0.08	0.05	-0.01
	-	(0.08)	(0.05)	(0.19)	(0.05)	(0.05)
Colonial	-	-0.10	-0.10	-0.12	-0.12	-0.09
	-	(0.11)	(0.06)	(0.05)**	(0.07)*	(0.05)*
Internal	-	0.20	0.18	0.24	0.14	0.17
	-	(0.09)**	(0.08)**	(0.17)	(0.07)*	(0.08)**
War vs. Rival	-	-	-	-	-	0.17
	-	-	-	-	-	(0.05)***
War not Rival	-	-	-	-	-	0.12
	-	-	-	-	-	(0.06)*
Succession	-	-	-	-	-	0.16
	-	-	-	-	-	(0.06)**
Constant	0.34	0.33	0.11	0.09	0.37	0.10
	(0.03)***	(0.03)***	(0.01)***	(0.01)***	(0.05)***	(0.01)***
century dummies	No	No	Yes	Yes	Yes	Yes
monarch dummies	No	No	Yes	Yes	Yes	Yes
R-squared	0.02	0.03	0.27	0.22	0.32	0.29
Number of observations	1404	1404	1404	600	804	1404

Note: England, France (Estate General and Assembly of Langue d'oïl), Portugal, and Castile. Sources are described in Section 4.1. Standard errors clustered by monarch.* $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

Table 3: Battles, War, Weather, and the calling of Parliament - Alternative measures

Dependent Variable: Parliament held in a given year: 1350(1385)-1700						
strict territorial	No	Yes	Yes	No	Yes	Yes
Parliament coded Henriques and Palma (2019)	No	No	Yes	Yes	Yes	Yes
			All	All	Tax	Dynastic
Lag1 Parliament	0.09	0.09	0.14	0.14	0.05	0.03
	(0.05)*	(0.05)*	(0.06)**	(0.06)**	(0.06)	(0.03)
Territorial win	-0.12	-0.16	-0.15	-0.13	-0.14	-0.12
	(0.04)***	(0.04)***	(0.06)***	(0.04)***	(0.10)	(0.04)**
Territorial defeat	0.30	0.27	0.25	0.22	0.35	0.09
	(0.06)***	(0.07)***	(0.07)***	(0.07)***	(0.18)*	(0.04)**
Unusual Weather (1sd)	0.06	0.06	0.04	0.04	-0.03	0.02
	(0.03)*	(0.03)*	(0.03)	(0.03)	(0.04)	(0.01)
Naval	-0.02	-0.02	-0.07	-0.08	-0.08	0.05
	(0.08)	(0.08)	(0.10)	(0.10)	(0.12)	(0.04)
Naval defeat	0.16	0.17	0.20	0.21	0.35	-0.04
	(0.10)	(0.10)*	(0.22)	(0.21)	(0.23)	(0.05)
Abroad Europe	-0.01	0.04	0.06	0.07	0.09	0.02
	(0.05)	(0.05)	(0.05)	(0.04)	(0.07)	(0.03)
Colonial	-0.09	-0.09	-0.09	-0.09	-0.12	-0.03
	(0.05)*	(0.05)	(0.06)	(0.06)	(0.07)*	(0.01)*
Internal	0.17	0.18	0.05	0.05	-0.02	-0.00
	(0.08)**	(0.09)**	(0.08)	(0.08)	(0.12)	(0.06)
War vs. Rival	0.17	0.17	0.10	0.09	0.10	0.00
	(0.05)***	(0.05)***	(0.05)**	(0.05)**	(0.06)*	(0.04)
War not Rival	0.12	0.12	0.09	0.09	0.19	-0.05
	(0.06)*	(0.06)*	(0.07)	(0.07)	(0.09)**	(0.03)**
Succession	0.16	0.15	0.19	0.20	0.10	0.12
	(0.06)**	(0.06)**	(0.07)**	(0.07)***	(0.09)	(0.07)*
Constant	0.10	0.10	0.44	0.44	0.63	0.05
	(0.01)***	(0.01)***	(0.08)***	(0.08)***	(0.14)***	(0.03)
century dummies	Yes	Yes	Yes	Yes	Yes	Yes
monarch dummies	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.29	0.30	0.26	0.26	0.23	0.17
Number of observations	1404	1404	1260	1260	945	945

Note: Base line sample as in Table 2. Alternative sample for battles restricts 'territorial' to within a country's borders. Alternative sample for parliament as described in Henriques and Palma (2019). For columns 3 and 4 the parliament coded for France (Section 4.1) is added to the data in Henriques and Palma (2019). In columns 5 Parliament is coded 1 only if it can be verified that taxes were increased. In columns 6 Parliament is coded 1 if it can be verified that dynastic concerns were decided. France not included in columns 5 and 6. See Henriques and Palma (2019) for details. Standard errors clustered by monarch.$^{*}p < 0.1$ $^{**}p < 0.05$ $^{***}p < 0.01$

In Table 4 we present our results by country. In these regressions, century dummies are no longer identified across countries as they are effectively time fixed effects similar to monarch dummies. For this reason, we present two sets of regressions for a given country, each using one set of time dummies. Territorial defeat is statistically significant for England, France, and Portugal with either set. For Castile territorial defeat is just out of the 10% threshold for the specification with century dummies.

We also document the relationship between calling parliament and the economy using country specific variables in Table 4. Our ideal variable is the share of agriculture as it comes closest to the parameter k in our model. The results for England can be seen in column 1 and 2. When monarch fixed effects are included, there is no clear partial correlation between parliament being called and the share of agriculture. In column 2, with century dummies only, the result is as predicted by our model. The share of agriculture is negatively related to a parliament being called in a given year. The point estimate indicates that if the share increases by 1 percentage point, parliament is less likely to be called by 2 percentage points. For France we have estimates of rainfall. The variable 'Rain France (1sd)' takes value 1 if the French estimated rainfall in that year was 1 standard deviation above or below the sample mean. In column 3 and 4 we can see that years with too much or too little rainfall (and therefore bad for agriculture), parliament is more likely to be summoned. For Portugal (column 6) we have estimates for agricultural GDP per capita and for Castile (columns 8 and 9) we have estimates of agricultural goods consumption per capita. Since we control for estimates of GDP in both countries, the agricultural activity indexes have a similar interpretation as the share of agriculture. We find that in years with above average agricultural consumption/income (years of high yields), parliaments in Portugal and Castile are less likely to be called (an increase of 1 percentage point in agricultural activity decreases the probability of parliament by approximately 1 percentage point in Castile and 4 percentage points in Portugal).[52]

[52]In the Appendix Table B3 we show that results for Castile are robust to defining the dependent variables as 1 if a parliament was called in Castile or in Aragon after 1469. There are an extra 22 years in which parliament was called in Aragon but not in Castile.

Table 4: Battles, Weather, Agriculture, and the calling of parliaments - by country

Dependent Variable: Parliament held in a given year: 1350-1700									
	England		France		Portugal			Castile	
						1527-1700			
Lag1 Parliament	-0.10	-0.06	0.24	0.30	0.07	0.12	0.14	-0.01	0.18
	(0.07)	(0.08)	(0.06)***	(0.06)***	(0.04)	(0.08)	(0.04)	(0.04)	(0.09)*
Territorial win	-0.09	-0.07	-0.07	-0.03	-0.24	-0.24	-0.14	-0.14	-0.23
	(0.07)	(0.08)	(0.04)	(0.04)	(0.12)*	(0.11)*	(0.15)	(0.14)	(0.17)
Territorial defeat	0.21	0.21	0.21	0.16	0.63	0.74	0.65	0.25	0.47
	(0.12)*	(0.10)*	(0.06)***	(0.07)**	(0.22)**	(0.33)*	(0.16)***	(0.29)	(0.30)
War vs Rival	0.19	0.27	0.10	0.06	0.20	0.11	0.18	0.17	0.11
	(0.08)**	(0.07)***	(0.10)	(0.08)	(0.06)***	(0.04)**	(0.08)**	(0.08)**	(0.09)
War not Rival	0.11	0.14	-0.08	-0.09	-	-	-	0.01	0.01
	(0.10)	(0.08)*	(0.06)	(0.03)				(0.04)	(0.05)
Share Agriculture	0.01	-0.02	-	-	-	-	-	-	-
	(0.01)	(0.01)**							
Agric. gdp/cons. pc	-	-	-	-	-	-0.04	-	-0.01	-0.01
						(0.01)***		(0.01)	(0.00)*
GDP pc	-0.07	0.07	-	-	-	0.04	-	0.05	0.03
	(0.08)	(0.04)*				(0.01)***		(0.02)**	(0.01)*
Unusual Weather (1sd)	0.04	0.03	0.18	0.15	0.07	0.01	0.06	0.05	0.09
	(0.05)	(0.05)	(0.08)***	(0.08)*	(0.05)	(0.08)	(0.04)	(0.08)	(0.08)
Constant	0.32	0.95	0.07	0.03	0.10	-0.21	0.31	-2.50	-0.75
	(0.40)	(0.52)	(0.01)	(0.09)	(0.01)***	(0.18)	(0.12)**	(0.89)**	(1.20)
monarch dummies	Yes	No	Yes	No	Yes	Yes	No	Yes	No
century dummies	No	Yes	No	Yes	No	No	Yes	No	Yes
Other Battles/Sucession	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.27	0.18	0.24	0.19	0.27	0.31	0.21	0.27	0.12
Number of observations	351	351	351	351	351	174	351	351	351

Note: England; France (Estate General and Assembly of Langue d'oïl), Portugal, Castile. Sources are described in Section 4.1. Standard errors clustered by monarch. * $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

4.3 An Event Study of Territorial Battles and Parliamentary Activity

In this section we implement an event study. The outcome variable is the average number or parliaments within 365 days after a territorial battle occurred (or the resolution of a siege). For this purpose we reorganize the data around the exact day a territorial battle took place. In the previous section the outcome variable was 1 if there was a parliament in that calendar year and zero otherwise. In this section we count the number of parliaments within 365 days of a battle.[53] Exact months for each parliament held in our period are only available for England and France. We restrict the event study to these two countries. There are 33 territorial battles involving England (18 wins and 15 defeats) and 42 involving France (24 wins and 18 defeats). See Table A1 in the appendix for the full list of territorial battles. In France, there were on average 0.44 parliaments in the 365 days preceding a territorial battle and 0.48 in the 365 days following the battle. In England, there were on average 0.70 parliaments in the 365 days preceding a territorial battle and 0.93 in the 365 days following the battle.

The simplest analysis is to compare the number of parliaments before and after a territorial defeat and before and after a territorial win. We do so in Figure 2 (a) and (b) by pooling England and France and splitting the sample between territorial defeats and win. The number of parliaments in the 365 days before the territorial battle is normalized to zero and no control variables are added. The quantity of interest are simple averages per period. There is a clear statistically significant increase in the one-year period immediately after a territorial defeat, whereas there is no change in the number of parliaments in the one-year period after a territorial win.

We follow Cullen and Perez-Truglia (2021)'s methodology in order to identify the causal effect of a territorial defeat as opposed to a territorial win. This methodology differs from a standard event-study where the event itself is seen as the treatment and the control group consists of units where the event did not take place; or takes place at a different period in the case of a staggered design. The typical example is a policy evaluation, e.g. an increase in the minimal wage at different dates across different American states (Cengiz et al. (2019)). There is no clear 'pre' and 'post' event for the control group in a standard event-study. In Cullen and Perez-Truglia (2021) the event is the random reassignment of smoking workers to either smoking managers (treatment) or non-smoking managers (control). The estimate compares the before and after differences between treated and the control around an assignment event. As in Cullen and Perez-Truglia (2021), there is a clear 'pre' and 'post' event in our setting, i.e., the territorial battle, for both treatment (defeat) and control (win).

Formally, let $y_{i,t}$ be the outcome variable, i.e., the number of parliaments within the period t for each country i. Each country faces a territorial battle that may deliver a win or a defeat.[54]

[53] If two parliaments follow each other within a month we count only one. This occurs in France in four occasions during the One-hundred Years War: Oct 1424 and Nov 1424 (Western and Eastern Languedoil parliaments respectively); March 1424 and May 1425; two parliaments in April 1435 but in different locations; Nov and Dec 1426 (Western and Eastern Languedoil respectively).

[54] Approximately half-of the battles are between England and France, the other half involves another opponent.

According to our model, our prediction is that a defeat is more likely to trigger a parliament than a win. Let $D^j_{i,t+e}$ denote the traditional event-study variables that indicate the periods leading up to and following an event. $D^j_{i,t+e}$ takes value 1 if country i experiences the event of type j in period $t+e$, where $j \in J = \{win, defeat\}$:

$$y_{it} = \sum_{j \in J} \sum_{e \in \varepsilon} \beta_{j,e}.D^j_{i,t+e} + \eta_{i,t} + \delta_t + \epsilon_{i,t}.$$

We are interested in estimating the effect referred by Cullen and Perez-Truglia (2021) as 'single-difference'. We measure how parliaments respond to a territorial defeat versus a territorial win: $\beta_{defeat,e} - \beta_{win,e}$. The event window ε includes 5 years before and after the event aggregated at the yearly level. The omitted category is the 365 days immediately before a battle event. We include monarch fixed effects $\eta_{i,t}$ and year fixed effects δ_t. We cluster the standard errors at the monarch level.

