War and the Rise of Parliaments

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Abstract

We consider the development of political institutions in Europe between 1350 and 1700 AD. In particular, we propose a model which links i) the regular calling of Parliament and ii) the transition (or absence of such transitions) to “Rule by Parliament” (i.e. Constitutional Monarchy) with the risks associated with particular wars and battles, and the underlying economic relationship between monarchs and the commercial elites. We test the model’s predictions with a dataset we compile for England, France, Portugal and Spain that includes yearly parliamentary activity, major battles, war years, and measures of economic activity. We find support for two predictions of the model. Firstly, we provide empirical evidence that Parliaments are more likely to be called in years in which a) the country suffers a territorial defeat – our proxy for a high-risk period; and b) there is a weather shock and agriculture output is relatively low – our proxy for the resources available to the monarch that are not constrained by the commercial elites. Because of the random nature of these events, we are able to claim a causal link. We also present case studies for the four countries in our sample that link the model’s premises and results with transitions (or lack of) to Rule by Parliament.

Keywords: Political Transitions; Wars; Glorious Revolution; Commitment; Parliament; Autocracy; Democracy.

JEL Classification: P16, H11, N40.

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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.” Charles V at the opening of the French Parliament in 1370. (Boulle (1845) p. 87)

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)). Indeed, well into the 18th century, the main business of government was to finance and wage wars. The objective of this paper is to demonstrate how these wars, and the manner in which they were financed, influenced the frequency, rise, and fall of parliaments in Western Europe. To do this, we focus on four countries: England, France, Portugal and Spain, from the medieval period – a point at which all four Parliaments were similarly active – up to the end of the 17th century – a point at which clear differences in institutional characteristics had emerged. England holds regular, annual, Parliamentary sessions. Portugal and Spain have drastically reduced their Parliamentary activity. And in the second half of the 17th century, France’s Parliament is not summoned at all (Figure 1).

We introduce a model that explains both the regular calling of Parliament, as well as full-blown political transitions to Rule by Parliament. Importantly, this model provides us with testable predictions that we take to the data. Regarding the ‘calling of Parliament’, our model considers that: a) foreign policy is in the hands of the Monarch, i.e. Absolutism, and b) the outcome of wars is dependent on the amount of resources invested in them. Resultantly, the Monarch may find themselves having to raise war funds from a Commercial 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 war 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) the Nation is facing a high-risk, rather than a low-risk period, and when resources that are easily available to the Monarch become limited.

The main empirical contribution is to compile a data set from 1350-1700, which links annual parliamentary activity with detailed information about wars, battles, and economic variables. This allows us to test the predictions of our model. We find two main results. Firstly, we find that parliaments are more likely to be called during high-risk periods. We use two proxies for a high-risk period: battle defeats within, or in the vicinity of, the country’s boundaries and

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1 In 19th century England, between 74% and 85% of government revenue was dedicated to warfare (Brewer (1989)). For similar data on France and Spain, 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 12th and 13th century (e.g., Bisson (1966), Procter (1980), and Maddicott (2010)).
3 The sources for the data are described in detail in Section 4.1.
whether or not the country is at war with a dynastic rival (England vs. France and Portugal vs Spain). Secondly, we find that parliaments are less likely to be called when resources easily available to the monarch are relatively high. We proxy this with the share of agriculture for England, agricultural consumption per capita for Spain, inferred rainfall data for France, and reconstructed temperature data for Europe. The randomness of battle outcomes (Gennaioli and Voth (2015)) and weather variations affecting agricultural output suggest that we can interpret our results for the frequency of parliaments as causal. No previous research on parliamentary activity during this period, i.e., Van Zanden et al. (2012) and Stasavage (2010), has explained the annual variance of this activity, nor has the literature investigated the link between annual parliamentary activity and annual battle data.

Our model also considers that a country may transition to Rule by Parliament in rare, extreme-risk periods in which the ruling Monarch is also fighting for their own, dynastic survival. We define ‘Rule by Parliament’ as foreign policy being decided by Parliament alone. The transition from Absolutism to Rule by Parliament might occur when the Commercial Elite is willing to withhold financial resources from the Monarch, effectively increasing the chance of the Monarch being replaced. Two conditions are necessary for the Elite to credibly withhold resources. First, that the replacement Monarch/dynasty must be preferred by the Elite (e.g., the new Monarch may be militarily stronger). 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 try to

\textsuperscript{3}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 frequency) with yearly battle data.
promise the Elite benefits in future periods, i.e., transferring decision-making power regarding foreign policy over to Parliament. In such instances, the Elite either accepts the bargain or welcomes the alternative invading Monarch.

We discuss several case studies supporting this argument. The first, from 1216, is the acclamation of Prince Louis of France as King of England, by invitation of the Barons who rebelled against King John and negotiated the Magna Carta. We also discuss the annexation of the Portuguese Crown in 1580 by Phillip II of Spain, followed by 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. Finally, we discuss how a reduction in the Elite’s leveraging power may have diminished the likelihood of a transition to Rule by Parliament in France, Portugal, and Spain. 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 17th century.

The necessity for the Monarch to bargain with the Commercial Elite for resources is a feature of our model also present in Angelucci et al. (2017), a detailed study of self-governed English towns in which the Monarch must negotiate in order to raise extraordinary taxes. Angelucci et al. (2017) also discuss how Parliament was an efficient institution for this negotiation. In our model, the need for the Monarch to bargain increases when the agricultural share of the economy, which is more readily available to the Monarch, decreases. We interpret agricultural income as being more readily available to a Monarch than commercial income for two complementary reasons: a) landed aristocracy is naturally aligned with the Monarch, as their own success is usually dependent on the success of that Monarch or dynasty and b) commercial and financial wealth is harder to tax or expropriate than agricultural wealth, simply because it is easier to hide.

Our modelling of political transitions builds on Acemoglu and Robinson (2001)’s views of representative institutions as a solution to a commitment problem. In our case, however, bargaining between a Monarch and the Elite occur over the choice of foreign policy. In Acemoglu and Robinson (2001), the rulers and the rest of the population bargain over redistribution. Indeed, models of political transitions mostly focus on contemporaneous (19th and 20th 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) and Boix (2003)), or provides public goods, e.g., Lizzeri and Persico (2004), Llavador and Oxoby (2005), and De Mesquita and Smith (2010). In Ticchi and Vindigni (2009) wars are external threats that help the rulers make credible commitments to citizen-soldiers, who in turn demand redistribution in return for their efforts. In this model, the citizen-soldiers’ motivation for taking power is to use the state apparatus for redistribution. Whilst we do not dispute the role of redistribution in advancing political transitions, particularly in the 19th and 20th century, Rule by Parliament was historically achieved when there were no mass armies, and the government redistributed neither its wealth, nor other economic public goods, to its people.

We also 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. In an ‘aligned’ foreign policy, wars yield relatively high monetary returns to both Monarch and Elite, whilst in a ‘misaligned’ foreign policy, the economic returns are relatively small, even though the Monarch might receive ego-rents by participating. For example, unnecessarily costly dynastic wars, and 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. Rather than treat wars as homogenous, we differentiate between them on two dimensions: a) foreign policy, i.e. aligned and misaligned wars, and b) the level of threat, i.e. extreme-risk, high-risk and low-risk periods.

In the next section we introduce the model, in section 3 we present our results, in section 4 we present our empirical results, and in section 5 we discuss some historical examples.

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7 A large literature in history, sociology, and political sciences 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 (1998), Stasavage (2011), Spruyt (2007) and Stasavage (2016) for a review). Our work is the first to provide a complete theoretical and empirical framework linking economic variables, battles, and wars with the frequency of parliament and the development of political institutions.

8 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
2 The Model

2.1 Setup

Our setting focuses on a specific country (which we sometimes refer to as “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 represent the wealthy ruling class, and a Monarch \((M)\) \(^9\) In what follows, we will index variables with the subscript \( t \) to indicate the period \( t \) and with superscripts \( M \) and \( E \) to denote the Monarch and the Elite, respectively, with \( I \in \{M, E\} \) denoting the generic player. 

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. In some (rare) cases, we will allow for the possibility that \( M \) is replaced by another Monarch in the future, so that we use \( M \) to describe the incumbent monarch while \( \hat{M} \) will denote the possible replacement but 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. We assume away savings so that the income generated by existing wealth and war investments in a particular period is consumed in that same period. All such income is shared between \( M \) and \( E \) in proportion \( k \) and \( 1-k \) respectively. The fraction \( k \in (0, 1) \) is available to the Monarch directly, through ownership, expropriation, taxation that doesn’t need negotiation, or loans \(^{10}\) The Elites’ fraction \( 1-k \) cannot be utilized without \( E \)’s consent. The main conflict we intend to model is between Commercial Elites and the Monarch (and, possibly, the Landed Elites allied with the Monarch) \(^{11}\) In addition to investable income, there is also non-investable income \( \phi \) which represents the component of income that is available to the whole population and which we interpret as sustenance income. All non-investable income is owned by \( E \) but cannot be utilized or even collateralized for wars. \(^{12}\) 

We also assume that \( E \) and monarchs discount the future period’s utility at a rate \( \beta \in (0, 1) \). 

Wars occur in each period. \(^{13}\) We will assume that the agent who chooses foreign policy will always participate in such wars, whereas the other side might decide to participate with their resources or not. 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, both Monarch and Elite face no downside risk in the sense that only the resources invested in

\(^9\)We abstract from the collective-action problem and free-rider issues by treating \( E \) as an individual player.

\(^{10}\)Any loans from outside the country would have to backed up by the monach’s resources as collateral so such loans can be thought of part of the Monarch’s income.

\(^{11}\)But 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.

\(^{12}\)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.

\(^{13}\)This is for simplicity: the model could be extended to allow for the possibility of periods without wars without significantly affecting our results.
war are at stake. We interpret these as wars where the action is far away from our country, as in an offensive campaign. High-risk wars, on the other hand, are wars where - in case of defeat - some losses are incurred regardless of whether there is active participation in the war, and which can be interpreted as defensive campaigns on - or close to - home soil. The second dimension differentiates wars on the basis of the foreign policy adopted by our country. Whomever has control of foreign policy has the option of choosing between a foreign policy in which the Monarch’s objectives are aligned with those of the Elite and one where the is a misalignment between the two sides. In particular, we assume that an aligned foreign policy is one which is, in expectation, profitable for both $M$ and $E$, while a misaligned foreign policy may be very profitable for $M$ but not profitable for $E$. The main interpretation here is that misaligned foreign policies arise when an absolutist Monarch puts egoistic or dynastic considerations above the welfare of the country as a whole.

Under Absolutism, the Monarch is in charge of foreign policy whereas this is determined by the Elite under Rule by Parliament (in short, RBP). The chosen foreign policy determines the potential rewards for participation in a war as described above.

