International Warfare, Cooperative Statebuilding, and European Parliaments

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Abstract

Does war make the state or undermine it? Many argue that pressure from international warfare promoted cooperative statebuilding in Western Europe: monarchs granted parliamentary rights to elites in return for revenues to fight wars. We develop a new theory of cooperative statebuilding that demonstrates how outside threats might instead hinder this process. The key contribution of our formal model is to highlight how war threats affect—and may weaken—the elite's demand for constraints on the executive. For landed elites, who depend on the ruler for security against outsiders, war threats undercut their leverage to refuse funding an unconstrained ruler. For merchant elites, war threats may strengthen their leverage too much, causing them to exit the polity rather than fund a hopeless war effort. Only under circumscribed conditions do war threats make a strong parliament more likely to emerge cooperatively, which helps to account for variance in historical European parliaments.

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An important development in Western European political history was the rise of parliaments. The conventional argument is that "war made the state" (Tilly 1975, 42) because competition from international warfare pressured rulers to find new revenue sources. This, in turn, increased the bargaining leverage of taxpaying elites to demand representation in exchange for revenue (Bates and Lien 1985; Levi 1988). Although many sovereigns preferred autocratic rule, dire needs for resources often compelled them to delegate power to representative bodies. Thus, external threats spurred a process of *cooperative statebuilding* among domestic actors, addressing the dual problems of how to simultaneously empower and limit the state. In the late medieval and early modern periods, kings in every major Western European state called sessions of parliament to seek war financing (Myers 1975, 56; Finer 1997*b*, 1026; Graves 2001, 10; Hoffman 2015), though these parliaments varied in their responsibilities and strength over time. Statistical analyses show that warfare is correlated with the onset and frequency of parliamentary meetings in early European states (Stasavage 2011; Van Zanden, Buringh and Bosker 2012; Blaydes and Paik 2016; Abramson and Boix 2019; Cox, Dincecco and Onorato 2020).[1]

We revise the conventional logic by formalizing a previously unrecognized tension: strong outsider threats cause the state to become either strong or limited, but not both. Our game-theoretic model departs from long-standing theories of European state-building by examining how external war threats affect demands by *elites* for parliamentary constraints, rather than the sole existing focus on the *ruler*'s willingness to supply parliamentary concessions. We distinguish between two types of elites—landed elites whose wealth is concentrated in an immobile asset, and merchant elites with mobile wealth—to explain how war threats can undermine the likelihood of parliamentary constraints emerging.

The war threat makes the landed elite more reliant on the ruler, but the merchant elite less reliant. Strong war threats increase a landed elite's demand for security from the ruler because their wealth is immobile. This effect *undercuts* the landed elite's leverage to withhold funding if the ruler does

[1]Cirone (2020) overviews the broader political economy literature on historical parliaments. In contrast to this cooperative logic, other arguments focus on how coercive strategies affected early European parliaments (Downing 1993; Boucoyannis 2015), which we discuss later in our paper.

not delegate to parliament. For example, in France during the Hundred Years' War and in many countries during the Thirty Years' War, elites fearful of invasion did not gain parliamentary privileges; instead, they capitulated to demands by the Crown. In these cases, war threats promoted funded but unconstrained states. Alternatively, even if the ruler is willing to delegate to parliament, a merchant elite with mobile wealth might prefer to exit the polity rather than to fund a hopeless war effort. For example, in the formation of the Hanseatic League, war threats spurred elites to exit territorial states, therefore undermining state formation rather than promoting parliament. In contrast to the case with landed elites, a strong war threat boosts the merchant elite's leverage to demand parliament but by *too much*, undermining the elite's willingness to fund even a ruler who accepts constraints. Overall, in neither case does the war threat promote a funded *and* limited state, contrary to conventional arguments. After the model analysis, we apply these theoretical mechanisms to help explain variance in the strength of parliament in historical European cases.

Our findings also contribute to broader formal theory literature on international conflict and domestic institutions. A key question in this literature is how warfare influences state fiscal capacity. Besley and Persson (2011) posit a positive relationship, whereas subsequent scholarship posits that the relationship depends on the nature of the war (Hoffman 2015) or on the importance of finance (Gennaioli and Voth 2015). We show that the elite's security needs and the nature of the elite's wealth (landed versus mercantile) are similarly important conditioning factors for the warfare-capacity relationship. Our focus on parliamentary institutions distinguishes us from those that consider alternative fiscal instruments for war finance, such as borrowing (Slantchev 2012; Krainin, Ramsay and Wang 2018; Queralt 2019), mercantile trade policies (Queralt 2015), and tax farming (Johnson and Koyama 2014). Our results also differ from other studies that analyze the interaction between external security and institutional representation, which recover the conventional wisdom for either historical parliaments (De Magalhaes and Giovannoni 2019) or more recent episodes of franchise expansion (Ticchi and Vindigni 2008).

We also contribute to the formal democratization literature. In existing models, democratization

occurs because of domestic threats from below (Acemoglu and Robinson 2006; Boix 2003; Dower et al. 2018) or intra-elite splits (Ansell and Samuels 2014). We examine different factors that determine prospects for parliament to arise in equilibrium: how an *external threat* affects the ruler's demand for funds and the *unitary* elite's willingness to supply funding. In other models, autocrats create parliaments to induce agents to make costly investments that benefit the regime (Gailmard 2017) or to better aggregate information (Congleton 2011). Our finding that war threats undercut the landed elite's outside option resembles a mechanism from models studying a quite different substantive question, civilian control over the military, that show how outsider threats can undercut the military's leverage to stage a coup (McMahon and Slantchev 2015; Paine 2020). We additionally show that replacing the outside option of refusing with that of exiting produces the opposite effect of war on the elite's negotiating leverage, and we also analyze how the external threat affects the ruler's endogenous choice of institutional constraints.

1 Summary of Key Concepts and Findings

1.1 Setup of Strategic Interaction

A ruler and a representative elite actor interact in the shadow of an exogenous external invader. Each strategic actor is endowed with a certain percentage of domestic wealth. In the first strategic move, the ruler chooses whether to impose parliamentary constraints, that is, to delegate spending authority to the elite actor; or to rule autocratically, that is, to retain discretion to spend funds however she sees fit.

Next, the elite decides whether to fund the ruler or exercise an outside option. We separately consider two types of elite actors who differ in their available outside option. A landed elite can refuse to fund, thus remaining on their land while forgoing the possibility of gaining the benefits of public goods. By contrast, the merchant elite's outside option is to exit (e.g., hiding their mobile wealth, exiting the country altogether), which secures the elite's endowment from invasion but sacrifices

some initial wealth. The elite's three possible choices intentionally resemble Hirschman's (1970) distinction among loyalty (fund the government), voice (refuse), and exit, although we model a distinct tradeoff.[2]

If the elite funds the government, then another strategic choice occurs over public expenditures.[3] An autocratic ruler decides whether to provide public goods, or to privately consume her initial wealth and expropriate revenues from the elite. This highlights a moral hazard–type problem inherent for an elite that funds an unconstrained ruler: "the king may use resources for purposes of which the elite does not approve" (Rosenthal 1998, 69). By contrast, under a parliamentary regime, the elite makes the spending choice—and clearly prefers public goods over being expropriated.

Public goods create a security effect (increase the probability of surviving the external invasion) and a redistribution effect (which raises the elite's, but not necessarily the ruler's, consumption). In early Europe, the main public good besides defense against invasions was the provision of internal security against banditry, which boosted elites' consumption and was costly for rulers to provide. Given the spillover effects from defense spending on internal security, it is natural to assume that public goods provide security benefits and redistribute toward the elite. A different conceptualization of "public" good that satisfies this assumption is for the ruler to forgo various strategies of predatory revenue, described below.

Finally, Nature determines whether the external invasion succeeds.

Various elements of our setup provide a "most likely" case for recovering the conventional logic that war threats produce strong but limited states: stronger war threats enhance the security benefit of public goods, delegating to parliament ensures that public expenditures go toward public goods rather than autocratic expropriation, and the ruler lacks a strategic option to substitute coercion for parliament in order to gain elite funds.[4] Despite these assumptions, our findings alter the

[2] In an extension, we allow the elite to choose either outside option.

[3] Nature reveals the exact strength of the outsider threat just prior to the decision of whether to provide public goods. Before this, the ruler and elite share a common prior expectation about the strength of the external threat.

[4] We relax each of the latter two assumptions in extensions.

conventional logic in important ways. In equilibrium, the ruler delegates to parliament if and only if three conditions are met. The following introduces the three conditions for a parliamentary equilibrium and explains how the war threat affects each.

1.2 Ruler Willingness Condition

The first condition for a parliamentary equilibrium is *ruler willingness*: if the ruler's decision to delegate to parliament is pivotal for securing elite funding, would the ruler rather impose parliamentary constraints than not receive funding? In general, ruler willingness might fail because of the redistributive effect of public good provision. Rulers endowed with a high endowed share of domestic wealth are less willing to delegate to parliament because public good provision entails more redistribution toward the elite.

Our main point of agreement with the conventional logic is that a strong external invader makes ruler willingness more likely to hold. The greater the security benefit from providing public goods, the more the ruler will be willing to tolerate any adverse redistributive effects.

The ruler's endowed share of domestic wealth reflects political centralization, which encompasses not only revenue sources directly controlled by the crown, but also "ordinary" sources of revenue that it could collect from society. In broad strokes, during the European medieval period, this factor helps to distinguish fragmented Western European from autocratic contemporaneous empires in China or the Middle East (Blaydes 2017; Stasavage 2020). In Mamluk-controlled Egypt, for example, a highly centralized and efficient slave army controlled the territory. Rulers offered land grants to pay senior officers, but "sultans strove mightily and successfully to prevent the *iqta* from becoming hereditary" (Finer 1997*b*, 733). Elites not directly connected to the Crown possessed little independent wealth, which created disincentives to create a parliament that would have enabled elites to achieve a broader distribution of wealth.

By contrast, throughout much of Europe, local elites consolidated hereditary control over land nominally owned by the Crown, and feudal knights controlled military power. This lowered the

opportunity cost of delegating to parliament and providing public goods. Non-parliamentary revenues in Europe were piecemeal. They included Crown lands and spoils from occupation of foreign territories, such as Spanish control of American silver and Swedish spoils from conquests during the Thirty Years' War. "Ordinary" revenues consisted of various taxes that did not require parliamentary consent, such as custom taxes and various direct taxes (e.g., the Spanish *alcabala*, a sales tax; the French *taille*, a land tax); royal monopolies; and profits from the administration of justice. Rulers could sell off parts of the state through tax farming, selling offices, allowing cities to purchase charter rights, and selling immunities and pardons. Other acts were essentially confiscation: debasing the currency, English purveyance, and the French *chambre de justice*.

1.3 Elite Credibility Condition

Even if the ruler is willing to submit to constraints, a parliamentary equilibrium exists only if the ruler's parliament decision is pivotal for securing elite funding. Our main insights arise from analyzing how the war threat affects the *elite's* incentives to provide funding with and without parliamentary constraints, which yields two additional conditions for a parliamentary equilibrium.

The *elite credibility constraint* requires the elite to have a credible threat to withhold funds if the ruler does not delegate to parliament. If elite credibility fails, then the ruler will not delegate to parliament because she can get her first-best: elite funding despite no constraints. Certainly, all else equal, the elite prefers that the ruler delegates to parliament, which eliminates the possibility of predation. But the elite may nonetheless fund an autocratic ruler and gamble that the ruler will choose beneficial public goods. Absent an external threat, elite credibility holds only if the elite has a large endowed share of domestic wealth, which creates a high opportunity cost to funding an unconstrained ruler.

A stronger war threat affects the elite credibility constraint in two ways. First, the war threat decreases a landed elite's expected utility to refusing relative to that of funding the government. Refusing to fund the ruler necessarily prevents the elite from enjoying the security benefit of public

goods, which is most needed when the threat is strong. This effect is restricted to landed elites, who depend on the ruler for security. By contrast, the probability of invasion does not affect the merchant's exit option. Second, a stronger war threat enhances the ruler's fear of external takeover, which increases the probability that an autocratic ruler will choose to provide public goods. Thus, in effect, the war threat endogenously causes an autocratic ruler to use their funds in a beneficial manner, hence mimicking the behavior of a parliamentary ruler.

Overall, a strong war threat *undercuts* the leverage of a landed elite to demand parliament, thus yielding funded but unconstrained states. We also show in an extension that this undercutting effect is stronger for defensive than offensive wars. This distinction helps to explain greater parliamentary development in England, which primarily fought offensive wars, than in France or Spain, which repeatedly faced invasion threats that undermined the credibilty of domestic elites to not fund the ruler.

1.4 Elite Willingness Condition

Parliament also fails to arise in equilibrium if the elite does not fund the ruler even upon delegating to parliament. Stronger war threats violate this *elite willingness constraint* for a merchant elite, which goes against the conventional wisdom. The same mobile wealth that enables a merchant elite to demand parliament when facing a strong invader can also push it to exit rather than to fund a largely hopeless war effort. Exiting protects its endowment against expropriation by the outsider. Thus, another mechanism through which strong war threats undermine parliamentary states is by *bolstering* the leverage of a merchant elite to demand parliamentary representation *but too much*, hence violating the elite willingness constraint and causing the state to break apart. We compare examples of viable exit options in moderate-threat environments where parliaments arose (medieval Spain, early British North America) to examples where exit broke apart territorial states (the Hanseatic League).

Exiting can entail moving or hiding capital, or physically fleeing. Bates and Lien (1985) discuss

how the mobility of capital affected the bargaining leverage of elites when negotiating taxation with kings in early modern Europe. Although trade taxes could be "highly lucrative," their shortcoming was that "they could be easily avoided" (55). Dincecco and Onorato (2018) discuss the option for non-landlords to flee the countryside for the city during war. Cities provided a safe harbor and were rarely sacked, because they were easier to defend and the gains from sacking cities were relatively low. Urban dwellers could move their wealth from centralized storage locations to private vaults run by goldsmiths in town, or could themselves move to new urban locations altogether and switch their allegiance to another polity. Mobile assets coupled with the small average size of European states in the early modern era made fleeing a viable possibility, as European sovereigns faced competition and did not want to lose taxable commerce to neighboring states (Cox, Dincecco and Onorato 2020, 5). Alternatively, merchants could exit by forming mutual-protection organizations beyond princely rule, such as trading leagues.

Collectively, our formalization of the elite credibility and elite willingness constraints highlights a central tension for cooperative statebuilding: a strong enough war threat makes it impossible to satisfy both conditions. This produces a state that is either strong (i.e., funded) or limited, but not both.

1.5 Distinguishing Vertical and Horizontal Functions of Parliament

Parliaments, historical and contemporary, serve many purposes. We can divide these into *vertical* and *horizontal* functions. The vertical functions involve mediation between the ruler and the broader society. Our model focuses on a particularly important vertical function: the imposition of fiscal constraints on the ruler by the taxpayers. This is the main focus of the bellicose literature on state formation, which examines how war threats create incentives to make concessions to elites in return for securing funds. Additional vertical functions we do not examine include the elicitation of information about the population (Congleton 2011) and the promotion of economic investment (Gailmard 2017). On the other hand, the horizontal functions of parliament entail the mediation of

conflict among the elite groups that constitute its membership (Karaman and Pamuk 2013; Ansell and Samuels 2014; Beramendi, Dincecco and Rogers 2018). These horizontal functions, while historically important, are not as clearly connected to the relationship between external threats and cooperative statebuilding.

We intentionally omit many of these other possible functions of parliaments. This modeling choice enables us to isolate our new mechanisms, rather than reflects a belief that other functions are empirically unimportant. Simplifying and reducing the number of moving pieces enables us to clearly explicate which elements of our model, as opposed to other possible functions of parliament, yield new implications (Paine and Tyson 2020). Furthermore, existing theories do not suggest that introducing any of these additional options would qualitatively alter our main comparative statics predictions. Despite our simplifying choices, parliament sometimes arises in equilibrium in our model, and sometimes not. Enabling parliament to reveal information or to stimulate investment would create additional incentives to call parliament, whereas intra-elite splits would potentially make it feasible for the ruler to gain funds by dividing and ruling. However, *unless* any element directly interacted with the magnitude or effect of the war threat, adding any of these elements would simply change the size of the parameter space in which parliament arises rather than fundamentally alter our non-monotonic relationship between war threats and equilibrium parliament, which we show explicitly in an extension with divided elites.

2 A Model of Cooperative Statebuilding

We model a strategic interaction between two players, a ruler R and a distinct elite actor E. We normalize total domestic wealth to 1 and let $\theta_R \in (0, 1)$ denote the proportion held by R, leaving $1 - \theta_R$ for E.

1. Ruler's parliament choice. R moves first, choosing whether to delegate spending authority to parliament or to rule autocratically. This choice determines which players allocates expenditures

(step 4), but does not directly affect payoffs.

2. Elite's funding choice. E decides whether to fund the government. Funding entails paying taxes and supplying troops to fight, moving the game to step 3. Otherwise, E exercises its outside option, moving the game to step 5.

We consider two distinct outside options, each corresponding to a different class of elites. First, the elite can *refuse* to provide funds. Refusal protects the elites' wealth from expropriation by the ruler, although because its wealth remains in the country, it is at risk from the outsider. A landed elite, whose wealth cannot be easily liquidated or moved, would have refusal as its outside option.

The second possible outside option is *exiting* the ruler's dominion. By exiting, the elite keeps its wealth safe from both the ruler and from the external threat, but at a cost: it only keeps a fraction $\sigma \in (0, 1)$ of its initial wealth. This corresponds to a merchant elite with mobile wealth.

3. Outsider's strength realized. After R chooses whether to delegate to parliament and E chooses whether to fund, Nature draws and reveals $\theta_X \geq 0$, the strength of the outsider threat. The distribution of θ_X is common knowledge throughout the game, but its realized value becomes known only after the first two strategic moves.