The key assumption is that the outcome of a battle is unpredictable and can be seen as a random outcome. In Table A1 in the appendix we analyse the comments on each battle from the original sources to establish this. The event study goes further and allows us to test for parallel trends, i.e., that the numbers of parliaments being called were on the same trajectories irrespective of the upcoming battle being a win or a defeat. Under this identifying assumption we capture the causal impact of defeat versus a win, given that a battle occurred.

The main results can be seen in Figure 2 (c). In each period we compare the average number of parliaments among country-periods that suffered 'defeat' versus those that 'won'. The baseline at $t-1$ normalizes to zero this difference in the year preceding the battle. There is a clear increase in the number of parliaments after a territorial defeat compared to a win, significant at the 10% level. Pre-trends are parallel. The effect is temporary. By the second year after a battle, the difference in the number of parliaments after a defeat and after a win reverts to baseline.

This lack of long-term effects of a battle defeat on the calling of parliaments corroborates the 'high-risk' scenario in our model. The threat to the Monarch and the bargaining with the commercial Elite through parliament occur within a period. According to the model, long-term effects are only to be expected in the case of an 'extreme-risk' scenario that leads to a transition to Rule by Parliament. In our sample this only occurs in England during the Glorious Revolution of 1688.

Since our estimation does not make use of staggered assignment of treatment, most issues raised in Goodman-Bacon (2021) and Callaway and Sant'Anna (2021) do not apply. Issues regarding the lack of point identification raised in Borusyak et al. (2021) also do not apply since anticipation effects can be ruled out under the identifying assumption that the outcome of the battle is unpredictable. Moreover, we have no evidence to suggest that treatment effects should differ across countries: the point estimates correlating a battle defeat and the calling of parliament for England and France in Table 4 are very similar; or across time: columns 4 and 5 in Table 2. Our implementation is closest to Cengiz et al. (2019). In order to deal with the issues

surrounding the staggered implementation of minimum wage increase, they stack and align the minimum wage reforms in event-time and create control groups using states where the policy was not implemented during the same time period. In our setting, assignment of treatment is aligned in event-time by construction, i.e, around a battle. The pre and post for both treatment and control group are clearly defined, and the battle date provides a clear center for the inclusion period in each sub-experiment. Once stacked Cengiz et al. (2019) estimate the average effect of 138 policy reforms. We estimate the average of 75 random assignments to either 'defeat' or 'win'.

As a robustness check, in Figure 2 (d) we present the results of a standard event-study analysis by only allowing for one type of event $J = \{defeat\}$. Compared to the previous specification the under-script j and the summation over j would drop. A territorial defeat is the event and the control group consists of 10 years around a territorial win. A territorial win is simply seen as a marker to determine a time period for a comparable control sample as suggested in Cengiz et al. (2019). The difference between the number of parliaments in the control sample and the one-year period before a territorial defeat is normalized to 0 at period -1. In the estimate we can see that there are no pre-trends in the number of parliaments before a territorial defeat, but there is a clear jump in the number of parliaments within one year after the defeat and a return to trend two years onwards. Both methods (Figure 2 (c) and (d)) yield very similar results. This is expected as a territorial win has no effect on the calling of parliament (Figure 2 (b)).

In order to identify the causal effect of a defeat versus a win, given that a battle occurred, we go beyond the test of parallel pre-trends presented in Figure 2 (c) and (d). In Table A1 in the appendix, we list every territorial battle involving England or France and use the information provided by our two sources (Bradbury (2004) and Clodfelter (2002)) to assess whether either opponent had clear superior odds to win the battle. We provide a one sentence summary explaining our classification.

In 39 out of 51 battles, the description indicates there were no clear odds favouring either side for a variety of reasons: the losing side initiated the battle; there was a long siege; the leader of the winning side was killed in battle; both sides were evenly matched regarding numbers of troops or the losing side was more numerous; and other forms of detailed descriptions.[55] For seven battles, the lack of detailed accounts prevents us from discussing odds while in only five entries, do the descriptions suggest one side was favoured.[56] Our classification of battles parallels that of Lindsey (2019), who shows that the outcome of sea battles in the 1650-1830 period were unpredictable if both sides had actively decided to engage.

The analysis in Table A1 and the lack of pre-trends when comparing territorial defeats and wins support the view that the outcome of territorial battles within our sample were unpredictable. We therefore interpret the outcomes of territorial battles as quasi-random events in line of the interpretation of the event-study analysis in Figure 2 (c) and (d).

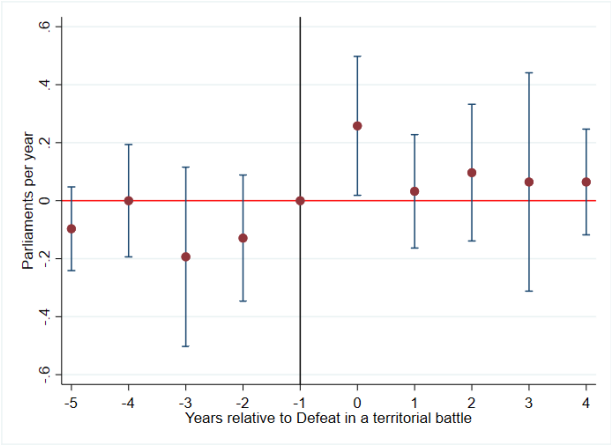
[55]for example: 'Captain Young fled to announce premature news of [English] defeat' and '12 hours of bitter fighting before the Allies broke'.

[56]Descriptions that led to this conclusion: 'French pursue and win; 'bombarded for three weeks' before surrender; 'defenses easily overcome'; and losing side clearly outnumbered.

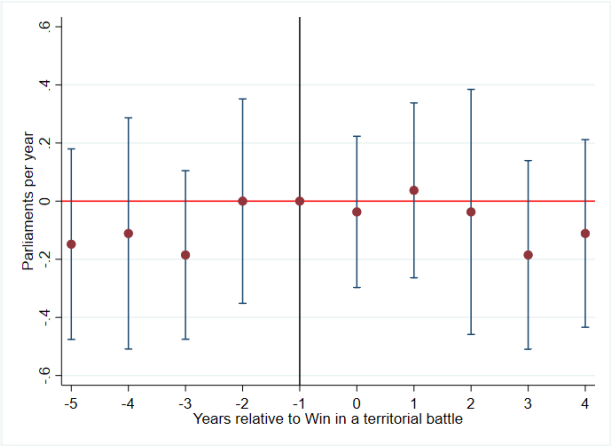
Table A1 also provides insights on how periods of low risk or high risk could potentially transition to extreme risk once conflict is ongoing. The outcome at Agincourt (25/10/1415) could have easily gone another way and generated an extreme risk event as described in our model. The English were retreating with the French in pursuit, but decided to form a defensive formation by the river and confront the pursuers. The English eventually won, but the French got dangerously close to the English King Henry V, denting his helmet, killing one brother, and almost killing another. Small changes in events during the mist of battle could have turned Agincourt from an English victory to an extreme risk period: the English king and his brothers dead and the French king victorious with a claim to Normandy and the English throne. Henry VI, heir to Henry V, had not yet been born.

Figure 2: Event Study: Parliament activity before and after a territorial battle in England and France, 1350-1700

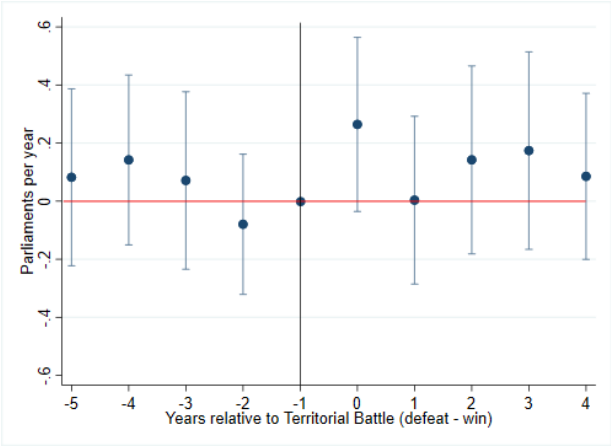
(a) Before and after a Battle defeat



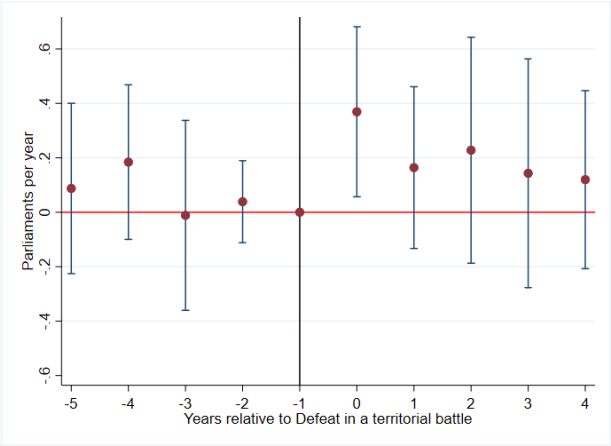
(b) Before and after Battle win



(c) Comparison of events: territorial defeat vs. win



(d) Territorial defeat as event



Note: There are 33 territorial battles involving England and 42 involving France. The dependent variable is the number of Parliaments held within 365 days of a battle (or the resolution of a siege). This value has been normalized to zero at the baseline period: one year before a battle. Panel (a) and (b) compare simple averages before and after a territorial battle. In Panel (c) the event is the battle and it either assigns treatment (defeat) or control (win). The difference between the average parliamentary activity in $t-1$ before a win and before a defeat is normalized to zero. Panel (d) implements a standard event analysis. The event it a territorial battle defeat. The control group consists of a 5-year interval around a battle win. The difference between the average parliamentary activity in the control group and the $t-1$ period for the treated group is normalized to zero. Point estimates represent differences from baseline. Standard errors clustered at the monarch level are used to calculate the 95% confidence intervals. Data compiled by authors. Sources are described in Section 4.1.

5 Discussion of Historical Case Studies

In this section we describe three extreme-risk events: one for Portugal and two for England. We also discuss, more broadly, why Rule by Parliament occurred in England but did not take hold in either France, Portugal, or Castile.

5.1 Portugal 1580: The Elite Prefers a Foreign Monarch

Portugal had a very active parliament in the pre-1500 period (Figure 3a). This activity coincided with a dispute over the Portuguese throne with the monarchs of Castile. The high frequency of parliaments is enclosed between two key battles fought against Castile: Aljubarrota in 1385 and Toro in 1476. During the same period and during the 1500s Portugal expands its trading empire in the Mediterranean and down the coast of Africa through a series of colonial battles. By opening up a direct trade route to Asia it became one of the wealthiest countries in Europe and faced few foreign threats during the first half of the 16^{th} century, when its parliamentary activity drops. However, the death of Dom Sebastian I in 1578 without a male heir started a succession crisis. Three main claimants soon emerged: Dona Catarina, Duchess of Brangança; Dom Antonio Prior do Crato, illegitimate grandson of former King Manuel I; and Philip II, King of Spain, the closest male relative to the dead King, but from his mother's side. Philip eventually won the Portuguese throne through a strategy of bargaining with Portugal's main players while showing military superiority. The Spanish army entered Portuguese territory while the Portuguese Parliament was still discussing the validity of the multiple claims. Soon, Philip negotiated with Dona Catarina for her to drop her claim but fighting continued as he and Dom Antonio failed to reach a compromise. Dom Antonio had himself declared King without the consent of parliament but he was soon defeated by the Spanish forces, when few in the country joined his cause. Ramos (2009) (pp. 270) summarizes the events as follows: "...one must not forget the constant armed threat, but it is certain that an important part of the Portuguese elite negotiated with Philip their becoming a part of a catholic monarchy that would cover the entire [Iberian] Peninsula."[57]

The unification of the Portuguese and Spanish Crowns under Philip II is an example of a country's Elite choosing a military strong foreign Monarch instead of someone from the incumbent dynasty. This confirms the predictions of our model: the Elite may prefer a misaligned - but much stronger - replacement Monarch, if the Elite perceives its returns to be higher in the future (due to defeats being less likely). Veen et al. (2000) suggests exactly this in the case of the Portuguese mercantile elite joining the Spanish Crown: "the need for silver of the Habsburg monarchy became a more attractive proposition than investment in the Carreira da India."[58]

By the time Portugal reconquered its independence in 1640-1660, its role as an international

[57] Self-translation from Portuguese.

[58] This passage indicates that Castile was sufficiently large compared to Portugal that its annexation did not alter the relative importance of mining/agriculture versus commercial wealth, i.e., the variable k in the model.

Figure 3: Parliament, War, and Atlantic Trade in England, France, Portugal, and Castile

Note: 11-year moving averages. A value of 1 indicates that a parliament was summoned in the past five years, the current year, and the future five years. Data on parliaments compiled by authors. Sources are described in Section 4.1. Data on ships to Asia by decades from Steensgaard (1970). Normalized so that the period with highest number for a given country (157 ships from England in 1681-1690) is normalized to 1. Data on five-yearly ships to America is from Tracy (1993). Normalized so that the period with highest number (193 ships in 1606-1610) is normalized to 1. Share agriculture provided by Broadberry et al. (2015) for England and Álvarez-Nogal and De La Escosura (2013) for Castile. Data on Wars in Bradbury (2004) and Clodfelter (2002).

trading nation was in decline. In Figure 3a we can see the drop in the number of ships to Asia.[59] Portugal also failed to see a decline in the share of agriculture as shown in Figure B4 in the online appendix.[60] Parliament was called often both during the succession crisis in 1580 and during the independence struggles around 1640 and 1660, but the frequency of its meetings declines until the end of the 17^{th} century.[61]

5.2 England 1216: the Invasion of Prince Louis of France

This event took place before our period of study but still has interesting implications for our analysis. The key conflict in this example is between the Monarch and the landed Elite, i.e., the barons. The commercial elite – and their representation through the third estate in parliament – had yet to emerge as a political force. Nevertheless, this is a historical example that can be read through the lens of our model because the Elite refused to support a particularly misaligned Monarch and demanded constitutional changes under the threat of invasion by an alternative Monarch.