Regardless of the choice of foreign policy, there is an exogenous - and fixed - probability that our country will face a low-risk scenario in any particular period whereas with complementary probability, our country faces a high-risk scenario.\footnote{This set-up, therefore, assumes that foreign policy has no impact on the low/high risk dimension, as it is not clear what such impact should be.} In this latter case, we will also allow for the (small) probability 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, if both sides participate in a war, returns are shared between $M$ and $E$ through Nash Bargaining where the disagreement point is the player’s outcome in case of non-participation. Given our assumptions, at least one side always participates in any given war and therefore obtains all the potential returns from war in case of non-participation from the other side. Our interpretation of the Nash Bargaining process is that the side that chooses foreign policy may offer within-period transfers to the other side in order to obtain the latter’s participation. These (possible) transfers between the two players have two natural 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 credible and therefore not allowed.

This is a crucial assumption and is necessary in a model where we wish to endogenize the creation of institutions. Any promise to provide more transfers or change foreign policy in the
future will not be credible in the absence of institutions to enforce it. In particular, in this model, the only way the Monarch can credibly commit to intertemporal transfers of utility, is by conceding Rule by Parliament because with it, future foreign policy will be chosen by the Elite.

2.1.1 Low-risk Scenarios

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

$$\varepsilon_M^f + \varepsilon_E^f + \Pr (x^E_t, x^M_t) \rho^f$$

with

$$\Pr (1, 1) = p,$$

$$\Pr (0, 1) = pk,$$

$$\Pr (1, 0) = p(1 - k)$$

$\Pr (x^E_t, x^M_t)$ captures the probability of winning the war and depends on the participation decision of the two sides. In particular, a decision to participate implies committing all investable resources in the war, so that there is a basic probability $p$ if both $M$ and $E$ participate in the war, and this probability is reduced proportionally to the investment if only one side participates. The linearity assumption simplifies the analysis, but our results would still hold if we assumed that the probability of winning was an increasing and (weakly) concave function $P(k)$ of the overall resources invested in war with $P(1) = p$.

For a given foreign policy $f = a$ (aligned) or $-a$ (misaligned), $\rho^f$ represents the total returns in tangible resources and $\varepsilon_I^f$ the returns in non-tangible resources (ego-rents) for $I \in \{M, E\}$, where the former can only be obtained in case of victory. The variable $x^I_t \in \{0, 1\}$ represents player $I$’s decision to enter the war or not. Given our assumption that the agent who decides on foreign policy has to participate in the war, we must have that $x^M_t = 1$ under absolutism and $x^E_t = 1$ under RBP. We embed the Nash Bargaining assumption directly in our payoffs. Let $\tau^f_t (x^E_t, x^M_t)$ represents the net transfers from $M$ to $E$ given the participation decisions. 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 distinguish between aligned and misaligned foreign policy by assuming that

$$\rho^f = \begin{cases} R & if \quad f = a \\ r & if \quad f = -a \end{cases}$$

$$\varepsilon_M^f = \begin{cases} 0 & if \quad f = a \\ \gamma & if \quad f = -a \end{cases} \quad and \quad \varepsilon_E^f = 0$$

The parameters $R$ and $r$ represent returns on the tangible resources that are obtained in case

\[15\] By modeling $\tau^f_t$ as net transfers from $M$ to $E$ we are of course allowing for the possibility that such transfers are negative.
of victory. The parameter $\gamma \geq 0$ represents non-transferable ego-rents that will be given to $M$ in case of a misaligned foreign policy. In our interpretation, a good example of the case where $\gamma > 0$ is that where a Monarch has an incentive to choose a foreign policy that increases her (or her royal house’s) prestige regardless of the possible benefits that may accrue to the Elite. Note that we assume $\varepsilon^E_F = 0$ but this is just a normalization: any model where $E$ also gets ego-rents from foreign policy, as long as it allows for greater returns for $M$ from misaligned foreign policies and greater returns for $E$ for aligned foreign policies would give us the same results.

So, $M$’s utility given participation decisions will be

$$u_t^{M,f}(x_t^E, x_t^M) = \begin{cases} \varepsilon^f_M + pk^f - \tau^f_t (0,1) & \text{if } (x_t^E, x_t^M) = (0,1) \\ \varepsilon^f_M + pp^f - \tau^f_t (1,1) & \text{if } (x_t^E, x_t^M) = (1,1) \\ k - \tau^f_t (1,0) & \text{if } (x_t^E, x_t^M) = (1,0) \end{cases}$$

In a similar fashion, the corresponding expected returns for $E$ are

$$u_t^{E,f}(x_t^E, x_t^M) = \begin{cases} p(1-k)p^f + \phi + \tau^f_t (1,0) & \text{if } (x_t^E, x_t^M) = (1,0) \\ \phi + \tau^f_t (1,1) & \text{if } (x_t^E, x_t^M) = (1,1) \\ (1-k) + \phi + \tau^f_t (0,1) & \text{if } (x_t^E, x_t^M) = (0,1) \end{cases}$$

which differ from the monarch’s in two ways, as mentioned above: the non-investible resources $\phi$ are only present in $E$’s pay-off and there are no ego-rents, of any kind, for the Elite.

### 2.1.2 High-risk and Extreme-risk Scenarios

We also model the possibility that, regardless of the foreign policy chosen, our country may finds itself in a high-risk (defensive) position. We model this different situation by assuming that if a given side does not participate in a high-risk war, but the war is lost, then $E$ and $M$ will incur losses $l$ and $L$ respectively. We also allow for the extreme-risk scenario – a special case of a high-risk scenario – where the stakes are maximal for everyone involved: the Monarch will be removed in case of a loss, thus getting zero returns for current period and all future periods, whereas $E$ will lose all of her resources (including $\phi$), but for the current period only. This is to capture the asymmetry between a Monarch that can lose everything, and the Elite which can suffer a big blow but not a vital one. Below, we use $U_t^{I,f}$ to indicate the per-period utility for player $I$ in a high-risk period and $\hat{U}_t^{I,f}$ to indicate the per-period utility for player $I$ in an extreme-risk period. Thus, beginning with high-risk periods, utility given participation decisions will be

$$U_t^{M,f}(x_t^E, x_t^M) = \begin{cases} \varepsilon^f_M + pk^f - \tau^f_t (0,1) & \text{if } (x_t^E, x_t^M) = (0,1) \\ \varepsilon^f_M + pp^f - \tau^f_t (1,1) & \text{if } (x_t^E, x_t^M) = (1,1) \\ k - (1-p(1-k))L - \tau^f_t (1,0) & \text{if } (x_t^E, x_t^M) = (1,0) \end{cases}$$
and

\[ U_t^{E,f}(x_t^E, x_t^M) = \begin{cases} 
  p (1 - k) \rho^f + \phi - (1 - p (1 - k)) l + \tau_t^f (1, 0) & \text{if } (x_t^E, x_t^M) = (1, 0) \\
  \phi - (1 - p) l + \tau_t^f (1, 1) & \text{if } (x_t^E, x_t^M) = (1, 1) \\
  1 - k + \phi - (1 - pk) l + \tau_t^f (0, 1) & \text{if } (x_t^E, x_t^M) = (0, 1) 
\end{cases} \]

respectively. In an extreme-risk period, instead, we have:

\[ \hat{U}_t^{M,f}(x_t^E, x_t^M) = \begin{cases} 
  \varepsilon^f + pk\rho^f - \tau_t^f (0, 1) & \text{if } (x_t^E, x_t^M) = (0, 1) \\
  \varepsilon^f + pp\rho^f - \tau_t^f (1, 1) & \text{if } (x_t^E, x_t^M) = (1, 1) \\
  k - (1 - p (1 - k)) L - \tau_t^f (1, 0) & \text{if } (x_t^E, x_t^M) = (1, 0) 
\end{cases} \]

and

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

So, in a high-risk war more resources are at risk than in a low-risk war; which makes the outside option of not participating more costly. Typically, this will happen when the war is in or near our country’s own territory. In extreme-risk cases, for the Monarch, there is no difference with the high-risk case from the perspective of the one-shot payoffs described above, but in case of defeat, the Monarch will get a flow of zero utilities from then onwards. For \( E \), the difference between high-risk and extreme-risk wars is that in the latter, all resources are at risk for the elite, including \( \phi \). We assume, for consistency, that \( l \leq 1 - k + \phi \) and \( L \leq k \). We next proceed to describe utilities for \( E \) and \( M \) over the whole infinite horizon.

### 2.1.3 Infinite Horizon

In each period, a high-risk scenario obtains with probability \( \pi \) and a low-risk scenario with complementary probability \( 1 - \pi \). In addition, conditionally on a high-risk scenario, there are rare cases where such scenario actually becomes an extreme-risk scenario. We will actually assume that this probability is arbitrarily close to zero so that in effect the total utility for \( E \) in the game is

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

where \( f_t \) is the foreign policy chosen in period \( t \). For \( M \) we have, analogously,

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

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 simplify 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. Another way to interpret this would be that Monarchs are more optimistic (or reckless) and systematically underestimate the probability of finding themselves in a position where they could be losing it all. [Hoffman and Rosenthal (2000)] suggests 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. We will allow the new Monarch to differ from the incumbent on two dimensions which may make her a more or less palatable alternative from the Elite’s perspective. The first dimension is ego-rents (which we denote with $\zeta$) so that the new Monarch may be more or less aligned with the Elite’s foreign policy preferences. We assume that the new Monarch may also bring a new probability of winning wars (which we denote with $q$). This is to capture both the possibility that the new Monarch may be more competent and able to leverage our country’s investable resources or have a network of alliances that have an impact on the probability of winning wars. To simplify notation, we abuse it slightly by using $p$ and $\gamma$ to represent the generic Monarch’s probability of winning and her ego-rents while using $\zeta$ and $q$ only when we wish to emphasize we are discussing the new Monarch.

2.2 Timing

We assume Absolutism at the beginning of the game. This means that $M$ decides on which wars to undertake unless she voluntarily gives $E$ such power. Formally, we will denote with $I_t$ the player in charge of foreign policy in period $t$ (with $I_0 = M$) while $-I_t$ denotes the other player. In the each period $t \geq 0$,

1. $I_t$ decides on foreign policy $f_t \in \{a, -a\}$.

2. Nature determines whether the war is high-risk (with probability $\pi$) or low-risk (with complementary probability). In the former case, Nature also determines whether there is extreme risk (with probability $\chi$) or not. As discussed above, when choosing foreign policy, all players behave as if $\chi = 0$.

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 $E$ will choose foreign policy in the next period - or stick with Absolutism. If $I_t = E$ then nothing happens.

4. If $I_t = M$ then net transfers $\tau^f_t(0, 1)$ and $\tau^f_t(1, 1)$ are determined whereas if $I_t = E$ then transfers $\tau^f_t(1, 0)$ and $\tau^f_t(1, 1)$ are determined through Nash Bargaining. We interpret non-zero transfers as *Calling Parliament (CP)*.

