A Theory of External Wars and European Parliaments

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Abstract

The development of parliamentary constraints on the executive was critical in Western European political history. Previous scholarship identifies external wars as a key factor, but with varying effects. Sometimes, willing monarchs granted parliamentary rights in return for revenues to fight wars. Yet at other times, war threats empowered rulers over other elites or caused states to fragment. We analyze a formal model to understand how external wars can either stimulate or undermine prospects for a contractual relationship between a ruler and elite actors. We recover the standard intuition that war threats make the ruler more willing to grant parliamentary rights in return for revenue. Our key insight is that war threats also affect the bargaining position of elites. A previously unrecognized tension yields our new findings: stronger outsider threats increase pressure either on elites to fund the ruler or on the ruler to accept constraints—but not both simultaneously. Elites with immobile wealth depend on the ruler for security. War threats undercut their credibility to refuse funding for an unconstrained ruler. By contrast, war threats make elites with mobile wealth and a viable exit option unwilling to fund a hopeless war effort. Only under circumscribed conditions do war threats align three conditions needed for parliament to arise in equilibrium: ruler willingness, elite credibility, and elite willingness. We apply our theory to posit strategic foundations for waves and reversals of historical European parliaments.

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The development of parliamentary constraints on the executive was critical in Western European political history. External war is the most widely discussed stimulant for the development of states and political institutions (Tilly 1992; Kaspersen and Strandsbjerg 2017). Yet the consequences of war varied for parliamentary institutions. The most common argument in the literature is that *war stimulated parliamentary development*, which finds support in the late medieval period. Weak monarchs throughout Western Europe negotiated with elites to gain funds to fight external wars. The standard bargain was that parliaments would gain rights over levying specific extraordinary taxes, in return for granting the resultant revenues to the Crown (Bates and Lien 1985; Levi 1988; Stasavage 2011; Ferejohn and Rosenbluth 2016; Cox, Dincecco and Onorato 2020). However, centuries later, most European parliaments lost their powers. Scholars again highlight the importance of external wars during the Age of Absolutism, *but posit the opposite e ect*. Wars stimulated a demand for professional standing armies, which provided a means for rulers to coerce elites for revenues (Finer 1975; Downing 1993; Van Zanden, Buringh and Bosker 2012; Cox, Dincecco and Onorato 2021).

These contrasting empirical experiences raise foundational questions about wars and parliaments. Theoretically, what are the mechanisms by which external wars influence the adoption of political constraints? Empirically, why did external wars vary in their effects on parliamentary delegation in Western Europe? In this article, we develop a general theoretical framework to examine the war-parliament nexus. Our formal model explains the conditions under which war can either promote or undermine parliamentary development. The empirical implications of the theory provide strategic foundations for waves and reversals of historical European parliaments.

We analyze a strategic interaction between a ruler and a domestic elite actor. They jointly face the prospect of invasion. They can reduce this external threat with a well-funded war effort, which entails the elite contributing taxes that the ruler spends on security. However, the ruler cannot fully commit to use elite-contributed revenues for boosting security, as opposed to expropriating the funds as private rents. The ruler can submit to parliamentary constraints that partially tie her hands against exploiting elites, but this choice creates a tradeoff. The ruler benefits from tying her hands if doing so induces elites to contribute taxes. However, sharing power not only limits the

ruler's discretion to spend tax monies for purposes besides security, but also bolsters the bargaining position of the elite relative to the ruler. These constraining effects may dissuade the ruler from sharing power. Given this tradeoff, we examine the equilibrium conditions under which a ruler delegates authority to parliament. We focus primarily on how the strength of the external threat affects this calculus.

We first recover a conventional implication: stronger external pressure makes the ruler more willing to delegate privileges to parliament. A well-funded war effort is always more likely to succeed than a poorly-funded one, but a stronger external threat widens the gap in the corresponding probabilities of surviving. Thus, when facing a strong external threat, the greater value-added of gaining war funding makes the ruler more tolerant of the sacrifices needed to induce a tax contribution from the elite actor. Thus, if we hold all else fixed, war threats stimulate parliament by enhancing the *ruler's willingness* to delegate privileges.

The problem for the conventional logic, though, is that we cannot hold all else fixed. War threats affect not only the ruler's demand for revenue, but also the *bargaining position of the elite actor*. Incorporating this consideration into the model yields a previously unrecognized tension. Stronger outsider threats increase pressure either on elites to fund the ruler *or* on the ruler to introduce constraints—but not both simultaneously. This insight helps to understand various ways in which external wars can undermine parliament.

In one scenario, war threats can undermine parliamentary development by increasing the bargaining leverage of the ruler vis-á-vis elites. For elites whose wealth is concentrated in immobile assets (e.g., landed nobles), a stronger war threat makes them more dependent on security provided by the ruler. For such elites, the outside option is to refuse funding. However, this outside option is toothless in the face of a strong invasion threat that imperils their immobile assets. They are compelled to provide funding regardless of whether the ruler delegates parliamentary powers. Thus, war threats can undercut the *credibility* of elite demands for parliamentary privileges in return for war funding. Facing a strong threat, the ruler may bypass fiscal constraints, knowing the elite's best option is to pay taxes anyway.

In another scenario, war threats undermine parliamentary development by creating the opposite tension: increasing the bargaining leverage of elites via-á-vis the ruler. Elites whose wealth is concentrated in mobile assets (e.g., merchants) have an outside option to exit, that is, hide or move their assets in response to an invasion threat. A strong war threat boosts their leverage to demand parliament, but potentially by too much. Elites with mobile wealth prefer to exit rather than fund a hopeless war effort. Thus, external war can undercut the *willingness* of elites to fund the ruler even when they gain parliamentary privileges.

After analyzing this baseline, we extend the model in two ways. First, we allow the ruler the possibility of using a standing military to coerce elites for revenue, rather than negotiate. Second, we allow for wars to be offensive (seizing wealth from another country) rather than defending the homeland. These components do not fundamentally alter the core logic, but do shift the parameter values in which the ruler delegates to parliament. The coercion option provides the ruler with an alternative if elites are unwilling to fund, and offensive wars enhance the credibility of elites to refuse funding if not granted parliamentary privileges.

Overall, three conditions are needed for the ruler to delegate to parliament in equilibrium: ruler willingness, elite credibility, and elite willingness. Stronger external war threats make the ruler more willing to delegate to parliament in return for war funding. However, too strong an invasion threat breaks at least one of the elites' incentive conditions. A strong threat either reduces the credibility of the demand for parliamentary powers in return for funding (if elite wealth is immobile), or diminishes the willingness of elites to fund a constrained ruler rather than exit (if elite wealth is mobile). Why? There is a tension between the elite's credibility to reject funds for an absolutist ruler and the elite's willingness to fund a ruler who has delegated to parliament. When stronger outside threats promote one of these conditions, it tends to come at the expense of the other. Given these countervailing effects, delegation to parliament is difficult to sustain if the outside threat is very weak or very strong. Even between these extremes, the effects of a marginal increase in external war threats on parliamentary delegation is ambiguous. The relationship depends on additional parameters such as the credibility of parliamentary constraints, the cost of effective war

efforts, and geostrategic position (which affects the offensive vs. defensive nature of warfare).

We apply the mechanisms of the model to offer strategic foundations for waves and reversals in European parliamentary history. The first wave occurred between the thirteenth and sixteenth centuries when most major states developed parliaments with veto power over extraordinary taxes. Elite willingness to supply war funding was often relatively high for two reasons. First, wars were relatively inexpensive, which lowered the amount that monarchs asked from elites. Second, impoverished rulers lacked viable alternative options to gain funds if not from parliament, which made parliamentary constraints more credible. Even though most parliaments lacked formal control over expenditures, rulers who misappropriated tax funds jeopardized their access to future parliamentary revenues. The model also helps to account for aberrant cases during this period. In France, elite credibility failed because landed elites faced a strong defensive threat. In parts of contemporary Germany, elite willingness failed. Merchants in city-states could use their mobile wealth to exit the control of territorial princes, who provided weak protection against the main external threat they cared about: expropriation along long trade routes. This led to the creation of trading leagues, most notably the Hanseatic League.

Between the sixteenth century and the French Revolution, Western Europe experienced a wave of parliamentary reversals. We focus on how the Military Revolution made elite willingness harder to hold in many European countries. First, wars became more expensive, which increased the amount that rulers demanded from parliament. Second, the leading states began to adopt professional standing armies, which replaced feudal levies supplemented with mercenaries. These standing armies could be used for domestic coercion, which expanded the range of ways in which a ruler could renege on their promises to parliament. These inauspicious conditions engendered gridlock and, subsequently, the disbandment of parliament in cases like Brandenburg-Prussia. However, England avoided a similar fate in part because of a more favorable geostrategic position that reduced the threat of defensive wars.

Overall, we adopt Levi's (1988, 10) core premise that rulers "maximize [state revenue] subject to the constraints of their relative bargaining power via-à-vis agents and constituents" (see also Bates

and Lien 1985 and, more recently, De Magalhaes and Giovannoni 2019.). Our core innovation is to consider how war threats affect the ruler's bargaining power. By distinguishing between different types of elite wealth, we draw from Tilly's (1992) analysis of capital-intensive (mobile wealth) and coercion-intensive (immobile wealth) paths of European state formation. For each, however, we uncover a distinct logic for how external wars can undermine parliaments. This contrasts with Tilly's overarching thesis that wars promoted militarization and centralization, which in turn produced societal bargaining and constitutional rule (see pgs. 99–103, 122–26). A central bargaining friction we highlight in the model, which war does not resolve, is that even after delegating some powers to parliament, historical European rulers still had problems committing to promised patterns of expenditures and divisions of spoils. In larger territorial states, long traveling distances impeded frequent meetings of parliaments (Stasavage 2011). This explains why states with limited government and credible budget procedures tended not to arise until the nineteenth century in Europe (Dincecco 2011; Cox 2016), which we discuss in Appendix C. Yet we also discuss variation over time before the nineteenth century by analyzing how changes during the Military Revolution weakened the de facto credibility of parliamentary constraints. Finally, we contribute to the small body of recent research that explores why the relationship between external wars and parliaments varied throughout European history. Abramson and Boix (2019) demonstrate that proximity to wars resulted in more frequent parliamentary meetings—unless the state lost sovereignty. The latter event occurred more frequently amid the Military Revolution, and hence can account for changes over time. Similarly, Cox, Dincecco and Onorato (2020, 2021) analyze the need for cooperation during the medieval period and the perils of gridlock later on.

1 Key Concepts and Tradeoffs

We model a strategic interaction between two players, a ruler and a distinct elite actor. In principle, the ruler could be first among equal elites, although we primarily have in mind cases with an established monarch and ruling dynasty distinct from the class of nobles, merchants, and other

societal elites.[1] These two actors bargain for control of the society's wealth. This wealth is threatened by an external actor—a threat that can be mitigated if the ruler and elite come to an agreement on funding the government and spending the funds on security. Prospects for striking a deal depend on the institutional environment. The ruler can grant parliamentary representation to the elite actor, which (imperfectly) ties the ruler's hands against reneging on a promised division of spoils. The series of moves is: (1) The ruler chooses institutional constraints, thus ruling absolutely or delegating to parliament. (2) The ruler makes a tax demand; the elite actor can accept it or else exercise an outside option. (3) The ruler potentially has a chance to renege on an offer that the elite accepted. (4) Nature determines whether the external threat succeeds.

We assume the elite actor has one of two possible options, depending on the nature of its wealth. First, the elite can *refuse* to fund the ruler. Refusal protects the elite's wealth from government appropriation. However, by not moving or hiding its wealth, it is still at risk from the outsider. An elite with immobile wealth—such as land, which cannot be moved, easily liquidated, or hidden—would have refusal as its outside option.