As soon as King John had the Pope declare the Magna Carta invalid, the barons started an open rebellion and invited Prince Louis of France to take the throne of England. Louis landed in Lincoln 1216, overran most of Southern England and was acclaimed King in London (but no coronation took place). In October 1216, John died at Newark Castle leaving his nine year old son, Henry the III, as his successor. Henry re-issued the Magna Carta and adopted a policy of reconciliation. Henry's efforts were aided by the church when the Papal Legate excommunicated the French army and their allies whilst the Royalists were allowed to sew the white cross of the crusaders onto their surcoats. In time, many of the rebel barons were drawn back into the Royalist fold. By the start of the 1217 campaigning season, William Marshal (the young King's regent) had mustered a large army at Northampton ready to counter Prince Louis, who returned to France (Hanley (2016)).

5.3 England 1688: The Glorious Revolution

England had a very active parliament until the end of the Hundred Years War (Figure 3b). The sources used to code parliamentary activity also provide descriptions and analysis of each parliament up to the 1500s based on the Parliament Rolls (Given-Wilson et al. (2005)). We provide extracts of the discussion for each parliament following a territorial defeat in the online Appendix.

[59] We normalized the number of ships sent to Asia and the Americas so that they take value between 0 and 1. The number of ships to Asia is divided by 157, the highest number achieved in any decade by a country in our sample (England 1681-1690).

[60] We do not have access to a direct measure of the share of agriculture for Portugal. Instead we normalize the average GDP per capita and agriculture index provided by Palma and Reis (2019). There is little change in their relative movements during the period.

[61] Gold is first found in Brazil in 1697 and large scale mining ensues. This provides a direct resource to the Portuguese Crown (an increase in k) and further explain the lack of parliaments in the 18^{th} century.

There is a drop in parliamentary activity after the Hundred Years War – with the exception of the period around the Anglo Scottish War in 1542-50. Activity picks up again during the Civil War and reaches its peak during the War of the Grand Alliance (1689-1697) against France.

The transition to Rule by Parliament in England took place under William of Orange in 1688. While William was sitting on the English throne, James II had fled into exile in France. The English elite had to choose between a Catholic Monarch who wanted an alliance with France - the strongest military power of the time - or a Protestant Monarch and his alliance with the weaker Dutch Republic. In Table 5 we can see that by 1700 France had by far the largest army (larger then the sum of England and the Dutch Republic).[62] The English under William suffered at territorial defeat against the Scots at Killecrankie in July 1689 and a naval defeat at Beachy Head in June 1690. The creation of the Bank of England highlights the institutional bargaining taking place during this extreme-risk period, it was first proposed in 1691 and incorporated in 1694.

Looking at the situation through the lens of our model, one could therefore argue that the Elite negotiated with William while holding a strong bargaining position: without their support, James II and his misaligned foreign policy would be reinstated, but the alliance with militarily strong France would also bring benefits to them, so that the threat was credible. Compatibly with the analysis in our model, William then granted reforms which greatly increased parliament's power in exchange for the Elite's support in his war against France. The outcome was an institutional setting where parliament finally had a decisive advantage over the Monarch, as described in North and Weingast (1989) and Cox (2012).[63]

Table 5: Army size in Early Modern Europe (in 1,000s)

	1550			1700		
	army	navy	total	army	navy	total
England	41	25	66	76	115	181
France	43	14	57	224	118	342
Dutch Republic	-	-	-	90	86	176
Spain	145	18	163	37	26	63

Source: Karaman and Pamuk (2010).

One could also ask why James II did not hand over power earlier in the reverse situation, when faced with the threat of invasion from the Dutch? In our model, the level of misalignment between Monarch and Elite is a crucial variable and a Monarch who enjoys high ego-rents may choose to go it alone over handing power to parliament. It is reasonable to assume that James II faced a more difficult decision as he was a Catholic King facing a protestant parliament,

[62] All three countries had similar size navies.

[63] See Pincus (2009) for a detailed account of the Glorious Revolution. As an example of institutional change, the Monarch lost the right to terminate parliament at will (Dimitruk (2018)).

a parliament that, in charge, would have made a return to Catholicism impossible. William of Orange did not have a significant religious or political misalignment with parliament and, because of his background as Stadtholder in the Dutch Republic, was accustomed to having to deal with powerful parliaments.

The reason that the commercial elites were able to play such a key role in the Glorious Revolution (and earlier during the Civil War) is clear in Figure 3b. Inter-continental trade increased substantially and rapidly during the 17^{th} century. The number of ships to Asia goes from near 0 in the decade 1601-1610 to 193 in the decade of 1681-1690. At the same time, the share of agriculture in England started to decline, thus indicating a rapidly growing relative strength of commercial and financial wealth.[64]

5.4 France

France had an active parliament during the Hundred Years War (Figure 3c). Our period of study starts for France with the defeat at Poitiers in September 1356 and the parliament that followed in October 1356. King John of France was being held captive by the English. This is an example of an 'extreme risk' period. The bargaining that took place between the heir to the throne and parliament shows the relative strength of the latter. Etienne Marcel, prévôt des marchands de Paris, became de facto leader of the third estate and requested the implementation of the Great Ordinance in exchange for 30,000 men and the extraordinary taxes needed to continue the campaign and release the imprisoned King (Boulle (1845)). The Great Ordinance of 1357's intent was to limit the power of the monarch on decisions regarding taxes and the devaluation of money. Eventually, these reforms were not implemented in full, but they show the French Parliament as a place of discussions on war financing and the running of the state. More importantly, this episode is evidence that a French monarch in face of military defeat (an extreme risk), was willing to negotiate institutional arrangements conceding considerable powers to parliament.

After 1450 and the end of the Hundred Years War, parliamentary activity declines but shows signs of persistence. In particular, a major defeat in St. Quentin (Northern France) in 1558 against Habsburg forces, leads the people of Paris and Ile-de-France to be 'panic stricken at the prospect of an invasion' (Major (1960), p.144). Once the assembly opens in January 1559: "the King spoke first. He pointed out that since his advent to the throne he had been forced to fight continually against England and the Habsburgs. To pay for the wars he had had to sell his domain and tax his subjects heavily. The time had come, he argued, to make a last great effort in the hope of bringing about good peace. Since money was the sinew of war, he asked those present what assistance they could offer" (Major (1960), p.144).

There were no further territorial defeats in France between 1558 and 1656 according to our coding of Clodfelter (2002), despite a continue War with the Habsburgs between 1618 and 1648. Parliament still met relatively frequently during the French Wars of Religion, but last had a full

[64] Jha (2015) shows direct evidence from the Civil War period that parliamentarians who were shareholders of overseas assets tended to support reforms that favored parliament over Absolutism.

meeting of all three estates in 1615. Louis XIV summons two parliaments, one in 1649 and one in 1651, but both are cancelled before they could take place.

Why didn't a transition to Rule by Parliament similar to the one that took place in England occur in France? If anything, there seems to have been a transition to further Absolutism. According to our model, there are two reasons. First, France relied heavily on agriculture throughout the period. According to Maddison (2007), even by the year 1700, France had a high share of the population working in agriculture, 63% (the share of the population in agriculture is one proxy for the agriculture share of GDP). As an alternative measure, in Figure B4 in the online appendix we normalize the average GDP per capita and the agriculture index provided by Ridolfi (2017). There is little change in the relative positions of these two indices during the period, which indicates no major changes in the share of agriculture. Furthermore, for reasons outside the scope of this paper, France did not develop a commercial sector to the same extent that England did in the 17^{th} century. As it can be seen in Figure 3c, France sent a considerably smaller number of ships to Asia (approximately 30% of the total sent by England by the year 1700). In our model, this low level of commercial development is associated with a high k, which makes the Monarch less likely to need to bargain with the commercial Elite, in high-risk or even extreme-risk periods.

Having won the Hundred Years War and kept its integrity during the War of Religions, France's military might increases substantially and by the end of the 17^{th} century, it had become the undisputed strongest military power in Europe (Table 5). This is a key reason – according to our model – why a transition to Rule by Parliament would not occur in France. The probability of being in a high-risk (or extreme-risk) period in the 16^{th} century was low and almost nonexistent by the 17^{th} century. It is hard to think of a credible external threat to the French throne for that period, i.e., a threat of an alternative dynasty to the ruling Bourbons, that would bring with it a higher probability of winning wars or a more aligned foreign policy.

5.5 Castile

The results of our model would argue that Castile was on track towards Rule by Parliament. The Cortes were very active during the 14^{th} and 15^{th} centuries with ongoing conflicts with the Portuguese Crown and Granada. During this period, Castile had a institutional setup that was relatively open to its urban and commercial elites. At the beginning of our period of observation, Castile has a need to attract migrants to settle the land conquered from the Moors and so did not begin from a fully-blown medieval feudal system. For the same reason, Castilian cities had traditionally enjoyed a series of liberties vis-a-vis the monarchy. The Cortes, the Spanish equivalent of a parliament, played an important part in policy and in financing the monarchy itself. Aragon was already a major trading power when it joined the kingdom of Castile. Indeed, the discoveries in the New World themselves were an accident in the attempt to open new trade routes to Asia.

The discovery of silver and gold in vast quantities in the Americas in the early 16^{th} century changed the country's economic and institutional trajectory. Silver changed the equilibrium between cities such as Madrid, the Cortes, and the monarchy. In the language of our model, the parameter k increased substantially. The Spanish Crown's main source of wealth from then on came from mines in the Americas, e.g., Potosí. Even when not directly belonging to the Crown, the wealth from the silver mines was observable and verifiable and therefore easily controlled by the monarch.[65] The process began in the early 16^{th} and went on until the mid 17^{th} century. The share of revenue that required approval by the Cortes went from 63% in 1517, down to an average of 30% in the remaining of the 16^{th} century and never goes above 50% in the 17^{th} century (Thompson (1994) Table 3, pg. 165). Drelichman and Voth (2014) (p.7) explicitly note that "...silver revenues flooded in on a scale that made compromises with Castile's representative assembly - the Cortes - seemingly expendable".

As predicted by our model, the silver allowed the Castilian Crown to bypass (or strong-arm) the Cortes and to follow its military policy unconstrained so that instead of securing trading routes and further colonization, the silver wealth was used to pursue costly dynastic wars in European territory. Besides the resource curse on the economy, there was a clear resource curse on the political institutions with the Cortes losing powers in its dealings with the monarch. Álvarez-Nogal and Chamley (2014) and Álvarez-Nogal and Chamley (2016) describe how the Cortes tried to fight back and document how most debt-crises during the reign of Phillip II (1556-1598) were ultimately due to disputes between the Crown and the Cortes. The successive increases in the tax level were driven by Phillip's wars and were opposed by the Cortes.

Moreover, during the 16^{th} century, Castile also had significant military power. As can be seen in Table 5, by 1550 Castile commanded by far the largest armed forces. Just as for France in the 17^{th} century, high and extreme risk events were unlikely, and it is hard to imagine a credible alternative ruler to the Spanish monarch during the 16^{th} century.

One feature of the data that does not accord, at a glance, with our predictions is that Castile had both a fluent trade in silver with the Americas and a high number of parliaments during the first half of the 17^{th} century (Figure 3d). Note, however, that during this period Castile is involved in the costly occupation of two territories struggling for independence, the Dutch Republic and Portugal so that the demands on the Crown's resources had become extraordinary, precipitating a further need for funds. By the time Castile recognized the Dutch Republic (1658) and Portugal (1668) as independent nations, it is clear that Castile is no longer a trading power and the frequency of parliaments drops dramatically.

Castile did not promote the development of a commercial sector beyond that dedicated to the exploitation of natural resources. Figure 3d shows a rapid fall in the number of ships to the Americas. Once these resources started to shrink, it reverted to being an agricultural and low wage economy (Álvarez-Nogal and De La Escosura (2013)). As can be seen in Figure 3d the share of agriculture moved little doing the period, increasing, if anything, as the country approached

[65] On several occasions, the King expropriated entire shipments of bullion (Sardone (2019)).

the 1700s. Under these condition, it was unlikely that Rule by Parliament would emerge.

5.6 Alternative Views of the rise of Parliaments

In this section we reflect how our empirical results relate to two alternative hypothesis for the rise of parliaments in our period of study: the role of internal conflict (e.g., Royle (2000), Ellis and Fender (2011), and Aidt and Franck (2015)) and an incrementalist view (Congleton (2010), Salter (2015), and Leon (2020)).

The role of internal conflict in the calling of parliament in our period of study can not be ruled out. In Table 2 we see that the partial correlation between internal conflict and the calling of parliament is smaller than that of a territorial defeat but statistically significant and robust across specification except for the pre-1500 sample. This pre-1500 and post-1500 divide is suggestive of parliaments taking a larger role in internal disputes in the latter part of our period of study. Such a view is in-keeping with the literature that focuses on the rise of parliaments in the early 19^{th} century by studying internal conflict, for example, Aidt and Jensen (2014).