5. Conditional on the transfers offered, $-I_t$ decides whether to join the war ($x_{-I_t} = 1$) or not ($x_{-I_t} = 0$).
6. Given \( x^{-I}_t \), Nature determines whether the war is won or not and payoffs are realized. In case of defeat in a extreme-risk war, the incumbent Monarch \( M \) is replaced by the new Monarch \( \hat{M} \).

If RBP is conceded by \( M \) in period \( t \) then \( I_s = E \) for any \( s \geq t + 1 \). If on the other hand, an extreme-risk war was lost in period \( t \) then Monarch \( \hat{M} \) takes over and \( I_s = \hat{M} \) 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 affecting our results in any significant way.

We interpret the Nash Bargaining between the Elite and the Monarch on whether to join the war as Calling Parliament. This is in keeping with the notion that public policy is all about wars and that most parliaments focused on how to raise resources to the Monarch to fight a war. Transfers can be interpreted in different ways. If they are agreed before the outcome of the war is known, they can be interpreted as a way of sharing the expected spoils of war, where expectation is taken with the probability of winning. Transfers can also be interpreted as the elite providing resources now whereas the Monarch gives rights that yield monetary benefits.

As for RBP, our time-line assumes that if it is conceded in any period, it will be enforced in the future as long a extreme-risk war is not lost in the same periods. This is a necessary condition for RBP to matter because if \( M \) could revoke such power at will, Rule by Parliament would be irrelevant. Equally, this allows us to interpret RBP as a commitment device for undertaking the wars the Elite prefers: without such commitment, the Monarch could not credibly promise this. This differs from CP where these is no commitment of any sort on future policy decisions and simply consists of the Elite’s decision to participate in a war in a particular period. We will also make the following assumptions.

**Assumption 1** \( r < \frac{1}{p} < R \)

**Assumption 2** Either \( \zeta = 0 \) or \( \zeta \) 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 \( \hat{M} \) 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 case. The new Monarch \( \hat{M} \) either has no ego-rents, or very high ego-rents.

A few observations about the structure we’ve described are worth making, particularly with respect to comparisons with the existing literature. The first observation is that our payoff structure is very similar to that in Jackson and Morelli (2007) in that wars require that a country

\[16\text{By assumption these transfers are within periods. So } E \text{ internalizes that any benefits that are based on future income streams may be revoked at any future period by the Monarch.}\]
invests certain resources hoping to gain a return by taking over the enemy’s resources, with the possibility of a bias that implies a difference in preferences towards war between Monarch and Elite. A first, obvious, difference is that while Jackson and Morelli (2007) study the impact of the bias on the decision to go to war, we assume that a war will happen, with the bias being about preferences between aligned and misaligned wars. More importantly, we distinguish between resources that \( M \) can freely utilize for war and those that require \( E \)’s participation and this will be crucial in a dynamic setting such as ours where \( M \) may be forced to abandon Absolutism in order to obtain \( E \)’s cooperation. Indeed, being able to explain when this mechanism leads to a change in political regime away from Absolutism and when it doesn’t can be seen as a way of endogenizing bias. Also, the distinction between resources that are immediately available to the sovereign and those that are available only with the Elites’ consent, allows us to capture the notions of state and fiscal capacity as discussed in Besley and Persson (2009).

The second observation is that there are also important similarities and differences with the setting in Acemoglu and Robinson (2001). The obvious similarities are that both models seek to explain institutional transitions by taking economic fundamentals as given. The differences are in the fundamentals themselves. Acemoglu and Robinson (2001) assume a level of development where redistribution is the crucial issue in public policy so that the incentives for democratization are mainly determined by the level of inequality in the country. In their model, recessions might give the poor a lower opportunity cost of a revolution and democracy might ensue because it is the only way for the Elites to credibly commit to a redistributive policy. In our paper, we focus on an earlier level of development, when public policy is mostly about the decision of whether to pursue misaligned (e.g. dynastic) or aligned (e.g. colonial) wars and the incentives for introducing Rule by Parliament are mainly determined by how many resources the Monarch has at her disposal in order to wage war; this, in turn, is determined by the way the economy is structured. Thus, times of crisis might give the Elites the opportunity to remove a Monarch that chooses misaligned wars even if this comes at a cost. When this threat is credible, the Monarch might decide to voluntarily relinquish her absolutist powers (i.e. the power to choose which wars to wage) in order to retain the throne.

Another key difference between our setup and Acemoglu and Robinson (2001) regards the implicit collective-action problem associated with revolutions. 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, but still benefit from the gains of a successful revolution. In our model, the individual Elite members are not required to coordinate in order

\[17\] Jackson and Morelli (2007) model bias as different returns in transferable resources, whereas we model bias in the form of ego-rents because we believe it better fits some of the historical evidence for the age we consider.

\[18\] 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.

\[19\] 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.
to realize the threat of not assisting the monarch during a defensive war. Instead, the collective-action problem arises if they wish to assist the Monarch. Thus, the institutional structure around summoning and holding a Parliament may be seen as mechanism to solve this collective action problem.

Finally, 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 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\footnote{For example, the discovery of extensive silver deposits in South America certainly had a crucial impact on the ratio $k$ for Spain. We will discuss this more extensively in our empirical section.} Taking into account theoretically and testing the results empirically would be extremely difficult, especially given the limited amount of data at our disposal. The model presented here, therefore, should be interpreted as model that takes certain characteristics of a country as given and describes how these may have an impact on the country’s institutional framework at a given time, but it does not aim to follow the impact of these changes on those same characteristics in the future.

3 Analysis

We will consider, as is standard, stationary equilibria of our game. As discussed, we will use the generic notation $(p, \gamma)$ to denote the generic monarch’s idiosyncratic parameters.

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 so that it is possible for us to analyze periods where the extreme-risk does not get realized by including the choice of foreign policy in the analysis. 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 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 $p r < 1$ so that $E$ will not participate unless appropriate transfers are given\footnote{If $q r \geq 1$ then $E$ will participate voluntarily in misaligned wars if ruled by $\hat{M}$.} 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 $\gamma$ 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.\(^{22}\)

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.\(^{23}\)

In the Appendix, we also show that $\gamma^*$ is an increasing function of $R, k, \pi$ and $l$ and a decreasing function of $r$. By their very nature, ego-rents are virtually impossible to measure so these comparative statics on $\gamma^*$ can at best be useful in the discussion of anecdotal evidence. However, our results yield testable predictions for the calling of 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

\(^{22}\)The threshold $\gamma^*$ is described in the Appendix.

\(^{23}\)The proof of Proposition 1 is in the Appendix.
function of $r$ and $p$. Finally, recall also that $l < 1 - k + \phi$ which means that higher values of $k$ and lower values of $\phi$ 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. Elites have 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 are more frequent.
5. Monarchs have a lower share of investable resources.

The first observations are of immediate intuition: anything that directly gives $E$ greater incentives to join a high-risk war will increase the frequency of successful negotiations for $E'$ participation. Also, since participation is impossible in low-risk periods and possible in high-risk periods, we should observe more parliaments when the probability of high-risk increases. As we shall see in the empirical section, we will proxy the existence of high-risk wars with defeats in battles that occurs within our country or on an adjacent one and will test whether in these cases the probability of parliaments being called is indeed higher. 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 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 $\gamma \geq \gamma^*$.

\[^{24}\text{In the proof of Proposition 2, in the Appendix, we nevertheless allow for } \gamma < \gamma^*\text{ too.}\]
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 Monarchs, a second factor in determining the possibility of RBP are ego-rents. As \( \gamma \) 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 the \( M \)'s willingness to concede RBP also decreases. 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 \( \phi \). 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 \( \hat{\gamma} > \gamma^* \) and a \( \hat{k} \) such that whenever \( \gamma > \hat{\gamma} \) or \( k > \hat{k} \) then RBP cannot obtain. Conversely, if \( \gamma \leq \hat{\gamma} \) and \( k \leq \hat{k} \) then we can define two further values \( k_\Gamma \) and \( k_\Delta \), with \( k_\Delta \geq k_\Gamma \) such that

- If \( k_\Gamma > 0 \) then RBP will obtain for all \( k \in \left[k_\Gamma, \min\left(k_\Delta, \hat{k}\right)\right] \)
- If \( k_\Gamma \leq 0 \) but \( k_\Delta > 0 \) then RBP will obtain for all \( k \in \left[0, \min\left(k_\Delta, \hat{k}\right)\right] \)
- If \( k_\Delta \leq 0 \) then RBP will not obtain.\(^{25}\)

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 \( \gamma \) is small enough. This is because, 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 quality for the non-optimal 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 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

\(^{25}\)The proof is in the appendix, where \( \hat{\gamma}, \hat{k}, k_\Gamma \) and \( k_\Delta \) are all explicitly defined.
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. This case is studied in detail in section 5.1. Another historical example occurred in medieval Genoa, as discussed in 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 elites, the latter can go as far as trying to remove the incumbent even if RBP is offered.

### 4 Empirical Analysis

#### 4.1 Data

Our study covers the period from 1350 to 1700 AD with data from England, France, Portugal and Spain. By 1350 the plague, which arrived in Western Europe in 1348, had run its course (Jedwab et al. (2019)) 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 (we will generically refer to this as “the commons”) that had a clear say on taxation, a necessary assumption in our model.

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). 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 assemblies began to have powers beyond a plebiscitary nature, i.e., to only acclaim decisions by the monarch without modifying them. In Portugal, the Cortes in 1331 were the first to give the commons a separate status, and the first at which they met separately from the other estates (Duarte (2003)). In Spain, during the first half of the 14th 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

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26 Voigtländer and Voth (2012) also focus their study in the period 1350-1700.

27 In 1362 a statute established that Parliament must approve all taxation. See https://www.parliament.uk/about/living-heritage/, origins of parliament.
no meetings in the 18th century at all whereas in Spain there are 6 meetings before 1789 (during the 17th century parliaments were held in 52% of the years). 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 convened. There are no further meetings of the three Estates until 1789. By that point, the threat of revolution and the need of redistribution starts to play a more important role in explaining political transitions then 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 18th century onwards. Gennaioli and Voth (2015) also shows evidence that most of the growth in state capacity occurs after 1650, when a country military might and a country’s wealth become more closely linked. By the 19th century wars have an important effect on state capacity (Besley and Persson (2008) and Queralt (2019)).

The four countries in our study provide a benchmark to compare how institutionally similar countries in the start of the period diverged so much by the end of the 17th 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 all four countries around the same time. For most of the period, all four countries were Catholic and had to acknowledge Papal influence. 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. The pair Portugal-Spain are the other dynastic rivals. They shared a common origin, a similar language, and a similar foundation based on reconquering lost territory from a common opponent. Their royal houses were closely related with good claims on each other’s throne.