Throughout the text, we assume $\theta_X \sim U[\psi - \epsilon, \psi + \epsilon]$, where $\psi > \epsilon > 0$.[5] Notice that $\mathbb{E}[\theta_X] = \psi$, so higher ψ corresponds to greater *ex ante* expectations about the magnitude of the external threat. The parameter ϵ represents the amount of prior uncertainty about θ_X. We sometimes refer to the limiting case of no external threat: $\psi = \epsilon = 0$ (i.e., $\theta_X = 0$ for certain).

4. Public good choice. After observing the draw of the outsider's strength, θ_X, a strategic choice occurs over spending: whether to provide public goods or to privately consume rents. This choice is nontrivial only if R chose autocratic rule in step 1 (hence R makes the spending choice) and E provided funds in step 2. If instead R delegated, then E makes the spending choice. It is trivial to

[5] In Appendix A.11, we show that our main results hold for a broad class of distributions.

show in any equilibrium that, regardless of the realized value of θ_X, E chooses public goods rather than let R expropriate. Additionally, if E did not fund, then public goods are not feasible.

Public goods encompass distinct security and redistributive components. R and E commonly value public goods at $\alpha > 0$.[6] These benefits are not so great that a player prefers the public good over consuming all initial domestic wealth: $\alpha < 1$. We also assume public goods raise E's consumption through redistribution: $\alpha > 1-\theta_R$. It would be natural to additionally assume that providing public goods raises total economic surplus, $2\alpha > 1$, although no proofs require this assumption.

5. War. Nature moves last and determines whether an exogenous external actor overthrows the regime. The domestic actors' military capability derives from their initial endowments. Specifically, if E did not fund or if R expropriated E, then the probability of surviving the external threat is relatively low, $p_L(\theta_X) \equiv \frac{\theta_R}{\theta_R+\theta_X}$.[7] By contrast, if E funded and R provided public goods, then the probability of regime survival is relatively high: $p_H(\theta_X) \equiv \frac{\theta_C}{\theta_C+\theta_X}$, where θ_C denotes the country's effective strength if E and R cooperate. We assume $\theta_C > 1$ (i.e., greater than total initial domestic wealth) to reflect that internal cooperation may produce economies of scale in security provision. Importantly, the relative security benefit of public good provision increases in the strength of the outside threat, as Figure 1 illustrates. Formally, the critical condition is that p_H/p_L increases with θ_X. In addition, by the monotone likelihood ratio property, the ratio of their *ex ante* expected values also increases with ψ.

Throughout the main text, we assume $\theta_R < \alpha \cdot \theta_C$. This assumption implies that if R rules autocratically but is nonetheless funded, then R will provide public goods if the outsider is sufficiently strong (θ_X large). Additionally, if the outsider's expected strength, ψ, is large enough, then R will delegate to parliament at the outset of the game.[8]

Consumption. Suppose no external takeover occurs. If E funds and R provides public goods, then

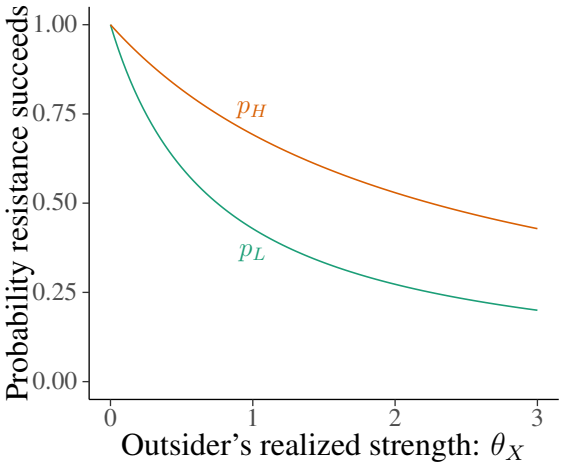
[6]The specific assumption that public goods benefit each actor equally is not consequential and simply eliminates an unnecessary parameter, which we show explicitly in the extension with offensive wars.

[7]In Appendix A.11, we show that our main results hold under alternative specifications of the survival probability functions.

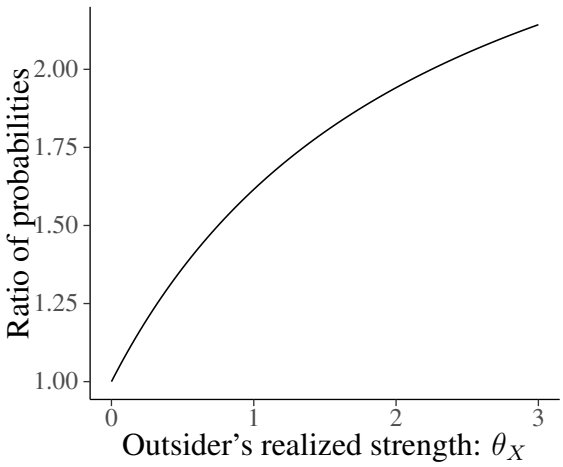
[8]This reduces tedious corner cases. In Appendix A.10, we outline how relaxing this condition would affect our main results.

Figure 1: Stronger external threat makes internal cooperation more important

(a) Probability of successful resistance.



(b) Ratio of probabilities: p_H/p_L.



Parameters: $\theta_R = 0.75, \theta_C = 2.25$.

they each consume α. If E funds and R expropriates, then R consumes 1 and E consumes 0. If E does not fund, R consumes θ_R, and E's consumption depends on its outside option: $1 - \theta_R$ from refusing and $\sigma \cdot (1 - \theta_R)$ from exiting. Note that R's parliament choice does not directly affect the payoffs.

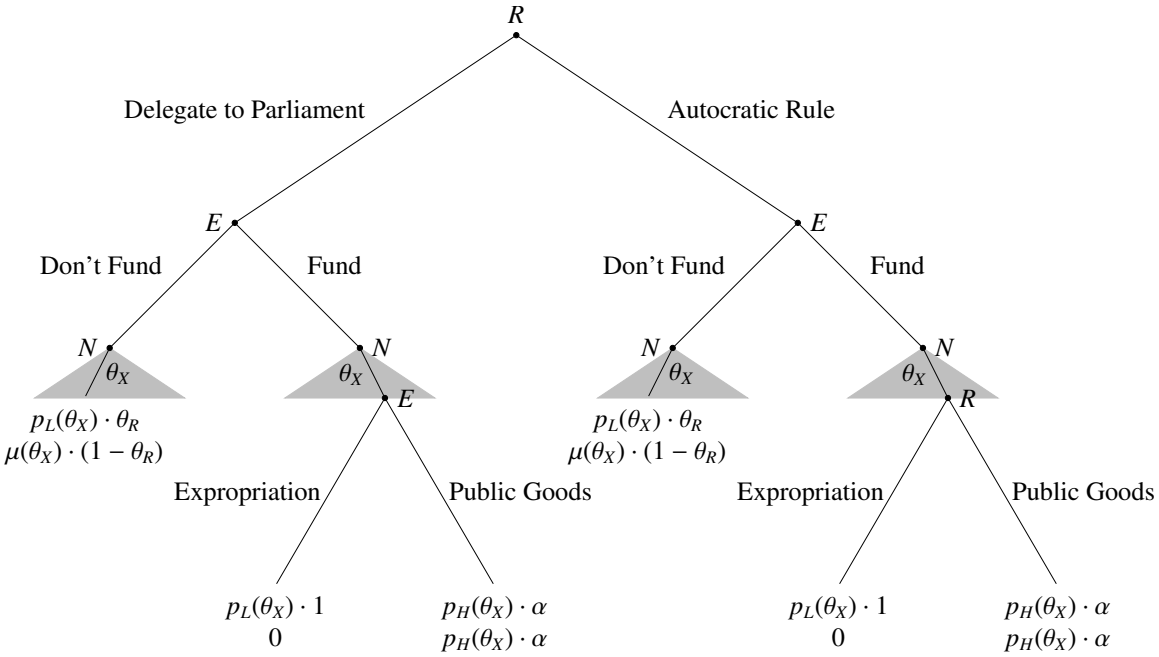
If instead external takeover occurs, then both players consume 0 except in one circumstance: if E's outside option is to exit and it exercises that option, then its consumption equals $\sigma \cdot (1 - \theta_R)$ irrespective of whether external takeover occurs. Figure 2 displays the complete game tree, and Appendix A.1 summarizes all mathematical notation, including for the subsequent lemmas and propositions in the baseline game.

3 Analysis

3.1 Ruler's Willingness to Delegate to Parliament

When we exclusively consider the *ruler's* incentives to delegate to parliament, we recover the conventional logic of war threats and parliamentary rule. Stronger threats increase the ruler's

Figure 2: Game Tree



R: Ruler, E: Elite, N: Nature.
Outside option is refuse (landed elite): $\mu(\theta_X) = p_L(\theta_X)$.
Outside option is exit (merchant elite): $\mu(\theta_X) = \sigma$.

willingness to trade representation for revenues, enabling parliamentary constraints to emerge in equilibrium.

The ruler chooses at the outset of the game whether to delegate to parliament. The strategically interesting case for assessing the ruler's willingness to call parliament is when doing so is pivotal for the elite's funding choice. In this case, the ruler knows she will not gain funding absent parliamentary constraints and will rely solely on her endowed strength to fend off the external threat. The ruler consumes θ_R if resistance against the outsider succeeds, and 0 otherwise. The ruler's expected utility from not being funded is therefore

$$\mathbb{E}\left[U_R(E \text{ doesn't fund})\right] = \overline{p}_L(\psi) \cdot \theta_R. \tag{1}$$

Here, $\overline{p}_L(\psi)$ denotes the *ex ante* probability of successfully resisting the outsider absent public

good provision when the outsider's expected strength equals ψ,

$$\overline{p}_L(\psi) = \mathbb{E}\left[p_L(\theta_X)\right] = \int_{\psi-\epsilon}^{\psi+\epsilon} \frac{p_L(\theta_X)}{2\epsilon}\, d\theta_X. \tag{2}$$

We define $\overline{p}_H$ analogously:

$$\overline{p}_H(\psi) = \mathbb{E}\left[p_H(\theta_X)\right] = \int_{\psi-\epsilon}^{\psi+\epsilon} \frac{p_H(\theta_X)}{2\epsilon}\, d\theta_X. \tag{3}$$

Conversely, in the strategically interesting case, delegating to parliament secures funding. This enables the ruler to fend off the invader with higher probability—due to the security benefits of public goods—and also, conditional on winning, replaces her private endowment θ_R with the public good α:

$$\mathbb{E}\left[U_R(R \text{ delegates, } E \text{ funds})\right] = \overline{p}_H(\psi) \cdot \alpha. \tag{4}$$

Combining these two equations yields the *ruler willingness constraint*.

$$\textbf{Ruler willingness constraint:} \qquad \overline{p}_H(\psi) \cdot \alpha \geq \bar{p}_L(\psi) \cdot \theta_R. \tag{5}$$

Higher initial wealth decreases the ruler's willingness to delegate to parliament because θ_R raises both the probability of successful resistance and the ruler's consumption if the invasion fails. However, the ruler willingness constraint becomes easier to meet as the military returns to scale from cooperation (θ_C) and the value of public goods (α) increase. The ruler willingness constraint does not depend on the nature of the elite (landed or merchant), as it only pertains to the ruler's incentives. Whether the ruler would prefer mandatory public good provision with funds over total flexibility without funds is not a function of the elite's outside option. The influence of elite type on whether parliament emerges will therefore enter only through its effect on the elite credibility and willingness constraints, introduced later.

The ruler does not face a tradeoff and does not delegate to parliament if doing so is not pivotal to

induce funding from the elite actor. If the elite *willingly funds an autocratic ruler*, then the ruler gains no benefit from restricting her discretion (at a later information set) to expropriate the elite. Thus, the failure of elite credibility prevents parliament. Conversely, if the elite *refuses to fund a parliamentary ruler*, then the ruler also gains no benefit from adopting parliament constraints.[9] Thus, the failure of elite willingness also undermines parliament.

We can now state the general conditions for an equilibrium in which the ruler delegates to parliament, which we call a parliamentary equilibrium.

Proposition 1 (Ruler's choice over parliamentary delegation)**.** *In equilibrium:*

(a) R *does not delegate to parliament if doing so is unnecessary to generate funding (elite credibility fails).*

(b) R *does not delegate to parliament if doing so is insufficient to generate funding (elite willingness fails).*

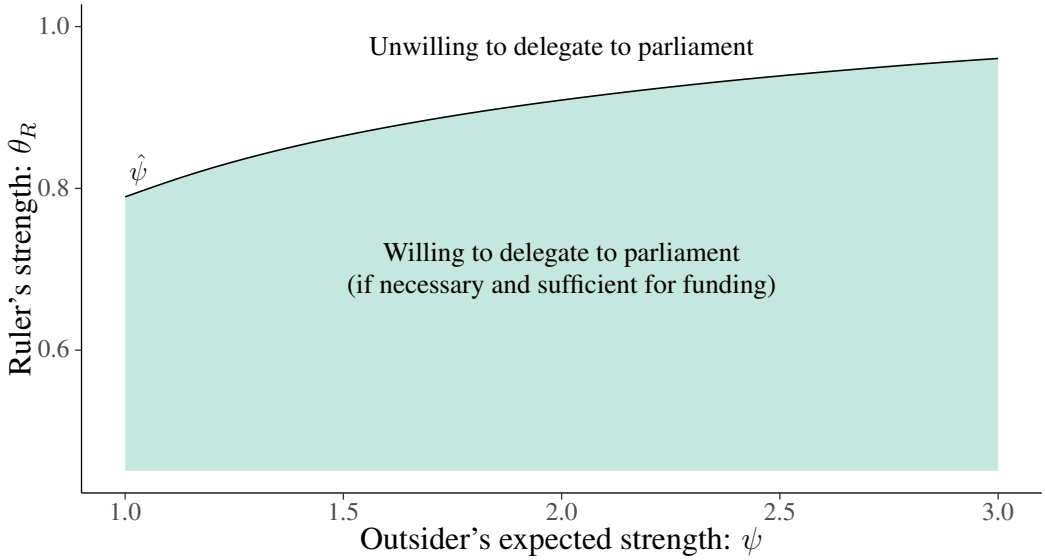
(c) R *may delegate to parliament if doing so is necessary and sufficient to generate funding. In this case:*

- *If* $\theta_R \leq \alpha$*, then* R *delegates to parliament regardless of* ψ*.*
- *If* $\theta_R > \alpha$*, then* R *delegates to parliament if and only if* $\psi \geq \hat{\psi}$*, where* $0 < \hat{\psi} < \infty$*.*

This result confirms a key element of the conventional logic of cooperative statebuilding: stronger external threats enhance the ruler's willingness to delegate to parliament—if doing so is pivotal for receiving funds. This result is driven by a simple but important property of the contest against the invader: the incremental addition of E's military capability makes the most difference when the outsider is strongest, as illustrated above in Figure 1. By delegating to parliament and constraining itself in order to receive funding, R trades off flexibility for additional security against invasion.

[9]Technically, R is indifferent if E never funds, as her delegation decision does not affect the outcome. If there were a small, positive cost to parliamentary delegation, as is plausible, then R would strictly prefer no delegation. For expositional ease, we instead assume R has a lexicographic preference not to delegate to parliament.

Figure 3: Ruler's willingness for parliamentary delegation



Parameters: $\alpha = 0.55$, $\sigma = 0.65$, $\theta_C = 2.25$, $\epsilon = 1$.

Figure 3 illustrates how the ruler's willingness for parliamentary delegation varies as a function of the ruler's initial wealth and the outsider's *ex ante* expected strength.

3.2 Public Good Provision by an Autocratic Ruler

The remainder of the analysis highlights various implications that depart from the conventional wisdom. We begin by analyzing the last strategic choice in the game: the decision over public good provision.[10] If the ruler delegated to parliament, then the spending choice is trivial: the elite makes the decision and obviously prefers that the government provide public goods rather than have its wealth expropriated. By contrast, an autocratic ruler chooses public goods rather than private expropriation if and only if the realization of the outsider threat, θ_X, is strong enough.[11] Formally, the condition for an unconstrained ruler to prefer public good provision over expropria-

[10] Recall that the actors reach this information set if and only if the elite funds the ruler.

[11] Notice the difference from the ruler's initial decision over delegation. That choice could condition only on ψ, the *ex ante* expected value of the distribution from which θ_X is drawn.

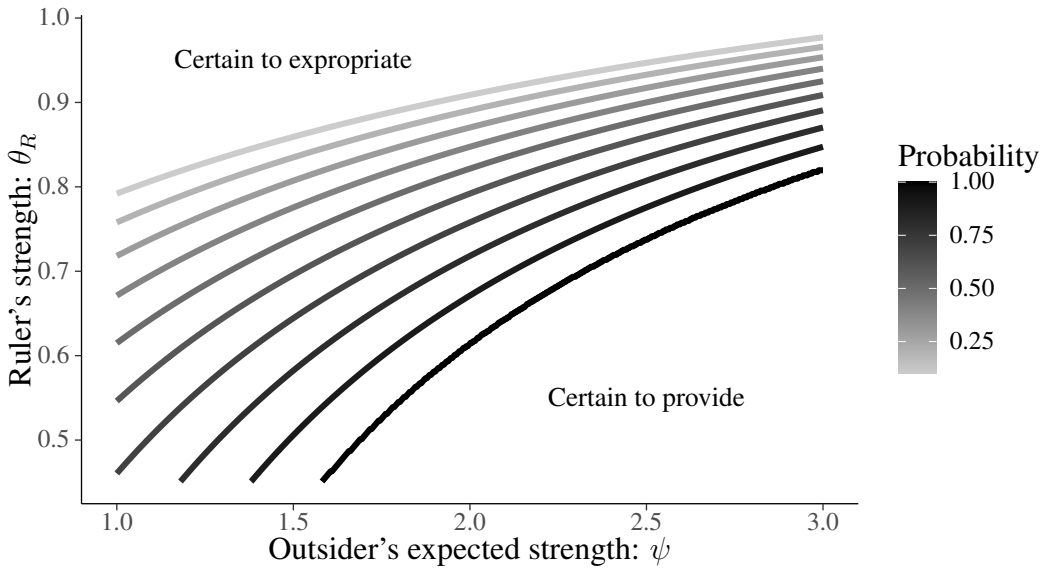
tion is $p_H(\theta_X) \cdot \alpha \geq p_L(\theta_X) \cdot 1$, which is equivalent to

$$\frac{p_H(\theta_X)}{p_L(\theta_X)} \geq \frac{1}{\alpha}. \tag{6}$$

Because strong outsiders enhance the security benefit of public goods, higher θ_X makes this condition easier to meet. Figure 4 illustrates how a stronger threat of invasion increases an unconstrained ruler's propensity to provide public goods.