It is clear from Figure 3 that the frequency of parliaments in all four countries varies considerably across the period. There is no clear long-term trend in England of an increase in the frequency of parliaments that then culminates in a parliament every year (or a linear decrease for the other countries). In all four countries the frequency varies upwards and downwards throughout the period. As argued in this Section, these long-term variations seem linked to the onset and resolution of conflict with neighbouring powers.

In Table 4 we can see how the lagged dependent variable affects the calling of a parliament. The once-lagged parliament is only robust for France. As a further test, we run our preferred regression model by country adding 10-year lags (online appendix Table B4). Only in France and Portugal we find that the once-lagged dependent variable has a clear statistical significant partial correlation with holding a parliament in a given year. The other lags are mostly statistically non-significant or have a negative point estimate. Surprisingly, the point estimates for England suggest a negative partial correlation, albeit not statistically significant. Moreover, in our event-study results in section 4.3 we find no evidence that the effect of a territorial defeat on the calling of parliament is persistent beyond one year. These results provide little support for an incrementalist view of transitions to Rule by Parliament.

Instead, our empirical analysis provides support for the view that all four parliaments in our study responded similarly to military and economic events throughout the period of study, up to the point in which England transitions to Rule by Parliament. Thus, we support the view of Henriques and Palma (2019) that there was no institutional divergence between England, Portugal and Spain until the late 17^{th} century; and the view of North and Weingast (1989), Pincus (2009), Cox (2012), and Cox and Dincecco (2021) that the Glorious Revolution was indeed a constitutional watershed event. We add to this view by showing how these constitutional changes were achieved during a very specific window of opportunity of extreme threat to the

sitting monarch.[66]

6 Concluding Remarks

Political transitions to Rule by Parliament as described in our model occurred in England in the 17^{th} century and arguably in other polities in periods further back in time, e.g., Athens in 461/462 BC and Venice in 1172 (De Magalhães (2013); see also Carugati (2020) for Athens in 403 BC). These transitions are rare and require very specific conditions to take place. Our model helps us identify these conditions. First, the country must be in a weak position militarily, otherwise there is no credible threat of an alternative invading ruler. Second, the country's commercial Elite must be relatively important compared to its agricultural sector, otherwise the ruler has no need to bargain. Third, the alternative to the current ruler cannot be too attractive for the Elite. Otherwise, it may be better for the commercial Elite to live under Absolutism with a militarily strong ruler than with Rule by Parliament under a weaker one. This was the case of Portugal in 1580, as discussed above, or Genoa in the 13^{th} and 14^{th} century (De Magalhães (2013)). Finally, the current ruler must be misaligned with the Elite, but not too misaligned as they may prefer to take the risk over giving substantial power to parliament. Thus, our model makes explicit that transitions to Rule by Parliament in historical times were extremely rare because they required Goldilocks conditions: moderate military strength, a significant but not extreme misalignment between Monarch and the commercial Elite, and an economy where the commercial Elite was sufficiently important. If all these conditions held during the same time period as an extreme-risk event – i.e., a looming foreign invasion – then a transition to Rule by Parliament was possible.

Another contribution of our model is to highlight that the same forces that shape a (rare) transition to Rule by Parliament in the event of an extreme-risk scenario, drive the calling of parliaments in relatively absolutist regimes. We cannot empirically test models that predict transitions to Rule by Parliament in historical times as these events are extremely rare. However, since the institutional setup used to explain Rule by Parliament is the same that is used to explain the regular calling of parliament, we can empirically test predictions of the model for the much more frequent periods where threats to the monarch were not so extreme. Thus we can – indirectly – provide an empirical test for a model that accounts for rare events of political transitions. Here, we show two main empirical findings. First, battle defeats in a country's own territory or on its immediate border – our proxy for high-risk – have a causal impact on the calling of parliament during the following year. Second, years of relatively low agricultural production (or high commercial/manufacture output) also increase the chances parliament is called. Both results support the empirical predictions of our model.

Furthermore, the model allows us to consider long-lasting implications on institutional development if territorial battles and wars in our period had ended with different outcomes during

[66] Our results have a parallel to modern day evidence of a 'democratic window of opportunity' for step-change democratization in Africa (Brückner and Ciccone (2011) and Aidt and Leon (2016)).

critical junctures (Acemoglu and Robinson (2013) and Capoccia (2016)). Had the battle of Orleans gone the other way, with England conquering most of France, it becomes hard to imagine - according to the model - that parliament would have been as active as it turned out to be in England or that a joint England-France would have evolved to a full blown Rule by Parliament when it did. The monarch of a victorious England-France would rule a country with a higher share of agriculture and with the ability of raising a significant army, thus reducing the need of parliament. Conversely, a losing but independent France that was small and centered in the Seine valley might have required more parliamentary activity due to its vulnerability. Had there been a clear pro-commerce heir to Dom Sebastião at the time of his death in 1578, the Portuguese commercial elite could have continued to thrive and parliament would have been more active than under Spanish rule. In an early example of the resource curse, if no silver or gold had been found in the Americas, Castile and Aragon may have continued to be a trading and manufacturing nation of middling military power with an active parliament.

Finally, future work should consider extensions of our theory to endogenize processes that we assume exogenous. In our theory, for example, the underlying economic variables are fixed, as we do not allow for the possibility of economic dynamics. We are able to explain dynamics in the institutional variables but we cannot capture possible feedback effects from the latter back to the economy. One could imagine, for example, that over time calling more parliaments may generate further reductions in the share of agriculture, thus accelerating the process of transition to Rule by Parliament.

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Table A1: Territorial Battles involving England or France

Battle	date	Opponents	Clear odds	Comment on odds	Source
Mauron	14/08/1352	**England** vs France	No	Losing side initiated.	B. p. 202
Breteuil	26/07-20/08/1356	England vs **France**	No	Stalemate; negotiated surrender.	B. p. 198
Poitiers	19/09/1356	**England** vs France	No	Losing side initiated.	B. p. 205
Rennes	3/10/1356-5/07/1357	England vs **France**	No	Long siege: nine months.	B. p. 205
Thurie	1370	**England** vs France	No	Subterfuge to breach defenses.	B. p. 206
La Rochelle	1/06/1372	England vs **France**	No	Subterfuge to breach defenses.	B. p. 202
Otterburn	5/08/1388	England vs **Scotland**	No	Leader of winning side killed in battle.	B. p. 216
Pilleth	22/06/1402	England vs **Wales**	NEI	Ambush, but no other description .	B. p. 217
Homildon Hill	14/09/1402	**England** vs Scotland	NEI	English stop Scottish invasion.	B. p. 214
Harfleur	13/08-22/09/1415	**England** vs France	No	Stalemate; negotiated surrender. Weather and sickness played role.	B. p. 201
Agincourt	25/10/1415	**England** vs France	No	Losing side initiated. English King's helmet dented, brother killed.	B. p. 196
Valmont	11/03/1416	**England** vs France	No	Losing side initiated: 'expecting easy victory but were defeated'.	B. p. 206
Caen	4/09-20/09/1417	**England** vs France	NEI	Storm city but castle surrenders on terms.	B. p. 198
Rouen	29/07/1418-19/01/1419	**England** vs France	No	Long siege: six months.	B. p. 205
Falaise	12/1418-19/01/1419	**England** vs France	NEI	Town surrender but castle resited for a month.	B. p. 200
Bauge	22/03/1421	England vs **France**	No	Losing side initiated.	B. p. 197
Meaux	21/10/1421-10/05/1422	**England** vs France	No	Long siege: seven months. English King becomes ill, dies in August.	B. p. 202
Cravant	31/07/1423	**England** vs France	No	French held the high ground but lost.	B. p. 200
Verneuil	17/08/1424	**England** vs France	No	'Captain Young fled the field to announce premature news of [English] defeat'.	B. p. 207
Herrings	12/02/1429	**England** vs France	No	Losing side initiated: English ambushed by the French.	B. p. 201
Orleans	7/10/1428-7/05/1429	England vs **France**	No	Long siege: six months.	B. p. 204
Patay	18/06/1429	England vs **France**	Yes	French pursue and win: 'victory confirming the change of fortunes'.	B. p. 204
Beauvais	12/08/1431	**England** vs France	No	'War was swinging in favour of France, but the traditional English formation still won some victories'.	B. p. 197
Rouen	29/10/1449	England vs **France**	No	Negotiated surrender.'Somerset allowed to leave'.	B. p. 205
Formingny	15/04/1450	England vs **France**	No	'English held early French attacks'. 'A second French force arrived'.	B. p. 200
Caen	30/06/1450	England vs **France**	Yes	'French bombarded with cannons for three weeks'. Surrender.	B. p. 198
Falaise	21/07/1450	England vs **France**	NEI	No details.	B. p. 200
Castillon	17/07/1453	England vs **France**	No	Losing side initiated: 'Talbot unwisely attempted to storm the camp'.	B. p. 199
Beauvais	22/07/1472	Burgandy vs **France**	No	Losing side initiated: Ladders too short/lacked ammunition for cannons.	B. p. 197
Flodden Edge	9/09/1513	**England** vs Scotland	No	Losing side initiated/Losing side larger: Scots 40,000+5,000 French vs England 26,000'.	C. p. 17
Solway Moss	24/11/1542	**England** vs Scotland	No	Losing side larger: 3500 English vs 10000 Scots.	C. p. 17
Ancrum moor	27/02/1544	England vs **Scotland**	No	Losing side larger: 4,500 English vs 2,000 Scots.	C. p. 17
Pinkie Cleugh	10/09/1547	**England** vs Scotland	No	Losing side initiated/Losing side larger: 23,000 Scots vs 16,500 English.	C. p. 17
St Quentin	10/08/1557	France vs **Spain**	Yes	Losing side outnumbered: French 26,000 vs Imperialists 50,000.	C. p. 10
Gravelines	13/07/1558	France vs **Spain**	No	Evenly matched: French 10,500 vs Imperialists 13,000	C. p. 10
La Rochelle	1/06/1627	England vs **France**	No	Long siege: fourteen months. Evenly matched relief attempt: 8000 English vs 6000 French.	C. p. 39
La Rochelle	1/09/1628	England vs **France**	No	Long siege: fourteen months. Large relief attempt fails: 140 ships and 6000 men.	C. p. 39
Rocroi	19/05/1643	**France** vs Spain	No	Evenly matched: Spain 23,000 vs France 20,800.	C. p. 39
Freiburg	5/08/1644	**France** vs Bavarian	No	Evenly matched: Bavarians 16,800 vs French 20,000.	C. p. 39
Len	02/08/1648	**France** vs Spain	No	Evenly matched forces: Spanish 18,000 vs French 16,000. Spain attempts to invade France.	C. p. 39
Arras	24/08/1654	**France** vs Spain	NEI	Relieved Siege.	C. p. 41
Valenciennes	16/07/1656	France vs **Spain**	NEI	Relieved Siege.	C. p. 41
Dunes	14/06/1658	**France** vs Spain	No	Evenly matched: French 15,000 vs Spain 16,000; 4-hour battle	C. p. 41
Seneffe	11/08/1674	Dutch/Allies vs **France**	No	Allies lost despite larger force: Allies 65,000 vc French 45,000.	C. p. 47
Enzheim	4/10/1674	**Dutch/Allies** vs France	No	Evenly matched: Allies 38,000 vs French 32,000.	C. p. 47
Luxembourg	1/05/1684	**France** vs Spain	Yes	'The Spanish defenses were easily overcome'.	C. p. 47
Killiecrankie	27/07/1689	England vs **Scotland**	No	Losing side larger: 2,500 Scots vs 3,400 English. Scottish leader killed	C. p. 53
Fleurus	1/07/1690	Allies vs **France**	No	Evenly matched: Allies 37,000 vs French 45,000.	C. p. 48
Steenkerke	3/08/1692	Allies vs **France**	No	Evenly matched: Allies 63,000 vs French 57,000.	C. p. 48
Neerwiinden	29/08/1693	Allies vs **France**	No	'12 hours of bitter fighting before Allies broke'.	C. p. 48
Namur	15/09/1695	**Allies** vs France	Yes	Losing side clearly outnumbered: French 14000, Allies 80,000.	C. p. 48

Note: Battle information from Bradbury (2004), abbreviated to 'B.' and Clodfelter (2002), abbreviated to 'C.'. Opponent in bold indicates the winner. 'NEI' stands for 'not enough information'.