The second possible outside option is to *exit*. By exiting, the elite keeps its wealth safe from both the ruler and the external threat, but at a cost: it only keeps a fraction of its wealth. This option corresponds to an elite with mobile wealth, such as merchants. We conceptualize the exit option broadly. It can entail moving or hiding capital internally, or leaving the country altogether. 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). Tilly (1975) highlights that effective taxes on movables required high levels of monetization and surveillance. These features provided ample opportunities for exit given the paucity of bureaucratic capacity in historical European states (Stasavage 2020). Dincecco and Onorato (2018) discuss how cities

[1]This assumption also aligns with Gorski and Sharma's (2017) discussion of how premodern states in Western Europe were family states more than they were modern sovereign states. At the end of the model analysis, we explain how our model can encompass the case in which the ruler is first among equals. In this sense, our work complements Boix (2015), who models interactions under anarchy as well as conditions under which a single monarch arises (as opposed to elites organizing a republic).

were easier to defend than areas of open land 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. A variant of "hiding" wealth was for towns to band together by exiting the royal domain and forming mutual-protection organizations beyond princely rule, such as trading leagues. In other cases, merchants could physically move and establish trade relations with a more cooperative ruler.

The elite's outside option influences the topline choice: does the ruler delegate powers to parliament? The ruler faces a dilemma because parliamentary delegation *enhances the bargaining position of domestic elites*. Institutions matter; it is very difficult for elites to hold a ruler accountable to promises absent any de jure power and a forum that facilitates communication and coordination against transgressions (Myerson 2008; Boix and Svolik 2013). Yet institutions require mechanisms of self-enforcement to be viable (Meng 2020; Paine 2021). Promises by a monarch to elites are not credible by fiat, but instead because the ruler takes concrete actions to limit her discretion by shifting the balance of domestic power toward elites.

Formally, two parameters in the model change if the ruler delegates privileges to parliament. First, with probability $\overline{q} > 0$, parliament ties the ruler's hands against reneging on the deal with the elite actor. By contrast, this probability is $\underline{q} = 0$ if the ruler rules absolutely.[2] The monarch benefits from tying her hands by increasing the elite's incentive to provide funding. Naturally, the elite is more willing to fund if the ruler is less likely to be able to renege. Second, upon delegating, the elite's share of domestic wealth increases from a lower amount $\underline{\omega}$ to a higher level $\overline{\omega}$—which concomitantly reduces the ruler's share. This creates a direct cost for the ruler from delegating powers to parliament. An additional, indirect, cost arises from the first effect: conditional on receiving funding from the elite, higher q hinders the ruler by preventing her from reneging.

A historically common parliamentary privilege was veto rights over extraordinary taxes. Some

[2]Assuming $\underline{q} = 0$ is for expositional ease; all the results are identical, subject to some corner solutions, for any $\underline{q} < \overline{q}$. A positive value of $\underline{q}$ would arise in cases in which elites can communicate and exercise sanctions outside of a centralized institution without enduring prohibitively high transaction costs, such as merchants concentrated in particular towns or lending families communicating with each other to deny funds to a sovereign in default (Drelichman and Voth 2014).

share of domestic wealth was unambiguously in the royal domain ($\underline{\omega}$), and societal elites unambiguously controlled other sources of wealth ($1 - \overline{\omega}$). However, monarchs and elites disputed other sources of wealth, such as manorial control following a death, proceeds from taxation of peasants, and administrative control over certain taxes. Designating these sources of wealth as extraordinary taxes and granting veto rights to parliament over such taxes enabled elites to control these disputed shares of wealth. This worsened the ruler's reservation value to not reaching a deal, hence lowering ω. And with restricted access to resources, the ruler faced more limited opportunities to act arbitrarily without facing repercussions.[3] Regular parliamentary meetings also bolstered the bargaining position of elites by enabling them to act collectively in a centralized body (Stasavage 2020, 210; Boucoyannis 2021). These factors raise q.[4]

For example, in 1653 in Brandenburg-Prussia, Elector Frederick William struck a deal with the Brandenburg Estates that yielded the following economic privileges for large landowners:

> "Eliminating the legal restrictions which had bound the Junkers in the past, [Frederick William] recognized them as the only class authorized to acquire estates and confirmed and stabilized privileges they had extorted from his predecessors, like exemption from taxation and the right to control the lives of their peasants. Finally, he specifically recognized their authority in local affairs and their right to be regarded as the governing class in all matters that concerned the state as a whole" (Craig 1964, 4).

In Spain in the early seventeenth century, the Castilian Cortes granted the monarch revenues from a direct tax, the *millones*. The cortes and councils from its constituent cities administered the tax themselves. This arrangement enabled these elites to profit from the corrupt collection of a tax which they did not themselves pay (Gelabert 1999, 216–22), and also limited the discretion of the Crown:

> "[Elites] insisted on retaining administrative control of the new taxes they conceded; they attempted to impose budgets to ensure that public monies were spent in the public

[3]To microfound this claim, imagine that the ruler and elite interact over multiple periods and that if the ruler expropriates funds granted by the elite actor in one period, then the elite refuses funding in the future. The costliness of this punishment depends on the ruler's alternative sources of revenue. If the ruler relinquishes a direct claim to a chunk of domestic wealth (that is, unless she consults parliament), then she is less likely to find alternative sources of funding in the future. Thus, reneging is more costly, as reflected in our parameter $\overline{q}$.

[4]When the ruler does not delegate, we interpret the tax demand as an ad hoc levy. The elite's ability to refuse funding arises entirely from their de facto sources of wealth, rather than any de jure rights within a parliamentary body.

> good, and they demanded other conditions in the form of legislation and restrictions on the use of the royal prerogative, as their price for approving new subsidies. In effect, they began to distinguish between public revenues and the king's private funds and to exercise, if only in a limited and tentative fashion, the power of the purse" (Jago 1981, 310).

Yet parliamentary veto powers over extraordinary taxes do not eliminate all ways for the ruler to expropriate funds granted by parliament. The ruler retains some means to raise revenues independent of parliament, including ordinary taxes, external rents, debasing the currency, or issuing new debt. The ruler also retains legal leeway to spend the money differently than promised. Overall, in the case of parliamentary veto powers over extraordinary taxes, $\overline{q}$ is positive but less than 1.

A stronger privilege is a parliamentary monopoly over revenue-raising and expenditures. In this case, $\overline{q} \approx 1$, as the ruler never has an opportunity to allocate revenues in ways not sanctioned by parliament. Credible budget procedures create a favorable reversion option for parliament if the ruler fails to reach a deal (i.e., high $\overline{\omega}$) and cut off ways to end-around parliament (Cox 2016). England following the Glorious Revolution is an early case, and other major European states adopted these reforms in the nineteenth century (Dincecco 2011; Cox and Dincecco 2021); see also Appendix C.2.

After the model analysis, we discuss how $\overline{q}$ varied over time even before the rise of parliamentary powers over expenditures. In the medieval era, $\overline{q}$ was relatively high because rulers lacked non-parliamentary sources for gaining funding. Later, the Military Revolution eroded the underlying credibility of parliamentary promises because access to a standing professional army provided rulers with alternative means to renege on deals. Overall, the value of $\overline{q}$ in a particular case reflects not only de jure parliamentary prerogatives, but also broader factors that influence the de facto credibility of constraints on the executive.[5]

[5]In the model, we treat the ruler's choice of parliamentary constraints as binary. This makes the analysis more tractable and enables us to express the credibility of parliamentary constraints with a single parameter, $\overline{q}$. This simplification also has some empirical verisimilitude. Historically, there have been limitations on the range of privileges that parliaments could feasibly control, hence lowering $\overline{q}$. See Appendix C.2 for a longer discussion. In a companion paper, we show that the theoretical insights are similar when allowing the ruler to choose among a continuous range of institutional constraints and tax demands.

2 Model Setup

1. Ruler's choice of parliamentary delegation. The ruler moves first and chooses whether to delegate privileges to parliament, $\omega \in \{\underline{\omega}, \overline{\omega}\}$, where $0 < \underline{\omega} < \overline{\omega} < 1$. Choosing $\omega = \underline{\omega}$ constitutes absolutist rule, whereas $\omega = \overline{\omega}$ denotes delegation to parliament. This choice determines the baseline division of domestic wealth, which is normalized to 1. The elite controls ω and the ruler controls the remaining $1 - \omega$. When describing the equilibrium results, we say the state is "limited" when the ruler chooses $\omega = \overline{\omega}$ along the path of play.

2. Elite taxation. The ruler demands taxes $\tau > 0$ from the elite in order to fund a military improvement. The value of τ is exogenously fixed, reflecting the cost of making a discrete improvement in the state's security (e.g., adopting new naval technology, or building a standing army).

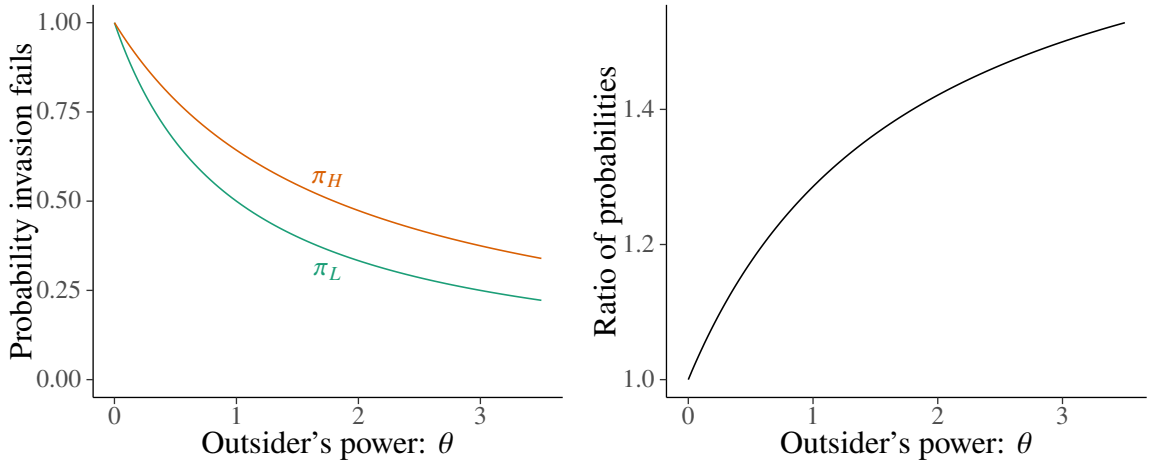
The elite may either accept or reject the demand. If the elite accepts, then the tax is transferred to the ruler, and the game moves to step 3. If the elite rejects, then we say the elite has exercised its *outside option*. Depending on the nature of the elite's wealth (immobile or mobile), this option is either to refuse or to exit, as described above.

3. Ruler's opportunity to renege. If the elite accepted the tax demand in the last step, Nature makes a move determining whether the ruler is bound to spend the tax money on security. With probability $q(\omega) \in [0, 1]$, the ruler's hands are tied, and she has no option to expropriate the taxes for her own consumption. We assume an absolutist ruler has no commitment power: $q(\underline{\omega}) = 0$. A ruler who delegates has less freedom of action, and with positive probability will have no option but to spend tax monies on security: $q(\overline{\omega}) = \overline{q} > 0$.

If the ruler is not bound *ex post*, then she chooses between using the taxes for security or reneging on the deal with the elite. If she reneges, using taxes for expropriation rather than security, then the proceeds τ are added to her wealth, and the state's protection against outside threats remains low (see step 4). An elite with mobile wealth is assumed to exercise its outside option in this case,

Figure 1: A stronger external threat makes internal cooperation more important.

(a) Probability of successful resistance. (b) Ratio of probabilities: π_H/π_L.