Lemma 1 (Invasion threats substitute for parliamentary constraints)**.** *Assume that R chooses autocratic rule and that E funds the government. It is a best response for R to provide public goods if and only if $\theta_X \geq \hat{\theta}_X$, where $0 < \hat{\theta}_X < \infty$.*

Figure 4: *Ex ante* probability of public good provision by a funded autocratic ruler



Parameters: $\alpha = 0.55$, $\sigma = 0.65$, $\theta_C = 2.25$, $\epsilon = 1$.

Lemma 1 highlights a substitution effect largely overlooked in previous scholarship. By increasing the ruler's need for security, a stronger invasion threat raises the probability that the ruler uses its funds responsibly even without parliamentary constraints. We return to this logic below, when analyzing the elite's decision to fund the government, to show that this effect of strong external threats encourages the elite actor to fund an autocratic ruler.

3.3 Elite Demand for Parliament

We now analyze the elite's demand for parliamentary constraints. When is delegating spending authority to parliament pivotal for inducing the elite to fund the government? As Proposition 1 shows, beyond the ruler's willingness to call parliament, additional conditions on the elite side must also be met for a parliamentary equilibrium to exist. By incorporating elite demand for parliament into our model, we fill a crucial gap in the existing literature on cooperative statebuilding. We uncover novel channels through which war threats undercut parliament from arising in equilibrium, contrary to the conventional expectation. These channels differ depending on the type of elite. A landed elite depends on the ruler for security even if it refuses to fund her. Thus, a strong external threat makes parliament *unnecessary* because the elite funds an autocratic ruler. For a merchant elite, however, a strong war threat means delegation to parliament is *insufficient* to garner funds, as the elite would rather exit than risk losing everything in war. Bringing these together, we formalize an important tension between the imperatives of cooperative statebuilding—in the presence of a strong outside threat, the state can be strong or it can be limited, but not both.

We derive the generic constraints before distinguishing between landed and merchant elites. If the ruler delegates to parliament and the elite supplies funds, then public good provision is assured. Resistance against the outsider is elevated from p_L to p_H, and the elite consumes the public good α if resistance succeeds. The elite's payoff in this case is

$$\mathbb{E}\left[U_E(R \text{ delegates}, E \text{ funds})\right] = \overline{p}_H(\psi) \cdot \alpha,$$

for $\overline{p}_H(\psi)$ defined in Equation 3. Delegation is sufficient for funding if the elite prefers funding a parliamentary ruler over exercising its outside option, which is either refuse or exit. This is the *elite willingness constraint*.

$$\textbf{Elite willingness constraint:} \qquad \overline{p}_H(\psi) \cdot \alpha \geq \mathbb{E}\left[U_E(\text{outside option})\right]. \tag{7}$$

If the ruler does not delegate to parliament, the elite can still fund her. Funding is risky: an autocratic ruler will expropriate funds unless the outsider turns out to be quite strong, $\theta_X \geq \hat{\theta}_X$, as shown in Lemma 1. Let $\tilde{p}_H(\psi)$ denote the *ex ante* probability that, if funded, an unconstrained government will provide public goods *and* successfully resist the outsider:

$$\tilde{p}_H(\psi) = \Pr(\theta_X \geq \hat{\theta}_X) \cdot \mathbb{E}[p_H(\theta_X) \,|\, \theta_X \geq \hat{\theta}_X]. \tag{8}$$

The elite consumes the public good α if the ruler decides not to expropriate and the outsider fails to take over, so the elite's payoff from funding an unconstrained ruler is

$$\mathbb{E}\left[U_E(R \text{ doesn't delegate, } E \text{ funds})\right] = \tilde{p}_H(\psi) \cdot \alpha.$$

The *elite credibility constraint* is satisfied when the elite has a credible threat to exercise its outside option if the ruler does not delegate:

$$\textbf{Elite credibility constraint:} \qquad \mathbb{E}\left[U_E(\text{outside option})\right] \geq \tilde{p}_H(\psi) \cdot \alpha. \tag{9}$$

As with the elite willingness constraint, the exact form of the elite credibility constraint depends on whether the elite's outside option is to refuse or to exit.

There is an important tension between the willingness and credibility constraints, which helps to explain our new findings. If an *autocratic* ruler provides public goods with high probability, then $\tilde{p}_H(\psi) \approx \overline{p}_H(\psi)$, which makes it nearly impossible to satisfy elite willingness and elite credibility simultaneously. The elite's threat to withhold funds will lack credibility, and thus parliament will not arise in equilibrium—unless there is a nontrivial chance of expropriation by an unconstrained ruler.

Proposition 2 (Tension between elite willingness and credibility)**.** *If $\psi \geq \hat{\theta}_X + \epsilon$ and the elite willingness constraint* (7) *holds strictly, then the elite credibility constraint* (9) *fails.*

This starkly illustrates the difficulty of building states that are strong but limited, particularly in the shadow of a pressing invasion threat. Either the elite will prefer its outside option regardless of the ruler's choice to delegate, undermining state strength, or else the elite willingly funds even an autocratic ruler, undermining limits on the executive.

3.4 Refusal as Outside Option: Landed Elites

For landed elites, whose wealth cannot easily be moved out of or hidden within the ruler's dominion, the outside option is to refuse. By refusing to fund the ruler without actually moving its endowment, the elite runs the risk of expropriation by the outsider, but otherwise consumes its full endowment:

$$\mathbb{E}\left[U_E(\text{outside option})\right] = \overline{p}_L(\psi) \cdot (1 - \theta_R), \tag{10}$$

for $\overline{p}_L(\psi)$ defined in Equation 2. Importantly, a landed elite depends on the ruler for security against the external threat even if it does not fund her.

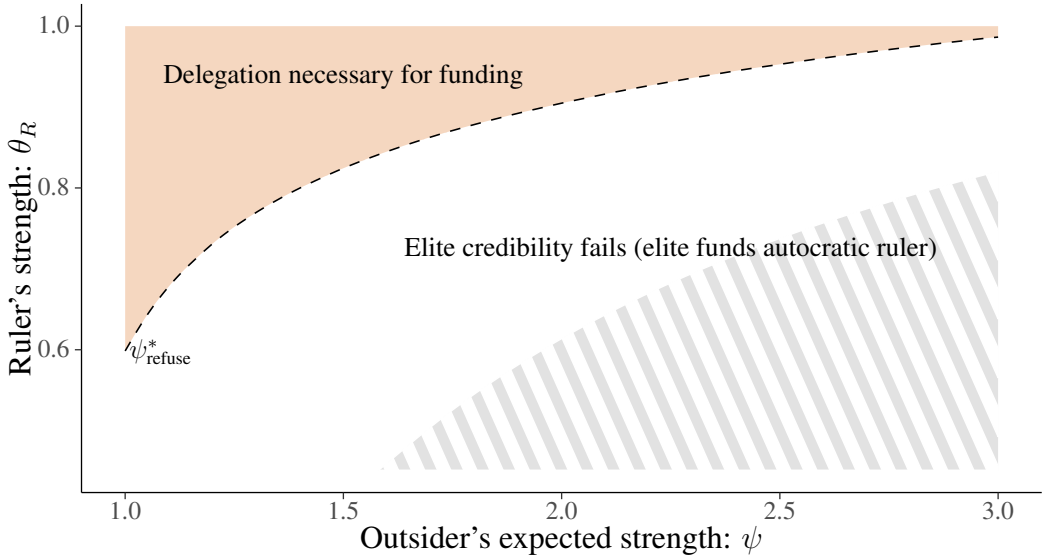
The elite willingness constraint (see Equation 7, with Equation 10 as the value of the outside option) always holds for a landed elite. Parliamentary rule guarantees public good provision, which raises the landed elite's security against the outsider and its consumption (if the invasion fails), relative to exercising its outside option.

By contrast, the credibility constraint, (see Equation 9, with Equation 10 as the value of the outside option) for a landed elite depends on the strength of the invader. The war threat undercuts the landed elite's leverage to refuse funding for an autocratic ruler through two complementary mechanisms. First, a strong threat undermines the security of elite consumption. Absent an external threat, an elite that refuses to fund consumes its initial endowment. But as the war threat grows, the elite's consumption becomes less secure, increasing its demand for security provision (effect 1a). Although the expected utility to funding the government also decreases in ψ (effect 1b), the expected utility of refusing plummets more because of the increasing differences relationship depicted in Figure 1. Hence, effect 1a strictly dominates 1b. Second, war threats also undermine elite

credibility by affecting ruler behavior. As shown in Lemma 1, a stronger threat increases the likelihood of an autocratic ruler providing public goods, which undercuts the elite's threat to withhold funds from an autocratic ruler.

Lemma 2. *If E's outside option is to refuse, the elite willingness constraint always holds, while the elite credibility constraint holds if and only if $\psi \leq \psi^*_{refuse}$, where $\hat{\theta}_X - \epsilon < \psi^*_{refuse} < \hat{\theta}_X + \epsilon$.*

Figure 5: Credibility constraint for a landed elite



Parameters: $\alpha = 0.55$, $\sigma = 0.65$, $\theta_C = 2.25$, $\epsilon = 1$. *Shaded region: Autocratic ruler certain to provide public goods.*

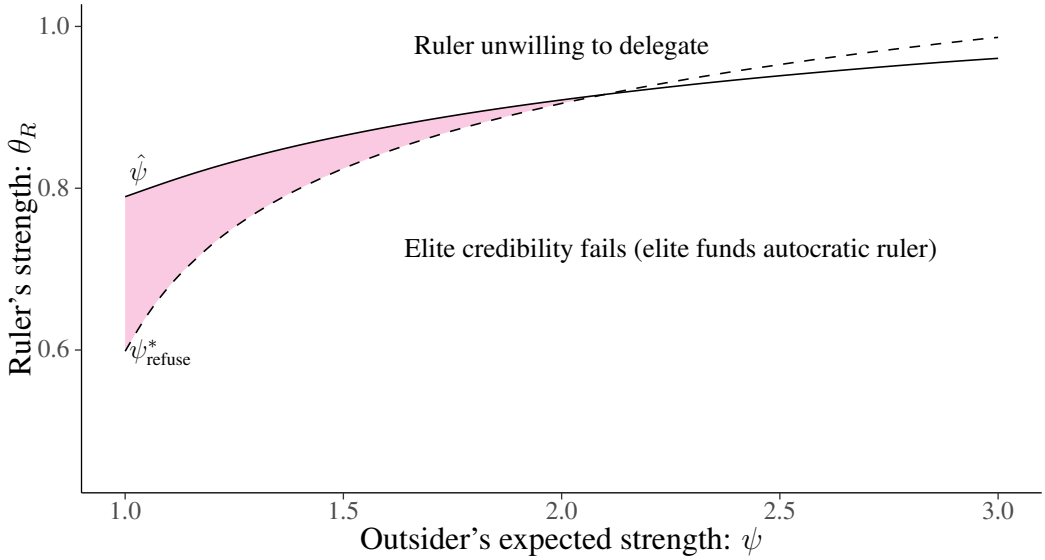
Figure 5 illustrates when the credibility constraint is satisfied as a function of the invader's strength and the ruler's initial endowment (which, again, is inversely related to the elite's endowment). Clearly, a strong outside threat undermines the elite credibility constraint. Fixing the ruler's strength (the y-axis) and increasing the war threat (moving right on the x-axis) eventually undermines elite credibility. The ruler's initial endowment also affects whether elite credibility holds. Fixing the war threat (x-axis) and increasing the ruler's strength (moving up on the y-axis) bolsters elite credibility. The payoff from funding an unconstrained ruler decreases with θ_R because stronger autocratic rulers are more likely to expropriate rather than provide public goods. Meanwhile, ruler strength has countervailing effects on the elite's payoff from refusing: increasing the

probability of successful resistance but decreasing the elite's consumption. Overall, the most favorable conditions for the credibility constraint with a landed elite are a (1) weak war threat and (2) strong ruler, i.e., the upper-left portion of Figure 5.

Parliamentary delegation is sustainable as an equilibrium only if the outsider's strength is moderate, as Figure 6 illustrates. The ruler is unwilling to accept constraints if the outsider is too weak, while a landed elite lacks a credible threat to withhold funds if the outsider is too strong.

Proposition 3 (Parliamentary equilibrium with a landed elite)**.** *Assume E's outside option is to refuse. If $\theta_R \leq \alpha$, a parliamentary equilibrium exists if and only if $\psi \leq \psi^*_{refuse}$. Otherwise, if $\theta_R > \alpha$, a parliamentary equilibrium exists if and only if $\hat{\psi} \leq \psi \leq \psi^*_{refuse}$.*

Figure 6: Parliamentary equilibrium with a landed elite



Parameters: $\alpha = 0.55$, $\sigma = 0.65$, $\theta_C = 2.25$, $\epsilon = 1$.

Accounting for the elite's incentives to fund the ruler produces important exceptions to the conventional logic of cooperative statebuilding. The colored region in Figure 6 is the intersection of the colored regions in Figures 3 and 5. Thus, the same effects discussed above that come into tension with the conventional logic undermine parliament in equilibrium. For high enough ψ, elite credibility must fail because refusal is very low-valued compared to funding. The landed elite is

highly unlikely to survive without the security boost from public goods, and there is a high likelihood that an unconstrained ruler will choose public goods. Although a parliamentary equilibrium cannot exist for a *very strong* outsider, there are some conditions under which a small increase in outsider strength promotes parliament, in compliance with the conventional logic. If elite credibility is satisfied but ruler willingness fails just barely, then a small increase in ψ would engender a parliamentary equilibrium. However, by introducing the elite's demand for parliament into our analysis, we show that strong-enough war threats in conjunction with landed elites produces strong (i.e., funded) but not limited states.

3.5 Exit as Outside Option: Merchant Elites

Merchant elites, whose wealth is more liquid than that of landed elites, have a different outside option. Unlike in the previous case, exercising their outside option protects elite wealth against successful invasion, as exiting takes their wealth outside (or hides it within) the territory under threat.[12] The cost of exiting is that a merchant elite leaves behind a fraction $1 - \sigma$ of its initial wealth:

$$\mathbb{E}\left[U_E(\text{outside option})\right] = \sigma \cdot (1 - \theta_R). \tag{11}$$

Unlike for a landed elite, a merchant elite's outside option does not depend on the outsider's expected strength, ψ, which yields a distinct mechanism relating war threats to equilibrium parliament.

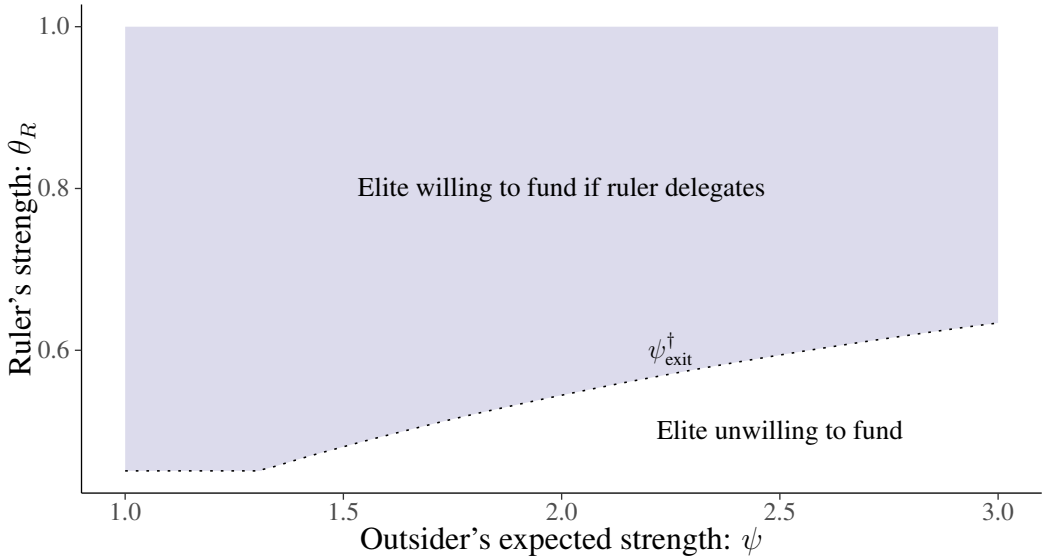
For a merchant elite, the question of willingness—whether it is better to fund a parliamentary ruler than to exit (see Equation 7, with Equation 11 as the value of the outside option)—is no longer trivial. When the external threat is weak, the logic is the same as for a landed elite: successful resistance is nearly assured, and the elite would rather consume the public good than its own, smaller initial endowment. Thus, parliament suffices to make funding preferable. However, this

[12] In practice, exit by a merchant elite may change the value of invading the territory, which in turn may alter an outsider's incentives to invade. We do not model this possibility here, leaving it as a consideration for future work with a strategic outsider.

logic breaks down for a stronger outsider. Facing a strong threat, the elite would rather exit and consume the fraction σ of its initial endowment, given the high likelihood of consuming nothing (even with public good provision) from funding the government. Consequently, a merchant elite willingly funds the ruler if and only if the outsider is weak enough, as illustrated in Figure 7.