Table A2: Territorial Battles involving Portugal or Castile

Battle	date	Opponents	Clear odds	Comment on odds	Source
Aljubarrota	14/08/1385	Castile vs **Portugal**	No	Castile initiated invasion and charged but lost.	B. p. 223
Toro	1/03/1476	**Aragon-Castile** vs Portugal	NEI	No details	B. p. 225
Loja	1/07/1482	Castile-Aragon vs **Granada**	No	Castile-Aragon initiates the siege, but is then ambushed.	B. p. 224
Granada	04/1491-2/01/1492	**Castile-Aragon** vs Granada	No	Long siege: eight months.	B. p. 224
Alcantara	25/08/1580	**Spain** vs Portugal	NEI	10,000 Portuguese against Spain.	C. p. 16
Azores	07/1583	**Spain** vs Portugal	Yes	Spanish landed and 'quickly conquered the island'.	C. p. 16
Montijo	26/05/1644	Spain vs **Portugal**	NEI	'8,000 infantry and 2,500 cavalry engaged'.	C. p. 43
Estremadura	1661	Spain vs **Portugal**	No	Spain 'dispatched 35,000'. 'The Portuguese checked the invaders'.	C. p. 43
Ameixal	8/06/1663	Spain vs **Portugal**	No	Evenly matched: Portugal 17,000 vs Spain 18,500.	C. p. 43
Montes Claras	17/06/1663	Spain vs **Portugal**	No	Evenly matched: Portugal 20,000 vs Spain 23,000.	C. p. 43
Villaviciosa	06/1665	Spain vs **Portugal**	No	'Bitter eight-hour-long, hand-to-hand battle'.	C. p. 43

Note: Battle information from Bradbury (2004), abbreviated to 'B.' and Clodfelter (2002), abbreviated to 'C.'. Opponent in bold indicates the winner. 'NEI' stands for 'not enough information'.

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Appendix A Proofs

In the appendix we prove propositions 1 and 2 under more general conditions than those discussed in the main part of the paper so that the statements there are special cases of those considered here.

Proof of Proposition 1 Under Absolutism M participates, while E can participate in low-risk, high-risk wars, neither or both. Also, this will depend on the foreign policy. Let

$$W_f^E\left(x_h^E(f), x_l^E(f)\right)$$
$$W_f^M\left(x_h^E(f), x_l^E(f)\right)$$

be E and M's continuation values in a generic period, when there is Absolutism, when f is the foreign policy and E's decision is $x_h^E(f)$ in high-risk periods and $x_l^E(f)$ in low-risk periods. Since $\tau_j^f(1,1)$ represents transfers from M if E agrees to join the war and $\tau_j^f(0,1)$ the transfer if E does not, then M's utility is clearly maximized if $\tau_j^f(0,1)=0$ and so we will denote with $\tau_j^f=\tau_j^f(1,1)$ for $j\in\{h,l\}$. Thus, net of possible ego-rents

$$\begin{aligned}
W_f^M(1,1) &= \tfrac{1}{1-\beta}\left\{\pi\left[p\rho^f-\tau_h^f\right]+(1-\pi)\left[p\rho^f-\tau_l^f\right]\right\}\\
W_f^M(0,1) &= \tfrac{1}{1-\beta}\left\{\pi pk\rho^f+(1-\pi)\left[p\rho^f-\tau_l^f\right]\right\}\\
W_f^M(1,0) &= \tfrac{1}{1-\beta}\left\{\pi\left[p\rho^f-\tau_h^f\right]+(1-\pi)\,pk\rho^f\right\}\\
W_f^M(0,0) &= \tfrac{1}{1-\beta}\left\{\pi pk\rho^f+(1-\pi)\,pk\rho^f\right\}
\end{aligned}$$

and

$$\begin{aligned}
W_f^E(1,1) &= \tfrac{1}{1-\beta}\left\{\pi\left[\phi-(1-p)\,l+\tau_h^f\right]+(1-\pi)\left[\phi+\tau_l^f\right]\right\}\\
W_f^E(0,1) &= \tfrac{1}{1-\beta}\left\{\pi\left[1-k+\phi-(1-pk)\,l\right]+(1-\pi)\left[\phi+\tau_l^f\right]\right\}\\
W_f^E(1,0) &= \tfrac{1}{1-\beta}\left\{\pi\left[\phi-(1-p)\,l+\tau_h^f\right]+(1-\pi)(1-k+\phi)\right\}\\
W_f^E(0,0) &= \tfrac{1}{1-\beta}\left\{\pi\left[1-k+\phi-(1-pk)\,l\right]+(1-\pi)(1-k+\phi)\right\}
\end{aligned}$$

We begin with the case where E participates in both HR and LR periods and then consider the case where E only participates in HR periods: since the reservation utility from non-participation is lower in HR periods, it will never be the case that E only participates in LR periods. Nash bargaining implies that in LR periods, conditional on participation in HR periods, τ_l^f maximizes

$$\begin{aligned}
&\left(p\rho^f-\tau_l^f+\beta W_f^M(1,1)-pk\rho^f-\beta W_f^M(1,0)\right)\\
&\times\left(\tau_l^f+\phi+\beta W_f^E(1,1)-(1-k+\phi)-\beta W_f^E(1,0)\right)
\end{aligned}$$

subject to

$$p\rho^f - \tau_l^f + \beta W_f^M(1,1) - pk\rho^f - \beta W_f^M(1,0) \geq 0 \Leftrightarrow p\rho^f(1-k) \geq \tau_l^f$$
$$\tau_l^f + \phi + \beta W_f^E(1,1) - (1-k+\phi) - \beta W_f^E(1,0) \geq 0 \Leftrightarrow \tau_l^f \geq 1-k$$

It is easy to see that there exist transfers that can satisfy both constraints iff $p\rho^f \geq 1$. In HR periods, conditional on participation in LR periods, τ_h^f maximizes

$$\left(p\rho^f - \tau_h^f + \beta W_f^M(1,1) - pk\rho^f - \beta W_f^M(0,1)\right)$$
$$\times \left(\phi - (1-p)l + \tau_h^f + \beta W_f^E(1,1) - (1-k+\phi) + (1-pk)l - \beta W_f^E(0,1)\right)$$

subject to

$$p\rho^f - \tau_h^f + \beta W_f^M(1,1) - pk\rho^f - \beta W_f^M(0,1) \geq 0 \Leftrightarrow p\rho^f(1-k) \geq \tau_h^f$$
$$\phi - (1-p)l + \tau_h^f + \beta W_f^E(1,1) - (1-k+\phi) + (1-pk)l - \beta W_f^E(0,1) \geq 0$$
$$\Leftrightarrow \tau_h^f \geq (1-k)(1-pl)$$

Now, since in aligned wars to $p\rho^a = pR > 1$ while in misaligned wars $p\rho^{-a} = pr < 1$ by assumption, and E's participation constraints are weaker for high-risk periods (since $1 - pl < 1$), then a solution exists only for aligned wars and by solving the problem it is easy to see that it is equal to

$$\widehat{\tau}_l^a = \frac{1}{2}(1-k)(pR+1) \text{ and}$$
$$\widehat{\tau}_h^a = \frac{1}{2}(1-k)(pR+1-lp)$$

It is easy to check that these transfers satisfy the participation constraints and (since $l > 0$) that $\widehat{\tau}_h^a < \widehat{\tau}_l^a$. So, while aligned wars will lead to E's participation in both high and low risk periods, this is not the case of misaligned wars. We now consider the possibility that E only participates in high-risk wars because, as discussed, E's participation is easier to guarantee in HR periods. So, focusing on misaligned wars, then conditional on non-participation in LR periods, τ_h^{-a} maximizes

$$\left(pr - \tau_h^{-a} + \beta W_{-a}^M(1,0) - pkr - \beta W_{-a}^M(0,0)\right)$$
$$\times \left(\phi - (1-p)l + \tau_h^{-a} + \beta W_{-a}^E(1,0) - (1-k+\phi) + (1-pk)l - \beta W_{-a}^E(0,0)\right)$$

subject to

$$pr - \tau_h^{-a} + \beta W_{-a}^{M}(1,0) - pkr - \beta W_{-a}^{M}(0,0) \geq 0 \Leftrightarrow pr(1-k) \geq \tau_h^{-a}$$
$$\phi - (1-p)l + \tau_h^{-a} + \beta W_{-a}^{E}(1,0) - (1-k+\phi) + (1-pk)l - \beta W_{-a}^{E}(0,0) \geq 0$$
$$\Leftrightarrow \tau_h^{-a} \geq (1-k)(1-pl)$$

In this case, participation constraints can be satisfied for any τ_h^{-a} such that

$$pr(1-k) \geq \tau_h^{-a} \geq (1-k)(1-pl)$$

which is possible whenever

$$pr \geq 1 - pl \Leftrightarrow l \geq \frac{1-pr}{p} = l^*$$

Conditional on this condition being satisfied, we then have that optimal transfers in high-risk misaligned wars are

$$\widehat{\tau}_h^{-a} = \frac{1}{2}(1-k)(pr + 1 - pl)$$

Now, obviously the condition $l \geq l^*$ is easier to obtain as r and p increase, but observe that we also have the constraint that $l < 1 - k + \phi$ which implies that higher values of k and lower values of ϕ make it harder for there to exist an l that satisfies both this constraint and $l \geq l^*$. We now consider the foreign policy decision for M. By choosing an aligned foreign policy (and given the E will always participate in wars with such foreign policy) then M can expect

$$\frac{1}{1-\beta}\left\{\pi\left[pR - \widehat{\tau}_h^{a}\right] + (1-\pi)\left[pR - \widehat{\tau}_l^{a}\right]\right\}$$
$$= \frac{pR(1+k) - (1-k)(1-\pi pl)}{2(1-\beta)}$$

whereas with a misaligned foreign policy, she can expect, if $l \geq l^*$

$$\frac{1}{1-\beta}\left\{\gamma + \pi\left[pr - \widehat{\tau}_h^{-a}\right] + (1-\pi)pkr\right\}$$
$$= \frac{2\gamma + p(\pi + 2k - \pi k)r - \pi(1-k)(1-pl)}{2(1-\beta)}$$

or, if $l < l^*$

$$\frac{1}{1-\beta}\left\{\gamma + \pi pkr + (1-\pi)pkr\right\}$$
$$= \frac{\gamma + pkr}{1-\beta}$$

Putting everything together, we have that M will choose a misaligned war whenever

$$\gamma \geq \gamma^* = \begin{cases} \dfrac{pR(1+k) - pr(\pi + 2k - \pi k) - (1-k)(1-\pi)}{2} & if \quad l \geq l^* \\ \dfrac{pR(1+k) - pr(\pi + 2k - \pi k) - (1-k)(1-\pi)}{2} + \dfrac{1}{2}\pi(pr + pl - 1)(1-k) & if \quad l < l^* \end{cases}$$

where we note that

$$\frac{\partial\left(\frac{pR(1+k)-pr(\pi+2k-\pi k)-(1-k)(1-\pi)}{2}\right)}{\partial k} = \frac{1}{2}(pR - 2pr + \pi pr + 1 - \pi) > \frac{1}{2}(pR - 2 + \pi + 1 - \pi) = \frac{1}{2}(pR - 1) > 0$$

while

$$\frac{\partial\left(\frac{pR(1+k)-pr(\pi+2k-\pi k)-(1-k)(1-\pi)}{2} + \frac{1}{2}\pi(pr+pl-1)(1-k)\right)}{\partial k} = \frac{\partial\left(\frac{pR(1+k)-pr(\pi+2k-\pi k)-(1-k)(1-\pi)}{2}\right)}{\partial k} + \frac{1}{2}\pi(1 - pr - pl)$$

and since $l < l^*$ then $1 - pr - pl > 0$. It is immediate to check that γ^* is increasing in π, l and decreasing in r. Under RBP the same exact kind of analysis applies, but we omit it here as it is obvious that E will always choose the aligned foreign policy and M will always participate in aligned wars. The remaining question is whether, under Absolutism, M will ever want to concede RBP. Obviously, this is an issue only when $\gamma \geq \gamma^*$. We begin with the case $l \geq l^*$ so that parliament would be called successfully in a HR period. When $l \geq l^*$, in a low-risk period, the expected utility for M to not conceding RBP is

$$\gamma + pkr + \beta\frac{2\gamma + p(\pi + 2k - \pi k)r - \pi(1-k)(1-pl)}{2(1-\beta)}$$

while by conceding RBP this becomes

$$\gamma + pr + \beta\frac{pR(1+k) - (1-k)(1-\pi pl)}{2(1-\beta)}$$

Not conceding RBP is preferable if

$$\gamma \geq \gamma^* + pr(1-k)\frac{1-\beta}{\beta}$$

Similarly, in a high-risk period for RBP to not be conceded we need

$$\gamma + \left(pr - \frac{1}{2}(1-k)(pr+1-pl) \right) + \beta \frac{2\gamma + p(\pi + 2k - \pi k) r - \pi(1-k)(1-pl)}{2(1-\beta)}$$
$$\geq \gamma + pr + \beta \frac{pR(1+k) - (1-k)(1-\pi pl)}{2(1-\beta)}$$
$$\Leftrightarrow \gamma \geq \gamma^* + \frac{1}{2}(pr+1-pl)(1-k)\frac{1-\beta}{\beta}$$

If we instead consider the case $l < l^*$ then the conditions for not conceding RBP in both low-risk and high-risk periods becomes

$$\gamma + pkr + \beta \frac{\gamma + pkr}{1-\beta} \geq \gamma + pr + \beta \frac{pR(1+k) - (1-k)(1-\pi pl)}{2(1-\beta)}$$
$$\Leftrightarrow \gamma \geq \gamma^* + pr(1-k)\frac{1-\beta}{\beta}$$

Clearly, these boundaries are higher than γ^* for any $\beta < 1$ but equal to γ^* for $\beta = 1$.■