Parameters: $\Delta = 0.8$.

obtaining a share σ of its post-tax wealth, $\omega - \tau$.[6] If instead the ruler abides by the deal, then the taxes are spent to improve the state's military capacity (see step 4).

4. External threat. At the end of the game, regardless of whether the elite paid taxes or exercised its outside option, an external war threat determines each player's final consumption. Let $\theta \geq 0$ denote the external threat's strength. This is the critical parameter in our analysis.

If the elite did not pay taxes, then the probability of surviving the external threat is relatively low: $\pi_L(\theta) = \frac{1}{1+\theta}$.[7] We assume that the probability of survival remains at π_L if the elite paid taxes but the ruler reneged on the promise to provide security.[8] The provision of security raises the state's effective power by $\Delta > 0$, resulting in a higher probability of survival: $\pi_H(\theta) = \frac{1+\Delta}{1+\Delta+\theta}$. Accordingly, when describing the equilibrium results, we say the state is "strong" when the security boost is provided along the path of play. To ensure that the ruler is willing to provide security

[6]The main substantive results of the analysis would not change if we instead assumed an elite with mobile wealth remained in the country upon paying taxes that the ruler expropriated.

[7]A scope condition for our analysis is that the ruler cannot or will not pay for the security improvement from her own funds. This could be due to restrictions on the use of the ruler's other funds, or simply because they are insufficient ($1 - \underline{\omega} < \tau$). If the ruler would fund the security improvement on her own, then the interaction is trivial: the elite would not pay taxes, and hence the ruler would not accept *ex ante* constraints on her authority.

[8]In an extension, we consider an alternative form of the renege option: coercing the elites for more revenue, while not diminishing the security boost.

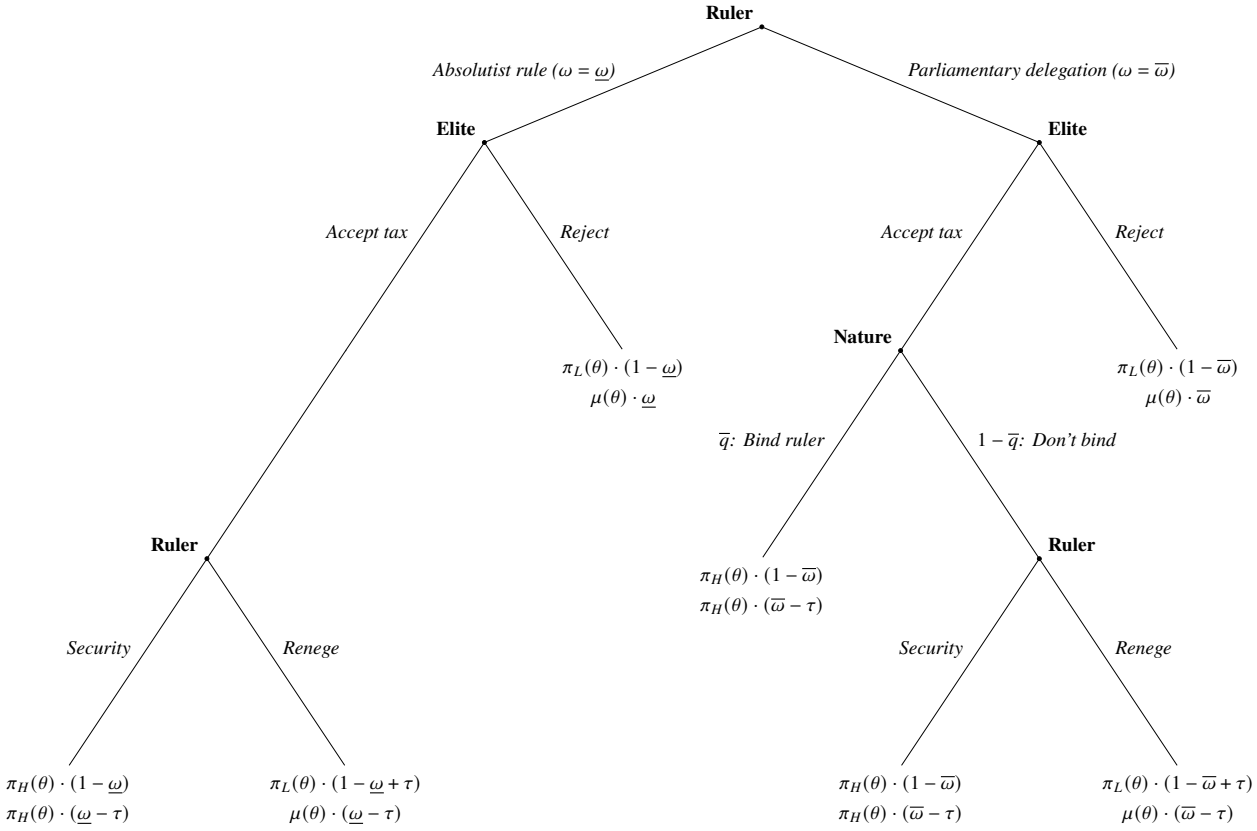
voluntarily if the external threat is strong enough, we assume that the military benefit is sufficiently high relative to the costs: $\Delta > \frac{\tau}{1-\overline{\omega}}$.

Consumption. Suppose no external takeover occurs. If the elite has not exited the ruler's domain, then its consumption is ω, less τ if it paid taxes. If the elite has exited, it receives $\sigma \cdot \omega$ if it did not pay taxes, or $\sigma \cdot (\omega - \tau)$ if it did. If the elite paid taxes and the ruler reneged, then the ruler's consumption is $1 - \omega + \tau$. Otherwise, the ruler's consumption is $1 - \omega$.

If instead an outside takeover occurs, then the ruler receives 0. The elite also receives 0 except if it exited—either in lieu of paying taxes, or because the ruler reneged.

Figure 2 presents the game tree, and Appendix A.1 summarizes all notation in the model.

Figure 2: Game tree.



Refusal outside option: $\mu(\theta) = \pi_L(\theta)$
Exit outside option: $\mu(\theta) = \sigma$

Alternative outside options. In our main model analysis, to clarify the exposition of the key mechanisms, we focus one-by-one on a pure refusal option or a pure exit option for the elites. In supplementary analyses, we consider two alternative outside options that combine elements of each ideal type. First, in Appendix B.1, we analyze a hybrid outside option, in which some proportion of elite wealth is moved out of the country while the rest remains. Second, in Appendix B.2, we consider the possibility that the value of exiting declines as external threats become stronger, reflecting a lack of safe harbors for mobile assets.

3 Three Conditions for Parliamentary Delegation

We begin the analysis by deriving three incentive compatibility conditions that are individually necessary and jointly sufficient for the ruler to delegate to parliament in the first stage of the game: ruler willingness, elite credibility, and elite willingness. In the next section, we analyze how the strength of the external threat affects each condition.

3.1 Ruler's Willingness to Delegate

We say *ruler willingness* holds when the ruler would rather delegate to parliament and receive taxes than choose absolutist rule and have the elite exercise its outside option. To determine the ruler's preferences between these options, we must first answer a preliminary question: how would the ruler spend the taxes if given the opportunity and choice? Holding fixed the initial choice of constraints, the ruler's expected utility from spending on security is $\pi_H(\theta) \cdot (1 - \omega)$, compared to $\pi_L(\theta) \cdot (1 - \omega + \tau)$ from reneging. Therefore, the ruler prefers spending on security when the proportional increase in security against the external threat outweighs the proportional decrease in her consumption due to forgoing expropriation:

$$\frac{\pi_H(\theta)}{\pi_L(\theta)} \geq \frac{1 - \omega + \tau}{1 - \omega}. \tag{1}$$

Stronger external threats create a greater premium on maximizing security, as illustrated above in Figure 1. This raises the ruler's propensity to spend taxes on security even when institutional constraints do not bind. Additionally, because the security benefit is multiplicative, wealthier rulers (greater $1 - \omega$) have a greater incentive to spend on security, holding fixed the tax cost τ. The following result summarizes these findings.[9]

Lemma 1 (War threats promote security spending)**.** *Let the initial choice of ω be fixed. If institutional constraints do not bind, the ruler prefers to spend taxes on security if and only if $\theta \geq \hat{\theta}(\omega)$, where $0 < \hat{\theta}(\underline{\omega}) < \hat{\theta}(\overline{\omega}) < \infty$.*

Given this preliminary result, we can now analyze the ruler's willingness to consent to constraints. The expected utility of a constrained ruler who receives taxes from the elite is as follows. If the outside threat is strong enough, $\theta \geq \hat{\theta}(\overline{\omega})$, then a constrained ruler will choose to spend on security even when she has the opportunity to expropriate instead. The ruler then receives a relatively small slice of the domestic pie but has a strong chance of resistance against external invasion, for an overall expected utility of $\pi_H(\theta) \cdot (1 - \overline{\omega})$.

Conversely, if the outside threat is weak, then the ruler spends on security only when not given the opportunity to do otherwise. This occurs with probability $\overline{q}$. However, with probability $1 - \overline{q}$, the ruler reneges by forgoing military improvements and using the taxes for her own consumption, resulting in an expected utility of $\pi_L(\theta) \cdot (1 - \overline{\omega} + \tau)$.

The ruler willingness condition formalizes when the ruler would rather delegate and receive the tax demand than to forgo constraints and have her demand rejected. If she chooses absolutist rule and the elite takes its outside option, the ruler gets a relatively large share of the domestic pie with weak defense against the outsider, for an expected utility of $\pi_L(\theta) \cdot (1 - \underline{\omega})$. We construct the ruler willingness condition by comparing this to the ruler's preferred outcome after delegating and

[9] All proofs are in the Appendix.

receiving taxes:

$$\textbf{Ruler willingness condition:} \quad \begin{aligned} &\pi_L(\theta)\cdot(1-\underline{\omega}) \leq \underbrace{\pi_H(\theta)\cdot(1-\overline{\omega})}_{\text{always spend on security}} \quad \text{or} \\ &\pi_L(\theta)\cdot(1-\underline{\omega}) \leq \underbrace{\overline{q}\cdot\pi_H(\theta)\cdot(1-\overline{\omega})+(1-\overline{q})\cdot\pi_L(\theta)\cdot(1-\overline{\omega}+\tau)}_{\text{renege when possible}}. \end{aligned} \tag{2}$$

This condition compares the ruler's best-case scenario under delegation (acceptance of the tax demand) to her worst-case scenario under absolutist rule (rejection). Therefore, if ruler willingness fails, there cannot be an equilibrium in which $\omega = \overline{\omega}$.

Lemma 2. *If the ruler willingness condition does not hold, then there is no equilibrium in which the ruler delegates to parliament.*

It may appear counterintuitive that ruler willingness would ever fail to hold in the presence of an external threat. Overall domestic surplus is higher in expectation with an agreement than without because $\pi_H > \pi_L$, so a standard bargaining logic would seem to suggest that an agreement should be reached (Fearon 1995).[10] However, imposing greater constraints shifts the share of domestic wealth away from the ruler, thereby reducing the ruler's potential consumption if she delegates. If this effect is large enough, the ruler prefers a larger share of a smaller pie. This means a bargaining surplus result akin to Fearon (1995) does not apply to the ruler willingness condition. Essentially, a hold-up problem impedes successful negotiations between the ruler and elite. Greater discretion by the ruler to spend public funds however she sees fit reduces the elite's willingness to acquiesce to the tax demand. The ruler may be able to overcome this commitment problem by imposing fiscal constraints. However, these constraints shift the balance of bargaining power in favor of the elite. In effect, the *elite's* inability to commit to not exploiting its enhanced bargaining power can cause a deal to unravel.