Lemma 3. *If E's outside option is to exit, then the elite willingness constraint holds if and only if $\psi \leq \psi^{\dagger}_{exit}$, where $\psi^{\dagger}_{exit} > 0$.*

Figure 7: Willingness constraint for a merchant elite

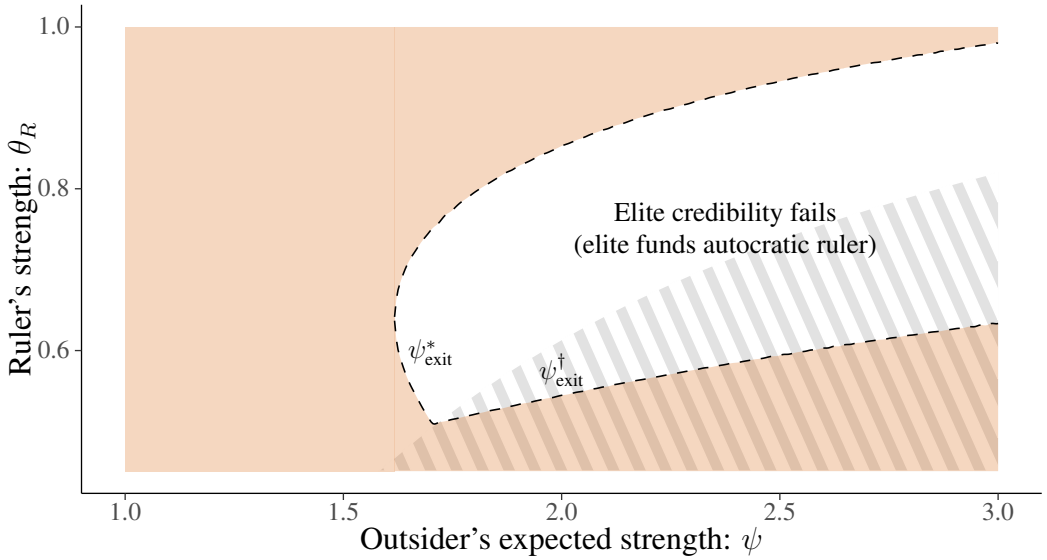


Mobile wealth also changes the nature of the elite credibility constraint, which holds when the elite would rather exercise its outside option than fund an autocratic ruler (see Equation 9, with Equation 11 as the value of the outside option). Two elements are identical to those in the landed elite case: stronger threats drive down the expected utility to funding the government (what we labeled as effect 1b in the discussion of elite credibility for a landed elite) and cause an autocratic ruler to provide public goods with higher probability (effect 2). The difference is the absence of effect 1a from the landed elite case because, for a merchant elite, the value of the outside option equals $\sigma \cdot (1 - \theta_R)$, which does not depend on the external threat's strength. For the merchant case, war threats and whether the elite credibility holds exhibits an inverted U-shaped relationship, in

contrast to the landed elite case in which stronger war threats always make elite credibility more likely to hold. Facing a weak outsider, elite credibility holds for the same reason as with a landed elite: the security benefit of public goods, as well as the probability that an autocratic ruler chooses to provide public goods, is simply too low to justify funding. Yet, now, very strong war threats break the state apart rather than induce cooperation because the merchant elite can simply exit—as opposed to strong war threats undercutting the value of the elite's outside option and forcing them to rely on the ruler (effect 1a). In between these two extremes, intermediate increases in ψ can improve prospects for parliament even for merchant elites because of effect 2 from the landed elite case: an autocratic ruler provides public goods with higher likelihood.[13] Figure 8 illustrates the credibility constraint for a merchant elite.

Lemma 4. *Assume E's outside option is to exit. If $\sigma \geq \sigma^* \equiv (\overline{p}_H(\hat{\theta}_X + \epsilon) \cdot \alpha)/(1 - \theta_R)$, then the elite credibility constraint holds for all ψ. Otherwise, if $\sigma < \sigma^*$, then the elite credibility constraint holds if and only if $\psi \notin (\psi^*_{exit}, \psi^\dagger_{exit})$, where $\hat{\theta}_X - \epsilon < \psi^*_{exit} < \hat{\theta}_X + \epsilon < \psi^\dagger_{exit}$.*

Figure 8: Credibility constraint for a merchant elite



Parameters: $\alpha = 0.55$, $\sigma = 0.65$, $\theta_C = 2.25$, $\epsilon = 1$. *Shaded region: Autocratic ruler certain to provide public goods.*

[13] As Appendix Figure A.1 shows, this indirect effect of increasing ψ dominates the direct effect on decreasing the likelihood of surviving the threat until the point where an autocratic ruler provides public goods with probability 1.

Combining the elite's constraints with the ruler willingness constraint shows, once again, that a parliamentary equilibrium depends on the outsider being neither too weak nor too strong, in contrast with the conventional logic of cooperative statebuilding. Yet modeling an exit option produces a distinct mechanism. For landed elites, the conventional wisdom breaks down because large threats undermine elite credibility. For merchant elites, the conventional wisdom breaks down because large threats undermine elite willingness.[14] Mobile wealth breaks the elite's dependence on the ruler for security, and hence strong threats induce exit even from a parliamentary state, rather than capitulation to an autocratic ruler as in the landed case. Our result does not completely undermine the conventional logic: if the ruler prefers consuming her endowment over the public good, then marginal increases in outsider strength can induce parliament. However, by introducing the elite's demand for parliament into our analysis, we show that strong-enough war threats in conjunction with merchant elites produce weak, unfunded states.

Proposition 4 (Parliamentary equilibrium with a merchant elite)**.** *If E's outside option is to exit, then there is a parliamentary equilibrium if and only if $\underline{\psi} \leq \psi \leq \overline{\psi}$, where*

$$\underline{\psi} = \begin{cases} 0 & \theta_R \leq \alpha, \\ \hat{\psi} & \theta_R > \alpha, \end{cases} \qquad \overline{\psi} = \begin{cases} \psi^*_{exit} & \sigma < \sigma^*, \\ \psi^\dagger_{exit} & \sigma \geq \sigma^*. \end{cases}$$

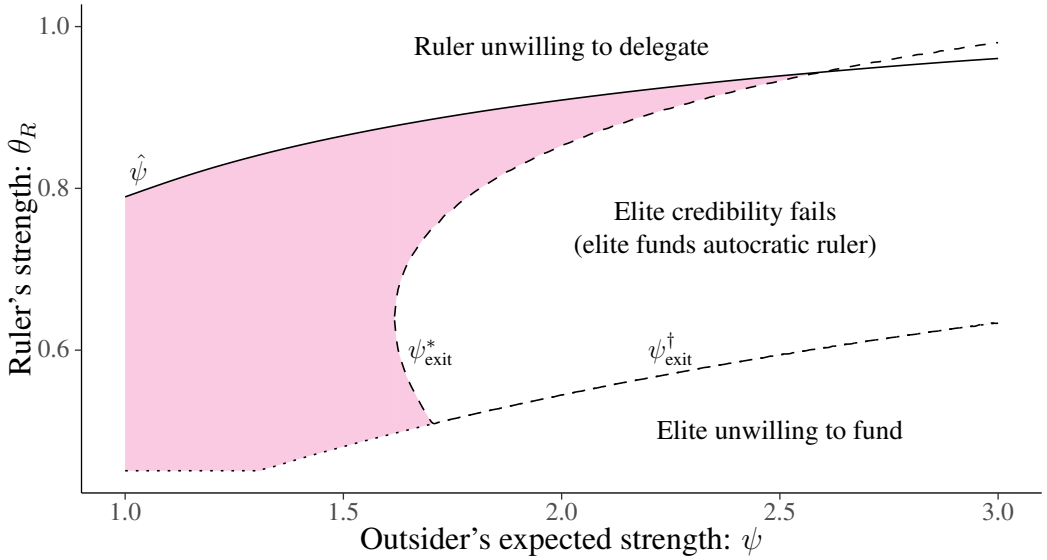
4 Extensions

4.1 Offensive Wars

Our baseline model makes the simplifying assumption that the actors suffer equally from losing a war (unless the elite exits). Thus, as also indicated by the nomenclature "invader," we conceive of

[14] Comparing the previous figures shows visually that the region in Figure 7 in which the elite is unwilling to fund perfectly corresponds with the lower-right orange region in Figure 8. As the gray region in Figure 8 shows, an autocratic ruler provides public goods with probability 1 here. Hence, the merchant elite's unwillingness to fund a parliamentary ruler in this region perfectly counteracts the elite credibility constraint, as discussed in Proposition 2.

Figure 9: Parliamentary equilibrium with a merchant elite



the war as defensive in its aims. By contrast, rulers and elites often value war outcomes differently if the war is offensive (Levi 1988; Kiser and Linton 2002; Cox, Dincecco and Onorato 2020). This is in part because offensive wars entail a moral hazard problem. Elites usually fund the bulk of the costs regardless, but the ruler reaps most spoils of winning (Rosenthal 1998).

We extend the baseline model with additional parameters to account for a continuum of war aims ranging from "purely defensive" (recovering the baseline model) and "purely offensive."[15] We assume the elite's outside option is to refuse, as this is when the nature of the war makes the most difference for elite incentives. The extension consists of three changes. First, the ruler and elite each retain some domestic consumption even if they lose the international war. This reflects that if the stakes of conflict are partially or even primarily abroad, then only a fraction of domestic wealth is at risk. Second, winning the war yields spoils that are expropriated from the outsider. Finally, the ruler keeps all international spoils if she wins the conflict unassisted, but must share some with the elite if she received funds and provided public goods.

The main finding is that the elite's bargaining power is stronger the more offensively oriented is the external conflict. Refusing is more attractive when the war is more offensive because less of

[15] Details are in Appendix B.1.

the elite's wealth is at stake in the conflict. This reduces the elite's dependence on the ruler for security. Offensive wars also affect the ruler's incentives and decisions. If the ruler faces a very strong outsider, she is unlikely to win the external conflict either way, and would strictly prefer consuming all domestic wealth over consuming the public good. The ruler is therefore certain to expropriate if the conflict is purely offensive and the outsider is quite strong. With an offensive war and a strong opponent, the elite's bargaining power is at its highest; its threat to withhold funding if the ruler does not delegate is certain to be credible. This is in stark contrast with the purely defensive case analyzed in the baseline model, in which outsider strength undercut the elite's credibility rather than bolstering it.

4.2 Coercive Statebuilding

To isolate *cooperative* incentives for elite funding and parliamentary delegation, we do not include in the baseline model a strategic choice for the ruler to coerce the elite. In essence, this creates a "hard case" for showing that war threats do not necessarily promote parliaments, given the more common contention in the literature that, by raising the stakes of the game, war can cause rulers to override their parliaments and coercively collect funds (e.g., Downing 1993). We consider an extension in which the ruler has a third option (besides delegating to parliament or not) to coerce the elites for funds.[16] Incentives to use coercion indeed arise in the presence of a moderate invasion threat. However, these incentives are the decisive factor preventing delegation to parliament only in a narrow range of cases. When the invasion threat is strong, parliament is unsustainable even without coercion, as our core results establish.

4.3 Fragmented Elites

While our main analysis focuses on parliament as a constraint on the ruler's ability to expropriate, parliaments may also serve to mediate conflicts among elites (Beramendi, Dincecco and Rogers 2018). We extend our model to analyze whether elite fragmentation affects our findings about the

[16] Details are in Appendix B.2.

relationship between external threats and parliamentary formation.[17] In the extension, there are two distinct elite actors, one of whom may exploit the other (e.g., through colluding with a ruler using divide-and-rule tactics) in the absence of a parliament. Parliament forms only if both elites are willing to participate—keeping in mind how its formation will affect the balance of power between them—and at least one elite has a credible threat to withhold funds from an unconstrained ruler. Depending on how parliament alters the distribution of goods between elite actors, it may be easier or harder for parliament to form when elites are fragmented than when they are unified. For the most part, however, external threats affect prospects for parliament similarly as in the baseline model. The only substantive difference is that landed elites are no longer certain to be willing to participate in parliament, specifically if external threats are weak and the landed elite expects less influence with parliament than without it. In this case, the elite willingness constraint mirrors the ruler willingness constraint, and a sufficiently strong threat is necessary for them to accede to parliamentary constraints. Nevertheless, a strong external threat still undermines the landed elite's credible threat to withhold funds in the absence of a parliament, so—as in the baseline model—parliament still only forms for moderate levels of external threat.

4.4 Parliament without Fiscal Supremacy

The most important service of parliaments in early modern Europe was to provide financial assistance to the crown (Finer 1997*b*, 1026; Graves 2001, 192-5). However, parliaments ranged considerably across time and space in their functions and powers. Most could refuse to grant taxes for undesired policies, but especially early on, many imposed only limited constraints on the ruler (Myers 1975, 29-34; Finer 1997*b*, 1036-9). Large kingdoms posed particular logistical difficulties for parliaments to hold rulers accountable (Stasavage 2011). We extend our baseline model to incorporate a fixed probability that a ruler who delegates will nonetheless be able to expropriate if funded; the baseline model is a special case in which this probability equals zero.[18] The relation-

[17] Details are in Appendix B.3.
[18] Details are in Appendix B.4.

ship between war and parliament is qualitatively similar, and there are two countervailing effects on a parliamentary equilibrium. As expected, this alteration hinders prospects for parliament by making the elite more skeptical of funding a ruler who has delegated (tighter elite willingness constraint). But the overall effect is ambiguous because greater leeway for the ruler increases her willingness to submit to parliament in the first place.

4.5 Dual Outside Options for Merchant Elite

Our main analysis assumes that the merchant elite's sole option is to exit. This enables isolating the distinct effects of the exit outside option vis-a-vis the refusal option. But one might instead imagine that a merchant elite has both options: to refuse or to exit. We analyze this possibility formally in Appendix B.5. In the equilibrium of the extended model, a merchant elite prefers refusal over exit if (and only if) the external threat is sufficiently weak. Hence, facing a weak invader, a merchant elite essentially behaves as if it were landed. Compared to our baseline analysis of merchant elites, a parliamentary equilibrium is more likely to exist when the external threat is low enough. Having the refusal option increases the elite's outside option value, thereby making the credibility condition easier to hold. However, there is no offsetting effect on elite willingness, as willingness always holds whenever the elite would rather refuse than exit.[19] Finally, the introduction of a dual outside option does not change our conclusions about the effects of strong external threats. The elite still prefers exit over refusal when the outside threat is sufficiently strong, so it behaves just as in the baseline model: strong threats undermine statebuilding by making a merchant elite unwilling to fund even a constrained ruler.

5 Applying the Model to Western Europe

The novel mechanisms from our model arise from evaluating how war threats affect elites' leverage to gain parliamentary concessions, which departs from the predominant focus of existing theories

[19] This follows because the elite prefers refusal over exit when $\bar{p}_L(\psi) > \sigma$.

on the ruler's willingness to delegate. The following examples illustrate how divergent elite incentives help to explain variance in the historical development of Western European parliaments.

5.1 Elite Credibility Condition

In our core model with defensive wars, a strong war threat undermines the credibility of a landed elite to refuse funding for a ruler not constrained by parliament, in part because the value of its refusal option plummets. However, as we show in an extension, the elite credibility constraint is more likely to bind if the war aims are offensive rather than defensive because a lost war is less costly for the elite. Here we compare early parliamentary development in England with both France and Spain. As an island nation, England faced a low threat of defensive wars, and instead its wars were offensively oriented. By contrast, invasion threats and actual occupation occurred periodically in France and Spain.[20] This provides some insight into why France and Spain accord with the general pattern of parliaments declining in importance across Western Europe after 1500, whereas England defied this trend (Van Zanden, Buringh and Bosker 2012). Appendix C.1 provides another example from the English colony of Jamaica.

Many scholars attribute England's stronger constitutional development relative to continental states on its insular island location, which enabled it to avoid the defensive land wars prevalent in Europe. There are many examples in which English nobles resisted royal requests for war funds because they did not want to finance foreign wars not pertinent to national survival. Henry III faced resistance from nobles who had "[no] interest in the southern lands of the old Angevin Empire . . . Henry might try to persuade the magnates that his rights on the Continent were their concern, as he did in the parliament of July 1248, but the point was not taken" (Maddicott 2010, 171-2). In 1525, Henry VIII sought to regain the French Crown or, at least, recover provinces that England had previously lost to France, but faced intense elite opposition (Graves 2001, 80). Tudor monarchs throughout

[20] In the extension, we also show that strong war threats are less likely to promote public good provision by an unconstrained ruler if the aims are offensive. As an example of the moral hazard problem of offensive warfare, Charles II used funds granted by Parliament to ally with the Dutch to instead fight them. This led Parliament in 1674 to cut off funding for the war (Hoffman and Norberg 1994, 74).

the sixteenth century faced resistance to their demands to collect taxes in coin. "Short of an actual invasion of the realm by a foreign power, many MPs undoubtedly thought that no crisis could be severe enough to warrant ... draining away more of their fiscal resources and coin than they could afford" (Hoffman and Norberg 1994, 51). Instead, England "counted on the protection of the seas to keep it from invasion" (52). Later, the Stuart monarch Charles I again faced resistance to fighting continental wars. "On five occasions—in 1625 (twice), 1626, 1628 and 1629—Charles called Parliaments to fund his wars, but only twice did he obtain subsidies. Unlike the Dutch, the English were not fighting for independence and so there was less enthusiasm for war, especially for the French war which seemed to have little to do with the national interest" (Graves 2001, 124).[21]

By contrast, France lacked this natural geographic protection. The French king's ability to levy taxes during the Hundred Years' War with England (1337–1453) exemplifies an invasion undercutting the elite credibility constraint. The French Estates-General convened periodically during the war, but it was quite weak even compared to the contemporaneous English Parliament. Thus, although a national body existed, we consider this a case (using terminology from the model) of not *delegating* any authority to parliament. Nevertheless, in the 1430s, the Estates General granted extensive taxation prerogatives to King Charles VII in the form of the *taille*. Why would elites that lacked any real ability to check the king—who himself lacked strong means to coerce elites—grant such broad privileges? Hopcroft's (1999, 76) explanation matches closely with our proposed mechanism: "The initial breakdown of resistance to direct taxation in France may be partly accounted for by the fact that at the time France had experienced many long years of war on its territory. People were prepared to make great sacrifices to stop the warfare on their lands." The regional distribution of anti-tax revolts provides corroborating evidence. In the south of France, where there was no military threat, the state faced considerable resistance to tax collection. By contrast, in the occupied north, there was comparatively little resistance (Hopcroft 1999, 82).