Proof of Proposition 2 We begin with the case where M is in charge, and compare the decision to participate from E, conditional on future foreign policies being aligned or misaligned. Similarly to Proposition 1, we assume zero transfers for non-participation while τ_A^f represent transfers to E for participation when future wars are aligned and τ_{-A}^f when they are misaligned. Finally, V represents to continuation value in future periods for E in case of defeat (no such continuation values applies to the monarch who will be replaced in such case). In the case where, if the Monarch continues, the foreign policy will be aligned (which happens when RBP is granted, or when $\gamma < \gamma^*$), we are maximizing

$$\left(p\rho^f - \tau_A^f + p\beta W_a^M(1,1) - pk\rho^f - pk\beta W_a^M(1,1) \right)$$
$$\times \left(\tau_A^f + p\phi + p\beta W_a^E(1,1) + (1-p)\beta V - pk(1-k+\phi) - pk\beta W_a^E(1,1) - (1-pk)\beta V \right)$$

subject to

$$p\rho^f - \tau_A^f + p\beta W_a^M(1,1) - pk\rho^f - pk\beta W_a^M(1,1) \geq 0$$
$$\Leftrightarrow p(1-k)\left[\rho^f + \beta W_a^M(1,1) \right] \geq \tau_A^f$$
$$\tau_A^f + p\phi + p\beta W_a^E(1,1) + (1-p)V - pk(1-k+\phi) - pk\beta W_a^E(1,1) - (1-pk)V \geq 0$$
$$\Leftrightarrow \tau_A^f \geq p(1-k)\left[k - \phi + \beta V - \beta W_a^E(1,1) \right]$$

For the Monarch, there is a continuation value (with an aligned foreign policy) only in case of victory while for E continuation values are represented by $W_a^E(1,1)$ in case of victory and V in case of defeat. Recall that we consider τ_A^f as the net transfers for participation, which means that it is possible that $\tau_A^f < 0$ satisfies both of these constraints. Transfers

that satisfy these two constraints exist whenever

$$p(1-k)\left[\rho^f+\beta W_a^M(1,1)\right]\geq p(1-k)\left[k-\phi+\beta V-\beta W_a^E(1,1)\right]$$
$$\Leftrightarrow W_a^M(1,1)+W_a^E(1,1)+\frac{\phi+\rho^f-k}{\beta}\geq V$$
$$\Leftrightarrow \frac{1}{1-\beta}\left[pR+\phi-\pi l(1-p)\right]+\frac{\phi+\rho^f-k}{\beta}\geq V$$

Whenever feasible this gives us transfers

$$\tau_A^f=\frac{1}{2}p(1-k)\left(\beta\left(V+W_a^M(1,1)-W_a^E(1,1)\right)+k+\rho^f-\phi\right)$$

On the other hand, if whenever the Monarch survives, the foreign policy will be misaligned (which happens when $\gamma>\gamma^*$ and RBP is not granted) and in this case, we are maximizing

$$\left(p\rho^f-\tau_{-A}^f+p\beta\left[W_{-a}^M\left(x^E,0\right)+\frac{\gamma}{1-\beta}\right]-pk\rho^f-pk\beta\left[W_{-a}^M\left(x^E,0\right)+\frac{\gamma}{1-\beta}\right]\right)$$
$$\times\left(\tau_{-A}^f+p\phi+p\beta W_{-a}^E\left(x^E,0\right)+(1-p)\beta V-pk(1-k+\phi)-pk\beta W_{-a}^E\left(x^E,0\right)-(1-pk)\beta V\right)$$

subject to

$$p\rho^f-\tau_{-A}^f+p\beta\left[W_{-a}^M\left(x^E,0\right)+\frac{\gamma}{1-\beta}\right]-pk\rho^f-pk\beta\left[W_{-a}^M\left(x^E,0\right)+\frac{\gamma}{1-\beta}\right]\geq 0$$
$$\Leftrightarrow p(1-k)\left[\rho^f+\beta\left(W_{-a}^M\left(x^E,0\right)+\frac{\gamma}{1-\beta}\right)\right]\geq\tau_{-A}^f$$
$$\left(\tau_{-A}^f+p\phi+p\beta W_{-a}^E\left(x^E,0\right)+(1-p)\beta V-pk(1-k+\phi)-pk\beta W_{-a}^E\left(x^E,0\right)-(1-pk)\beta V\right)\geq 0$$
$$\Leftrightarrow \tau_{-A}^f\geq p(1-k)\left[k-\phi+\beta V-\beta W_{-a}^E\left(x^E,0\right)\right]$$

where $W_{-a}^I\left(x^E,0\right)$ (for $I=E,M$) takes into account that, depending on whether $l\leq l^*$ or not, in case of future high-risk wars, E may or may not participate. So, for the Monarch, there is a continuation value (with a misaligned foreign policy) only in case of victory while for E continuation values are represented by $W_{-a}^E\left(x^E,0\right)$ in case of victory and V in case of defeat. Transfers that satisfy these two constraints exist whenever

$$p(1-k)\left[\rho^f+\beta\left(W_{-a}^M\left(x^E,0\right)+\frac{\gamma}{1-\beta}\right)\right]\geq p(1-k)\left[k-\phi+\beta V-\beta W_{-a}^E\left(x^E,0\right)\right]$$
$$\Leftrightarrow W_{-a}^M\left(x^E,0\right)+W_{-a}^E\left(x^E,0\right)+\frac{\gamma}{1-\beta}+\frac{\phi+\rho^f-k}{\beta}\geq V$$
$$\Leftrightarrow\begin{cases}\frac{1}{1-\beta}\left[p(\pi+k-\pi k)r+\phi-\pi l(1-p)+(1-k)(1-\pi)+\gamma\right]+\frac{\phi+\rho^f-k}{\beta}\geq V & if \quad l\geq l^*\\ \frac{1}{1-\beta}\left[prk+\phi-\pi l(1-pk)+(1-k)+\gamma\right]+\frac{\phi+\rho^f-k}{\beta}\geq V & if \quad l<l^*\end{cases}$$

Whenever feasible this gives us transfers

$$\tau_{-A}^{f}=\frac{1}{2}p\left(1-k\right)\left(\beta\left(V+W_{-a}^{M}\left(x^{E},0\right)-W_{-a}^{E}\left(x^{E},0\right)+\frac{\gamma}{1-\beta}\right)+k+\rho^{f}-\phi\right)$$

If multiply the conditions for transfers τ_{A}^{f} and τ_{-A}^{f} to be possible by $(1-\beta)$ and then take the limit as $\beta\to1$ we then get that the conditions above become

$$\Gamma=pR+\phi-\pi l\left(1-p\right)\geq v$$

and

$$\Delta=\begin{cases}p\left(\pi+k-\pi k\right)r+\phi-\pi l\left(1-p\right)+\left(1-k\right)\left(1-\pi\right)+\gamma & if\quad l\geq l^{*}\\ prk+\phi-\pi l\left(1-pk\right)+\left(1-k\right)+\gamma & if\quad l<l^{*}\end{cases}\geq v$$

respectively, where $v=\lim_{\beta\to1}\left(1-\beta\right)V$.[67] Γ is constant in k and γ while Δ is increasing in γ and - it is easy to see - linearly decreasing in k. As we shall see below, v is also a function of k but not of γ. So we have two cases:

1. Fix $k\in[0,1]$ and assume $\Gamma\geq\Delta\left(k\right)$. Then, if $v(k)>\Gamma$, E will not participate in the extreme-risk war under any circumstances. If $\Gamma\geq v(k)>\Delta\left(k\right)$ then E will participate in the extreme-risk war if and only if future foreign policy is aligned. Finally, if $\Delta\left(k\right)\geq v\left(k\right)$ then E will participate in the extreme-risk war regardless of future foreign policy.
2. Fix $k\in[0,1]$ and assume $\Gamma<\Delta\left(k\right)$. Then, if $v(k)>\Delta\left(k\right)$ then E will not participate in the extreme-risk war under any circumstances. If $\Delta\left(k\right)\geq v(k)>\Gamma$ then E will participate in the extreme-risk war if and only if future foreign policy is misaligned. Finally, if $\Gamma\geq v\left(k\right)$ then E will participate in the extreme-risk war regardless of foreign policy.

In case 2, E might prefer a misaligned foreign policy to an aligned one because the transfers that can be obtained from M in an extreme-risk period are so large that it makes this worthwhile. We now consider v. For generic parameters, (q,ζ) replacing (p,γ) we have that

$$v=\begin{cases}\pi\left[\phi-\left(1-q\right)l+\frac{1}{2}\left(1-k\right)\left(q\rho^{f}+1-ql\right)\right] & if\qquad q\rho^{f}\geq1\\ \quad+\left(1-\pi\right)\left[\phi+\frac{1}{2}\left(1-k\right)\left(q\rho^{f}+1\right)\right] & \\ \pi\left[\phi-\left(1-q\right)l+\frac{1}{2}\left(1-k\right)\left(q\rho^{f}+1-ql\right)\right] & if\quad q\rho^{f}<1\text{ and }l\geq l^{*}\left(q,\rho^{f}\right)\\ \quad+\left(1-\pi\right)\left(1-k+\phi\right) & \\ \pi\left[1-k+\phi-\left(1-qk\right)l\right]+\left(1-\pi\right)\left(1-k+\phi\right) & if\quad q\rho^{f}<1\text{ and }l<l^{*}\left(q,\rho^{f}\right)\end{cases}$$

[67] Note that for sufficiently high β these conditions are independent of current foreign policy f.

It is immediate to notice that

$$v\left(k=1\right)=\phi-\pi\left(1-q\right)l$$

while, for any l

$$\Gamma=pR+\phi-\pi\left(1-p\right)l$$
$$\Delta\left(k=1\right)=pr+\phi-\pi\left(1-p\right)l$$

We then have $v\left(k=1\right)$ is smaller than Γ and smaller than $\Delta\left(k=1\right)$ for any $\gamma\geq\max\left(0,\pi l\left(q-p\right)-pr\right)$. In other words, for sufficiently large k and γ, $v\left(k\right)<\min(\Gamma,\Delta\left(l\right))$.[68] Since Δ is a decreasing function of k while Γ is constant, we can define a k^{*} such that $\Delta\left(k^{*}\right)=\Gamma$ with $\Delta\left(k\right)<\Gamma$ for $k>k^{*}$ and $\Delta\left(k\right)>\Gamma$ for $k<k^{*}$. In particular,

$$k^{*}=\begin{cases}\dfrac{\gamma-\left(Rp-1\right)-\pi(1-pr)}{\left(1-pr\right)\left(1-\pi\right)} & if\quad l\geq l^{*}\\ \dfrac{\gamma-\left(Rp-1\right)-\pi pl}{1-pr-\pi pl} & if\quad l<l^{*}\end{cases}$$

which is obviously increasing in γ. We can also define k_{Γ} to be such that $v\left(k_{\Gamma}\right)=\Gamma$ with $v\left(k\right)>\Gamma$ for $k<k_{\Gamma}$ and $v\left(k\right)>\Gamma$ for $k>k_{\Gamma}$

$$k_{\Gamma}=\begin{cases}1-2\dfrac{Rp+\pi l\left(p-q\right)}{q\left(\rho^{f}-\pi l\right)+1} & if\qquad q\rho^{f}\geq1\\ 1-2\dfrac{Rp+\pi l\left(p-q\right)}{\pi q\rho^{f}-\pi-\pi lq+2} & if\quad q\rho^{f}<1\text{ and }l\geq l^{*}\left(q,\rho^{f}\right)\\ 1-\dfrac{Rp}{1-\pi lq} & if\quad q\rho^{f}<1\text{ and }l<l^{*}\left(q,\rho^{f}\right)\end{cases}$$

Since $k_{\Gamma}<0$ whenever $q\rho^{f}<1$ and $l<l^{*}\left(q,\rho^{f}\right)$ then we ignore the last case. Finally, we define k_{Δ} to be such that $v\left(k_{\Delta}\right)=\Delta\left(k_{\Delta}\right)$ with $v\left(k\right)>\Delta\left(k\right)$ for $k<k_{\Delta}$ and $v\left(k\right)>\Delta\left(k\right)$

[68] It is easy to see that

$$\Delta\left(\gamma=\gamma^{*}\left(1\right),k=1\right)=\Gamma$$

so that if we impose $\gamma\geq\gamma^{*}$ then

$$\Delta\left(\gamma,k=1\right)>v\left(k=1\right)$$

for $k > k_\Delta$. We have

$$k_\Delta = \begin{cases} 1 - 2\frac{\gamma+pr+\pi l(p-q)}{2\pi+q\rho^f+2pr(1-\pi)-\pi lq-1} & if \quad q\rho^f \geq 1 \text{ and } l \geq l^* \\ 1 - 2\frac{\gamma+pr+\pi l(p-q)}{q\rho^f+2pr+2\pi lp-\pi lq-1} & if \quad q\rho^f \geq 1 \text{ and } l < l^* \\ 1 - 2\frac{\gamma+pr+\pi l(p-q)}{\pi+2pr+\pi q\rho^f-\pi lq-2\pi pr} & if \quad q\rho^f < 1,\ l \geq l^*\left(q,\rho^f\right) \text{ and } l \geq l^* \\ 1 - 2\frac{\gamma+pr+\pi l(p-q)}{-\pi+2pr+\pi q\rho^f+2\pi lp-\pi lq} & if \quad q\rho^f < 1,\ l \geq l^*\left(q,\rho^f\right) \text{ and } l < l^* \\ 1 - \frac{\gamma+pr+\pi l(p-q)}{\pi+pr-\pi lq-\pi pr} & if \quad q\rho^f < 1,\ l < l^*\left(q,\rho^f\right) \text{ and } l \geq l^* \\ 1 - \frac{\gamma+pr+\pi l(p-q)}{pr+\pi l(p-q)} & if \quad q\rho^f < 1,\ l < l^*\left(q,\rho^f\right) \text{ and } l < l^* \end{cases}$$