Besides external threat strength, which we address in detail below, three additional factors shape

[10]The potential failure of ruler willingness in this model is not due to the discrete nature of bargaining here. The same result would arise in a model in which the ruler and elite negotiate over a continuous division of the cost of military improvements, as we demonstrate in a companion paper.

the ruler's willingness to accept parliamentary constraints. The first is how much of her baseline wealth she gives up by delegating to parliament, formalized as the difference $\overline{\omega} - \underline{\omega}$. If the difference is negligible, then ruler willingness is certain to hold. By contrast, if the upfront cost of delegation is very high, then the ruler will prefer absolutist rule even if her tax demand is then sure to fail.

The second factor affecting ruler willingness is $\overline{q}$, the likelihood that the institutional constraints bind her decision *ex post*. We interpret this parameter as a measure of institutional strength. Whenever the ruler would not voluntarily spend on security after delegating, lower institutional strength promotes ruler willingness, as the greater chance to expropriate raises the ruler's expected utility.

The third key influence on ruler willingness is Δ, the extent of the improvement in protection against the invasion threat when the ruler spends taxes on security. Naturally, the ruler is more willing to forego consumption when the benefits of spending those funds on security are greater. We formalize these comparative statics in Remark A.1 in the Appendix.[11]

3.2 Elite Credibility: Rejecting Demands by an Absolutist Ruler

We now analyze the elite's demand for constraints on the ruler's ability to spend tax monies. When is delegating privileges to parliament pivotal for inducing the elite to accept the ruler's tax demand? As we show below, in order for delegation to occur on the equilibrium path, it is not enough for the ruler to be willing to do so—additional conditions on the elite side must be met as well. Existing theories largely overlook these considerations about elites' demand for parliamentary constraints.

We derive the general form of the constraints before distinguishing between different types of elite outside options. Our first consideration is whether the elite can credibly threaten to sanction the ruler—that is, exercise its outside option—if the ruler opts to rule absolutely. We call this the *elite credibility condition*. By rejecting an absolutist ruler's tax demand, the elite receives expected utility $\mu(\theta) \cdot \underline{\omega}$, where $\mu(\theta) = \pi_L(\theta)$ if the elite's wealth is immobile and $\mu(\theta) = \sigma$ if it is mobile. If instead the elite accepts, then its payoff depends on whether the ruler subsequently spends the

[11] All formal results numbered with an "A" are stated in the Appendix.

taxes on security or reneges. Reneging, which the ruler chooses if $\theta < \hat{\theta}(\underline{\omega})$ (see Lemma 1), leaves the elite with $\mu(\theta) \cdot (\underline{\omega} - \tau)$. This outcome is clearly worse for the elite than the outside option. Spending on security results in a payoff of $\pi_H(\theta) \cdot (\underline{\omega} - \tau)$ for the elite; whether this is better or worse than the outside option depends on the external threat strength, the size of the tax demand, and other parameters. Elite credibility holds whenever the elite's best response is to reject a demand by an absolutist ruler.

$$\textbf{Elite credibility condition:} \qquad \theta \leq \hat{\theta}(\underline{\omega}) \quad \text{or} \quad \underline{\omega} \geq \frac{\pi_H(\theta)}{\mu(\theta)} \cdot (\underline{\omega} - \tau). \tag{3}$$

When elite credibility fails, the elite will agree to the ruler's tax demands even if she does not delegate parliamentary privileges. This is sufficient for the ruler to not empower parliament. Delegation has two direct downsides for the ruler—the loss of initial wealth (from $1 - \underline{\omega}$ to $1 - \overline{\omega}$) and the loss of autonomy conditional on receiving tax funds (probability $\overline{q}$ of being constrained to spend on security).

Lemma 3. *If the elite credibility condition does not hold, then there is no equilibrium in which the ruler delegates to parliament.*

Besides external threat strength, which we discuss below, factors shaping elite credibility include the size of the tax demand and the elite's baseline share of wealth. All else equal, a higher tax demand τ facilitates elite credibility: the elite can more easily threaten to reject the demand when the cost of accepting it is higher. Meanwhile, the elite's baseline share of wealth $\underline{\omega}$ has ambiguous effects: it may strengthen elite credibility by making the ruler less likely to provide security voluntarily, or weaken it by increasing the relative benefit of security for the elite. Remark A.2 formalizes these comparative statics.

3.3 Elite Willingness: Funding a Parliamentary Ruler

The other side of elite incentives is whether the elite prefers to accept the tax demand of a constrained ruler. We call this the *elite willingness condition*. As with elite credibility, we evaluate

elite willingness by comparing the elite's outside option value to the expected payoff from funding the ruler. The difference is that we now make the comparison assuming the ruler has delegated parliamentary privileges. By taking the outside option, the elite receives $\mu(\theta) \cdot \overline{\omega}$. Meanwhile, the value to the elite of funding the ruler depends on how tightly the constraints bind, as well as how the ruler will respond when the constraints fail *ex post*. If the constraints bind or the ruler voluntarily chooses to spend on security, the elite's expected utility from accepting the tax demand is $\pi_H(\theta) \cdot (\overline{\omega} - \tau)$. On the other hand, if the constraints do not bind (which occurs with probability $1 - \overline{q}$) and the ruler opts to expropriate, the elite's expected utility is $\mu(\theta) \cdot (\overline{\omega} - \tau)$. We put these together to define the elite willingness condition.

Elite willingness condition:

$$\mu(\theta) \cdot \overline{\omega} \leq \begin{cases} [\overline{q} \cdot \pi_H(\theta) + (1 - \overline{q}) \cdot \mu(\theta)] \cdot (\overline{\omega} - \tau) & \theta < \hat{\theta}(\overline{\omega}), \\ \pi_H(\theta) \cdot (\overline{\omega} - \tau) & \theta \geq \hat{\theta}(\overline{\omega}). \end{cases} \tag{4}$$

Like the elite credibility condition, elite willingness is critical for there to be an equilibrium in which the ruler delegates to parliament. When elite willingness fails, the elite rejects the ruler's tax demand regardless of her initial choice of constraints. Because delegation reduces the ruler's initial wealth, absolutist rule is clearly better for her if the tax demand will be rejected either way.

Lemma 4. *If the elite willingness condition does not hold, then there is no equilibrium in which the ruler delegates to parliament.*

In addition to the strength of the external threat, which we address below, elite willingness is determined by the size of the tax demand and the strength of institutional constraints. All else equal, a greater tax demand τ threatens elite willingness for the same reason that it strengthens elite credibility: even if the ruler were sure to uphold the deal, the elite must forgo more wealth to achieve the same proportional increase in security (see Remark A.2). In circumstances where the ruler would be tempted to renege on the deal given the opportunity, greater institutional strength $\overline{q}$ has the opposite effect, reinforcing elite willingness.[12] These comparative statics are formalized in

[12]The exception is when the elite's wealth is mobile and the exit option is preferable even to guaranteed security ($\sigma > \pi_H(\theta)$). But in this case, elite willingness will fail regardless of the value of $\overline{q}$.

Remark A.3 in the Appendix.

3.4 Combining the Three Conditions

The combination of the three conditions we have introduced—ruler willingness, elite credibility, and elite willingness—determines whether the ruler delegates parliamentary privileges in equilibrium. If ruler willingness fails, then the ruler prefers absolutist rule with low security against outside invasion even if a taxes-for-security deal would in principle be possible. If elite credibility fails, then the elite has too little bargaining power to extract meaningful fiscal concessions from the ruler. Finally, if elite willingness fails, then the elite has too *much* bargaining power: the elite would reject even the most favorable deal, driving the ruler away from the bargaining table. Yet when all three conditions hold, the equilibrium outcome is for the ruler to delegate privileges to parliament.

Proposition 1. *There is an equilibrium in which the ruler delegates to parliament if and only if ruler willingness, elite credibility, and elite willingness hold. If all three conditions hold strictly, parliamentary delegation is the unique equilibrium outcome.*

In the remainder of the analysis, our goal is to determine how external war threats affect the possibility of an equilibrium in which the ruler delegates to parliament. Proposition 1 gives us a roadmap for this analysis: we must characterize the effect of external threats on each condition. Because the elite conditions are functions of the elite's outside option, which in turn depends on whether the elite's wealth is mobile or immobile, we analyze these cases separately below. In each case, however, the broad story is similar—external threats have countervailing effects on the equilibrium conditions, so fiscal constraints are sustainable only when external threats are neither too weak nor too strong. Stated differently, the values of other parameters determine the overall effect of external threats on parliamentary delegation.

4 Effects of External War Threats

We now analyze how the magnitude of the external threat affects each of the three conditions for an equilibrium in which the ruler bestows parliamentary privileges. We uncover novel channels through which war threats undercut parliamentary delegation in equilibrium, contrary to the conventional expectation. These channels differ depending on the source of the elite's wealth. An elite with immobile wealth depends on the ruler for security even if it refuses to fund her. Thus, a strong external threat makes delegation *unnecessary* because the ruler's tax demand will be accepted even if she does not submit to prior constraints. For an elite with mobile wealth, however, a strong war threat means parliamentary delegation is *insu cient* for the ruler to garner funds, as the elite would rather move its wealth than risk losing everything in war. Our new results follow from a previously unrealized tension: war threats tend to push elite credibility and elite willingness in opposite directions. Consequently, strong external threats either induce elite funding or compel parliamentary constraints, but not both.

4.1 Ruler Willingness to Delegate

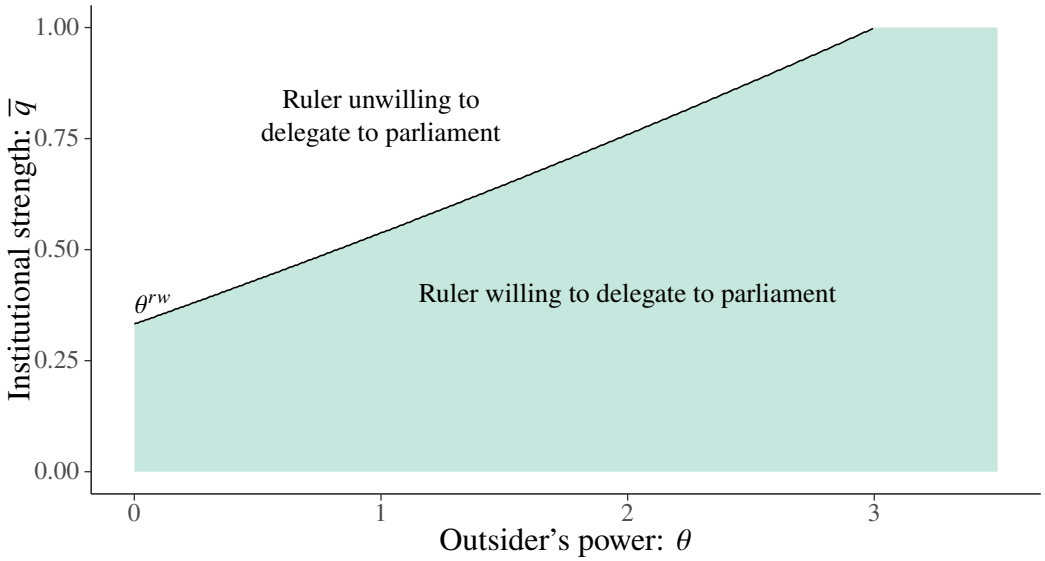
We begin by analyzing the effects of external threats on the ruler's initial decision to delegate privileges to parliament. When we considered the ruler's final decision of how to spend tax monies in Lemma 1, we found that stronger war threats increased the ruler's incentive to spend on security voluntarily. Now, moving up the game tree to consider the ruler's delegation decision, we recover the conventional logic that connects wars to parliament. *Stronger threats increase the ruler's incentive to trade personal wealth for security*, which is a precondition for the ruler to submit to fiscal constraints in equilibrium.