[21] Of course, English nobles *sometimes* funded offensive wars (e.g., Edward I's conquest of Wales, or Edward III and Henry V's advances during the Hundred Years' War with France). The key point is that they frequently rebuffed royal requests for reasons related to the mechanisms proposed in our model.

In Spain, defensive warfare *reversed* earlier parliamentary gains. The Castilian Cortes entered the seventeenth century in a relatively strong position such that we can think of the Spanish Crown as having delegated to parliament.[22] Spain accumulated considerable debt following the failed Armada against England in 1588 and turned to the Castilian Cortes to impose a new direct tax, the *millones*. The Cortes acquiesced, but in return for concessions that placed the relationship between Crown and Cortes onto a "formally contractual basis" by "specifying the purposes to which the new money was to be applied and in making the grant conditional on the the promulgation of a large number of general measures deemed to be for the common good of the kingdom" (Hoffman and Norberg 1994, 186-7). However, the Thirty Years' War reversed earlier progress as Philip IV gained tax concessions without bargaining with parliament. "[T]he fact that from the mid 1630s the war was being fought on Spanish soil was also a crucial factor in determining the climate in which the king's demands were received ... Spain itself was under threat and the integrity of the Monarchy in jeopardy. There could be no question that the demands were just and that to accede to them was a necessity of survival as well as conscience" (197).[23] The last meeting of the Cortes under the Habsburgs occurred in the 1660s.

5.2 Elite Willingness Condition

Our model also shows how strong war threats undermine the willingness of a merchant elite to fund the government, leading it to exit instead—even if parliamentary constraints are present. We consider two ways to operationalize the exit constraint: physical migration and mobile assets. In cases of moderate threat environments, elites' leverage from the exit option should promote parliamentary development (medieval Spain, English North America), whereas stronger external threats will induce exit and state fragmentation (Hanseatic League; Appendix C.2 discusses precolonial

[22] This characterization reflects a relatively recent change in the historiography of the topic (Hoffman and Norberg 1994, 181-2; Graves 2001, 90).

[23] This contrasts with the Cortes' earlier opposition to funding what was essentially an offensive war to prevent Dutch independence from the Habsburg empire. "The Cortes of Castile, appalled at the high cost of seeking the salvation of the Dutch, petitioned Philip [II] in 1593 to abandon the crusade and to leave the matter more economically and more efficiently to God. As for the heretics, 'if they want to be damned, let them be"' (Maland 2015, 6).

Africa).

An elite threat to physically migrate is typically effective when the land-to-labor ratio is high. For example, Spain was a frontier society in the Middle Ages, which contributed to early parliamentary gains. As Visigothic peoples defeated Muslim polities on the Iberian peninsula, "[a] new population had to be attracted by allowing them personal liberty and allocating lands to them on favorable terms, and charters of privileges and self-government (*fueros*) had to be granted to the new towns" (Hoffman and Norberg 1994, 142). Consequently, the first European *parliamentary* meeting (as opposed to earlier proto-parliaments or king's councils that were not regular bodies and lacked representatives from towns) occurred in Leon (Spain) in 1188. However, this exit option eroded over time as Spain increased in population, leading to unfavorable conditions for parliament in later centuries (see discussion above).

Similar conditions account for the spread of representative institutions across English North American colonies in the seventeenth century. Following the Stuart Restoration, the typical mode of colonization was for Charles II to issue grants to individual proprietors. Given their inherent desire to concentrate control and maximize profits, this would seem to create less auspicious conditions for parliamentary development than, for example, earlier English charter settlements in Massachusetts. However, potential settlers had a viable exit option to either not move at all to the New World, or to move to a colony that granted political rights. Thus, proprietors faced strong incentives to allow assemblies. "Throughout the empire, propertied Englishmen cherished legislative control over taxation as their most fundamental liberty. The proprietors accepted assemblies as a means to attract or retain propertied colonists, who were essential to a colony's economic development, which was critical to the proprietors' revenues" (Taylor 2002, 246-7).

Bates and Lien's (1985) argument connecting war and parliament focuses on asset mobility. Two of the strongest parliaments in Western Europe throughout the early modern era were in England and the Netherlands. In both countries, long-distance trade was an important component of national wealth and government revenues. By the end of the seventeenth century, during which England's

Glorious Revolution and subsequent parliamentary deepening occurred, merchants were influential elites in these countries due to their profits from Atlantic trade and slaving (Acemoglu, Johnson and Robinson 2005). Mobile capital enables merchants to hide or otherwise move their assets outside the reach of the state, creating leverage to demand parliamentary rights.

However, the negotiating leverage of mobile elites can also *undermine* state formation in high-threat environments. In both medieval Spain and early English North American colonies, the exit option triggered parliament in *moderate* threat environments. Given the viable migration option, counterfactually, it seems likely that stronger external threats would have undermined state formation in these cases. In fact, an important reason that English colonies did not emerge south of Virginia until the mid-seventeenth century was that the threat of Spanish invasion waned over time. "Charles Town boldly defied Spanish claims to that coast, signifying England's new confidence in its emerging imperial power as Spain grew weaker. In 1607, the English had felt obliged to hide their Jamestown colony up a distant river, but in 1670 they defiantly planted Charles Town near the coast on the very margins of Florida" (Taylor 2002, 224).

The Hanseatic League in Europe provides a factual example of exit and state fragmentation in a high-threat environment. Here, rather than fund a territorial state governed by a German prince, merchants in numerous towns exited by forming a trading league. The fall of the Carolingian empire enabled many independent towns to emerge in central Europe beyond the reach of princely control (Stasavage 2011). Although coalescing into a broader political unit offered certain benefits, joining a territorial state was not necessarily the best option even if granted charter or parliamentary protection by a particular prince. Given the fragmented nature of the European state system in the late Middle Ages, "[t]owns that transacted business across these feudal units were faced with a variety of different legal codes, local tolls, differences in weights and measures, variation in coinage, and sometimes outright robbery, all to the detriment of the burghers' business" (Spruyt 1996, 119). To counteract the problem of numerous points along a trading route where a rival state could expropriate or extort them—therefore posing a large external threat, from the perspective

of merchants—cities could band together into leagues not controlled by nobles. This alternative generated a viable exit option. The Hanseatic League was the most prominent of the trading leagues. This organization, which was not itself a territorial state, provided a means for merchants to protect their trade wealth while exiting from oversight by feudal nobles (Spruyt 1996, 109-29).

6 Conclusion

This paper develops and analyzes a formal model to examine the strategic underpinnings of a conventional argument about cooperative statebuilding: war threats stimulated parliamentary development in Western Europe. We recover conditions under which this logic holds, but also highlight two new mechanisms that yield the opposite implication. Each arises from considering how the war threat affects an elite actor's leverage to demand parliament. A strong threat makes incredible a landed elite's refusal to fund an autocratic ruler. Low leverage to demand parliament creates a strong (i.e., funded) but unconstrained state. A strong war threat also makes a merchant elite unwilling to fund even a government with parliamentary constraints. Here, elites' leverage to exit is too high, which produces a weak (i.e., unfunded) state. Bringing these together, we formalize an important tension between the imperatives of cooperative statebuilding—strong outside threat promote either strong or limited states, but not both. These theoretical mechanisms help to account for patterns of parliamentary development in historical Europe.

The model we have developed here can easily be to extended to study related questions about the relationship between war and statebuilding. One natural avenue for extension would be to endogenize the external actor to analyze cross-border effects of political developments. Our results here imply that the establishment of parliamentary constraints in one country may not have straightforward effects on its neighbors' political institutions. When one country's strength grows due to parliamentary fiscal control, this may make neighboring rulers more willing to submit to their own elites' constraints, but it also may decrease those elites' demand for parliament.

Another promising line of research would be to enrich the tradeoffs involved with coercion. Rulers that lack access to funds cannot afford a standing army. Even for those that do, militaries pose problems of disloyalty either in the form of coups (directly overthrowing the ruler) or fleeing the battlefield (not defending the ruler when in peril). But rulers that solve these problems can generate what Finer (1997*a*) terms an "extraction-coercion" cycle in which a standing military can coerce the population for revenues, which in turn enables the ruler to pay for the standing military. Parameters that relate to these factors could affect prospects for cooperative versus coercive paths of state building.

Finally, although the question of how war threats affect executive constraints is particularly important for understanding European statebuilding, our formal logic is not restricted to this setting. Outsider threats undercutting elite credibility appears important for some twentieth century cases as well. For example, amid threat of Russian invasion, German Socialists supported the government's war efforts at the outset of World War I without concrete promises of democratic reforms. In South Africa, amid the perceived threat of African majority rule, English descendants supported the Afrikaaner-led apartheid government despite the United Party controlling all important political positions. There are many other historical examples of the exit constraint undermining state formation as well, e.g., low population density precolonial Africa and mountainous areas in Southeast Asia (see also Appendix C.2). Future research could use and extend the current theoretical framework to understand commonalities and differences between these cases and the historical European statebuilding experience.

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Online Appendix for "International Warfare, Cooperative Statebuilding, and European Parliaments"

CONTENTS

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A Supplementary Information for Baseline Model

A.1 Summary of Notation

- R: ruler
- E: representative elite actor
- θ_R: share of wealth held by R, with $1 - \theta_R$ for E
- σ: fraction of wealth retained by a merchant elite that chooses to flee
- θ_X: strength of the outsider threat; drawn by Nature following R's choice over delegating to parliament and E's choice over funding the government
- ψ: ex ante expected value of θ_X
- ϵ: parameterizes the extent of ex ante uncertainty about θ_X
- α: each player's consumption from the public good
- p_L: probability that the strategic actors survive the outsider threat without public good provision; equals $\frac{\theta_R}{\theta_R+\theta_X}$
- p_H: probability that the strategic actors survive the outsider threat with public good provision; equals $\frac{\theta_C}{\theta_C+\theta_X}$
- θ_C: parameterizes the security benefit of public goods
- $\overline{p}_L$: ex ante (i.e., before Nature draws θ_X) probability of surviving the outsider threat absent public good provision (see Equation 2)
- $\overline{p}_H$: ex ante (i.e., before Nature draws θ_X) probability of surviving the outsider threat given public good provision (see Equation 3)
- $\hat{\theta}_X$: threshold for R's decision to provide public goods if funded but unconstrained (see Lemma 1)
- $\hat{\psi}$: threshold for R's decision to delegate to parliament (see Proposition 1)
- $\tilde{p}_H$: ex ante probability that a funded but unconstrained ruler will provide public goods and successfully resist the outsider (see Equation 8)
- ψ^*_{refuse}: for a landed elite, threshold for whether elite credibility constraint holds (see Lemma 2)
- $\psi^\dagger_{exit}$: for a merchant elite, threshold for whether elite willing constraint holds (see Lemma 3)
- σ^* and ψ^*_{exit}: for a merchant elite, thresholds for whether the elite credibility constraint holds (see Lemma 4)
- $\underline{\psi}$ and $\overline{\psi}$: for a merchant elite, thresholds for whether a parliamentary equilibrium exists (see Proposition 4)

A.2 Proof of Lemma 1

We begin with a useful fact about our contest success function, proving the property illustrated in Figure 1.

Lemma A.1. *p_H/p_L is strictly increasing in θ_X.*

Proof. We have

$$\begin{aligned}
\frac{\partial}{\partial \theta_X}\left[\frac{p_H}{p_L}\right] &= \frac{1}{p_L}\cdot\frac{\partial p_H}{\partial \theta_X} - \frac{p_H}{p_L^2}\cdot\frac{\partial p_L}{\partial \theta_X} \\
&= \frac{1}{p_L}\left[-\frac{\theta_C}{(\theta_C+\theta_X)^2} + \frac{p_H}{p_L}\cdot\frac{\theta_R}{(\theta_R+\theta_X)^2}\right] \\
&= \frac{1}{p_L}\left[\frac{p_H}{p_L}\cdot\frac{p_L^2}{\theta_R} - \frac{p_H^2}{\theta_C}\right] \\
&= \frac{p_H}{p_L}\left[\frac{p_L}{\theta_R} - \frac{p_H}{\theta_C}\right] \\
&= \frac{p_H}{p_L}\left[\frac{1}{\theta_R+\theta_X} - \frac{1}{\theta_C+\theta_X}\right] \\
&> 0,
\end{aligned}$$

as claimed. □

This result drives the proof of the lemma.

Lemma 1 (Invasion threats substitute for parliamentary constraints)**.** *Assume that R chooses autocratic rule and that E funds the government. It is a best response for R to provide public goods if and only if $\theta_X \geq \hat{\theta}_X$, where $0 < \hat{\theta}_X < \infty$.*

Proof. Because $p_H(0) = p_L(0) = 1$ and $\alpha < 1$, Equation 6 cannot hold at $\theta_X = 0$. At the other extreme, we have

$$\lim_{\theta_X \to +\infty} \frac{p_H(\theta_X)}{p_L(\theta_X)} = \lim_{\theta_X \to +\infty} \left(\frac{\theta_C}{\theta_C+\theta_X}\right)\left(\frac{\theta_R+\theta_X}{\theta_R}\right) = \frac{\theta_C}{\theta_R}.$$

Our assumption that $\theta_R < \alpha\theta_C$ thus implies that Equation 6 holds for sufficiently large ψ. The existence of the cutpoint $\hat{\theta}_X \in (0,\infty)$ then follows from the fact that p_H/p_L is continuous and strictly increasing. □

A.3 Proof of Proposition 1

We first prove that the important monotonicity of p_H/p_L (see Lemma A.1) carries over to the ratio of their expectations. Treating ϵ as fixed, let $F(\cdot;\psi)$ and $f(\cdot;\psi)$ denote the CDF and PDF,

respectively, of the uniform distribution over $[\psi - \epsilon, \psi + \epsilon]$.

Lemma A.2. *$\overline{p}_H/\overline{p}_L$ is strictly increasing in ψ.*

Proof. Observe that

$$\frac{\overline{p}_H(\psi)}{\overline{p}_L(\psi)} = \frac{\int_0^\infty p_H(\theta_X) f(\theta_X; \psi)\, d\theta_X}{\int_0^\infty p_L(\theta_X) f(\theta_X; \psi)\, d\theta_X}.$$

Because p_H/p_L is strictly increasing in θ_X (per Lemma A.1) and f satisfies the MLRP in ψ, this ratio of integrals is strictly increasing in ψ (Wijsman 1985). □

We can also show that the limit of $\overline{p}_H/\overline{p}_L$ as the outsider grows arbitrarily strong in expectation is the same as that of p_H/p_L as the outsider's realized strength increases without bound.

Lemma A.3.

$$\lim_{\psi \to +\infty} \frac{\overline{p}_H(\psi)}{\overline{p}_L(\psi)} = \frac{\theta_C}{\theta_R}.$$

Proof. First observe that

$$\begin{aligned}
\overline{p}_H(\psi) &= \int_0^\infty p_H(\theta_X) f(\theta_X; \psi)\, d\theta_X \\
&= \frac{\theta_C}{2\epsilon} \int_{\psi-\epsilon}^{\psi+\epsilon} \frac{1}{\theta_C + \theta_X}\, d\theta_X \\
&= \frac{\theta_C}{2\epsilon} \log\left(\frac{\theta_C + \psi + \epsilon}{\theta_C + \psi - \epsilon}\right),
\end{aligned}$$

and, following an analogous line of logic,

$$\overline{p}_L(\psi) = \frac{\theta_R}{2\epsilon} \log\left(\frac{\theta_R + \psi + \epsilon}{\theta_R + \psi - \epsilon}\right).$$

Therefore, via repeated application of L'Hôpital's rule,

$$\begin{aligned}
\lim_{\psi \to +\infty} \frac{\overline{p}_H(\psi)}{\overline{p}_L(\psi)} &= \frac{\theta_C}{\theta_R} \lim_{\psi \to +\infty} \frac{\log\left(\frac{\theta_C+\psi+\epsilon}{\theta_C+\psi-\epsilon}\right)}{\log\left(\frac{\theta_R+\psi+\epsilon}{\theta_R+\psi-\epsilon}\right)} \\
&= \frac{\theta_C}{\theta_R} \lim_{\psi \to +\infty} \frac{(\theta_R + \psi)^2 - \epsilon^2}{(\theta_C + \psi)^2 - \epsilon^2} \\
&= \frac{\theta_C}{\theta_R} \lim_{\psi \to +\infty} \frac{\theta_R + \psi}{\theta_C + \psi} \\
&= \frac{\theta_C}{\theta_R}.
\end{aligned}$$

□

This allows us to prove the proposition.

Proposition 1 (Ruler's choice over parliamentary delegation)**.** *In equilibrium:*

(a) R does not delegate to parliament if doing so is unnecessary to generate funding (elite credibility fails).

(b) R does not delegate to parliament if doing so is insufficient to generate funding (elite willingness fails).

(c) R may delegate to parliament if doing so is necessary and sufficient to generate funding. In this case:

- *If $\theta_R \leq \alpha$, then R delegates to parliament regardless of ψ.*
- *If $\theta_R > \alpha$, then R delegates to parliament if and only if $\psi \geq \hat{\psi}$, where $0 < \hat{\psi} < \infty$.*

Proof. To prove part (a), observe that by Lemma 1 we have $p_L(\theta_X) > p_H(\theta_X) \cdot \alpha$ for all $\theta_X \in [0, \hat{\theta}_X)$. Therefore,

$$\begin{aligned}\mathbb{E}[U_R(R \text{ doesn't delegate, } E \text{ funds})] &= \int_0^\infty \max\{p_L(\theta_X), p_H(\theta_X) \cdot \alpha\}\, dF(\theta_X; \psi) \\ &\geq \int_0^\infty p_H(\theta_X) \cdot \alpha\, dF(\theta_X; \psi) \\ &= E[U_R(R \text{ delegates, } E \text{ funds})].\end{aligned}$$

In case the above holds with equality (i.e., if $\hat{\theta}_X \notin (\psi - \epsilon, \psi + \epsilon)$), the argument follows by the lexical preference ordering assumed in footnote 9.