Any other countries in Western Europe differ from these four countries in fundamental ways, and some of these difference imply that their experience is not directly covered by our theoretical model. Countries that existed as a polity throughout most of the period we study such as Denmark, Sweden, and Austria, for example, have parliaments that only started to convene much later ( in the 15th, 16th, and again 16th centuries, respectively Van Zanden et al. (2012)); none participated fully in Atlantic colonization; and Parliament activity was lower on average. 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 across their different regions (Van Zanden

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[Dincecco (2009)] shows that per capita revenues are more or less constant for most of the 17th 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 17th century both countries started to move away from private and towards public collection.
et al. (2012)). Eastern European countries differed in systematic ways already by 1350 and fundamentally so after 1500 (Acemoglu et al. (2005)).

We manually coded yearly parliamentary activity by creating the variable $\text{Parliament}_{it}$, 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 on-line resources for parliaments after 1504.\footnote{http://www.histparl.ac.uk/research/parliaments.} For France we use Marongiu (1968) and Boulle (1845) for parliaments before 1421 and Major (1960) for parliaments thereafter. For Portugal we use Valério (2001). For Spain, we use the appendix of the Enciclopedia Universal Ilustrada.\footnote{We consider the Cortes in Castile and Leon until 1479 when, in addition, we also consider the Cortes of Aragon.} In comparison with Van Zanden et al. (2012), we have the same sources for Portugal and Spain while for France we added Boulle (1845). Our sources for England are different because they are more detailed.

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 Spain/Castile-Leon: 69).\footnote{Brady (2004) is the source for the period before 1500 and Clodfelter (2002) for the period after 1500.} Battles are defined as territorial if they took place within the country or in a neighboring country with a shared land border.\footnote{For example, territorial battles in Normandy during the One Hundred Years War are coded as territorial for England.} Naval battles immediately off the cost of the home country are also counted as territorial. Hence the variable $\text{Territorial battles}_{it}$ takes value 1 if there was a territorial battle in country $i$ in year $t$. A battle is defined as naval if it took place in European waters but not immediately off the cost of country $i$. Thus, $\text{Naval battles}_{it}$ takes value 1 if there were such battle involving country $i$ in year $t$ or 0 otherwise. Similarly, $\text{European battles}_{it}$ 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, territorial 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 Rebellion, the Peasants’ Revolt). 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. The first is War vs Rival, which takes value 1 for England and France 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 Spain 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 any European war involving each country, but that did 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 Spain (index with baseline 100 at year 1850,
in our sample the mean is 131 and median is 133). We were unable to find yearly economic data for Portugal and France for our period. As an alternative, we looked for weather data. Climate researchers use different indicators to reconstruct historical rainfall estimates and we take these estimates as a proxy for variations in yearly agriculture output. We were able to find reconstructed rainfall data for France. Labuhn et al. (2016) uses oxygen isotope ratios in oak tree rings in Fontainebleau and Angouleme from 1326 to 2000. Guiot et al. (2005) produces Europe-wide temperature reconstructions that we use for the pooled sample and for Portugal. From these datasets, we create an indicator variable that takes value 1 if estimated precipitation/temperature was at least one standard deviation away from the sample mean.

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

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</table>

Sources: Parliament: England (Given-Wilson et al. (2005), www.histparl.ac.uk); France (Marongiu (1968), Boule (1845), and Major (1960)); Portugal (Valéria (2001)); Spain (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 and Álvarez-Nogal and De La Escosura (2013) for Spain.

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. The country that calls parliament more often is Spain. In both periods parliaments meets 60% of the years. England follows with approximately 55% 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 21% to 10% and from 44% to 13%. 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). Álvarez-Nogal and De La Escosura (2013) also have estimates of the share in agriculture for Spain but this data is not available in their supplementary material. The authors were contacted and we were informed that these data are preliminary and consists of averages over longer periods and, therefore, are not suitable for our regressions based on yearly observations. Nevertheless, we display them in Table 1.
than in Portugal and Spain (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 Spain post-1500 but no higher than 3% in other instances. Internal battles (part of civil wars or revolt) are frequent in England (7% across the period), followed by France (3%) but are rare in Portugal and Spain. England and France were at war with each other 68% of the years before 1500 and only 10% after. Spain and Portugal were at war with each other 5% of the years before 1500 and 12% after (rows 7 and 8). Almost half of the years after 1500 had an unusual temperature, compare to only 21% in the period before 1500 (row 9). Finally, the share of agriculture decreases in England when comparing the two periods (45% to 38%), but stays constant in Spain (57% and 56%) (row 10).

4.2 Results

We estimate with OLS the following linear probability model:

\[ \text{Parliament}_{it} = \beta' X_{it} + \epsilon_{it}, \]

where \( \text{Parliament}_{it} \) 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, \( \text{Parliament}_{it-1} \), century and Monarch fixed effects, and an indicator variable taking value 1 in a year of succession.\(^{35}\) Standard errors are clustered at the level of the Monarch.

The most robust and novel result is a negative statistically significant contemporaneous correlation between a Parliament being called and there being a territorial defeat in that year.\(^{36}\) 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 38% in a given year. This probability nearly doubles in a year with a territorial defeat. The result is robust to including all other battle variables in column 2, and to including century and Monarch fixed effects in column 3.\(^{37}\) Importantly, the result is 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. Second, we use two different sources for battles, one for pre 1500 (Bradbury (2004)) and one for post 1500 (Clodfelter (2002)). Other battle variables such as naval and internal have the expected sign and are robust in some specifications but not others.

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

\(^{35}\) This 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)).

\(^{36}\) This is exclusively a contemporaneous correlation (Appendix, Table B1).

\(^{37}\) 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.
the previous year increases the probability of a Parliament in the current year by 12 percentage points.\footnote{Our large time dimension suggests we do not have to worry about the incidental parameter problem or the Nickell bias (Baltagi \citeyear{Baltagi2008}).} Column 6 also shows that Parliaments are more likely to be called in years of war between countries that are dynastic rivals (either England vs. France or Spain vs. Portugal), which is an alternative proxy for a high-risk period described in the model. Wars that are not against one’s rivals has a positive point estimate that is not statistically significant. Another reason to call Parliament is the need to settle succession issues; Parliament is 14 percentage points more likely to be called by in years in which a new Monarch ascends the throne. Finally, parliaments are more likely to be called (by 5 percentage points) in years with an unusually high or low temperature. This latter result is important as it lends supports to the result in our model that parliaments are more likely to be called in years of disrupted agricultural production.\footnote{In Table B2 in the Appendix we show that these results are robust to probit and logit specifications.}

In Table \ref{table3} 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 regression for a given country if results change according to the time dummies used. Territorial defeat is statistically significant for England when Monarch fixed effects are used (column 1) but not if century fixed effects are used (column 2). For all other country specific regressions, territorial defeats are statistically significant no matter what time fixed effects are used.

We also document the relationship between calling Parliament and the economy using country specific variables in Table \ref{table3}. 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 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 we do not have a country specific measure of weather or the share of agriculture. The point estimate for the European temperature reconstruction has the correct sign but it is not statistically significant (column 4). For Spain, columns 5 and 6, we have estimates of agricultural goods consumption per capita. Since we control for estimates of GDP as well, they have a similar interpretation as the share of agriculture. We find that in years with above average agricultural consumption (years of high yields), Parliaments in Spain are less likely to be called (an approximate increase of 1 percentage point in agricultural consumption decreases the probability of parliament by 1 percentage point). This result is statistically significant in the
Table 2: Battles, War, Temperature, and the calling of Parliament

<table>
<thead>
<tr>
<th></th>
<th>Pre-1500</th>
<th>Post-1500</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable:</strong> Parliament held in a given year: 1350-1700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lag1 Parliament</td>
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</tr>
<tr>
<td>Territorial</td>
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<tr>
<td></td>
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<td>(0.10)</td>
</tr>
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<tr>
<td></td>
<td>(0.10)**</td>
<td>(0.11)**</td>
</tr>
<tr>
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<td>-0.02</td>
<td>-0.05</td>
</tr>
<tr>
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<td>(0.10)</td>
<td>(0.04)</td>
</tr>
<tr>
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<td>0.30</td>
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<td></td>
<td>(0.07)</td>
<td>(0.06)</td>
</tr>
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<td>-0.10</td>
</tr>
<tr>
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<td>(0.22)</td>
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<td>(0.26)</td>
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<td>(0.06)</td>
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<td>-0.10</td>
</tr>
<tr>
<td></td>
<td>(0.06)</td>
<td>(0.28)**</td>
</tr>
<tr>
<td>War not Rival</td>
<td>-0.10</td>
<td>-0.12</td>
</tr>
<tr>
<td></td>
<td>(0.07)</td>
<td>(0.08)**</td>
</tr>
<tr>
<td>Succession</td>
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<td>-0.12</td>
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<tr>
<td></td>
<td>(0.06)**</td>
<td>(0.17)</td>
</tr>
<tr>
<td>Temp. Europe (1sd)</td>
<td>-0.10</td>
<td>-0.12</td>
</tr>
<tr>
<td></td>
<td>(0.08)**</td>
<td>(0.07)</td>
</tr>
<tr>
<td>Constant</td>
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<td>0.37</td>
</tr>
<tr>
<td></td>
<td>(0.04)**</td>
<td>(0.03)**</td>
</tr>
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<td>No</td>
</tr>
<tr>
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</tr>
<tr>
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</tr>
<tr>
<td></td>
<td>(0.01)</td>
<td>(0.21)</td>
</tr>
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</table>

Note: England, France, Portugal, Spain (parliaments of Leon-Castile and Catalonia from 1469). Sources are described in Section 4.1. Standard errors clustered by monarch. ∗ p < 0.1 ** p < 0.05 *** p < 0.01
regression with century fixed effects (column 6).

4.3 A causal relation between defeat, weather and Parliament

There are three reasons why our results correlating territorial defeats and parliaments reveal a causal relationship.

First, even though the choice of going to war and engaging in battle is endogenous, the outcome seems to be exogenous within our period. There are a total of 73 territorial battles in our sample. Approximately half of those battles (37) were defeats and half were victories. This holds for each country; 25 territorial battles for England, 12 defeats; 34-17 for France; 7-3 for Portugal; and 7-5 for Spain. Moreover, Gennaioli and Voth (2015) show that the probability of victory in battle up to 1650 was no different for the richer versus the poorer belligerent country. Richer countries begin to have a probabilistic advantage only after 1650. Thus, we can think of battle outcomes, conditioning on there being a battle, as a random event.

Second, we are able to show for England (Table B1 in the Appendix) that every territorial defeat except one is followed by a Parliament within a year. For France (Table B2), out of the 17 territorial defeats, 6 or 7 are accompanied by a Parliament within a year; 2 have a Parliament in the same calendar year, but before that year’s battle; and 8 have no parliament within a year before or after the battle. The order of events in England and France suggests that one can rule out that the partial correlation we find is reverse causation (i.e., that Parliament triggers a battle). There is a strong case for Granger causality. Unfortunately we we unable to date the month of Parliaments being held for Portugal and Spain.