To understand why war threats promote ruler willingness, consider the ruler's comparison between (a) absolutist rule without taxes and (b) constrained rule with taxes. Accepting constraints typically means a smaller slice of the domestic pie for the ruler. The potential benefit to the ruler is that taxes will allow her to provide security, thereby increasing the probability of keeping her

wealth safe from external invasion. The decrease in the ruler's slice of the domestic pie resulting from parliamentary delegation is independent of the external threat, whereas the potential security benefit increases as the outsider grows stronger. Consequently, ruler willingness fails if the war threat is weak enough and holds if the threat is strong enough.

Lemma 5 (War threats promote ruler willingness)**.** *The ruler willingness condition holds if and only if* $\theta \geq \theta^{rw}$*, where* $\theta^{rw} > 0$ *if and only if* $\tau < \frac{\overline{\omega}-\underline{\omega}}{1-\overline{q}}$ *and where* $\theta^{rw} < \infty$ *if and only if* $\Delta > \frac{\overline{\omega}-\underline{\omega}}{1-\overline{\omega}}$*.*

Figure 3: Ruler willingness condition.



Parameters: $\Delta = 0.8$, $\underline{\omega} = 0.7$, $\overline{\omega} = 0.8$, $\tau = 0.15$.

Figure 3 plots the ruler willingness condition as a function of the outsider's power (x-axis) and the strength of institutional constraints (y-axis). As we move from left to right along the x-axis, representing stronger external threats, we begin with the ruler possibly being unwilling to delegate, but eventually reach a point at which ruler willingness holds. This finding comports with the bellicist logic of state formation: a looming invasion threat increases the ruler's demand for security, driving her to submit to parliamentary constraints on her spending in order to receive needed taxes for military improvements.

Figure 3 also shows how the ruler is less willing to submit to constraints that have a higher probability of binding her spending decisions. Moving up the y-axis on the graph, representing

stronger institutional constraints, we see that ruler willingness initially holds at low levels, but eventually fails unless the external threat is large. In the absence of a strong war threat, an improvement to the constraining power of parliamentary institutions may work against the formation of limited executive power, insofar as it decreases the ruler's willingness to submit to fiscal constraints.

4.2 Elite Constraints with Immobile Wealth

When the elite's wealth cannot be easily moved out of the country or hidden within the ruler's domain, its outside option is to refuse the tax demand. By refusing to fund the ruler without actually moving its wealth, the elite runs the risk of expropriation by the outsider, but otherwise consumes its full endowment. Because the ruler can provide security improvements only with tax funding, the elite expects to retain a fraction $\pi_L(\theta)$ of its wealth after refusing:

$$\mathbb{E}[U_E(\text{outside option})] = \pi_L(\theta) \cdot \omega.$$

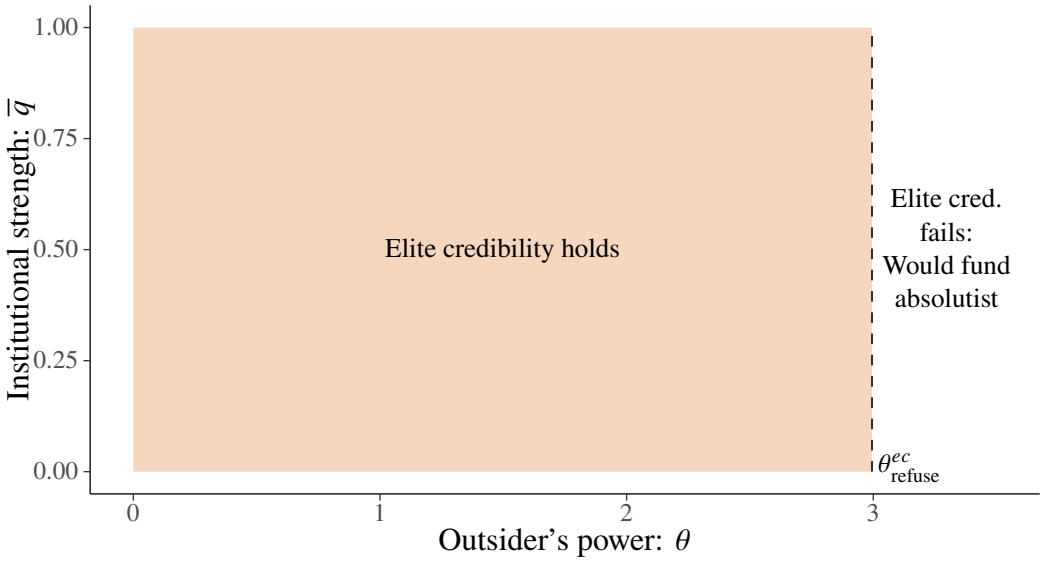
Elite credibility holds when the elite would refuse to pay taxes to a ruler who is unconstrained by parliament. There are two mechanisms by which a *stronger outside threat hampers elite credibility when the elite's wealth is immobile*. First, stronger war threats make it more likely that the ruler will choose to provide security if the elite accepts the tax demand. Strong threats thus align the ruler's incentives with elite incentives, making it matter less whether the ruler is formally constrained.

Second, a stronger threat undercuts the elite's refusal option. Indeed, the threat drives down the value of *both* possible choices, either refusing or funding. In the latter case, the elite is dependent on the ruler to provide security, but the ruler is also tasked with defeating a strong invader. However, by increasing the value-added of enhanced security, a stronger external threat drives down the expected utility of refusal by a larger magnitude. This follows from the assumption that the ratio $\frac{\pi_L}{\pi_H}$ decreases with external threat strength.

Altogether, a stronger external threat increases the elite's incentive to yield to the ruler's tax demand, which undermines elite credibility.

Lemma 6 (War threats reduce immobile elite credibility)**.** *Assume the elite's outside option is to refuse. The elite credibility condition holds if and only if the external threat is weak enough:* $\theta \leq \theta^{ec}_{\text{refuse}}$*, where* $\theta^{ec}_{\text{refuse}} \geq \hat{\theta}(\underline{\omega}) > 0$*.*

Figure 4: Elite credibility with immobile wealth.



Parameters: $\Delta = 0.8$, $\underline{\omega} = 0.7$, $\overline{\omega} = 0.8$, $\tau = 0.15$.

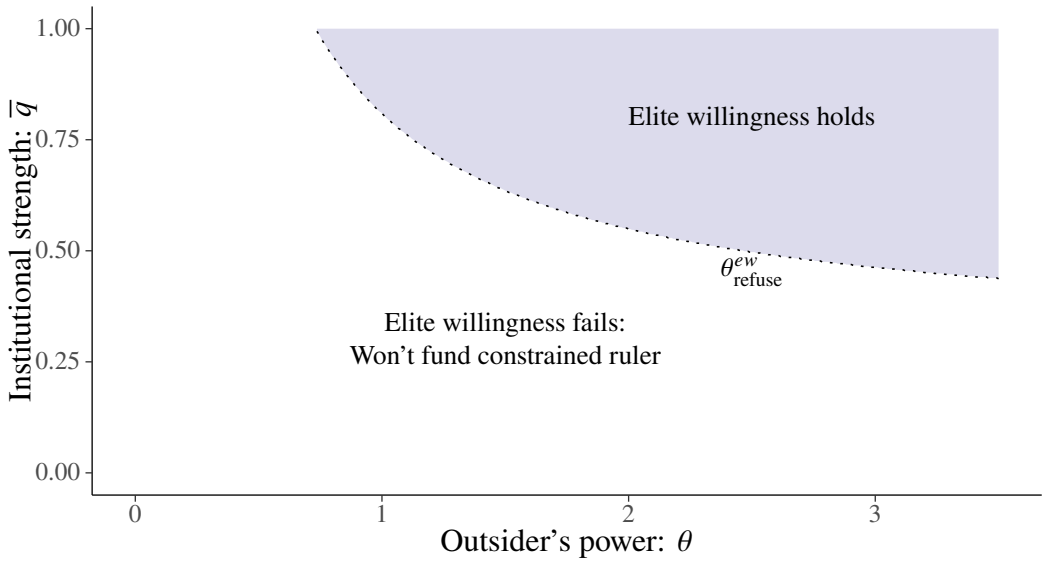
Figure 4 illustrates when the elite credibility condition is satisfied as a function of the invader's power and the strength of institutional constraints. Clearly, a strong outside threat undermines elite credibility. Meanwhile, we see that the strength of institutional constraints does not affect elite credibility, as this condition depends only on the elite's optimal choice *conditional on the ruler having chosen absolutism*.

For virtually the same reasons why elite credibility holds only when the outsider is weak, the willingness condition for an elite with immobile wealth holds only when the outside threat is *strong* enough. To see why, first consider the extreme case with no outside threat: $\theta = 0$, so that $\pi_L(\theta) = \pi_H(\theta) = 1$. Then even if the ruler did spend taxes on security—which she would not, absent a security threat—the elite would have reduced its endowment by τ for no increase in the chance of prevailing against invasion. Clearly it would be better not to pay taxes in this case. This calculus changes once we introduce an outside threat and increase its magnitude. Two factors

begin to push the elite in favor of funding a ruler who has submitted to fiscal constraints. First, the relative benefit of security is greater for the elite, increasing its incentive to pay taxes in order to decrease the proportion it expects to lose in conflict with the outsider. Second, per Lemma 1 above, a stronger outside threat increases the ruler's incentive to spend taxes on security rather than consumption. Altogether, then, outside threats increase the elite's willingness to accept the tax demands of a ruler who has accepted fiscal constraints.

Lemma 7 (War threats promote immobile elite willingness)**.** *Assume the elite's outside option is to refuse. The elite willingness condition holds if and only if the external threat is strong enough:* $\theta \geq \theta^{ew}_{\text{refuse}}$*, where* $\theta^{ew}_{\text{refuse}} > 0$*.*

Figure 5: Elite willingness with immobile wealth.



Parameters: $\Delta = 0.8$, $\underline{\omega} = 0.7$, $\overline{\omega} = 0.8$, $\tau = 0.15$.

Figure 5 illustrates the willingness condition for an elite with immobile wealth. Stronger external threats and tighter institutional constraints both promote elite willingness in this case. Comparing to the illustration of ruler willingness above (Figure 3), we see a tension in the effects of institutional strength on the ruler and elite willingness conditions. The commitment effect pushes the elite toward funding a ruler who has delegated, but it also pushes the ruler away from delegating in the first place.

4.3 Elite Constraints with Mobile Wealth

Elites with mobile wealth, which can be liquidated, moved, or hidden, have a distinct outside option—and thus a distinct strategic calculus. For these elites, exercising the outside option protects their wealth against outside invasion, as exiting takes it outside (or hides it within) the territory under threat.[13] The cost of exiting is that an elite with mobile wealth leaves behind a fraction $1 - \sigma$ of what it would otherwise consume, representing the costs associated with liquidation, transportation, and evasion:

$$\mathbb{E}[U_E(\text{outside option})] = \sigma \cdot \omega.$$

In contrast to the case with immobile wealth, the value of the elite's outside option in this case is independent of the outsider's strength, θ. This difference yields the distinct mechanism that a *stronger outside threat hampers elite willingness when the elite's wealth is mobile*.

Mobile wealth changes the nature of the elite credibility condition (Equation 3), which holds whenever the elite would refuse the tax demand of any ruler who opts for absolutist rule. In the immobile wealth case, we identified two ways that external threats undermine elite credibility: first by increasing the likelihood that the ruler would choose security over consumption if taxes were collected, and second by reducing the relative value of the outside option for the elite. The first of these effects is still operative for an elite whose outside option is to exit.

However, the second effect now goes in the opposite direction, thus creating a channel through which war threats enhance elite credibility. For an elite with mobile wealth, a stronger outside threat reduces the expected utility of paying taxes to the ruler and depending on her for security, *but has no effect on the value of the outside option*. This is the key difference between the refusal and exit outside options.