To prove part (b), observe that R's expected utility from not being funded does not depend on whether R delegates to parliament. From there the argument follows by the lexical preference ordering assumed in footnote 9.

To prove part (c), first observe that the condition to prefer constrained funds over no funds is

$$\frac{\overline{p}_H(\psi)}{\overline{p}_L(\psi)} \geq \frac{\theta_R}{\alpha}. \tag{A.1}$$

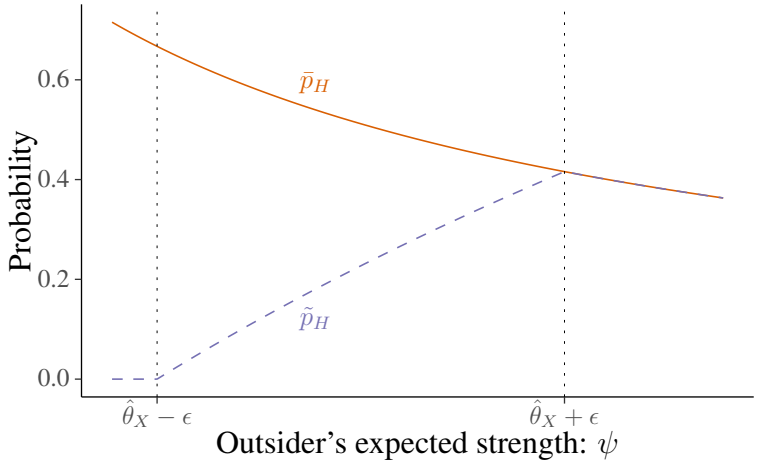
The LHS of this expression is strictly increasing in ψ, per Lemma A.2. Our assumption that $\theta_R < \alpha\theta_C$ guarantees that the condition holds for large enough ψ, per Lemma A.3. Because $\overline{p}_H \geq \overline{p}_L$ with equality at 0, the condition holds for all ψ if and only if $\theta_R \leq \alpha$. □

A.4 Proof of Proposition 2

Proposition 2 (Tension between elite willingness and credibility)**.** *If $\psi \geq \hat{\theta}_X + \epsilon$ and the elite willingness constraint (7) holds strictly, then the elite credibility constraint (9) fails.*

Proof. For $\psi \geq \hat{\theta}_X + \epsilon$, we have $\tilde{p}_H(\psi) = \overline{p}_H(\psi)$ per Equation A.3. It is then immediate that Equation 9 fails if Equation 7 holds strictly. □

Figure A.1: Probability of public good provision and successful resistance



Note: $\theta_R = 0.85$. *Other parameters same as Figure 4. The strictly decreasing orange curve for* $\bar{p}_H$ *depicts the direct effect of increasing* ψ*: the probability that the ruler will defeat the outsider even if she provides public goods goes down. This is one component of the gray* $\tilde{p}_H$ *curve; the other is the indirect effect of* ψ *that raises the ex ante probability with which an autocratic ruler chooses to provide public goods. For any values of* ψ *small enough that this probability is strictly less than 1, the indirect effect dominates, which explains the region in which the gray curve is strictly increasing. But for* ψ *high enough that an autocratic ruler provides public goods with probability 1, only the direct effect remains and the two curves are identical. This explains why the overall relationship between* ψ *and* $\tilde{p}_H$ *is inverted U-shaped.*

A.5 Proof of Lemma 2

Define $\tilde{p}_H(\psi)$ as the probability that the ruler provides public goods *and* the effort against the outsider succeeds if the ruler is unconstrained. Specifically, let

$$\tilde{p}_H(\psi) = \int_{\hat{\theta}_X}^{\infty} p_H(\theta_X)\, dF(\theta_X; \psi), \tag{A.2}$$

where $\hat{\theta}_X$ is defined as in Lemma 1. Under our assumption that $\theta_X \sim U[\psi-\epsilon, \psi+\epsilon]$, we have

$$\tilde{p}_H(\psi) = \begin{cases} 0 & \psi \leq \hat{\theta}_X - \epsilon, \\ \int_{\hat{\theta}_X}^{\psi+\epsilon} \frac{p_H(\theta_X)}{2\epsilon}\, d\theta_X & \hat{\theta}_X - \epsilon < \psi < \hat{\theta}_X + \epsilon, \\ \bar{p}_H(\psi) & \psi \geq \hat{\theta}_X + \epsilon. \end{cases} \tag{A.3}$$

Notice that $\tilde{p}_H$ is strictly increasing on $(\hat{\theta}_X - \epsilon, \hat{\theta}_X + \epsilon)$ and strictly decreasing on $(\hat{\theta}_X + \epsilon, \infty)$, as illustrated in Figure A.1.

Lemma 2. *If* E*'s outside option is to refuse, the elite willingness constraint always holds, while the elite credibility constraint holds if and only if* $\psi \leq \psi^*_{refuse}$*, where* $\hat{\theta}_X - \epsilon < \psi^*_{refuse} < \hat{\theta}_X + \epsilon$.

Proof. The elite willingness constraint in this case is equivalent to

$$\overline{p}_H(\psi) \cdot \alpha \geq \bar{p}_L(\psi) \cdot (1 - \theta_R), \tag{A.4}$$

which always holds as $\overline{p}_H \geq \bar{p}_L$ and $\alpha > 1 - \theta_R$.

The elite credibility constraint in this case is equivalent to

$$\overline{p}_L(\psi) \cdot (1 - \theta_R) \geq \tilde{p}_H(\psi) \cdot \alpha. \tag{A.5}$$

It is evident from Equation A.3 that this holds if $\psi \leq \hat{\theta}_X - \epsilon$, as then $\tilde{p}_H(\psi) = 0$. For all $\psi \geq \hat{\theta}_X + \epsilon$, elite credibility is equivalent to $\overline{p}_L(\psi) \cdot (1 - \theta_R) \geq \bar{p}_H(\psi) \cdot \alpha$, which cannot hold as $0 < \bar{p}_L \leq \bar{p}_H$ and $1 - \theta_R < \alpha$. From there, the existence of the cutpoint ψ^*_{refuse} follows from the fact that $\tilde{p}_H$ is continuous and is strictly increasing on $(\hat{\theta}_X - \epsilon, \hat{\theta}_X + \epsilon)$. □

A.6 Proof of Proposition 3

Proposition 3 (Parliamentary equilibrium with a landed elite)**.** *Assume E's outside option is to refuse. If $\theta_R \leq \alpha$, a parliamentary equilibrium exists if and only if $\psi \leq \psi^*_{refuse}$. Otherwise, if $\theta_R > \alpha$, a parliamentary equilibrium exists if and only if $\hat{\psi} \leq \psi \leq \psi^*_{refuse}$.*

Proof. Immediate from Proposition 1 and Lemma 2. □

A.7 Proof of Lemma 3

We first provide an implicit definition of the cutpoint $\psi^\dagger_{\text{exit}}$. This will prove useful in showing that the elite credibility constraint is defined in terms of the same point.

Lemma A.4. *There exists a unique $\psi^\dagger_{exit} > 0$ such that*

$$\sigma \cdot (1 - \theta_R) = \overline{p}_H(\psi^\dagger_{exit}) \cdot \alpha. \tag{A.6}$$

Proof. $\overline{p}_H$ is continuous and strictly decreasing with $\lim_{\psi \to \infty} \bar{p}_H(\psi) = 0$. Because $\alpha > 1 - \theta_R$ and $\sigma < 1$, we have $\sigma \cdot (1 - \theta_R) < \overline{p}_H(0) \cdot \alpha = \alpha$. The claim then follows from the intermediate value theorem. □

This allows us to prove the lemma in the text.

Lemma 3. *If E's outside option is to exit, then the elite willingness constraint holds if and only if $\psi \leq \psi^\dagger_{exit}$, where $\psi^\dagger_{exit} > 0$.*

Proof. The elite willingness constraint in this case is equivalent to

$$\overline{p}_H(\psi) \cdot \alpha \geq \sigma \cdot (1 - \theta_R).$$

As $\overline{p}_H$ is strictly decreasing, it is obvious that this condition holds if and only if $\psi \leq \psi^{\dagger}_{\text{exit}}$ as defined in Lemma A.4. □

A.8 Proof of Lemma 4

Lemma 4. *Assume E's outside option is to exit. If $\sigma \geq \sigma^* \equiv (\overline{p}_H(\hat{\theta}_X + \epsilon) \cdot \alpha)/(1 - \theta_R)$, then the elite credibility constraint holds for all ψ. Otherwise, if $\sigma < \sigma^*$, then the elite credibility constraint holds if and only if $\psi \notin (\psi^*_{exit}, \psi^{\dagger}_{exit})$, where $\hat{\theta}_X - \epsilon < \psi^*_{exit} < \hat{\theta}_X + \epsilon < \psi^{\dagger}_{exit}$.*

Proof. In this case, the elite credibility constraint is equivalent to

$$\sigma \cdot (1 - \theta_R) \geq \tilde{p}_H(\psi) \cdot \alpha. \tag{A.7}$$

The LHS of this condition is constant in ψ. Per Equation A.3, the RHS is constant in ψ on $(0, \hat{\theta}_X - \epsilon)$, strictly increasing on $(\hat{\theta}_X - \epsilon, \hat{\theta}_X + \epsilon)$, and strictly decreasing thereafter. It is immediate that the RHS is maximized at $\psi = \hat{\theta}_X + \epsilon$, so elite credibility must hold for all ψ if it holds at this point, which is equivalent to $\sigma \geq \sigma^*$. Otherwise, there is an interval around $\hat{\theta}_X + \epsilon$ for which elite credibility fails. It is immediate from Equation A.3 and Equation A.7 that the upper bound of this interval is $\psi^{\dagger}_{\text{exit}}$, as defined in Lemma A.4. Finally, the lower bound $\psi^*_{\text{exit}} > \hat{\theta}_X - \epsilon$ because $\tilde{p}_H(\psi) = 0$ for all $\psi \leq \hat{\theta}_X - \epsilon$. □

A.9 Proof of Proposition 4

Proposition 4 (Parliamentary equilibrium with a merchant elite)**.** *If E's outside option is to exit, then there is a parliamentary equilibrium if and only if $\underline{\psi} \leq \psi \leq \overline{\psi}$, where*

$$\underline{\psi} = \begin{cases} 0 & \theta_R \leq \alpha, \\ \hat{\psi} & \theta_R > \alpha, \end{cases} \qquad \overline{\psi} = \begin{cases} \psi^*_{exit} & \sigma < \sigma^*, \\ \psi^{\dagger}_{exit} & \sigma \geq \sigma^*. \end{cases}$$

Proof. Immediate from Proposition 1, Lemma 3, and Lemma 4. □

A.10 Relaxing Boundary Conditions

In this section, we briefly outline how the relaxation of the boundary condition $\theta_R < \alpha\theta_C$ would affect our baseline results. This condition has two primary implications for the baseline analysis:

- That an unconstrained ruler who receives funds will provide public goods if the realized θ_X is great enough.
- That the ruler is willing to accept constraints *ex ante* if ψ is great enough. (Reversal of this claim requires an even stronger violation of the original boundary condition: $\theta_R^2 > \alpha\theta_C$. See the proof of Proposition 1.)

The following results would require qualification if these conditions were relaxed. As the original boundary condition holds trivially if $\alpha\theta_C \geq 1$, in what follows assume $\alpha\theta_C < 1$.

Lemma 1 (unconstrained ruler's choice). If $\theta_R \geq \alpha\theta_C$, then it is never a best response for R to provide public goods, regardless of θ_X.

Proposition 1 (ruler willingness), part (c). If $\theta_R \geq \sqrt{\alpha\theta_C}$, then R is unwilling to delegate to parliament regardless of ψ.

Lemma 2 (credibility when outside option is refuse). If $\theta_R \geq \alpha\theta_C$, then the elite credibility constraint holds regardless of ψ. (This is because an unconstrained ruler now never provides public goods, so the RHS of Equation A.5 is always 0.)

Proposition 3 (parliamentary equilibrium when outside option is refuse). If $\alpha\theta_C \leq \theta_R < \sqrt{\alpha\theta_C}$, then a parliamentary equilibrium exists if and only if $\hat{\psi} \leq \psi$, as the elite credibility constraint now holds for all ψ. If $\theta_R \geq \sqrt{\alpha\theta_C}$, then there is never a parliamentary equilibrium, as the ruler is never willing to delegate to parliament.

Lemma 4 (credibility when outside option is exit). As with Lemma 2, if $\theta_R \geq \alpha\theta_C$, then the elite credibility constraint holds regardless of ψ.

Proposition 4 (parliamentary equilibrium when outside option is exit). If $\alpha\theta_C \leq \theta_R < \sqrt{\alpha\theta_C}$, then a parliamentary equilibrium exists if and only if $\hat{\psi} \leq \psi \leq \psi^{\dagger}_{\text{exit}}$. If $\theta_R \geq \sqrt{\alpha\theta_C}$, then there is never a parliamentary equilibrium, as the ruler is never willing to delegate to parliament.

A.11 General Functional Forms

We now briefly outline how our results generalize when we consider alternative functional forms for p_L and p_H as well as alternative distributional assumptions on θ_X. Let $p_L : \mathbb{R}_+ \to [0, 1]$ and $p_H : \mathbb{R}_+ \to [0, 1]$ be strictly decreasing functions such that:

- $p_L(0) = p_H(0) = 1$.
- $p_L(\theta_X) < p_H(\theta_X)$ for all $\theta_X > 0$.
- p_H/p_L is strictly increasing.

The functional forms in the main text, $p_L(\theta_X) = \theta_R/(\theta_R+\theta_X)$ and $p_H(\theta_X) = \theta_C/(\theta_C+\theta_X)$, belong to the class of functions meeting these conditions. In what follows, let $\rho = \lim_{\theta_X \to \infty} p_H(\theta_X)/p_L(\theta_X)$. The monotonicity assumption on p_H/p_L ensures that ρ is well-defined, with $\rho \in (1, \infty]$. As an analogue of our baseline model assumption $\theta_R < \alpha\theta_C$, which ensured that it was a best response for an unconstrained government to provide public goods if the realized θ_X were sufficiently high, we will assume here that $\rho > 1/\alpha$.

Let θ_X be distributed according to a continuous CDF F with support on $\mathbb{R}_+$ and an associated density function f. Let F be characterized by a parameter $\psi \in \Psi \subseteq \mathbb{R}$ such that F satisfies the monotone likelihood ratio property in ψ. Again letting $\overline{p}_L(\psi) = \int_0^\infty p_L(\theta_X) f(\theta_X; \psi)\, d\theta_X$ and $\overline{p}_H(\psi) = \int_0^\infty p_H(\theta_X) f(\theta_X; \psi)\, d\theta_X$, we assume the following regularity conditions on F:

- For all $\psi', \psi'' \in \Psi$ such that $\psi' < \psi''$, there exists $\theta_X \in \mathbb{R}$ such that $f(\theta_X; \psi') < f(\theta_X; \psi'')$.[24]
- For any $\theta_X \in \mathbb{R}_+$ and $\epsilon > 0$, there exists $\psi' \in \Psi$ such that $F(\theta_X; \psi) < \epsilon$ for all $\psi > \psi'$.[25]

We refer to the limiting case of F being a degenerate distribution on 0 as "no external threat."

The proof of Lemma A.2 carries over to the general environment, which implies that $\bar{\rho} \equiv \lim_{\psi \to \sup \Psi} \overline{p}_H(\psi)/\overline{p}_L(\psi)$ is well-defined, with $\bar{\rho} \in (1, \infty]$. In the baseline model, our assumption $\theta_R < \alpha\theta_C$ ensured that $\theta_R^2 < \alpha\theta_C$, which in turn implied that the ruler would be willing to delegate to parliament for sufficiently high ψ. The analogue of that condition in the general environment is $\bar{\rho} > \theta_R/\alpha$, which we assume hereafter. (If $\bar{\rho} \approx \rho$, as in the uniform case studied in the main text, then this is weaker than the condition imposed above, $\rho > 1/\alpha$.)

We now revisit the results stated in the main text. Broadly speaking, the results about the ruler's willingness to delegate to parliament and the elite willingness constraint do not change substantively in the general environment. However, our baseline results on the set of ψ for which the elite credibility constraint is satisfied do not necessarily carry over.

Lemma 1 (Invasion threats substitute for parliamentary constraints)**.** *Assume that R chooses autocratic rule and that E funds the government. It is a best response for R to provide public goods if and only if $\theta_X \geq \hat{\theta}_X$, where $0 < \hat{\theta}_X < \infty$.*

Our conditions on functional forms ensure that Lemma A.1 still holds, so there is still a cutpoint condition, $\theta_X \geq \hat{\theta}_X$, defining when it is a best response for an unconstrained ruler to provide public goods if funded. We have $\hat{\theta}_X > 0$ because $\alpha < 1$, and we have $\hat{\theta}_X < \infty$ because $\rho > 1/\alpha$.

Proposition 1 (Ruler's choice over parliamentary delegation)**.** *In equilibrium:*

(a) R does not delegate to parliament if doing so is unnecessary to generate funding (elite credibility fails).

(b) R does not delegate to parliament if doing so is insufficient to generate funding (elite willingness fails).

(c) R may delegate to parliament if doing so is necessary and sufficient to generate funding. In this case:

- *If $\theta_R \leq \alpha$, then R delegates to parliament regardless of ψ.*
- *If $\theta_R > \alpha$, then R delegates to parliament if and only if $\psi \geq \hat{\psi}$, where $0 < \hat{\psi} < \infty$.*

[24] This ensures that $\overline{p}_H/\overline{p}_L$ increases strictly, per Wijsman (1985).

[25] This ensures that $\overline{p}_L(\psi) \approx 0$, $\overline{p}_H(\psi) \approx 0$, and $\tilde{p}_H(\psi) \approx \overline{p}_H(\psi)$ for sufficiently large ψ.