Third, we provide in the Appendix extracts from the sources we used to code parliamentary activity describing and analyzing each parliament (8 for England and 6 for France). In every single instance there is a clear discussion of Parliament being used to raise taxes. In all but a couple of descriptions, the previous defeat is mentioned as a reason for the need to raise funds by calling Parliament.

Finally, there is a large literature that studies the causal links between weather variations and a series of outcomes (see Dell et al. (2014) for a review). We would argue that yearly variation in our measures of share of agriculture and agriculture consumption per capita can also be seen as exogenous and directly linked to weather shocks.
# Table 3: Battle defeats and the calling of Parliaments - by country

<table>
<thead>
<tr>
<th>Dependent Variable: Parliament held in a given year</th>
<th>England</th>
<th>England</th>
<th>France</th>
<th>Portugal</th>
<th>Spain</th>
<th>Spain</th>
</tr>
</thead>
<tbody>
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<td>Lag1 Parliament</td>
<td>-0.10</td>
<td>-0.00</td>
<td>0.25</td>
<td>0.07</td>
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<td></td>
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<td>(0.09)</td>
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<td>(0.04)</td>
<td>(0.04)</td>
<td>(0.19)**</td>
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<tr>
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<td>-0.24</td>
<td>-0.29</td>
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<tr>
<td></td>
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<td>(0.08)</td>
<td>(0.04)</td>
<td>(0.11)</td>
<td>(0.20)</td>
<td>(0.19)</td>
</tr>
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<td>Territorial defeat</td>
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<td>0.55</td>
<td>0.46</td>
<td>0.64</td>
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<td></td>
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<td>(0.11)</td>
<td>(0.06)**</td>
<td>(0.22)**</td>
<td>(0.23)*</td>
<td>(0.22)**</td>
</tr>
<tr>
<td>War vs Rival</td>
<td>0.19</td>
<td>0.27</td>
<td>0.09</td>
<td>0.17</td>
<td>0.15</td>
<td>0.09</td>
</tr>
<tr>
<td></td>
<td>(0.07)**</td>
<td>(0.07)**</td>
<td>(0.10)</td>
<td>(0.05)**</td>
<td>(0.07)*</td>
<td>(0.08)</td>
</tr>
<tr>
<td>War not Rival</td>
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<td>-</td>
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</tr>
<tr>
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<td>(0.07)</td>
<td>(0.07)</td>
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<tr>
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<tr>
<td></td>
<td>(0.01)</td>
<td>(0.01)**</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Agric. cons. per capita</td>
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<td>-</td>
<td>-</td>
<td>-</td>
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<td>-0.01</td>
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<td></td>
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<td></td>
<td></td>
<td>(0.01)</td>
<td>(0.00)**</td>
<td></td>
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<tr>
<td>GDP per capita</td>
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<td>-0.08</td>
<td>0.03</td>
<td>0.02</td>
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<tr>
<td></td>
<td>(0.08)</td>
<td>(0.04)</td>
<td></td>
<td>(0.03)</td>
<td>(0.01)</td>
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</tr>
<tr>
<td>Rain France (1sd)</td>
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<td>0.18</td>
<td>-</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>(0.08)**</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Temp. Europe (1sd)</td>
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<td>0.07</td>
<td>-</td>
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<td></td>
<td>(0.05)</td>
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<tr>
<td>Constant</td>
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<td>0.10</td>
<td>-0.64</td>
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<td></td>
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<td>(0.01)**</td>
<td>(0.01)**</td>
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<td>(0.93)</td>
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<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
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<td>Yes</td>
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</tbody>
</table>

*Note:* England; France, Portugal, Spain (parliaments of Leon-Castile and Catalonia from 1469). Sources are described in Section 4.1. Standard errors clustered by king. ∗ p < 0.1 ∗∗ p < 0.05 ∗∗∗ p < 0.01
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 Spain.

5.1 Portugal 1580: The Elites Prefer a Foreign Monarch

Portugal had a very active Parliament in the pre-1500 period (Figure 2a) while it expanded its trading empire in the Mediterranean and down the coast of Africa through a series of naval 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 16th century. 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 Bragança; 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.”

The unification of the Portuguese and Spanish crowns under Philip II is an example of a case in which the country’s Elite chose a military strong foreign Monarch instead of someone from the incumbent dynasty. This confirms the predictions of our model: the Elites 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: “To them [New Christian Portuguese], satisfying the need for silver of the Habsburg monarchy became a more attractive proposition than investment in the Carreira da India.”

By the time Portugal reconquered its independence in in 1640, its role as a international trading nation was in decline. In Figure 2a we can see the drop in the number of ships to Asia. Parliament was called often both during the succession crisis in 1580 and during the

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40Self-translation from the Portuguese.
41We 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).
Figure 2: Parliament activity and Atlantic Trade in England, France, Portugal, and Spain

(a) Portugal

(b) France

(c) England

(d) Spain

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.
independence struggles around 1640, but the frequency of its meetings declines until the end of the 17th century.

5.2 England 1216: the Invasion of Prince Louis of France

Despite taking place before our period of econometric analysis, this is a clear example of the Elite refusing to support a particularly misaligned 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 lands in Lincoln 2016, overruns most of Southern England and is acclaimed King in London (no coronation takes place). In October 1216, John dies 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. Slowly but surely, many of the rebel barons were drawn back into the Royalist fold. By the start of the 1217 campaigning season, Marshal (the young King’s regent) had mustered a large army at Northampton ready to counter Prince Louis, who returned to France (Hanley (2016)). Thus, the Plantagenet’s dynasty newfound willingness, when under direct threat, to provide a more credible commitment to institutional reforms was crucial in ensuring the cooperation of the Elite.

5.3 England 1688: The Glorious Revolution

England had a very active Parliament until the end of the Hundred Years War (Figure 2c). 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 Appendix.

There is a drop in Parliamentary activity after the Hundred Years War – with the exception of the period around the succession crisis due to the death of Henry VIII. Activity picks up again during the Civil War and reaches its peak after the Glorious Revolution.

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 4 we can see that by 1700 France had by far the largest army (larger than the sum of England and the Dutch Republic).

Looking at the situation through the lens of our model, one could therefore argue that the Elite could negotiate with William while holding a strong bargaining position: without their support,

42 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 18th century.

43 All three countries had similar size navies.
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 Rule by Parliament 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 \( \text{North and Weingast} \ (1989) \) and \( \text{Cox} \ (2012) \) \[44\]

Table 4: Army size in Early Modern Europe (in 1,000s)

<table>
<thead>
<tr>
<th></th>
<th>1550 army</th>
<th>1550 navy</th>
<th>1550 total</th>
<th>1700 army</th>
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<td>Dutch Republic</td>
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<td>-</td>
<td>-</td>
<td>90</td>
<td>86</td>
<td>176</td>
</tr>
<tr>
<td>Spain</td>
<td>145</td>
<td>18</td>
<td>163</td>
<td>37</td>
<td>26</td>
<td>63</td>
</tr>
</tbody>
</table>

Source: \( \text{Karaman and Pamuk} \ (2010) \).

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 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, 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 2c. Inter-continental trade increased substantially and rapidly during the 17th 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 \[45\]

5.4 France

France had an active Parliament during the Hundred Years War (Figure 2b). Our period of study starts for France with the defeat at Potiers in September 1356 and the Parliament that followed \[44\] See \( \text{Pincus} \ (2009) \) for a detailed account of the Glorious Revolution. As an example of institutional change, the Monarch lost the right to terminate Parliament at will \( \text{Dimitruk} \ (2018) \). \[44\] The \( \text{Jha} \ (2015) \) 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.
in October 1356. King John of France was being held captive by the English. The bargaining that took place between the heir to the throne and Parliament shows the relative strength of the latter. Etienne Marcel, pr´ evˆ ot 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 taxed 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. This episode also shows evidence that the French Monarch in face of military defeat was willing to negotiate with the third states through 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 the Spanish, 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). Parliament still met relatively frequently during the French Wars of Religion, but last had a full meeting of all three Estates in 1615.

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 our best proxy for the agriculture share of GDP). For reasons outside the scope of this paper, France did not develop a commercial sector to the same extent that England did in the 17th century. As it can be seen in Figure 2b, 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 Elites, in high-risk or even extreme-risk periods.

Moreover, having won the Hundred Years War and survived the War of Religions, France’s military might increases substantially and by the end of the 17th century, it had become the undisputed strongest military power in Europe. This can be seen in Table 4. 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 16th century was low and almost nonexistent by the 17th 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. This may explain why Absolutism consolidated in France: a high $k$, a very strong military, a low probability of being in a high-risk (extreme-risk) period and, on top of that, the lack of a credible dynastic alternative.

5.5 Spain

The results of our model would argue that Spain was on track towards Rule by Parliament until the discovery of silver and gold in vast quantities in the Americas in the early 16th century changed the country’s economic and institutional trajectory. Spain had a institutional setup that was relatively open to its Urban and Commercial Elites until then. At the beginning of our period of observation, Spain 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, Spanish 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 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.

Silver changed the equilibrium between cities such as Barcelona, 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 silver mines in South America. 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. The process began in the early 16th and went on until the mid 17th 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 16th century and never goes above 50% in the 17th 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 Spanish Crown to bypass (and actually co-opt) 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 (Drelichman and Voth (2008) and Drelichman and Voth (2014)). Moreover, during the 16th century, Spain also had significant military power. As can be seen in Table 4, by 1550 Spain had the by far the largest armed forces. Just as for France in the 17th century, high and extreme risk events were unlikely, and it is hard to imagine a credible alternative ruler to the Spanish

46On several occasions, the King expropriated entire shipments of bullion.
monarch during the 16\textsuperscript{th} century.

One feature of the data that does not accord, at a glance, with our predictions is that still Spain had both a fluent trade in silver and gold with the Americas and a high number of Parliaments during the first half of the 17\textsuperscript{th} century (Figure 2d). Note, however, that during this period Spain 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. But by the time Spain had lost Portugal and its colonies (1640) and recognized the Dutch Republic as an independent nation (1658), it is clear that Spain is no longer a trading power and the frequency of parliaments again decreases dramatically\cite{Figure 2d}. Spain had never developed a commercial sector behind that dedicated to the exploitation of natural resources and once that started to shrink, it reverted to being an agricultural and low wage economy (Álvarez-Nogal and De La Escosura 2013). Under these conditions, it was always unlikely that Rule by Parliament would emerge.

6 Concluding Remarks

Political transitions to Rule by Parliament as described in our model occurred in England in the 17\textsuperscript{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). These transitions are rare and require very specific conditions to take place. Our model helps us narrow down 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 either as it is may be better for the latter 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 and another example is Genoa in the 13\textsuperscript{th} and 14\textsuperscript{th} century (De Magalhães 2013). Finally, the current ruler must be misaligned with the Elite, but not too misaligned at it may prefer to go it alone instead of bargaining with Parliament. Our model makes it 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 Commercial Elites, and an economy where Commercial Elites were sufficiently important. If all these conditions held and an extreme-risk event occurred - i.e., a looming foreign invasion - then a transition to Rule by Parliament was possible.