Due to these countervailing effects for elites with mobile wealth, there is potentially a non-monotonic relationship between external threat strength and elite credibility. If the threat is low,

[13] In practice, exit by an elite with mobile wealth 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.

$\theta < \hat{\theta}(\underline{\omega})$, then elite credibility holds. An unconstrained ruler would spend taxes on consumption rather than security, yielding no conceivable benefit for the elite. If the threat is high, such that $\pi_H(\theta) \leq \sigma$, then elite credibility again holds. In this case, the expected losses from invasion outweigh the costs of exit *even when the ruler is certain to provide security*, so the elite can credibly threaten to withhold funds. In between these extremes, elite credibility may fail, threatening the existence of an equilibrium in which the ruler delegates to parliament.[14]

Lemma 8 (War threats and mobile elite credibility)**.** *Assume the elite's outside option is to exit. If* $\sigma \geq \hat{\sigma} \equiv \pi_H(\hat{\theta}(\underline{\omega})) \cdot (1 - \frac{\tau}{\underline{\omega}})$*, then the elite credibility condition holds for all* θ*. Otherwise, if* $\sigma < \hat{\sigma}$*, then the elite credibility condition holds if and only if* $\theta \notin (\hat{\theta}(\underline{\omega}), \theta^{ec}_{\text{exit}})$*, where* $\hat{\theta}(\underline{\omega}) < \theta^{ec}_{\text{exit}} < \infty$*.*

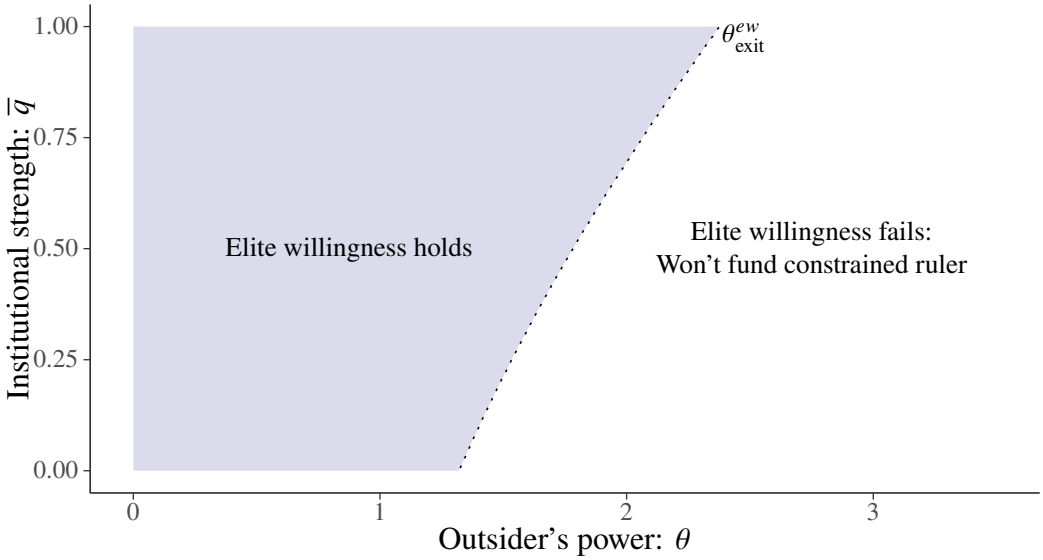
The relationship between war threats and elite willingness also changes when the elite's outside option is to exit. In the immobile wealth case, we saw the elite's willingness to accept taxes increase with external threat strength. An elite with immobile wealth depends on the ruler for security against invasion, so its willingness to fund the ruler in hopes of receiving a security benefit rises as the threat increases. The strategic calculation is reversed for an elite with mobile wealth, who does not depend on the ruler for security. Even if the ruler always spends taxes on security, the elite's expected utility from funding the ruler approaches 0 as the outside threat increases in magnitude. The cost of exiting, by contrast, is positive. An elite with mobile wealth will therefore accept a constrained ruler's tax demand only if the outside threat is not too strong.[15]

Lemma 9 (War threats reduce mobile elite willingness)**.** *Assume the elite's outside option is to exit. The elite willingness condition holds only if the external threat is weak enough:* $\theta \leq \theta^{ew}_{\text{exit}}$*, where* $\theta^{ew}_{\text{exit}} < \infty$*.*

[14] At moderate threat levels, if σ is high, then elite credibility always holds—the elite has a credible threat to exit whenever the ruler forgoes fiscal constraints. Consequently, only when the costs of exiting are sufficiently high (i.e., low σ) do we observe an elite credibility failure with moderate external threats.

[15] The following result, unlike previous results on external threats and equilibrium conditions, states a necessary condition but not a sufficient one. Because a stronger threat may change the ruler's choice after the elite accepts the tax demand, it is possible for a marginal increase in θ to improve elite willingness, even though eventually elite willingness fails when the threat is strong enough. See Lemma A.3 in the Appendix for details.

Figure 6: Elite willingness with mobile wealth.



Parameters: $\Delta = 0.8$, $\underline{\omega} = 0.7$, $\overline{\omega} = 0.8$, $\tau = 0.15$, $\sigma = 0.35$.

Figure 6 illustrates the relationship between outside threats and elite willingness for an elite with mobile wealth. The pattern is the opposite of that for an elite with immobile wealth, illustrated above in Figure 5. Now the elite is willing to fund a constrained ruler even in the absence of an external threat, so as to avoid the costs associated with exit. Once the threat is large enough, however, the elite would rather exit than depend on the ruler for security. We also see that institutional strength again promotes elite willingness, for the same reasons as in the case with immobile wealth.

4.4 Equilibrium Delegation to Parliament

How do external threats shape the ruler's ultimate decision to delegate privileges to parliament? To characterize the relationship between war threats and the choice to delegate, we bring together the ruler and elite conditions analyzed above. Surprisingly, given the different mechanisms for elites with immobile versus mobile wealth, the implications for how wars affect parliaments are qualitatively similar. In both cases, the countervailing effects of war threats on the elite credibility and elite willingness conditions yield the distinction from the conventional logic.

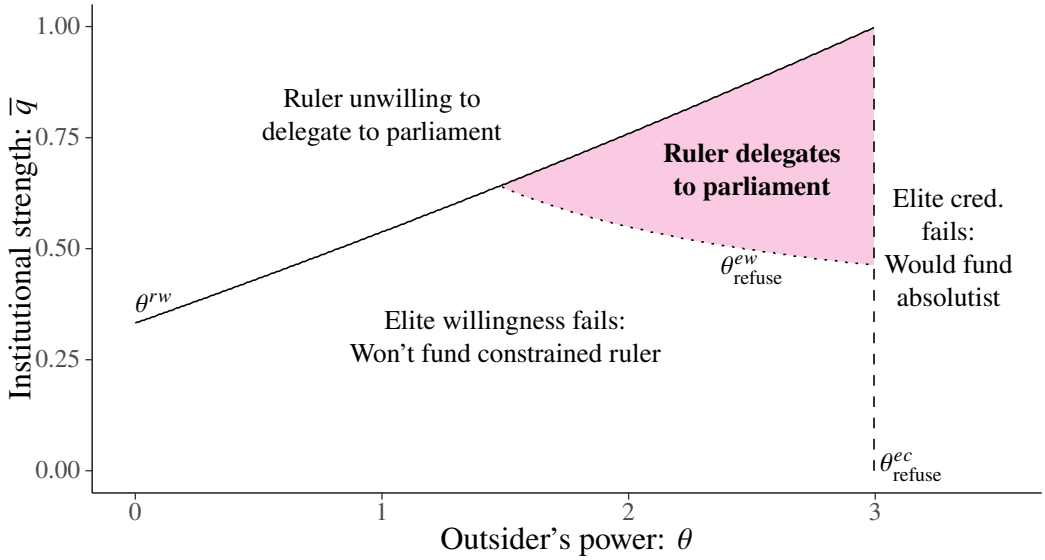
Immobile wealth. When the elite's wealth is immobile, there is a noteworthy tension between the elite's credibility and willingness conditions. This can undermine parliamentary delegation as an equilibrium outcome. If war threats are too weak, then the elite has no demand for security and thus no incentive to pay taxes even if the ruler has accepted fiscal constraints. But if the threat is too strong, then the elite's demand for security is too great to pressure the ruler for institutional concessions; the elite will provide taxes to an unconstrained ruler. In order for both conditions to be met—which is necessary for the ruler to choose to delegate—the outside threat must be at a moderate level. This requirement illustrates how our understanding of the relationship between war threats and parliamentary privileges changes once we account for elite incentives to fund the government.

Recall that delegation to parliament is the equilibrium outcome when ruler willingness, elite credibility, and elite willingness all hold (Proposition 1). In the case of an elite with immobile wealth, the threat must be large enough that ruler willingness and elite willingness hold, but small enough that elite credibility still holds. The following proposition summarizes these requirements.

Proposition 2 (Delegation equilibrium with immobile wealth)**.** *Assume the elite's outside option is to refuse. There is an equilibrium in which the ruler delegates to parliament if and only if the external threat is moderate:* $\max\{\theta^{rw}, \theta^{ew}_{\text{refuse}}\} \leq \theta \leq \theta^{ec}_{\text{refuse}}$.

For an elite with immobile wealth, Figure 7 illustrates the parameter values for which the ruler delegates to parliament in equilibrium. The shaded region represents the intersection of the three equilibrium conditions (previously illustrated in Figures 3–5), making clear the conditionality of the relationship between war threats and parliament. In the presence of a weak threat, the ruler will choose absolutism and the elite will respond by refusing the tax demand, resulting in a government that is neither strong nor limited. From there, a stronger invasion threat may make delegation more likely by promoting ruler or elite willingness. On the other hand, too strong a threat may break the possibility of parliamentary privileges by undermining elite credibility. In this case, the elite will accept the tax demand even in the absence of parliamentary constraints, resulting in a government that is strong but not limited.

Figure 7: Equilibrium choice of constraints with immobile elite wealth.



Parameters: $\Delta = 0.8$, $\underline{\omega} = 0.7$, $\overline{\omega} = 0.8$, $\tau = 0.15$.

Because of the tension between ruler willingness and elite willingness, stronger institutional constraints also have conditional effects. The question is which constraint binds the most tightly. If elite willingness just barely holds (θ close to $\theta^{ew}_{\text{refuse}}$), then a slight weakening of institutional constraints might foreclose the possibility of an equilibrium with delegation. But if ruler willingness just barely fails to hold (θ close to θ^{rw}), a similar weakening might actually push the ruler toward delegation. As the external threat grows stronger, the set of sustainable levels of institutional strength expands, until we reach the point of elite credibility failing.