(a) and (b) follow as before. For (c), first notice that Equation A.1 is still the condition for the ruler to prefer constrained funds over no funds in the general case. Because Lemma A.2 carries over to the general environment, so the LHS of this condition is still strictly increasing in ψ. Therefore, the condition holds for all ψ if and only if $\theta_R \leq \alpha$. Otherwise, if $\theta_R > \alpha$, then there exists $\hat{\psi} > 0$ such that the condition holds if and only if $\psi \geq \hat{\psi}$. Our assumption that $\bar{\rho} > \theta_R/\alpha$ ensures that $\hat{\psi} < \infty$.

Lemma 2. *If E's outside option is to refuse, the elite willingness constraint always holds, while the elite credibility constraint holds if and only if $\psi \leq \psi^*_{refuse}$, where $\hat{\theta}_X - \epsilon < \psi^*_{refuse} < \hat{\theta}_X + \epsilon$.*

Elite willingness — As in the baseline model, the condition that $\alpha > 1 - \theta_R$ suffices to ensure that elite willingness (Equation A.4) holds for all ψ.

Elite credibility — As before, the expected probability of resisting the external threat if the ruler is funded but unconstrained is given by Equation A.2. As in the baseline model, elite credibility (Equation A.5) must hold if there is no external threat, as then $\overline{p}_L(\psi) = 1$ and $\tilde{p}_H(\psi) = 0$. The result that elite credibility cannot hold for sufficiently large ψ also carries over. This is because the probability mass on $\theta_X < \hat{\theta}_X$ vanishes as ψ increases, meaning $\tilde{p}_H(\psi) \approx \overline{p}_H(\psi)$ and therefore $\tilde{p}_H(\psi) > \bar{p}_L(\psi)$ for sufficiently large ψ. However, it is not necessarily true that the set of ψ satisfying elite credibility is an interval, as the single-peaked structure of $\tilde{p}_H$ observed in the baseline case (Equation A.3) does not hold in general.

Proposition 3 (Parliamentary equilibrium with a landed elite)**.** *Assume E's outside option is to refuse. If $\theta_R \leq \alpha$, a parliamentary equilibrium exists if and only if $\psi \leq \psi^*_{refuse}$. Otherwise, if $\theta_R > \alpha$, a parliamentary equilibrium exists if and only if $\hat{\psi} \leq \psi \leq \psi^*_{refuse}$.*

Following the results discussed above, we can pin down the following about the existence of a parliamentary equilibrium:

- If $\theta_R \leq \alpha$, then the ruler willingness constraint holds trivially, so a parliamentary equilibrium exists if and only if elite credibility is satisfied. Consequently, a parliamentary equilibrium exists in the absence of an external threat. Additionally, a parliamentary equilibrium cannot exist if ψ is sufficiently large, as then elite credibility fails.
- If $\theta_R > \alpha$, then ruler willingness fails for sufficiently small ψ, and elite credibility fails for sufficiently large ψ. A parliamentary equilibrium may fail to exist for any ψ, or may exist at some interior values.

Lemma 3. *If E's outside option is to exit, then the elite willingness constraint holds if and only if $\psi \leq \psi^\dagger_{exit}$, where $\psi^\dagger_{exit} > 0$.*

Lemma A.4 continues to hold in the general case, and thus so does Lemma 3.

Lemma 4. *Assume E's outside option is to exit. If $\sigma \geq \sigma^* \equiv (\overline{p}_H(\hat{\theta}_X + \epsilon) \cdot \alpha)/(1 - \theta_R)$, then the elite credibility constraint holds for all ψ. Otherwise, if $\sigma < \sigma^*$, then the elite credibility constraint holds if and only if $\psi \notin (\psi^*_{exit}, \psi^\dagger_{exit})$, where $\hat{\theta}_X - \epsilon < \psi^*_{exit} < \hat{\theta}_X + \epsilon < \psi^\dagger_{exit}$.*

In the general environment, elite credibility (Equation A.7) will still hold if there is no external threat, as then $\tilde{p}_H(\psi) = 0$. Elite credibility will also hold for sufficiently large ψ, as then $\tilde{p}_H(\psi) \approx 0$. However, as discussed above with respect to Lemma 2, in the general case $\tilde{p}_H$ need not be single-peaked. So while elite credibility will hold for sufficiently small and large values of ψ, it may not be the case that the set of ψ for which it fails to hold is an interval.

Proposition 4 (Parliamentary equilibrium with a merchant elite)**.** *If E's outside option is to exit, then there is a parliamentary equilibrium if and only if $\underline{\psi} \leq \psi \leq \overline{\psi}$, where*

$$\underline{\psi} = \begin{cases} 0 & \theta_R \leq \alpha, \\ \hat{\psi} & \theta_R > \alpha, \end{cases} \qquad \overline{\psi} = \begin{cases} \psi^*_{exit} & \sigma < \sigma^*, \\ \psi^\dagger_{exit} & \sigma \geq \sigma^*. \end{cases}$$

Following the results discussed above, we can pin down the following:

- If $\theta_R \leq \alpha$, then the ruler willingness constraint holds trivially, so a parliamentary equilibrium exists if and only if elite credibility and willingness are satisfied. Consequently, a parliamentary equilibrium exists in the absence of an external threat. Additionally, a parliamentary equilibrium cannot exist if ψ is sufficiently large, as then elite willingness fails.
- If $\theta_R > \alpha$, then ruler willingness fails for sufficiently small ψ, and elite willingness fails for sufficiently large ψ. A parliamentary equilibrium may fail to exist for any ψ, or may exist at some interior values.

B SUPPLEMENTARY INFORMATION FOR EXTENSIONS

B.1 OFFENSIVE WARS

Here we extend the model to encompass offensive wars, specifically, by adding additional parameters. We focus on the case when the elite's outside option is to refuse, as this is when the nature of the war makes the most difference for elite incentives. First, we allow for the ruler and elite to each retain some of their domestic consumption even if they lose the conflict with the outsider. This reflects the possibility that the stakes of conflict might be partially or even primarily abroad, leaving only a fraction of their initial wealth at risk. Formally, let $\phi \in [0, 1]$ denote the proportion of consumption that each domestic actor retains even if the war is lost. This parameter is our primary measure of the war's offensiveness, as greater values mean less of the state's wealth is at stake in the conflict.

Second, we introduce the possibility of expropriating from the outsider in case of victory in the international conflict. Let $\beta \geq 0$ denote the total amount of additional consumption available to R and E if they win the conflict. The baseline model represents the special case of this extension with $\phi = 0$ (all domestic consumption at stake) and $\beta = 0$ (no expropriation from the outsider).

Finally, we assume that the ruler keeps all of the international prize if she wins the conflict unassisted, but that she must share a fraction of it with the elite if she received funds and provided public goods. Going back to our conceptualization of public goods as a bundled security and consumption benefit, this represents the idea that benefiting from elite support may involve incorporating elites into the state's security forces, thereby giving them bargaining power to demand some of the spoils of war. Formally, we assume that a fraction $\pi \in [0, 1]$ of the international prize β goes to the elite in case of victory following public goods provision, with the remainder going to the ruler.

In sum, payoffs in the offensive wars extension are as follows:

E's action	R's action	Conflict outcome	E's payoff	R's payoff
Don't fund	–	Win	$1 - \theta_R$	$\theta_R + \beta$
Don't fund	–	Lose	$\phi(1 - \theta_R)$	$\phi\theta_R$
Fund	Expropriate	Win	0	$1 + \beta$
Fund	Expropriate	Lose	0	ϕ
Fund	Public goods	Win	$\alpha + \pi\beta$	$\alpha + (1 - \pi)\beta$
Fund	Public goods	Lose	$\phi\alpha$	$\phi\alpha$

Our main finding in this extension is that the elite's bargaining power is stronger when the external conflict is offensive in nature. This is easiest to see when we hold fixed the chance that an unconstrained ruler provides public goods. The outside option of refusal is more attractive when the war is more offensive, as then less of the elite's wealth is at stake in the conflict, making the elite less dependent on the ruler for security. At the same time, the elite's expected payoff from funding the ruler also rises with the offensiveness of the conflict, due to the greater security of its public good consumption. The first of these effects dominates the second as long as there is a meaningful chance of expropriation (high enough that the elite would prefer refusal even in the absence of

an outside threat). Therefore, holding the ruler's behavior fixed, it should be easier for the elite credibility constraint to hold when facing an offensive war.

Lemma B.1. *In the model with offensive wars, assume that R does not delegate to parliament and, if funded, chooses public goods with probability $\Pr(\textit{public goods}) \leq \frac{1-\theta_R}{\alpha}$ for all θ_X. Then as the offensiveness of the external conflict ϕ increases, it becomes easier for the elite credibility constraint to hold.*

Proof. Letting $\gamma \equiv \Pr(\text{public goods})$, the elite credibility constraint in the extended model is equivalent to

$$[\phi + \overline{p}_L(\psi) \cdot (1-\phi)]\,(1-\theta_R) - \gamma\,[\phi\alpha + \bar{p}_H(\psi) \cdot [(1-\phi)\alpha + \pi\beta]] \geq 0. \tag{B.1}$$

The partial derivative of the LHS of this expression with respect to ϕ is

$$(1 - \overline{p}_L(\psi)) \cdot (1-\theta_R) - (1 - \bar{p}_H(\psi)) \cdot \gamma\alpha.$$

This expression is positive if $\gamma \leq \frac{1-\theta_R}{\alpha}$, as $\overline{p}_H \geq \bar{p}_L$. □

The offensiveness of the conflict also affects the ruler's incentives and decisions. In a purely defensive conflict, the ruler's incentive to provide public goods increases with the outsider's strength (Lemma 1). In that case, losing the conflict is catastrophic for the ruler, making her more willing to trade off consumption for security by providing public goods. This logic changes when the war is offensive—losing the war is no longer catastrophic when a portion of the ruler's domestic consumption is assured in either case. In the extreme case of a purely offensive conflict ($\phi = 1$), the condition for the ruler to prefer public goods provision after learning the outsider's strength is

$$\alpha + p_H(\theta_X) \cdot (1-\pi) \cdot \beta \geq 1 + p_L(\theta_X) \cdot \beta.$$

If the ruler faces a very strong outsider, she is unlikely to win the external conflict either way, and would strictly prefer consuming all domestic wealth over consuming the public good. The ruler is therefore certain to expropriate if the conflict is purely offensive and the outsider is quite strong. The same logic carries over even to partially offensive conflicts.

Lemma B.2. *In the model with offensive wars, the probability of public good provision by an unconstrained ruler decreases with the offensiveness of the external conflict ϕ. If $\phi > 0$ and ψ is sufficiently large, an unconstrained ruler is certain to expropriate.*

Proof. The condition for an unconstrained ruler to prefer public good provision over expropriation is

$$\underbrace{[p_H(\theta_X) \cdot (\alpha + (1-\pi)\beta) + (1 - p_H(\theta_X)) \cdot (\phi\alpha)]}_{U_R(\text{public goods})} - \underbrace{[p_L(\theta_X) \cdot (1+\beta) + (1 - p_L(\theta_X)) \cdot \phi]}_{U_R(\text{expropriate})} \geq 0.$$

The partial derivative of the LHS of this expression with respect to ϕ is

$$p_L(\theta_X) - p_H(\theta_X) \cdot \alpha < 0,$$

proving the first claim of the lemma. To prove the second claim, observe that $\lim_{\theta_X \to \infty} p_L(\theta_X) = \lim_{\theta_X \to \infty} p_H(\theta_X) = 0$ and therefore, if $\phi > 0$,

$$\lim_{\theta_X \to \infty} \Big\{ [p_H(\theta_X) \cdot (\alpha + (1-\pi)\beta) + (1 - p_H(\theta_X)) \cdot (\phi\alpha)] - [p_L(\theta_X) \cdot (1+\beta) + (1 - p_L(\theta_X)) \cdot \phi] \Big\}$$
$$= \phi(\alpha - 1) < 0.$$

Consequently, the probability of public good provision by an unconstrained ruler is zero for sufficiently large ψ. □

This result implies that the *ex ante* probability of public good provision is low when the war is partially or totally offensive and the external actor is strong. Returning to the elite's incentives, this means that the necessary condition of Lemma B.1—namely, a high probability of expropriation by an unconstrained ruler—will always be satisfied under these circumstances. With an offensive war and a strong opponent, the elite's bargaining power is at its highest; its threat to withhold funding if the ruler does not delegate is certain to be credible. This is in stark contrast with the purely defensive case analyzed in the baseline model, in which outsider strength undercut the elite's credibility rather than bolstering it.

Proposition B.1. *In the model with offensive wars, if $\phi > 0$, then the elite credibility constraint holds for all sufficiently large ψ.*

Proof. Immediate from Equation B.1 and Lemma B.2. □

B.2 Coercive Statebuilding

The core model intentionally omits a strategic option for the ruler to coerce the elite. The mechanisms that undermine the relationship between warfare and parliament in our model, based on elite credibility and willingness, are thus distinct from coercive options that rulers can pursue to avoid delegation. In other words, it creates a hard case for war not to cause parliament in equilibrium. However, coercion is part of the statebuilding process anywhere. Famous examples in early modern Europe include the Prussian and French kings during the Thirty Years' War using their armies to crush resistance to taxation and to establish fiscal absolutism. Although the dominant thrust of the historical statebuilding literature is that warfare contributes to parliament, historians and political scientists alike have discussed how in some cases, warfare contributed to absolutism (e.g., Downing 1993).

We extend the model to allow the ruler to choose between coercive and cooperative statebuilding at the outset of the game. When the ruler chooses whether to delegate or not in the baseline model (step 1), we introduce a third option: coercion. By coercing, the ruler makes a costly initial investment in her military capabilities, giving her the ability to expropriate the domestic elite's

wealth while also increasing the likelihood she will successfully resist the external threat. The cost of coercion is denoted κ, where $0 < \kappa < \theta_R$, and it yields for the ruler a fraction ω of the elite's endowment. If the leader coerces, then there is no possibility of voluntary elite funding or public good provision; the game proceeds immediately to the external conflict (step 5). We assume the military advantage due to coercion is less than that of successful cooperative statebuilding, making the probability of resistance $p_C(\theta_X) \equiv \frac{\theta_C}{\theta_C+\theta_X}$, where $\theta_R < \theta_C < \theta_C$. Following our earlier convention, we let $\overline{p}_C(\psi) = \mathbb{E}[p_C(\theta_X)]$.

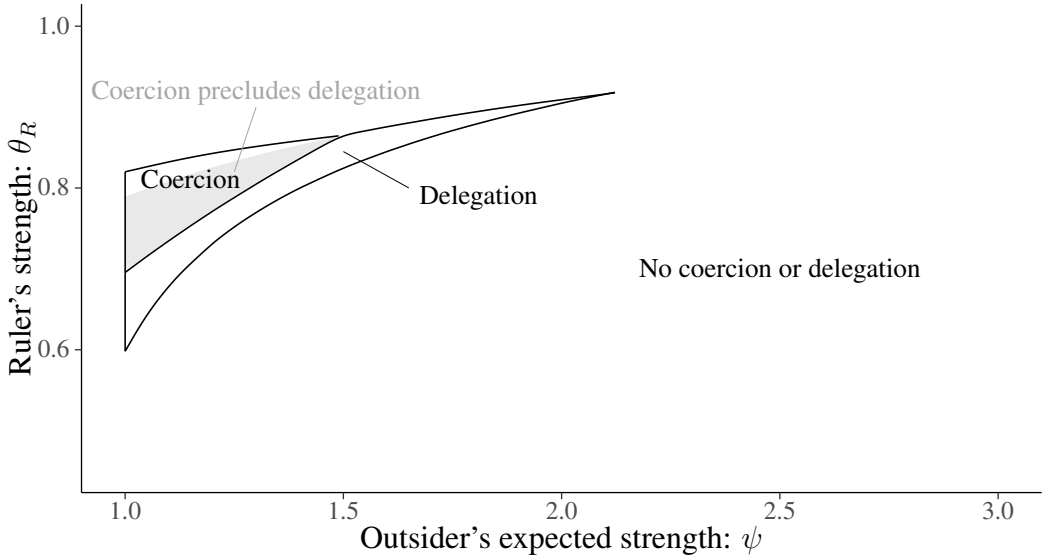
By introducing coercion, we essentially add another constraint on the ruler's incentives that must be satisfied in order for delegation to parliament to prevail as an equilibrium. We call the *ruler cooperation constraint* the requirement that the ruler prefer delegation over coercion:

Ruler cooperation constraint: $$\overline{p}_H(\psi) \cdot \alpha \geq \bar{p}_C(\psi) \cdot [\theta_R - \kappa + \omega(1-\theta_R)]\,.$$

This condition holds trivially if the cost of coercion is high, $\kappa > \omega + (1-\omega)\theta_R - \alpha$, as then both the value of consumption and the chance of successful resistance are greater if the ruler delegates.

Like the ruler willingness constraint in the baseline model, the cooperation constraint becomes easier to satisfy when the war threat is stronger. When there is little to no outside threat, the dominant incentive is the possibility of additional consumption from expropriating the domestic elite. For the ruler, the main benefit of delegation—relative to both sheer coercion and cooperation without delegation—is the boost in strength against the outsider, and the importance of this benefit increases with the outsider's power.

Figure B.1: Ruler's equilibrium choice when coercion is available



Note: $\kappa = 0.25, \omega = 0.7, \theta_C = 1.25$. *Outside option is refuse. Other parameters same as Figure 6. Shaded region represents parameters where the ruler would choose delegation if coercion were not available.*

Viewed in isolation, the coercion constraint appears to conform to the traditional logic of war making the state, as coercion is preferable to delegation unless there is a strong war threat. However,

when we consider elite incentives, we see that the introduction of a coercive option makes the most difference when the war threat's strength is in a middle range. Figure B.1 illustrates the equilibrium choices by a ruler who has the option to coerce or else seek funds from a landed elite. When the war threat is strong (right-hand side of the figure), the ability to use coercion is immaterial to the equilibrium. In this case, the ruler can get her first-best outcome—receiving funds without submitting to parliamentary constraints—regardless of the coercion option. On the other hand, for weak war threats ($\psi < \hat{\psi}$, top-left of the figure), the introduction of coercion does not erode parliamentary strength, as the leader would not have been willing to delegate anyway. Only for middling values of ψ (shaded region) do we see coercion overtake delegation as the equilibrium outcome.