A further 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,\footnote{Figure 2d shows a rapid fall in the number of ships to the Americas.}
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 there are no extreme-risk events. 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 – are positively correlated with there being Parliament that year. Second, years of relatively low agricultural production (or high commercial/manufacture output) are also positively correlated with Parliament being called. Both results support the empirical predictions of our model and also suggest that military and economic events help explain some institutional features of these countries.

These two types of events, military defeats and agricultural output variation, can be thought of as random shocks. These shocks, in turn, can be thought of as critical junctures (see Acemoglu and Robinson (2013) and Capoccia (2016)): winning or losing particular territorial battles (and/or facing a low agriculture output) has implications on Parliament being called that year, and once it has been called, further institutional changes may be set in motion. Hence, another interpretation of our empirical results is that we provide evidence that probabilistic events such as defeats in battle and generalized crop failures are good candidates for critical junctures in explaining institutional development.

The model, therefore, suggests how specific critical junctures might have had a long-lasting implication on institutional development. Had the Hundred Years War ended 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 Dom Sebastião not died in a colonial battle defeat in 1578, the Portuguese Commercial Elite would have continued to thrive and Parliament would have been more active than it became under Spanish rule. Finally, in an early example of the resource curse, if no silver or gold had been found in the Americas, Spain may have continued to be a trading and manufacturing nation with an active Parliament.

References


Acemoglu, D. and Robinson, J. A. (2000). Why did the West extend the franchise? Democ-


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, neither or both. Also, this will depend on the foreign policy. Let

$$
W^E_f (x^E_h(f), x^E_l(f))
$$

$$
W^M_f (x^M_h(f), x^M_l(f))
$$

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 $x^E_h(f)$ in high-risk periods and $x^E_l(f)$ in low-risk periods. Since $\tau^f_j (1, 1)$ represents transfers from $M$ if $E$ agrees to join the war and $\tau^f_j (0, 1)$ the transfer if $E$ does not, then $M$’s utility is clearly maximized if $\tau^f_j (0, 1) = 0$ and so we will denote with $\tau^f_j = \tau^f_j (1, 1)$ for $j \in \{h, l\}$.

Given this we have that, net of possible ego-rents

$$
W^M_f (1, 1) = \frac{1}{1-\beta} \left\{ \pi \left[ p\rho^f - \tau^f_h \right] + (1 - \pi) \left[ p\rho^f - \tau^f_l \right] \right\}
$$

$$
W^M_f (0, 1) = \frac{1}{1-\beta} \left\{ \pi pk\rho^f + (1 - \pi) \left[ p\rho^f - \tau^f_l \right] \right\}
$$

$$
W^M_f (1, 0) = \frac{1}{1-\beta} \left\{ \pi \left[ p\rho^f - \tau^f_h \right] + (1 - \pi) pk\rho^f \right\}
$$

$$
W^M_f (0, 0) = \frac{1}{1-\beta} \left\{ \pi pk\rho^f + (1 - \pi) pk\rho^f \right\}
$$

and

$$
W^E_f (1, 1) = \frac{1}{1-\beta} \left\{ \pi \left[ \phi - (1 - p) l + \tau^f_h \right] + (1 - \pi) \left[ \phi + \tau^f_l \right] \right\}
$$

$$
W^E_f (0, 1) = \frac{1}{1-\beta} \left\{ \pi \left[ 1 - k + \phi - (1 - pk) l \right] + (1 - \pi) \left[ \phi + \tau^f_l \right] \right\}
$$

$$
W^E_f (1, 0) = \frac{1}{1-\beta} \left\{ \pi \left[ \phi - (1 - p) l + \tau^f_h \right] + (1 - \pi) (1 - k + \phi) \right\}
$$

$$
W^E_f (0, 0) = \frac{1}{1-\beta} \left\{ \pi \left[ 1 - k + \phi - (1 - pk) l \right] + (1 - \pi) (1 - k + \phi) \right\}
$$

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, $\tau^f_l$ maximizes

$$
\left( p\rho^f - \tau^f_l + \beta W^M_f (1, 1) - pk\rho^f - \beta W^M_f (1, 0) \right)
$$

$$
\times \left( \tau^f_l + \phi + \beta W^E_f (1, 1) - (1 - k + \phi) - \beta W^E_f (1, 0) \right)
$$
subject to

\[ p\rho f - \tau f^i + \beta W^M_f (1, 1) - pk\rho f - \beta W^M_f (0, 0) \geq 0 \iff p\rho f (1 - k) \geq \tau f^i \]
\[ \tau f^i + \phi + \beta W^E_f (1, 1) - (1 - k + \phi) - \beta W^E_f (0, 0) \geq 0 \iff \tau f^i \geq 1 - k \]

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, \( \tau h_f \) maximizes

\[
\left( p\rho f - \tau h_f + \beta W^M_f (1, 1) - pk\rho f - \beta W^M_f (0, 1) \right) \\
\times \left( \phi - (1 - p) l + \tau h_f + \beta W^E_f (1, 1) - (1 - k + \phi) + (1 - pk) l - \beta W^E_f (0, 1) \right)
\]

subject to

\[ p\rho f - \tau h_f + \beta W^M_f (1, 1) - pk\rho f - \beta W^M_f (0, 1) \geq 0 \iff p\rho f (1 - k) \geq \tau h_f \]
\[ \phi - (1 - p) l + \tau h_f + \beta W^E_f (1, 1) - (1 - k + \phi) + (1 - pk) l - \beta W^E_f (0, 1) \geq 0 \]
\[ \iff \tau h_f \geq (1 - k) (1 - pl) \]

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

\[ \hat{\tau} a_i = \frac{1}{2} (1 - k) (pR + 1) \quad \text{and} \quad \hat{\tau} h_i = \frac{1}{2} (1 - k) (pR + 1 - lp) \]

It is easy to check that these transfers satisfy the participation constraints and (since \( l > 0 \)) that \( \hat{\tau} h_i < \hat{\tau} a_i \).

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. 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, \( \tau h^{-a} \) maximizes

\[
\left( pr - \tau h^{-a} + \beta W^M_{-a} (1, 0) - pk r - \beta W^M_{-a} (0, 0) \right) \\
\times \left( \phi - (1 - p) l + \tau h^{-a} + \beta W^E_{-a} (1, 0) - (1 - k + \phi) + (1 - pk) l - \beta W^E_{-a} (0, 0) \right)
\]

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subject to

\[
pr - \tau_h^{-a} + \beta W^M_{-a} (1, 0) - pkr - \beta W^M_{-a} (0, 0) \geq 0 \Leftrightarrow pr (1 - k) \geq \tau_h^{-a} \\
\phi - (1 - p) l + \tau_h^{-a} + \beta W^E_{-a} (1, 0) - (1 - k + \phi) + (1 - pk) l - \beta W^E_{-a} (0, 0) \geq 0 \\
\Leftrightarrow \tau_h^{-a} \geq (1 - k) (1 - pl)
\]

In this case, participation constraints can be satisfied for any \(\tau_h^{-a}\) 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 are

\[
\tilde{\tau}_h^{-a} = \frac{1}{2} (1 - k) (pr + 1 - pl)
\]

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 \(\phi\) 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

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

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

\[
\frac{1}{1 - \beta} \left\{ \gamma + \pi [pr - \tilde{\tau}_h^{-a}] + (1 - \pi) pkr \right\} = \frac{2 \gamma + p (\pi + 2k - \pi k) r - \pi (1 - k) (1 - pl)}{2 (1 - \beta)}
\]
or, if \( l < l^* \)

\[
\frac{1}{1 - \beta} \{ \gamma + \pi pkr + (1 - \pi) pkr \} = \frac{\gamma + pkr}{1 - \beta}
\]

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

\[
\gamma \geq \gamma^* = \begin{cases} 
\frac{pR (1 + k) - pr (\pi + 2k - \pi k) - (1 - k)(1 - \pi)}{2} & \text{if } l \geq l^* \\
\frac{pR (1 + k) - pr (\pi + 2k - \pi k) - (1 - k)(1 - \pi)}{2} + \frac{1}{2} \pi (pr + pl - 1)(1 - k) & \text{if } l < l^*
\end{cases}
\]

where we note that

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

\[
\frac{1}{2} (pR - 2 + \pi + 1 - \pi) = \frac{1}{2} (pR - 1) > 0
\]

while

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

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

and since \( l < l^* \) then \( 1 - pr - pl > 0 \). It is immediate to check that \( \gamma^* \) is increasing in \( \pi, l \) 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 chose 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

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

$$\iff \gamma \geq \gamma^* + \frac{1}{2} (pr + 1 - pl) (1 - k) \frac{1 - \beta}{\beta}$$

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

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

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

Clearly, these boundaries are higher than $\gamma^*$ for any $\beta < 1$ but equal to $\gamma^*$ 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 $\tau^f_A$ represent transfers to $E$ for participation when future wars are aligned and $\tau^f_{-A}$ 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

$$\left( pp^f - \tau^f_P + p\beta W^M_a (1, 1) - pkp^f - pk\beta W^M_a (1, 1) \right)$$

$$\times \left( \tau^f_A + p\phi + p\beta W^E_a (1, 1) + (1 - p) \beta V - pk (1 - k + \phi) - pk\beta W^E_a (1, 1) - (1 - pk) \beta V \right)$$

subject to

$$pp^f - \tau^f_A + p\beta W^M_a (1, 1) - pkp^f - pk\beta W^M_a (1, 1) \geq 0$$

$$\iff p (1 - k) \left[ \rho^f + \beta W^M_a (1, 1) \right] \geq \tau^f_A$$

$$\tau^f_A + p\phi + p\beta W^E_a (1, 1) + (1 - p) V - pk (1 - k + \phi) - pk\beta W^E_a (1, 1) - (1 - pk) V \geq 0$$

$$\iff \tau^f_A \geq p (1 - k) \left[ k - \phi + \beta V - \beta W^E_a (1, 1) \right]$$
So, 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 $\tau_A^f$ 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

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

$$\Leftrightarrow W_a^M (1, 1) + W_a^E (1, 1) + \frac{\phi + \rho^f - k}{\beta} \geq V$$

$$\Leftrightarrow \frac{1}{1 - \beta} [p \rho + \phi l (1 - p)] + \frac{\phi + \rho^f - k}{\beta} \geq V$$