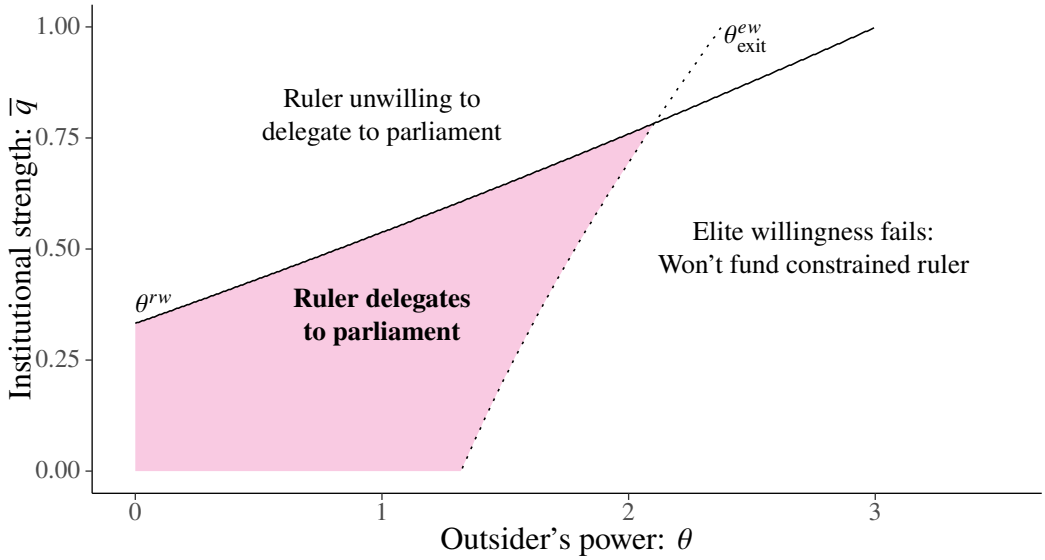
Mobile wealth. Turning to the case of an elite with mobile wealth, we once again see that pressing external threats do not lead to states that are strong and limited. High fiscal constraints are only sustainable as an equilibrium for an intermediate range of war threats. The war threat must be great enough that the ruler is willing to make fiscal concessions in order to receive tax monies, yet not so great that the elite would rather exit than depend on a constrained ruler for security. Additionally, if the elite's losses from exiting are high enough that elite credibility can fail, the magnitude of the threat must be outside the range where this is possible.

Proposition 3. *Assume the elite's outside option is to exit. If $\sigma \geq \hat{\sigma}$, then there is an equilibrium*

in which the ruler delegates to parliament only if $\theta^{rw} \leq \theta \leq \theta^{ew}_{\text{exit}}$. *Otherwise, if* $\sigma < \hat{\sigma}$, *then there is an equilibrium in which the ruler delegates to parliament only if* $\theta^{rw} \leq \theta \leq \min\{\theta^{ew}_{\text{exit}}, \hat{\theta}(\underline{\omega})\}$ *or* $\max\{\theta^{rw}, \theta^{ec}_{\text{exit}}\} \leq \theta \leq \theta^{ew}_{\text{exit}}$.

As in the prior case, we find that parliamentary delegation tends to be sustainable only when external threats are not too large. While the topline predictions are similar for elites with either type of wealth, there is a sharp difference in the mechanism that drives the result. For an elite with immobile wealth, strong external threats discourage parliamentary delegation by reducing the elite's bargaining power. In the presence of an overwhelming threat, we would expect an elite with immobile wealth to agree to rulers' tax demands even without meaningful constraints on the ruler's ability to spend. The state will be strong but not limited. If the elite's wealth were mobile instead, we would expect the same behavior by the ruler—no submission to fiscal constraints—but a distinct elite response. An elite with mobile wealth would exit rather than fund a hopeless effort against invasion, even if the ruler could promise to spend taxes on security rather than personal consumption. In this case, the state will be neither strong nor limited.

Figure 8: Equilibrium choice of constraints with mobile elite wealth.



Parameters: $\Delta = 0.8$, $\underline{\omega} = 0.7$, $\overline{\omega} = 0.8$, $\tau = 0.15$, $\sigma = 0.35$.

Figure 8 illustrates equilibrium delegation of parliament for an elite with mobile wealth. The

figure is the intersection of the willingness conditions shown in Figures 3 and 6.[16] As before, we see that marginal increases in war threats or in institutional strength can enable or hinder delegation, depending on which constraint is closest to binding. However, there is one substantive difference with the case of immobile wealth: now parliamentary delegation is sometimes sustainable as an equilibrium outcome even when the outsider is weak. This is because of the fixed cost of the exit option: the elite may prefer spending τ on a low-value security improvement over losing $1 - \sigma$ of their wealth to exit.[17]

The model of elites with mobile wealth also lends itself to an alternative interpretation, in which the "ruler" is the first among equal elites, such as a city-state looking to establish a republican navy. In such scenarios, the proportional benefits of military coordination are relatively high (Δ high), and so are the costs of exiting and thereby losing access to trade markets (σ low). High Δ and low σ promote ruler and elite willingness respectively, so our model leads us to expect successful bargaining and a strong state under these circumstances.

Alternative outside options. As noted in the model setup, we consider two outside options that combine elements of immobile and mobile wealth; full details are in the Appendix. These are a hybrid outside option where some wealth is moved while a remainder stays in the ruler's domain (Appendix B.1), and an alternative exit option where the value of exiting decreases with external threat strength due to shrinking safe harbors for wealth (Appendix B.2). In both cases, strong outside threats have the same effects as in the baseline model with mobile wealth—strengthening elite credibility, but weakening elite willingness. However, marginal increases in initially low threat levels may sometimes have the opposite effects.

[16] Elite credibility holds for all parameter values plotted, as $\sigma \geq \hat{\sigma} \approx 0.29$ for these parameters.

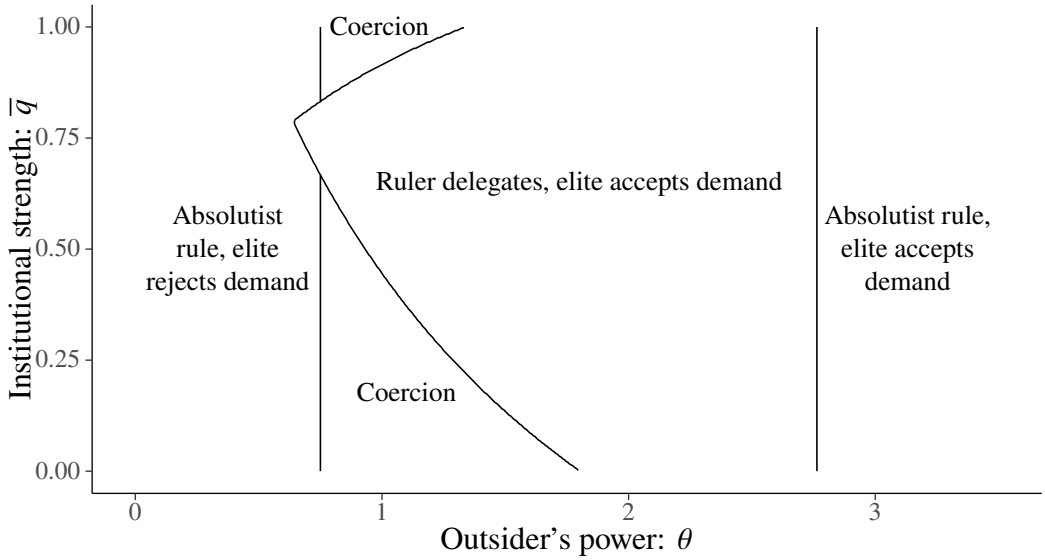
[17] This remains true when we consider a hybrid elite whose wealth is a mixture of mobile and immobile; see Appendix B.1.

5 Extensions

5.1 Coercion

An army does not merely provide defense against external threats—the ruler may also use it as an instrument of internal coercion (Finer 1975; Downing 1993). This consideration is particularly relevant when "funding the ruler" entails building a professional standing army, as opposed to supplementing a feudal levy with mercenary battalions. To analyze the new tradeoffs that emerge when rulers seek standing armies, we extend the baseline model with immobile elite wealth in two ways. First, we assume that the ruler can use a standing army both to defend against external threats and, if unconstrained, to expropriate additional wealth from the domestic elite. Second, we allow the ruler to pay an upfront cost to obtain the standing army through coercion, rather than through negotiation with the elite. Formal details appear in Section B.3 in the Appendix.

Figure 9: Equilibrium choices in the model with coercion.



Parameters: $\Delta = 1.4$, $\underline{\omega} = 0.7$, $\overline{\omega} = 0.8$, $\tau = 0.15$, $z = 0.15$, $c = 0.225$.

Figure 9 illustrates the equilibrium in the model with coercion as a function of the war threat and the institutional strength of parliament. As in the baseline model—and for similar reasons—the effects of a stronger outside threat on the initial choice to delegate vary depending on other

parameters. Its effects on the choice of costly upfront coercion are likewise variable. Once again, because institutional strength pushes elite and ruler willingness in opposite directions, stronger constraints may positively or negatively affect delegation in the presence of a moderate outside threat. However, in this case, a failure of either willingness condition may now lead the ruler to build the standing army coercively rather than to settle for a weak position against the outsider.

5.2 Offensive Wars

We next extend the model to allow for offensive wars. In this case, military success is not necessarily a public good, as the ruler may monopolize access to the spoils of victory abroad. The ruler is more motivated to fight than the elite because in expectation she receives an outsized share of the benefits, which introduces problems of political bias and moral hazard (Hoffman and Rosenthal 1997; Cox 2011). Delegating powers to parliament can mitigate these issues, but only to the extent that institutional constraints are likely to bind how the ruler allocates the spoils of war.

Here we summarize the most important findings from the extension, leaving the formal details to Section B.4 in the Appendix. Most importantly, elite credibility holds trivially in the case of offensive wars. An absolutist ruler has no *ex post* incentive to share the spoils of war with the elite; knowing this, the elite has no incentive to accept an absolutist's tax demand. Meanwhile, elite willingness is now inversely related to the strength of the outsider, as the expected spoils of conflict are greater against a weaker opponent. Institutional strength still enhances elite willingness, as the elite's expected share of the outside prize increases with the likelihood that the ruler's hands are tied *ex post*. The ruler's decisions are driven primarily by the value of the potential spoils. If the prize value is high, then the ruler will bypass parliament and fund the army coercively in order not to have to share any with the elite. For a moderate prize, the ruler may instead delegate to parliament to receive funds to pursue the war, but only if the tax cost of the war and the institutional strength of parliament are sufficiently low.

6 Application to Historical European Parliaments

The mechanisms in our model provide strategic foundations that help to understand episodes of parliamentary delegation and reversals in Western European history. Drawing from the vast literature on war, state formation, and parliaments in Europe, we distinguish three main periods for territorial states: (1) the emergence of parliaments with taxation powers through the sixteenth century, (2) the decline of parliaments over the next two centuries, and (3) a resurgence in parliaments in the nineteenth century and afterwards with newfound power over expenditures. In the article, we discuss the first two periods. Varying values of three parameters help to explain differences across polities in the elite credibility and willingness constraints: the magnitude of war threats, θ; the credibility of parliamentary constraints, $\overline{q}$; and the size of parliamentary grants needed to fund effective war efforts, τ.[18] In Appendix C.2, we discuss ruler willingness for the nineteenth-century reforms, for which we argue that external wars were less important than domestic conditions for the rise of parliaments with spending powers.