We can finally define $\widehat{\gamma}$ the value of γ such that $k^*\left(\widehat{\gamma}\right) = k_\Gamma$ with $k^*\left(\widehat{\gamma}\right) < k_\Gamma$ for $\gamma < \widehat{\gamma}$ and $k^*\left(\widehat{\gamma}\right) > k_\Gamma$ for $\gamma > \widehat{\gamma}$. This is

$$\widehat{\gamma} = \begin{cases} \gamma^{**} + (1-pr)(1-\pi)k_\Gamma & \\ = \gamma^*(0) + \frac{1}{2}\left(pR - 1 + (1-pr)\left(\pi + 2(1-\pi)k_\Gamma\right)\right) & if \quad l \geq l^* \\ \gamma^{**} + (1-pr-\pi pl)k_\Gamma & \\ = \gamma^*(0) + \frac{1}{2}\left(pR - 1 + \pi pl + 2(1-pr-\pi pl)k_\Gamma\right) & if \quad l < l^* \end{cases}$$

We now have all the ingredient to consider two possibilities:

I. $\gamma \geq \widehat{\gamma}$. In this scenario, $k^* \geq k_\Gamma$ and this in turn implies $k_\Gamma \geq k_\Delta$. Then we have that:

   (a) If $0 < k_\Delta \leq k_\Gamma \leq 1$ then $v(k) > \max(\Gamma, \Delta)$ for all $k < k_\Delta$, $\Delta \geq v(k) \geq \Gamma$ for all $k \in [k_\Delta, k_\Gamma]$ and $v(k) < \min(\Gamma, \Delta)$ for all $k > k_\Gamma$. Thus, there will be no participation from E for all for all $k < k_\Delta$, participation iff a misaligned foreign policy will be pursued in future periods for all $k \in [k_\Delta, k_\Gamma]$, and participation from E for all $k > k_\Gamma$.

   (b) If $k_\Delta \leq 0 < k_\Gamma \leq 1$ then $\Delta \geq v(k) \geq \Gamma$ for all $k \leq k_\Gamma$ and $v(k) < \min(\Gamma, \Delta)$ for all $k > k_\Gamma$. Thus, there will be participation from E iff a misaligned foreign policy will be pursued in future periods for all $k \in [0, k_\Gamma]$ and participation from E for all $k > k_\Gamma$

   (c) If $k_\Gamma < 0$ then $v(k) < \min(\Gamma, \Delta)$ for all k. In this case, E will always participate.

II. $\widehat{\gamma} > \gamma \geq \max(0, \pi l(q-p) - pr)$. In this scenario, $k^* < k_\Gamma$ so that $k_\Gamma < k_\Delta$. Then we have that:

   (a) If $0 < k_\Gamma < k_\Delta \leq 1$ then $v(k) > \max(\Gamma, \Delta)$ for all $k < k_\Gamma$, $\Gamma \geq v(k) > \Delta$ for all $k \in [k_\Gamma, k_\Delta)$ and $v(k) \leq \min(\Gamma, \Delta)$ for all $k \geq k_\Delta$. Thus, there will be no participation from E for all for all $k < k_\Gamma$, participation iff an aligned foreign policy will be pursued in future periods for all $k \in [k_\Gamma, k_\Delta)$, and participation from E for all $k \geq k_\Delta$.

   (b) If $k_\Gamma \leq 0 < k_\Delta \leq 1$ then $\Gamma \geq v(k) \geq \Delta$ for all $k \leq k_\Delta$ and $v(k) < \min(\Gamma, \Delta)$ for all $k > k_\Delta$. Thus, there will be participation from E iff an aligned foreign policy

will be pursued in future periods for all $k \in [0, k_\Delta]$ and participation from E for all $k > k_\Delta$

(c) If $k_\Delta < 0$ then $v(k) < \min(\Gamma, \Delta)$ for all k. In this case E will always participate.

The above implies that if $\widehat{\gamma} \leq \gamma^*$ then RBP will never be possible. We need to check under what conditions $\widehat{\gamma} > \gamma^*$. One can rewrite

$$\gamma^* = \begin{cases} \gamma^*(0) + \frac{1}{2}k(pR - pr(2-\pi) + 1 - \pi) & if \quad l \geq l^* \\ \gamma^*(0) + \frac{1}{2}k(pR - 2pr + 1 - \pi lp) & if \quad l < l^* \end{cases}$$

and

$$\widehat{\gamma} = \begin{cases} \gamma^*(0) + \frac{1}{2}(pR - 1 + (1-pr)\pi) + (1-pr)(1-\pi)k_\Gamma & if \quad l \geq l^* \\ \gamma^*(0) + \frac{1}{2}(pR - 1 + \pi pl) + (1 - pr - \pi pl)k_\Gamma & if \quad l < l^* \end{cases}$$

Recalling from proposition 1's proof that γ^* is increasing in k while $\widehat{\gamma}$ is constant, we can define a $\widehat{k}$ such that $\gamma^*\left(\widehat{k}\right) = \widehat{\gamma}$ and $\gamma^*(k) > \widehat{\gamma}$ for all $k > \widehat{k}$ and $\gamma^*(k) > \widehat{\gamma}$

$$\widehat{k} = \begin{cases} \dfrac{pR - 1 + (1-pr)\pi + 2(1-pr)(1-\pi)k_\Gamma}{pR - pr(2-\pi) + 1 - \pi} & if \quad l \geq l^* \\ \dfrac{pR - 1 + \pi pl + 2(1 - pr - \pi pl)k_\Gamma}{pR - 2pr + 1 - \pi lp} & if \quad l < l^* \end{cases}$$

and in particular, we can show that letting $y = \max(k_\Gamma, 0)$ then

$$\widehat{k} - y = \begin{cases} \dfrac{(pR - 1 + (1-pr)\pi)(1-y)}{pR - pr(2-\pi) + 1 - \pi} & if \quad l \geq l^* \\ \dfrac{(pR - 1 + \pi pl)(1-y)}{pR - 2pr + 1 - \pi lp} & if \quad l < l^* \end{cases}$$

which is strictly positive for any $y < 1$ and equal to zero for $y = 1$. This shows that there is always an interval $\left[\max(0, k_\Gamma), \widehat{k}\right)$ such that $\widehat{\gamma} > \gamma^*$ in that interval. So, given the analysis above we have that if M chooses a misaligned foreign policy under Absolutism (i.e. $\gamma \geq \gamma^*$) so that $k \in \left[0, \widehat{k}\right]$, then:

i. Suppose $k_\Gamma > 0$ and $\gamma < \widehat{\gamma}$. M will concede RBP in exchange for E's participation whenever $k \in \left[k_\Gamma, \min\left(k_\Delta, \widehat{k}\right)\right]$. If $k < k_\Gamma$ M will not concede RBP and E will not participate in the war. If $k_\Delta < \widehat{k}$, E will participate in the war and M will not concede RBP whenever $k > k_\Delta$.

ii. Suppose $k_\Gamma \leq 0$ but $k_\Delta > 0$ and $\gamma < \widehat{\gamma}$. M will concede RBP in exchange for E's participation whenever $k \in \left[0, \min\left(k_\Delta, \widehat{k}\right)\right]$. If $k_\Delta < \widehat{k}$, E will participate in the war and M will not concede RBP whenever $k > k_\Delta$.

iii. If $k_\Delta < 0$, there will be no RBP concession from M and E will always participate in the extreme-risk war.

Appendix B Robustness

Table B1: Lagged Territorial Battles

	Dependent Variable: Parliament held in a given year: 1350-1700						
Lag1 Parliament	-	0.34	0.11	-	0.33	0.11	0.11
	-	(0.05)***	(0.05)**	-	(0.05)***	(0.05)**	(0.05)**
Territorial win	-0.02	-0.02	-0.05	-0.02	-0.02	-0.05	-0.05
	(0.08)	(0.06)	(0.04)	(0.08)	(0.06)	(0.03)	(0.03)
Territorial defeat	0.28	0.25	0.27	0.27	0.21	0.26	0.26
	(0.09)***	(0.08)***	(0.06)***	(0.08)***	(0.08)***	(0.06)***	(0.07)***
Lag1 Territorial	-0.01	-0.01	0.01	-	-	-	-0.00
	(0.10)	(0.08)	(0.09)	-	-	-	(0.08)
Lag1 Territorial defeat	0.02	-0.07	-0.02	-	-	-	-0.01
	(0.12)	(0.12)	(0.12)	-	-	-	(0.12)
Forward1 Territorial	-	-	-	0.01	-0.01	0.00	0.00
	-	-	-	(0.11)	(0.08)	(0.07)	(0.07)
Forward1 Territorial defeat	-	-	-	0.07	0.08	0.08	0.08
	-	-	-	(0.14)	(0.13)	(0.12)	(0.12)
Constant	0.37	0.25	0.11	0.37	0.24	0.11	0.11
	(0.03)***	(0.03)***	(0.01)***	(0.04)***	(0.03)***	(0.01)***	(0.01)***
Other battles/succession/War/temp	No	No	Yes	No	No	Yes	Yes
monarch dummies	No	No	Yes	No	No	Yes	Yes
century dummies	No	No	Yes	No	No	Yes	Yes
R-squared	0.01	0.12	0.27	0.01	0.12	0.28	0.28
Number of observations	1404	1404	1400	1404	1400	1400	1404

Note: England, France (Estate General and Assembly of Langue d'oïl), Portugal, and Castile. Standard errors clustered by monarch.* $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

Table B2: Robustness - Probit, Logit, Interaction, and Two-way clustering

Dependent Variable: Parliament held in a given year: 1350-1700				
	Probit	Logit	Linear prob. interaction	Linear prob. two-way cluster
Lag1 Parliament	0.25	0.40	0.09	0.09
	(0.13)*	(0.22)*	(0.05)*	(0.04)**
Territorial win	-0.55	-0.90	-0.12	-0.12
	(0.17)***	(0.29)***	(0.04)***	(0.05)**
Territorial defeat	1.15	1.99	0.35	0.30
	(0.26)***	(0.48)***	(0.25)	(0.08)***
Territorial defeat*War vs Rival	-	-	-0.06	-
	-	-	(0.24)	-
Weather Unusual (1sd)	0.20	0.35	0.06	0.06
	(0.11)*	(0.19)*	(0.03)*	(0.03)*
War vs. Rival	0.57	0.97	0.16	0.16
	(0.13)***	(0.48)***	(0.05)***	(0.05)***
War not Rival	0.41	0.76	0.12	0.12
	(0.20)**	(0.33)**	(0.06)*	(0.07)*
Succession	0.56	0.92	0.16	0.16
	(0.22)***	(0.36)***	(0.06)**	(0.06)***
Constant	-1.22	-2.10	0.10	0.10
	(0.03)***	(0.06)***	(0.01)***	(0.01)***
Other battle variables	Yes	Yes	Yes	Yes
century dummies	Yes	Yes	Yes	Yes
monarch dummies	Yes	Yes	Yes	Yes
(Pseudo) R-squared	0.22	0.22	0.30	0.29
Number of observations	1404	1404	1404	1404

Note: England, France (Estate General and Assembly of Langue d'oïl), Portugal, and Castile. Standard errors clustered by monarch in columns 1-3. In column 4, standard errors are clustered by monarch pairs separately for England-France and Portugal-Castile. * $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

Table B3: Parliament of Castile and Aragon

Dependent Variable: Parliament held in a given year: 1350-1700		
	Castile and Aragon	Castile and Aragon
Lag1 Parliament	0.04	0.20
	(0.03)	(0.09)**
Territorial win	-0.28	-0.33
	(0.22)	(0.22)
Territorial defeat	0.25	0.46
	(0.28)	(0.28)
War vs Rival	0.19	0.14
	(0.07)**	(0.08)*
War not Rival	-0.02	0.02
	(0.07)	(0.07)
Weather unusual (1 sd.)	0.05	0.08
	(0.07)	(0.08)
Agric. gdp/cons. pc	-0.01	-0.01
	(0.01)	(0.00)***
GDP pc	0.03	0.02
	(0.03)	(0.01)*
Constant	-1.18	-0.01
	(1.23)	(1.04)
monarch dummies	Yes	No
century dummies	No	Yes
Other Battles/Sucession	Yes	Yes
R-squared	0.26	0.15
Number of observations	351	351

Note: From 1350 to 1469, Parliament is defined as 1 if there was a parliament in Castile in that year and 0 otherwise. From 1469 Parliament is defined as 1 if there as a Parliament in Castile or in Aragon that year and 0 otherwise. Sources are described in Section 4.1. Standard errors clustered by monarch.* $p < 0.1$ ** $p < 0.05$ *** $p < 0.01$