Whenever feasible this gives us transfers

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

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

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

subject to

$$p \rho^f - \tau_A^f + p \beta \left[ W_a^M (x^E, 0) + \frac{\gamma}{1 - \beta} \right] - p k \rho^f - p k \beta \left[ W_a^M (x^E, 0) + \frac{\gamma}{1 - \beta} \right] \geq 0$$

$$\Leftrightarrow p (1 - k) \left[ \rho^f + \beta \left( W_a^M (x^E, 0) + \frac{\gamma}{1 - \beta} \right) \right] \geq \tau_A^f$$

$$\left( \tau_A^f + p \phi + p \beta W_a^E (x^E, 0) + (1 - p) \beta V - p k (1 - k + \phi) - p k \beta W_a^E (x^E, 0) - (1 - p k) \beta V \right) \geq 0$$

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

where $W_a^I (x^E, 0)$ (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 $W_a^E (x^E, 0)$ in case of victory and $V$ in case...
of defeat. Transfers that satisfy these two constraints exist whenever
\[
p(1 - k) \left[ \rho^f + \beta \left( W^M_a (x^E, 0) + \frac{\gamma}{1 - \beta} \right) \right] \geq p(1 - k) \left[ k - \phi + \beta V - \beta W^E_a (x^E, 0) \right]
\]
\[
\iff W^M_a (x^E, 0) + W^E_a (x^E, 0) + \frac{\gamma}{1 - \beta} + \frac{\phi + \rho^f - k}{\beta} \geq V
\]
\[
\iff \left\{ \begin{array}{l}
\frac{1}{1 - \beta} \left[ p(\pi + k - \pi k) r + \phi - \pi l (1 - p) + (1 - k)(1 - \pi) + \gamma \right] + \frac{\phi + \rho^f - k}{\beta} \geq V \quad \text{if } l \geq l^*
\\
\frac{1}{1 - \beta} \left[ pr k + \phi - \pi l (1 - pk) + (1 - k) + \gamma \right] + \frac{\phi + \rho^f - k}{\beta} \geq V \quad \text{if } l < l^*
\end{array} \right.
\]
Whenever feasible this gives us transfers
\[
\tau^f_{-A} = \frac{1}{2} p(1 - k) \left( \beta \left( V + W^M_a (x^E, 0) - W^E_a (x^E, 0) + \frac{\gamma}{1 - \beta} \right) + k + \rho^f - \phi \right)
\]
If multiply the conditions for transfers \( \tau^f_{-A} \) and \( \tau^f_{A} \) to be possible by \( (1 - \beta) \) and then take the limit as \( \beta \to 1 \) we then get that the conditions above become
\[
\Gamma = pR + \phi - \pi l (1 - p) \geq v
\]
and
\[
\Delta = \left\{ \begin{array}{l}
p(\pi + k - \pi k) r + \phi - \pi l (1 - p) + (1 - k)(1 - \pi) + \gamma \quad \text{if } l \geq l^*
\\
pr k + \phi - \pi l (1 - pk) + (1 - k) + \gamma \quad \text{if } l < l^*
\end{array} \right. \geq v
\]
respectively, where \( v = \lim_{\beta \to 1} (1 - \beta) V \). Note that \( \Gamma \) is constant in \( k \) and \( \gamma \) while \( \Delta \) is increasing in \( \gamma \) 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 \( \gamma \). So we have two cases:

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

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

\[48\text{Note that for sufficiently high } \beta \text{ these conditions are independent of current foreign policy } f.\]
worthwhile.

We now consider \( v \). For generic parameters, \((q, \zeta)\) replacing \((p, \gamma)\) we have that

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

It is immediate to notice that

\[
v (k = 1) = \phi - \pi (1 - q) l
\]

while, for any \( l \)

\[
\Gamma = pR + \phi - \pi (1 - p) l \\
\Delta (k = 1) = pr + \phi - \pi (1 - p) l
\]

We then have \( v (k = 1) \) is smaller than \( \Gamma \) and smaller than \( \Delta (k = 1) \) for any \( \gamma \geq \max (0, \pi l (q - p) - pr) \).

In other words, for sufficiently large \( k \) and \( \gamma \), \( v (k) < \min (\Gamma, \Delta (l)) \).

Since \( \Delta \) is a decreasing function of \( k \) while \( \Gamma \) is constant, we can define a \( k^* \) such that \( \Delta (k^*) = \Gamma \) with \( \Delta (k) < \Gamma \) for \( k > k^* \) and \( \Delta (k) > \Gamma \) for \( k < k^* \). In particular,

\[
k^* = \begin{cases} 
\frac{\gamma - (Rp - 1) - \pi (1 - pr)}{(1 - pr) (1 - \pi)} & \text{if } l \geq l^* \\
\frac{\gamma - (Rp - 1) - \pi pl}{1 - pr - \pi pl} & \text{if } l < l^*
\end{cases}
\]

which is obviously increasing in \( \gamma \).

We can also define \( k_T \) to be such that \( v (k_T) = \Gamma \) with \( v (k) > \Gamma \) for \( k < k_T \) and \( v (k) > \Gamma \) for \( k > k_T \)

\[
k_T = \begin{cases} 
1 - 2 \frac{Rp + \pi l (p - q)}{q (\rho^f - \pi l) + 1} & \text{if } q \rho^f \geq 1 \\
1 - 2 \frac{\pi q \rho^f - \pi - \pi l q + 2}{1 - \pi l q} & \text{if } q \rho^f < 1 \text{ and } l \geq l^* (q, \rho^f) \\
\frac{Rp}{1 - \pi l q} & \text{if } q \rho^f < 1 \text{ and } l < l^* (q, \rho^f)
\end{cases}
\]

\[\text{49 It is easy to see that } \Delta (\gamma = \gamma^* (1), k = 1) = \Gamma \]

so that if we impose \( \gamma \geq \gamma^* \) then

\[\Delta (\gamma, k = 1) > v (k = 1)\]

48
Since \( k_\Gamma < 0 \) whenever \( q_\rho f < 1 \) and \( l < l^* (q, \rho f) \) then we ignore the last case. Finally, we define \( k_\Delta \) to be such that \( v(k_\Delta) = \Delta (k_\Delta) \) with \( v(k) > \Delta (k) \) for \( k < k_\Delta \) and \( v(k) > \Delta (k) \) for \( k > k_\Delta \). We have

\[
 k_\Delta = \left\{ \begin{array}{l}
 1 - 2 \frac{\gamma + \pi l (p - q)}{\gamma + \pi l (p - q) + \pi l (p - q)} & \text{if } q_\rho f \geq 1 \text{ and } l \geq l^* \\
 1 - 2 \frac{\gamma + \pi l (p - q)}{\gamma + \pi l (p - q) + \pi l (p - q)} & \text{if } q_\rho f \geq 1 \text{ and } l < l^* \\
 1 - 2 \frac{\gamma + \pi l (p - q)}{\gamma + \pi l (p - q) + \pi l (p - q)} & \text{if } q_\rho f < 1, \ l \geq l^* (q, \rho f) \text{ and } l \geq l^* \\
 1 - 2 \frac{\gamma + \pi l (p - q)}{\gamma + \pi l (p - q) + \pi l (p - q)} & \text{if } q_\rho f < 1, \ l \geq l^* (q, \rho f) \text{ and } l < l^* \\
 1 - 2 \frac{\gamma + \pi l (p - q)}{\gamma + \pi l (p - q) + \pi l (p - q)} & \text{if } q_\rho f < 1, \ l < l^* (q, \rho f) \text{ and } l \geq l^* \\
 1 - 2 \frac{\gamma + \pi l (p - q)}{\gamma + \pi l (p - q) + \pi l (p - q)} & \text{if } q_\rho f < 1, \ l < l^* (q, \rho f) \text{ and } l < l^* \\
 \end{array} \right.
\]

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

\[
 \hat{\gamma} = \left\{ \begin{array}{l}
 \gamma^* (0) + \frac{1}{2} (pR - 1 + (1 - pr) (\pi + 2 (1 - \pi) k_\Gamma)) & \text{if } l \geq l^* \\
 \gamma^* (0) + \frac{1}{2} (pR - 1 + \pi l (q - p) - pr) & \text{if } l < l^* \\
 \end{array} \right.
\]

We now have all the ingredient to consider two possibilities:

I. \( \gamma \geq \hat{\gamma} \). 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. \( \hat{\gamma} > \gamma \geq \max (0, \pi l (q - p) - pr) \). 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 \( k \geq k_\Delta \).
Recalling from proposition 1’s proof that 
\[ \hat{\gamma} \approx \gamma \]
and in particular, we can show that letting 
\[ y = \min(k, 0) \]
what conditions \( \hat{\gamma} > \gamma^* \). One can rewrite

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

and

\[ \hat{\gamma} = \begin{cases} 
\gamma^*(0) + \frac{1}{2} (pR - 1 + (1 - pr) \pi) + (1 - pr) (1 - \pi) k & \text{if } l \geq l^* \\
\gamma^*(0) + \frac{1}{2} (pR - 1 + \pi pl) + (1 - pr - \pi pl) k & \text{if } l < l^* 
\end{cases} \]

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

\[ \hat{k} = \begin{cases} 
pR - 1 + (1 - pr) \pi + 2 (1 - pr) (1 - \pi) k & \text{if } l \geq l^* \\
pR - pr (2 - \pi) + 1 - \pi \\
pR - 1 + \pi pl + 2 (1 - pr - \pi pl) k & \text{if } l < l^* 
\end{cases} \]

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

\[ \hat{k} - y = \begin{cases} 
\frac{(pR - 1 + (1 - pr) \pi) (1 - y)}{pR - pr (2 - \pi) + 1 - \pi} & \text{if } l \geq l^* \\
\frac{(pR - 1 + \pi pl) (1 - y)}{pR - 2 pr + 1 - \pi lp} & \text{if } l < l^* 
\end{cases} \]

which is strictly positive for any \( y < 1 \) and equal to zero for \( y = 1 \). This shows that there is always an interval \( \max(0, k), \hat{k} \) such that \( \hat{\gamma} > \gamma^* \) 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 \( k \in \left[ 0, \hat{k} \right] \).

i. Suppose \( k > 0 \) and \( \gamma \approx \hat{\gamma} \). Then, \( M \) will concede RBP in exchange for \( E \)'s participation whenever \( k \in \left[ k, \min \left( k, \hat{k} \right) \right] \). If \( k < k^* \) then \( M \) will not concede RBP and \( E \) will not participate in the war. If \( k > \hat{k} \) then \( E \) will participate in the war and \( M \) will not concede RBP whenever \( k > k \).

ii. Suppose \( k \leq 0 \) but \( k^* > 0 \) and \( \gamma < \hat{\gamma} \). Then, \( M \) will concede RBP in exchange for \( E \)'s participation whenever \( k < \max \left( 0, \min \left( k^*, \hat{k} \right) \right) \). If \( k < \hat{k} \) then \( E \) will participate in the war and \( M \) will not concede RBP whenever \( k > k^* \).
iii. If $k_\Delta < 0$ then 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