B.3 Fragmented Elites

In this section, we consider a model of parliament formation with a fragmented elite. We alter the baseline model by considering an elite class that consists of two distinct actors, both of whom must fund the ruler in order for her to be able to provide public goods.[26]

In the extended model, the elite consists of two groups, E_1 and E_2. If a parliament does not form, then each elite group i receives a share η_i of the wealth not controlled by the ruler, where each $\eta_i \geq 0$ and $\eta_1 + \eta_2 = 1$. We do not model the process that results in this distribution of wealth between the groups—it may result from open conflict between them, from one group colluding with the ruler through a divide-and-ruler strategy, or simply from each group's individual endowment. On the other hand, if a parliament does form, then each group receives a share η_i' of the public goods that are provided. Without loss of generality, we assume $\eta_1 < \eta_1'$ (which implies $\eta_2 > \eta_2'$).[27] Substantively, this means we may think of group 1 as the one liable to being expropriated absent parliament. Relative to the incentive structure for elites in the baseline model, then, group 1 will be more inclined to set up parliamentary institutions, while group 2 will be less so.

In the baseline model, parliament forms in equilibrium when the ruler is willing to submit to constraints, the elite can credibly commit to exercise the outside option if parliament is not formed, and the elite is willing to fund a constrained ruler rather than exercise its outside option. The conditions for a parliamentary equilibrium become slightly more complicated with a fragmented elite. Remember that we assume that the ruler requires funds from *both* elite actors in order to provide public goods. Therefore, a parliamentary equilibrium requires both elite actors to prefer funding a constrained ruler over exercising their outside option. Meanwhile, as in the baseline model, the ruler will not delegate to parliament if she can obtain funds even while ruling autocratically. With fragmented elites, this amounts to the condition that the credibility constraint must hold for at least one of the two elite actors.

[26] If the ruler only needed funds from one elite actor, then the bilateral interaction between the ruler and this actor would be essentially the same as in the baseline model. We focus on the case where funding from both elites is necessary as this is the circumstance when elite fragmentation could most strongly alter equilibrium outcomes.

[27] We do not consider the case in which $\eta_i = \eta_i'$, as then the strategic calculus of the baseline model is essentially unchanged.

Constraints for landed elites. For a landed elite actor in this extension, the willingness constraint is now

$$\overline{p}_H(\psi) \cdot \eta_i' \cdot \alpha \geq \overline{p}_L(\psi) \cdot \eta_i \cdot (1 - \theta_R),$$

which is equivalent to

$$\frac{\overline{p}_H(\psi)}{\overline{p}_L(\psi)} \geq \frac{\eta_i}{\eta_i'} \cdot \frac{1 - \theta_R}{\alpha}.$$

For group 1, which receives a distributional benefit from participating in parliament ($\eta_1' > \eta_1$), this condition holds for all ψ for the same reasons as in the baseline game. However, for group 2, the condition fails when the outsider's expected strength is weak if its loss from participating in parliament is sufficiently large ($\eta_2'/\eta_2 < (1 - \theta_R)/\alpha$). In this case, unlike for landed elites in the baseline model, elite willingness depends on the external threat being sufficiently large.

The credibility constraint for a landed elite is now

$$\overline{p}_L(\psi) \cdot \eta_i \cdot (1 - \theta_R) \geq \tilde{p}_H(\psi) \cdot \eta_i \cdot \alpha.$$

As η_i cancels out, this is equivalent to Equation A.5, meaning the elite credibility constraint is exactly the same for landed elites as in the baseline model.

Constraints for merchant elites. We assume that the political process determining the elite groups' respective shares in the absence of parliament occurs prior to the choice of whether to flee. Consequently, if a merchant elite flees, it takes a fraction η_i of the elites' initial wealth, $1 - \theta_R$, less the $1 - \sigma$ deadweight loss due to fleeing.[28] The willingness constraint for a merchant elite is now

$$\overline{p}_H(\psi) \cdot \eta_i' \cdot \alpha \geq \sigma \cdot \eta_i \cdot (1 - \theta_R).$$

This constraint is looser than in the baseline model for group 1, which is liable to be exploited in the absence of parliament, but it is tighter for group 2, which faces a distributional loss from parliamentary institutions. The relationship with the external threat—that merchant elite willingness is harder to sustain when ψ is high—remains the same, however.

The credibility constraint for a merchant elite is now

$$\sigma \cdot \eta_i \cdot (1 - \theta_R) \geq \tilde{p}_H(\psi) \cdot \eta_i \cdot \alpha.$$

Once again, η_i cancels out, and we have the same credibility constraint as in the baseline model.

Results. Combining the constraints for each type of elite group, the following table summarizes how the existence of a parliamentary equilibrium differs from the baseline model when the elite is fragmented. Remember that E_1 is the actor that receives a distributional benefit from parliament, and E_2 is the actor that suffers a distributional loss.

[28] Our conclusions about the relationship between external threats and parliamentary formation with a fragmented elite are identical if we instead assume that a merchant elite keeps η_i' after fleeing, or if its share from fleeing is independent of η_i and η_i'.

E_1	E_2	Differences
Landed	Landed	• Large enough ψ now required for E_2 willingness if $\eta_2'/\eta_2 < (1-\theta_R)/\alpha$
Landed	Merchant	• Tighter willingness for E_2
Merchant	Landed	• Looser willingness for E_1 • Large enough ψ now required for E_2 willingness if $\eta_2'/\eta_2 < (1-\theta_R)/\alpha$
Merchant	Merchant	• Looser willingness for E_1 • Tighter willingness for E_2

B.4 Parliament without Fiscal Supremacy

In this extension, we assume parliament is able to enforce constraints on a leader who has delegated with probability $q \in [0,1]$. The parameter q represents the strength of parliamentary constraints, with the limiting case $q = 1$ corresponding to our baseline model. The ruler's expected utility from delegating to parliament and receiving funds is now

$$\begin{aligned}
&\mathbb{E}\left[U_R(R \text{ delegates, } E \text{ funds})\right] \\
&\quad = \int \left[q p_H(\theta_X)\alpha + (1-q)\max\{p_H(\theta_X)\alpha, p_L(\theta_X)\}\right] dF(\theta_X;\psi) \\
&\quad = \begin{cases} q[\overline{p}_H(\psi)\cdot\alpha] + (1-q)\bar{p}_L(\psi) & \psi \le \hat{\theta}_X - \epsilon, \\ q[\overline{p}_H(\psi)\cdot\alpha] + (1-q)\left[\displaystyle\int_{\psi-\epsilon}^{\hat{\theta}_X} \frac{p_L(\theta_X)}{2\epsilon}\, d\theta_X + \int_{\hat{\theta}_X}^{\psi+\epsilon} \frac{p_H(\theta_X)\cdot\alpha}{2\epsilon}\, d\theta_X\right] & \hat{\theta}_X - \epsilon < \psi < \hat{\theta}_X + \epsilon, \\ \overline{p}_H(\psi)\cdot\alpha & \psi \ge \hat{\theta}_X + \epsilon. \end{cases}
\end{aligned} \tag{B.2}$$

The elite's utility from this outcome is now

$$\mathbb{E}\left[U_E(R \text{ delegates, } E \text{ funds})\right] = \left[q\overline{p}_H(\psi) + (1-q)\tilde{p}_H(\psi)\right]\cdot\alpha. \tag{B.3}$$

Expected utilities for all other outcomes are the same as in the baseline model.

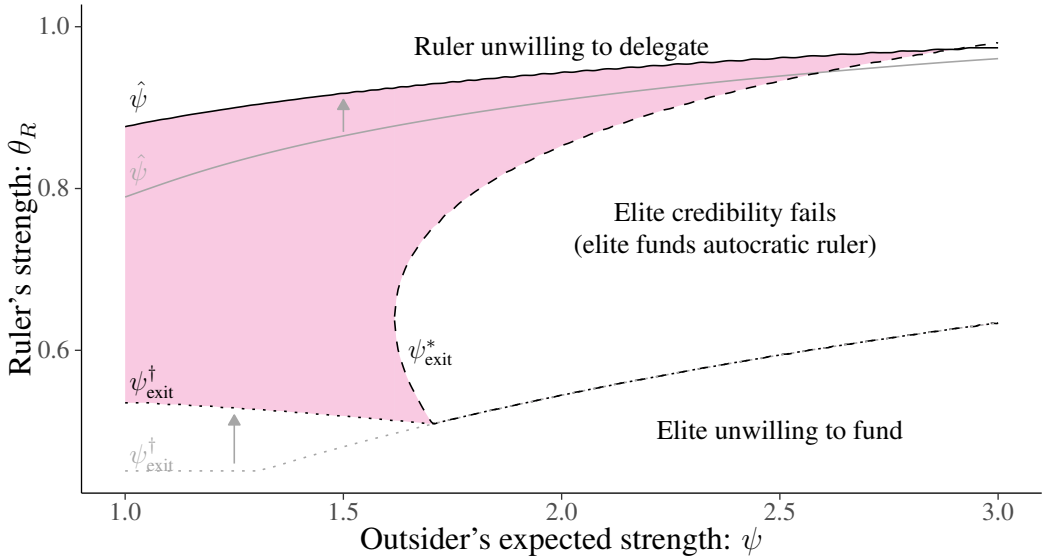
The ruler's expected utility from delegating and being funded enters on the left-hand side of the ruler willingness constraint, Equation 5. Per Equation B.2, this utility is strictly decreasing in q if $\psi < \hat{\theta}_X + \epsilon$, and otherwise is constant in q. Therefore, as parliament's fiscal supremacy declines, the ruler willingness constraint becomes looser if ψ is small enough, and otherwise is unaffected.

The elite's expected utility from funding a constrained ruler enters on the left-hand side of the elite willingness constraint, Equation 7. Per Equation B.3, this utility is strictly increasing in q if $\psi < \hat{\theta}_X + \epsilon$, and otherwise is constant in q. Therefore, as parliament's fiscal supremacy declines, the elite willingness constraint becomes tighter if ψ is small enough, and otherwise is unaffected.

Incomplete fiscal supremacy does not uniformly enable or hinder the possibility of delegation to parliament in equilibrium, as illustrated in Figure B.2. If the ruler would be just barely unwilling to

accept constraints under full supremacy, and the war threat were expected to be weak or moderate, then a weakening of parliamentary constraints tends to promote the occurrence of delegation. We see this in the upper-left and -middle of the figure, where a decrease in the constraining power of parliament makes a ruler with a high initial endowment more willing to delegate. On the other hand, if the elite would be just barely willing to fund a ruler who had delegated in the case of full supremacy, then looser parliamentary constraints might break the possibility of an equilibrium with delegation. This is what happens in the lower-left of the figure, when the temptation for the ruler to expropriate is greatest, and thus the elite's demand for true constraints on ruler behavior is highest.

Figure B.2: Parliamentary equilibrium with partial fiscal supremacy



Note: $q = 0.5$. *Outside option is exit. Other parameters same as Figure 9.*

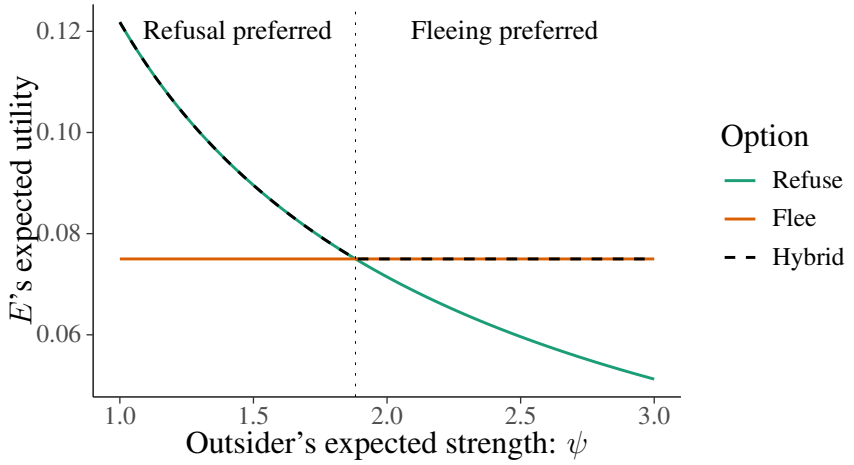
B.5 Dual Outside Options for Merchant Elite

In practice, the elite may not be restricted to a single outside option in case they elect not to fund the ruler. Consider a merchant elite that faces a moderate cost of exiting the country. If the external threat is insignificant, such merchants might prefer to stay put and run a small risk of losing their wealth to the outsider, rather than incurring the costs of exiting. Conversely, a landed elite might prefer to liquidate whatever assets they can, even at a high cost, if the alternative is near-certain expropriation by the external threat. To allow for these possibilities, we now briefly consider an elite that can choose to refuse *or* exit.

In this case, the elite effectively has two outside options. If the elite chooses not to fund the ruler, then it will exercise whichever outside option yields a greater expected utility:

$$\mathbb{E}\left[U_E(\text{outside option})\right] = \max\left\{\underbrace{\overline{p}_L(\psi)\cdot(1-\theta_R)}_{\text{refuse}}, \underbrace{\sigma\cdot(1-\theta_R)}_{\text{exit}}\right\}.$$

Figure B.3: Elite's choice and value with hybrid outside option



Note: $\sigma = 0.3, \theta_R = 0.75$. *Other parameters same as Figure 4.*

The value of the refusal option declines with the outsider's expected strength, ψ, while the value of exiting is constant. Therefore, as illustrated in Figure B.3, the elite's preferred outside option is to refuse if the outsider is weak; its preference is to exit if the outsider is strong.

When the outsider is relatively weak, so ψ is low, then the elite willingness and credibility constraints from the refusal case will apply. Willingness holds trivially, while credibility holds for small enough ψ (Lemma 2). Once the outsider is strong enough that the elite would rather exit than remain and refuse, the constraints from the exit case apply. In particular, elite willingness will fail for large enough ψ (Lemma 3).

Altogether, allowing the elite to choose either outside option does not alter the main substantive conclusions of our analysis. At most, delegation to parliament is sustainable as an equilibrium only for a bounded set of values of ψ. There cannot exist a parliamentary equilibrium when the war threat is very strong, as then the elite would rather exit than fund even a ruler who has submitted to parliamentary oversight. On the other hand, when the war threat is weak, the main threat to the existence of a parliamentary equilibrium is the ruler's willingness to accept parliamentary constraints.

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C SUPPLEMENTARY EMPIRICAL INFORMATION

C.1 ELITE CREDIBILITY: EXAMPLE FROM JAMAICA

Moving beyond European countries proper, England's overseas colony of Jamaica provides an informative example for how defensive war threats can undermine parliament. Rather than highlighting the offensive/defensive distinction, the main threat perceived by elites was always defensive and grew in magnitude over time, eventually causing a parliamentary reversal. England conquered Jamaica in the 1650s, and by 1660 its population was predominantly English (E). The white settlers refused to consent to taxation without representation, and the Crown (R) acquiesced to colonists' representation in the local Jamaican Assembly. Soon after, Jamaica became a major sugar producer, which it achieved in part through large-scale enslaved African labor (X). Over time, white elites came to perceive this as a grave "outsider" threat despite its domestic nature. Thus, ψ was low in the 1660s when the Jamaican parliament emerged, and grew over time. Contrary to the conventional cooperative logic, the stronger threat eventually caused white settlers to voluntarily *disband* their legislature. This is instead consistent with our mechanism for when the elite credibility threat fails. The triggering event was a small rebellion at Morant Bay in 1865 led by freedmen, which whites brutally suppressed. There is considerable evidence that they feared another rebellion in the future. Emblematic of the elites' views, in the vote to disband parliament and become a directly ruled British Crown Colony, Jamaica's governor "declared that only a strong-minded government could preserve the island from further violence" (Green 1976, 395).

C.2 ELITE WILLINGNESS: EXAMPLES FROM PRECOLONIAL AFRICA

Beyond the example of the Hanseatic League discussed in the text, precolonial Africa provides even more extreme examples of exit and state dissolution in high-threat environments. Kopytoff (1987) characterizes Africa as a "frontier continent" because of low population density and the tendency for segmentary groups to split and migrate to new territories. "The combination of large amounts of open land and rain-fed agriculture meant that, in precolonial Africa, control of territory was often not contested because it was easier to escape from rulers than to fight them ... They could move and farm on other pieces of land relatively easily because it was not necessary to sink significant investments into the land" (Herbst 2000, 39). In these conditions, large external invasion threats usually led to migration and state-breakup rather than anything resembling the conventional logic connecting wars and parliaments. For example, consider Ballard's (1965, 233-4) description of the region that later became French Equatorial Africa:

> "In the forests of Gabon and Middle Congo and the savannas of Oubangui-Chari and southern Chad, were small tribal groups whose traditional social organization had in many cases been upset by migrations and invasions coincident with the spread of the coastal slave trade and Muslim slave-raiding in the north."

In this case, Muslim slave raiders are X, leaders of the small tribal groups are R, and those migrating are E. Of course, the lack of a viable exit option would lead to worse outcomes for those targeted in slave raids, but the ability to flee the external threat rather than having to band together against it undermined state formation. This provides an unconventional perspective from which to

assess the role of asset mobility and exit in successful cases of European parliamentary development such as England and the Netherlands. Although their parameters may have laid within the intermediate region, an even stronger exit option could have undermined state development and parliament.

These conditions are not unique to Africa. Scott (2010, 22-6) provides numerous historical examples of peoples that routinely fled in response to encroaching states: those in the Zomia region of Southeast Asia (the focus of his book), as well as peoples at the frontier of the Chinese state; natives in response to Spanish colonialism in the New World and the Philippines; Cossacks in Russia; and settlements of escaped slaves in Jamaica, Suriname, and Brazil.

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