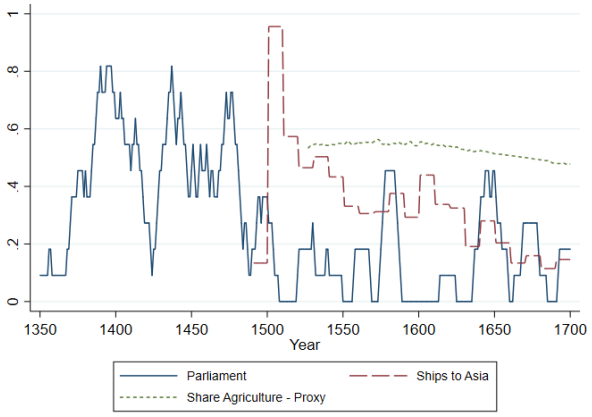
Table B4: Multiple lags - by country

Dependent Variable: Parliament held in a given year: 1350-1700				
	England	France	Portugal	Castile
Lag1 Parliament	-0.10	0.24	0.08	-0.00
	(0.06)	(0.06)***	(0.04)*	(0.05)
Lag2 Parliament	-0.02	-0.01	-0.07	-0.03
	(0.07)	(0.06)	(0.11)	(0.07)
Lag3 Parliament	-0.01	-0.02	-0.08	0.04
	(0.04)	(0.05)	(0.06)	(0.08)
Lag4 Parliament	0.05	0.01	0.11	0.06
	(0.06)	(0.07)	(0.06)*	(0.06)
Lag5 Parliament	0.03	0.00	-0.04	-0.09
	(0.04)	(0.05)	(0.05)	(0.07)
Lag6 Parliament	-0.01	-0.15	-0.02	-0.06
	(0.08)	(0.03)***	(0.06)	(0.06)
Lag7 Parliament	-0.11	0.00	-0.06	0.07
	(0.04)***	(0.03)	(0.02)**	(0.05)
Lag8 Parliament	0.02	0.06	0.00	0.04
	(0.04)	(0.09)	(0.06)	(0.07)
Lag9 Parliament	-0.06	-0.07	0.05	0.02
	(0.06)	(0.05)	(0.06)	(0.04)
Lag10 Parliament	- 0.04	-0.04	-0.10	-0.07
	(0.06)	(0.06)	(0.05)*	(0.07)
monarch dummies	Yes	Yes	Yes	Yes
Battles/Sucession vars	Yes	Yes	Yes	Yes
R-squared	0.29	0.25	0.30	0.28
Number of observations	351	351	351	351

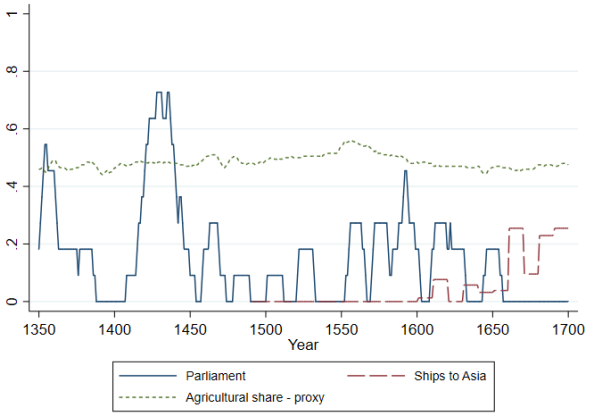
Note: England; France (Estate General and Assembly of Langue d'oïl), Portugal, Castile. Sources are described in Section 4.1. Standard errors clustered by monarch. $^{*}\ p < 0.1\ ^{**}\ p < 0.05\ ^{***}\ p < 0.01$

Figure B4: Parliament activity, GDP and Agriculture GDP: France and Portugal

(a) Portugal



(b) France



Note: 11-year moving averages. A value of 1 indicates that a parliament was summoned in the past five years, the current year, and the future five years. Data on parliaments compiled by authors. Sources are described in Section 4.1. GDP and Agriculture GDP indices provided by Ridolfi (2017) for France and Palma and Reis (2019) for Portugal.

Appendix C Notes on territorial defeats and subsequent parliaments

Below we reproduce excerpts from the summaries of each parliament in Table A1 from the main text for which there is a description in Given-Wilson et al. (2005): **England - April 1357**. The assembly authorized the payment of a single fifteenth and tenth: it was unusual for the Crown to request (or expect to receive) grants of direct taxation at a time when there was no likelihood of imminent renewal of war, and it would seem likely that the tax was requested and/or granted as a thanksgiving for the prince's good services: certainly, a significant proportion of it was assigned in relief of the debts of the Black Prince and his fellow commanders. **England - November 1372**. When the campaign had foundered at the end of September and the king had returned to England, it was decided that Edward should preside in person, and the parliament was postponed in order to ensure that those lords who had been intending to accompany him abroad could attend the assembly. [...] news had come of the surrender of La Rochelle to French forces and of the defection of one of the prince's erstwhile chief allies in Aquitaine. These crises, combined with the prince's ailing health, made it necessary for Edward III to re-establish formal direct sovereignty over Aquitaine and thus take direct responsibility for the continuing war for the defence of Aquitaine. [...] Guy Brian made rather more explicit reference to the urgent needs of defence and (by implication, if nothing else) the resulting obligation upon the commonalty to assist the king with subsidies for his wars. The roll is not explicit, but it would seem that the lords and commons conducted their discussion immediately and returned their decision on the same day - a process to be remarked both for its speed and for the way in which the lords were still evidently treated as full players in the grant of the resulting taxes. **England - September 1388**. The earl of Arundel's expedition to Brittany, which left in June, achieved very little while consuming most of the taxation voted in the Merciless Parliament. By the time he returned on 3 September, the northern counties had suffered a series of devastating Scottish raids culminating in the English defeat at the battle of Otterburn on 5 August. [...] As a result, it was less than two months after the dissolution of the Merciless Parliament when, largely out of financial necessity, the decision was taken at a council meeting held at Oxford on 28 July to issue writs summoning another parliament to meet on 9 September at Cambridge. [...] They did, however, manage to secure a reasonable grant of taxation from the commons: the wool subsidy and tunnage and poundage were renewed until 1 March 1390. **England - September 1402**. The king's finances remained in a hopeless state, with cash receipts at the exchequer sinking in the summer of 1402 to their lowest level yet, thus necessitating the most extensive borrowing operation of the reign. [...] Glendower enjoyed an almost unbroken run of successes against the English, capturing Lord Grey of Ruthin in April, and defeating and capturing Edmund Mortimer at the battle of Bryn Glas in June. [...] the commons had requested the appointment of an intercommuning committee of lords with whom they could discuss 'the business which they had to undertake in parliament for the common good and profit of the realm' - in other words, the king's request for money. Henry

was apparently somewhat reluctant to allow this, pointing out that he did not allow it out of duty or custom, but as a matter of special grace, and ordering the clerk of parliament to record this fact on the roll. [...] the plenary sessions of the following week seem to have been largely devoted to Scottish and Welsh affairs, which, not surprisingly, were high on everyone's agenda. [...] The author of the *Continuatio Eulogii* - one of only three chroniclers who took an interest in this parliament - records a debate which doubtless helps to explain the examination of John Ikelington on 4 November. According to the chronicler, the king in making his request for taxation 'declared that he had nothing', to which the commons replied by asking him what had happened to King Richard's treasure. The answer, they were told, was that the earl of Northumberland 'and others' had it - presumably meaning that it had been spent on the various military emergencies. This, not surprisingly, failed to satisfy them: in that case, they suggested to the king, since so much had been granted to him, and yet he had nothing, should not his ministers be interrogated about it? - but to this 'the king did not assent'. Another chronicler goes further, claiming that the taxes granted to the king were 'barely conceded, with great difficulty' (*cum magna difficultate vix concesse*), and pointing out that the treasurer, Henry Bowet, was removed (*amotus*) from office. **England - May/December 1421**. At no point in his speech did Langley mention the question of taxation; nor indeed is it mentioned at any other point on the roll. England and France were, after all, theoretically at peace. On the other hand, there is plenty to suggest that the question of how the continuing war against the Dauphin could be paid for was very much to the forefront of the discussions, and although Henry may have refrained from requesting a tax on this occasion, it is virtually certain that he extracted a promise of future support from the commons. [...] If Henry did actually ask the commons to grant him taxation, they must have refused. However, a third piece of evidence suggests that their refusal was not outright, for on the first day of the next parliament, 1 December 1421, before a speaker had even been elected, the commons granted the king a whole fifteenth and tenth. This was unprecedented, indeed it is very difficult to explain except by recourse to the assumption that, in return for forgoing a tax in May, Henry must have been promised that he would unquestionably be granted one when next he summoned a parliament. [...] In addition to the disaster of Bauge, the duke of Brittany made his peace with the Dauphin on 8 May, and the arrival in England in March of Jacqueline, countess of Hainault, threatened the ever-delicate alliance between Henry and his foremost continental ally, Duke Philip of Burgundy. **England - September 1429**. Events there [France] had reached crisis point, and were essentially what lay behind the need to crown the king at this point. It was also clear that the young king would have to cross to his French realm as soon as possible in order to be crowned there too.[...] two fifteenths were granted 'to brynge thys yonge kynge in to Fraunce'.[...] the first grant of a lay subsidy in the reign to date, and indeed the first since that granted in the parliament of December 1421. [...] By 18 June, not only was the siege lost, but so too was the battle of Patay, where John, lord Talbot and other leading English leaders were taken prisoner. Worse still, the Dauphin had been able to move on to Reims where he was crowned as Charles VII on 17 July. [...] it was clear that more

English troops would be needed to stem Charles VII's advance. To be able to cover costs and to meet the debts of previous campaigns, generous taxation was desperately needed from the commons. **England - November 1449**. The parliament which opened at Westminster on Thursday 6 November 1449 is one of the most politicized of the century, seeing as it does the impeachment of William de la Pole, duke of Suffolk, and a major act of resumption aimed at controlling royal revenues. The background to these events, as to the parliament as a whole, was the loss of Normandy. **England - November 1450**. The fact that the parliament of November 1450 followed so soon after its predecessor demonstrates the grave situation in which the Crown found itself during the summer and autumn, being faced with popular rebelion at home and defeat in Normandy. [...] The calling of parliament was no doubt stimulated by the final loss of Normandy. Cherbourg, the last English possession, fell on 12 August 1450. [...] It was agreed that the king should have exclusive right to the first £20,000 from the customs and subsidies levied at Southampton in order to make provision for the defence of the realm, given that England was beset by her enemies. Below we reproduce exerts from Boulle (1845) and Major (1960) discussing parliaments in Table A1 in the main text: **France - October 1356**. Les tier-état appela à sa tête Etienne Marcel prévôt des marchands de Paris, déjà fameux par sa résistance à divers actes de l'autorité royale [...] Le chancelier Laforest, chargé par le dauphin de rendre compte de la situation publique et de mettre à nu les plaies de la France, rapella les circonstances malheureuses qui avaient motivé la convocation des Etats. [...] Il flétrit avec énergie les prétension insolentes, les vexations et les attentats d'Edouard III, et dèclara que le dernier des Français périrait avant que la France consentî à devenir un fief de l'Anglaterre. [...] invita ce prince à se former un conseil composé de quatres prélats de douze chevaliers et de douse députés du tiers-état, en prenant l'engagement de ne rien décider sans la participation de ce conceil. [...] Charles, interdit par des exigences aussi dures, demanda avec émotion quelle serait la compensation de pareils sacrifices. – Une armée de trente mille hommes, répondit Lecocq, et l'argent nécessaire pour l'entretenir. (Boulle (1845) pp. 45-50.) **France - October 1370**. Il [Le Roi] obtin la gabelle du sel pour l'entretien de sa maison, quatre livres par feu dans les villes pour les frais de la guerre [...] Chales V prononça à cette Assemblée; paroles bien propres à justifier la confiance et l'affection des Etats, et à déterminer la concession du subside qu'il réclamait: "Quoique nous soyons Roi couronné et que nous voyions toute la France soumise à notre pouvoir, nous n'avons que la force d'un homme, et sans vous nous ne pourrions rien. Un prince, quelque puissant qu'il soit, ne régnera paisiblement que par l'affection de ses sujets; c'est pour cela, seigneurs, que nous ne voulons rien ordonner dans notre royaume que de votre gré." (Boulle (1845) pp. 85-87.) **France - October 1423**. Content to win from Languedoil alone a taille of 200,000 livres, and the aides or sales tax on all commodities to be collected for the three years. (Major (1960), p. 27) **France - October 1424**. Both assemblies agreed on setting the total needs of the Crown at 1,00,000 livres. (Major (1960), p. 29) **France - October 1431**. The absence of large assemblies between September 1428 and March 1431, may be readily explained. This period saw the first great victories of Charles VII and his triumphant coronation at Reims.

He had neither the time nor the need to hold large meetings[..]. There is ample evidence that provincial assemblies were held and that the idea of consent to taxation was by no means lost during these years of the three that followed. [..] Little is known of the assembly of the estates that finally did meet at Poitiers in march and April 1431 except that an ordonnance was issued at its request and 200,000 livres were voted. (Major (1960), p. 31) **France - January 1558**. On August 10, 1557, the French were completely defeated by the Spanish at Saint-Quentin. The people of Paris and the Ile-de-France were panic stricken at the prospect of an invasion [...]. There was desperate need for money to pay an enlarged army; [...]. On December 15 Henry II ordered the towns to send their mayors to Paris on Christmas eve.[...] The king spoke first. He pointed out that since his advent to the throne he had been forced to fight continually against England and the Habsburgs. To pay for the wars he had had to sell his domain and tax his subjects heavily. The time had come, he argued, to make a last great effort in the hope of bringing about good peace. Since money was the sinew of war, he asked those present what assistance they could offer. (Major (1960), p. 144-145)