<table>
<thead>
<tr>
<th>Dependent Variable: Parliament held in a given year: 1350-1700</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lag1 Parliament</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Territorial</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Territorial defeat</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Lag1 Territorial</td>
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<td>Lag1 Territorial defeat</td>
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</tr>
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<td></td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Other battles/succession/War/temp</td>
</tr>
<tr>
<td>monarch dummies</td>
</tr>
<tr>
<td>century dummies</td>
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<tr>
<td>R-squared</td>
</tr>
<tr>
<td>Number of observations</td>
</tr>
</tbody>
</table>

*Note: England, France, Portugal, Spain (parliaments of Leon-Castile and Catalonia from 1469). Standard errors clustered by king. * p < 0.1 ** p < 0.05 *** p < 0.01*
<table>
<thead>
<tr>
<th>Variable</th>
<th>Probit</th>
<th>Logit</th>
<th>Linear Prob. (interaction)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lag1 Parliament</td>
<td>0.32</td>
<td>0.52</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>(0.14)**</td>
<td>(0.23)**</td>
<td>(0.05)**</td>
</tr>
<tr>
<td>Territorial</td>
<td>-0.51</td>
<td>-0.82</td>
<td>-0.11</td>
</tr>
<tr>
<td></td>
<td>(0.16)***</td>
<td>(0.27)***</td>
<td>(0.04)***</td>
</tr>
<tr>
<td>Territorial defeat</td>
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<td>2.03</td>
<td>0.22</td>
</tr>
<tr>
<td></td>
<td>(0.29)***</td>
<td>(0.52)***</td>
<td>(0.14)*</td>
</tr>
<tr>
<td>Territorial defeat*War vs Rival</td>
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<td>-</td>
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</tr>
<tr>
<td></td>
<td></td>
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<td>(0.13)</td>
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<tr>
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<td>-0.16</td>
<td>-0.02</td>
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<tr>
<td></td>
<td>(0.27)</td>
<td>(0.45)</td>
<td>(0.08)</td>
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<td>1.50</td>
<td>0.15</td>
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<tr>
<td></td>
<td>(0.45)*</td>
<td>(0.79)*</td>
<td>(0.10)</td>
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<td>(0.50)*</td>
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<td>(0.25)***</td>
<td>(0.05)***</td>
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<td>(0.37)</td>
<td>(0.07)</td>
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<tr>
<td></td>
<td>(0.22)**</td>
<td>(0.37)**</td>
<td>(0.06)**</td>
</tr>
<tr>
<td>Temp. Europe (1sd)</td>
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<td>0.29</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>(0.10)*</td>
<td>(0.16)*</td>
<td>(0.03)*</td>
</tr>
<tr>
<td>Constant</td>
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<td>-2.09</td>
<td>0.10</td>
</tr>
<tr>
<td></td>
<td>(0.03)***</td>
<td>(0.06)***</td>
<td>(0.01)***</td>
</tr>
<tr>
<td>century dummies</td>
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<td>Yes</td>
<td>Yes</td>
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<tr>
<td>monarch dummies</td>
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<td>Yes</td>
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<td>Pseudo R-squared</td>
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*Note: England, France, Portugal, Spain (parliaments of Leon-Castile and Catalonia from 1469). Standard errors clustered by king. * p < 0.1 ** p < 0.05 *** p < 0.01*
## Appendix C  Notes on Territorial Defeats and subsequent Parliaments

Table B1: Territorial Defeats and Parliaments - England

<table>
<thead>
<tr>
<th>Date of Defeat</th>
<th>Battle Name</th>
<th>Opponent</th>
<th>Parliament within 1 year</th>
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</thead>
<tbody>
<tr>
<td>Oct 1356 - Jul 1357</td>
<td>Siege of Rennes</td>
<td>France</td>
<td>Apr 1357</td>
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<tr>
<td>Jun 1372</td>
<td>La Rochelle</td>
<td>France/Castile</td>
<td>Nov 1372</td>
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<tr>
<td>Aug 1388</td>
<td>Otterburn</td>
<td>Scotland</td>
<td>Sep 1388</td>
</tr>
<tr>
<td>Jun 1402</td>
<td>Pileth</td>
<td>Wales</td>
<td>Sep 1402</td>
</tr>
<tr>
<td>Mar 1421</td>
<td>Bauge</td>
<td>France/Scotland</td>
<td>May/Dec 1421</td>
</tr>
<tr>
<td>Oct 1428 - May 1429</td>
<td>Siege of Orleans</td>
<td>France</td>
<td>Sep 1429</td>
</tr>
<tr>
<td>Feb 1429</td>
<td>Patay</td>
<td>France</td>
<td>Sep 1429</td>
</tr>
<tr>
<td>Apr 1449</td>
<td>Rouen</td>
<td>France</td>
<td>Nov 1449</td>
</tr>
<tr>
<td>Apr/Jun 1450</td>
<td>Formingy/Falaise/Caen</td>
<td>France</td>
<td>Nov 1450</td>
</tr>
<tr>
<td>Jul 1453</td>
<td>Castillon</td>
<td>France</td>
<td>none</td>
</tr>
<tr>
<td>Feb 1544</td>
<td>Ancreum moor</td>
<td>Scotland</td>
<td>Jan 1545</td>
</tr>
<tr>
<td>Jul 1689</td>
<td>Killiecranckie</td>
<td>Ireland/Scotland</td>
<td>Jan 1689 - Feb 1690</td>
</tr>
</tbody>
</table>


Below we reproduce exerts from the summaries of each Parliament in Table B1 for which there is a description in Given-Wilson et al. (2005):

### 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.

### 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.

**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.

**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 concessse*), and pointing out that the treasurer, Henry Bowet, was removed (*amotus*) from office.

**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.

**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.

**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.

**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 rebellion 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.
<table>
<thead>
<tr>
<th>date of defeat</th>
<th>Battle name</th>
<th>Opponent</th>
<th>Parliament within 1 year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 1352</td>
<td>Mauron</td>
<td>England</td>
<td>none</td>
</tr>
<tr>
<td>Jul/Sept 1356</td>
<td>Potiers/Breteuil</td>
<td>England</td>
<td>Oct 1356</td>
</tr>
<tr>
<td>1370 (month unknown)</td>
<td>Thurié</td>
<td>England</td>
<td>1370 (month unknown)</td>
</tr>
<tr>
<td>Sep-Oct 1415</td>
<td>Agincourt/Harfleur</td>
<td>England</td>
<td>none</td>
</tr>
<tr>
<td>Mar 1416</td>
<td>Valmont</td>
<td>England</td>
<td>none</td>
</tr>
<tr>
<td>Sep 1417</td>
<td>Caen</td>
<td>England</td>
<td>none</td>
</tr>
<tr>
<td>Jul 1418 - Feb 1419</td>
<td>Rouen/Falaise</td>
<td>England</td>
<td>none (May 1421)</td>
</tr>
<tr>
<td>Oct 1421 - May 1422</td>
<td>Meaux</td>
<td>England</td>
<td>none</td>
</tr>
<tr>
<td>Jul 1423</td>
<td>Cravant</td>
<td>England</td>
<td>Aug 1423</td>
</tr>
<tr>
<td>Aug 1424</td>
<td>Verneuil</td>
<td>England</td>
<td>Nov 1424</td>
</tr>
<tr>
<td>Feb 1429</td>
<td>Herrings</td>
<td>England</td>
<td>March 1429/Mar 1430 (summoned/held)</td>
</tr>
<tr>
<td>1430 (month unknown)</td>
<td>Beauvais</td>
<td>England</td>
<td>Mar 1431</td>
</tr>
<tr>
<td>Jun 1557</td>
<td>St Quentin</td>
<td>Spain (Flanders)</td>
<td>Jan 1558</td>
</tr>
<tr>
<td>Jul 1558</td>
<td>Gravelines</td>
<td>Spain (Flanders)</td>
<td>none (Jan 1558 )</td>
</tr>
<tr>
<td>Jul 1656</td>
<td>Valenciennes</td>
<td>Spain (Flanders)</td>
<td>none</td>
</tr>
<tr>
<td>Oct 1674</td>
<td>Enzheim</td>
<td>Dutch</td>
<td>none</td>
</tr>
<tr>
<td>Aug 1698</td>
<td>Namur</td>
<td>Grand Alliance</td>
<td>none</td>
</tr>
</tbody>
</table>

Note: Battle information from Bradbury (2004) and Clodfelter (2002). Parliament information from Boulle (1845) and Major (1960).

Below we reproduce exerts from Boulle (1845) and Major (1960) discussing Parliaments noted in Table B2.

**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 La Forest, 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 États. [...] Il flétrit avec énergie les prétention insolentes, les vexations et les attentats d’Édouard III, et déclara que le dernier des Français périrait avant que la France consentît à devenir un fief de l’Anglaterre. [...] invita ce prince à se former un conseil composé de quatre prélats de douze chevaliers et de douze députés du tiers-état, en prenant l’engagement de ne rien décider sans la participation de ce conseil. [...] 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.)

**October 1370.** Il [Le Roi] obtint 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 proprès à justifier la confiance et l’affection des États, 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.)

October 1423. Content to win from Languedoil alone a taille of 200,000 livres, and the aides or sales tax on all commondities to be collected for the three years. (Major (1960), p. 27)

October 1424. Both assemblies agreed on setting the toal needs of the crown at 1,00,000 livres. (Major (1960), p. 29)

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)

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)
Table B3: Territorial Defeats and Parliaments - Portugal and Spain

<table>
<thead>
<tr>
<th>Date of Defeat</th>
<th>Battle Name</th>
<th>Opponent</th>
<th>Parliament in that year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 1385</td>
<td>Aljubarrota</td>
<td>Portugal-England</td>
<td>yes (month unknown)</td>
</tr>
<tr>
<td>Aug 1482</td>
<td>Loja</td>
<td>Reconquista</td>
<td>yes (month unknown)</td>
</tr>
<tr>
<td>1661 (month unknown)</td>
<td>Estremadura/Montijo</td>
<td>Portugal</td>
<td>yes (month unknown)</td>
</tr>
<tr>
<td>Jun 1663</td>
<td>Ameixal</td>
<td>Portugal</td>
<td>yes (month unknown)</td>
</tr>
<tr>
<td>Jun 1665</td>
<td>Montes Claros</td>
<td>Portugal</td>
<td>yes (month unknown)</td>
</tr>
</tbody>
</table>

**Spain**

<table>
<thead>
<tr>
<th>Date of Defeat</th>
<th>Battle Name</th>
<th>Opponent</th>
<th>Parliament in that year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar 1476</td>
<td>Toro</td>
<td>Aragon</td>
<td>yes (month unknown)</td>
</tr>
<tr>
<td>Aug 1580</td>
<td>Alcantara</td>
<td>Spain</td>
<td>yes (month unknown)</td>
</tr>
<tr>
<td>Jul 1583</td>
<td>Azores</td>
<td>Spain</td>
<td>yes (month unknown)</td>
</tr>
</tbody>
</table>