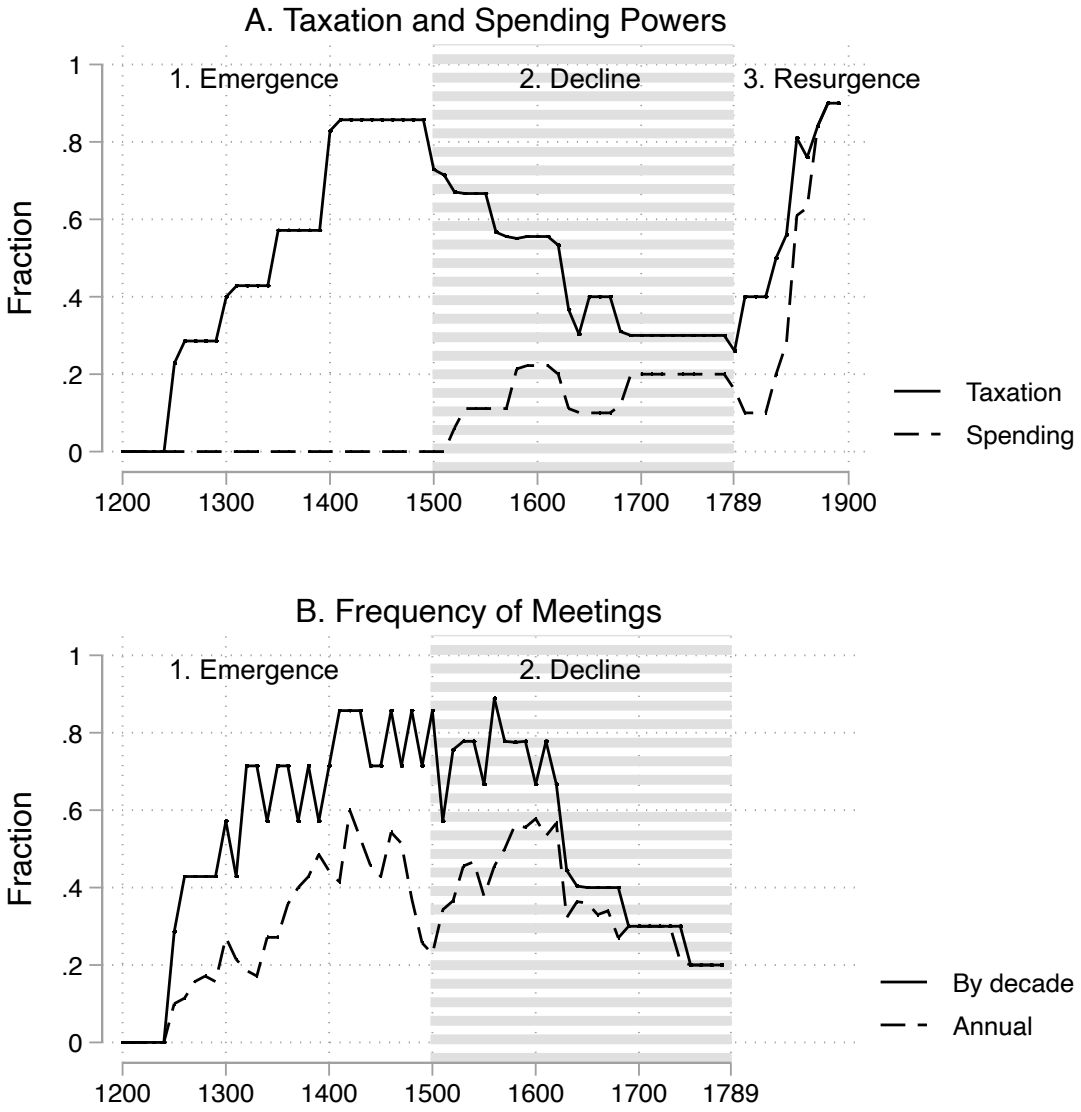
Figure 10 graphically summarizes these three periods using data described in Appendix C.1. Both panels use a sample of ten major territorial states between 1200 and 1900 with annual observations averaged over decade-long intervals. In Panel A, we plot the fraction of states that had parliaments with power over taxation (solid line) and with power over expenditures (dashed line). In Panel B, we plot the fraction of states with at least one parliamentary meeting in a given decade (solid line) and this fraction by year (dashed line).

6.1 Emergence of Medieval Parliaments

Participation in external wars was one stimulus for the rise of parliaments in Western Europe between the thirteenth and fifteenth centuries. As Figure 10 shows, during the fifteenth century, parliaments with powers over expenditures met frequently in major European states. Most bodies gained the right of approval for extraordinary taxes, although monarchs retained legal prerogatives

[18]Note that because we do not focus on ruler willingness in these sections, the only assumption required about the domestic share of wealth is $\overline{\omega} - \underline{\omega} > 0$, even if the difference in these two amounts is small.

Figure 10: Western European Parliaments Over Time



Sources. See Appendix C.1.

over expenditures. Historians broadly concur that warfare contributed to the early rise of European parliaments by inducing rulers to seek to raise taxes (Myers 1975, 56; Graves 2001, 10; Hoffman 2015, 134-5). Analyzing data between 1000 and 1600, Cox, Dincecco and Onorato (2020) show that recent participation in war correlates positively with a ruler calling their first parliament; and Blaydes and Paik (2016) demonstrate that areas with more Holy Land crusaders were more likely to have at least one parliamentary meeting between 1100 and 1400.

During this period, we contend that the credibility of parliamentary constraints, $\overline{q}$, tended to be relatively high; and the size of parliamentary grants needed to fund an effective war effort, τ, tended to be relatively low. Monarchs were weak both financially and militarily, which undercut their ability to raise revenue independent of parliament. Furthermore, wars were inexpensive in this period (compared to the later Military Revolution), which meant that even small grants from parliament could significantly bolster a war effort. These conditions facilitate elite willingness (Remark A.3), meaning this condition is likely to hold in the presence of moderate war threats, θ. Yet despite generally favorable scope conditions for war to promote parliament, several counterexamples from this period illustrate the general tension between war promoting states that are both funded *and* limited. First, large defensive war threats undermine elite credibility for elites with immobile wealth (Lemma 6), as with occupied France during the Hundred Years' War. Second, large defensive war threats undermine elite willingness for elites with mobile wealth (Lemma 9), exemplified by the formation of Hanseatic League.

Factors facilitating elite willingness. Monarchs were financially impoverished across medieval Europe. Although the Carolingian dynasty temporarily created a large and centralized state in the ninth century, a core element of their strategy for consolidating power was to offer land grants to knights in return for their service. Over time, these fiefs became hereditary and created a class of landed nobles that governed largely autonomous regional kingdoms and duchies (Bloch 1944). Later, the resumption of long-distance trade amid a Commercial Revolution coincided with a boom in urban population and wealth (Lopez 1976), which also lay beyond the direct control of monarchs.

Monarchs controlled piecemeal sources of revenue. These included royal domains (or Crown lands) 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, defaulting on the debt, English purveyance, and the French *chambre de justice*. Many rulers also had access to certain ordinary taxes and to royal monopolies on goods such as salt, although these reflected bargains with elites. These conditions contrasted with those in contemporaneous empires in China and

the Middle East, which had bureaucracies and standing armies better positioned to collect central revenues (Stasavage 2020).

For impoverished monarchs wanting to fund a war effort, calling domestic elites such as landed nobles, clergy, and merchants into an organized assembly yielded clear benefits. In fact, some monarchs mandated attendance at parliamentary meetings for elites otherwise reluctant to endure the costs and time of traveling to the capital (Stasavage 2011; Boucoyannis 2021). Conversely, monarchs had few viable sources of revenue if bargaining with elites failed. This reality constrained rulers against acting irresponsibly without facing serious repercussions, as discussed in the section before the model. Consequently, parliaments could gain relatively strong *de facto* powers, reflected in the parameter $\overline{q}$, despite more limited *de jure* prerogatives stemming from the lack of direct parliamentary control over how the ruler spent funds.

Why did parliaments not arise before the thirteenth century? Although low by later standards, the parameter τ for the cost of an effective war effort had increased compared to the earlier medieval period. For centuries, emergent European monarchs could get by without an institutionalized means of extracting revenues from elites because they lived off their royal domains and relied on feudal levies to fight wars. However, by the thirteenth century, rulers increasingly supplemented their feudal levies with mercenaries. The associated rising costs disabled kings from funding wars solely from their royal domains. For example, Richard I of England (1189–99) generally fought wars using the feudal levy and ad hoc requests for additional revenue. By contrast, his successor John raised more taxes to pay additional troops. These changes reflected not only the general unreliability of troops supplied by the feudal levy, but also the growing vulnerability of mounted knights to attacks by armed infantry (Mann 1986, 425-30). By the end of the thirteenth century, England had largely commuted knight service in-kind (Finer 1975, 99). The frequency of requests for additional funds from nobles and knights in their Council, which over time transformed into the English Parliament, increased sharply during this century (Kiser and Barzel 1991, 412).

These changes made rulers' interaction with other elites strategically relevant. Rulers needed to extract some positive amount τ from elites to fund wars. However, these costs of war paled in

comparison to later periods, as we describe below. Hence, we characterize τ as positive, but low.

Although conditions during the late medieval period were generally favorable for external war to promote parliaments, even this period contains some counterexamples that correspond with mechanisms from the model.

Failure of elite credibility: France. France diverged from many other Western European states during the medieval period because its Estates General met infrequently and lacked power over taxation (Marongiu 1968, 95-105; Myers 1975, 29-30; Graves 2001, 55–58). We contend that external war undermined elite credibility.

France's tax system transformed during the Hundred Years' War with England (1337–1453), but France did not establish a strong national parliament. The crown lacked any source of permanent taxes before the war. This changed in the 1350s when new taxes were needed to pay for King John II's ransom after he was captured by the English at the Battle of Poitiers. Renewed efforts at taxation in the 1420s occurred amid new and successful English offensives, which engendered a permanent land tax (the *taille*) and standing army (Henneman 1999, 112–18). The Estates-General played an important role in both of these critical decades, but never became a regular body. Excepting the 1350s (five meetings) and the 1420s (four), the Estates-General convened on average once every eleven years between 1302 (its first meeting) and 1453 (the end of the Hundred Years' War).[19]

The failure of the Estates-General in the 1350s to raise sufficient taxes for John's ransom "discredited [the body] as a part of the tax-raising process" (Henneman 1999, 112). Consistent with a failure of elite credibility, elites largely accepted heavy taxation because "The return of the king and a treaty to end the war with England easily met the criterion of 'evident necessity' that the legists claimed could justify extraordinary taxation" (113). The Estates General sanctioned another tax, the *fouage*, in the 1360s whose specific purpose was to pay military salaries and to overcome France's "chronic lack of military preparedness" (115).

This arrangement persisted in the 1420s and 1430s. King Charles VII regularly turned to the national and regional estates for taxes, and they often complied. In 1428, the Estates-General

[19]Data from Abramson and Boix (2019).

consented to customs tax for Charles, which he continued to impose in future years despite not reconvening the Estates-General for another decade. Once again, a defensive war threat imperiled elite credibility as "the English gathered their strength for an assault to the south" (Wolfe 1972, 28). In 1439, the Estates-General consented to raising large sums via the *taille* to reform the army. These reforms were recognized "essential" to repel the English occupation (Vale 1974, 77), and "the French were not in a mood to resist the king's demands for what he claimed he needed to end the war" (Wolfe 1972, 30). Afterwards, Charles VII did not call the Estates-General for the remainder of his reign yet continued to levy the *taille*. Following more minor reforms earlier in the decade, in 1445, Charles used funds (primarily from the *taille*) to fund the first regular paid professional army in medieval Europe, the *Compagnie d'Ordonnance* (Finer 1975, 99; Henneman 1999, 118). The new army ended the Hundred Years' War.

Overall, "Under Charles V and Charles VII, order, stability and strong government seemed highly desirable and something for which it was worth paying" (Henneman 1999, 120). During this period of invasion and occupation, the Crown gained control over permanent sources of taxes without empowering a national parliament.[20]

Failure of elite willingness: Hanseatic League. Elsewhere in Europe, other forms of political organization displaced territorial states. In some cases, mobile capital combined with external threats caused the elite willingness condition to fail. The Hanseatic League provides an example of exit and state fragmentation in a high-threat environment. Rather than fund territorial states governed by German princes, merchants in numerous towns exited by forming a trading league, which provided better protection for their wealth.

Existing research characterizes mobile wealth as beneficial for promoting tax bargaining (Bates and Lien 1985). Many cases support this logic. Rising urban trade and populations often engendered bargaining over communal rights and parliamentary representation, in return for permitting the ruler to collect trade taxes that could be "highly lucrative [but] easily avoided" (55). However, we

[20]Wolfe (1972, 47-51) also describes the weak powers over taxation exercised by regional parlements during this period.

highlight a crucial scope condition for this argument. Contractual relationships with a territorial ruler benefit elites with mobile wealth only if the monarchy was strong enough to protect their assets against external threats:

> "If the monarchy was strong, as in England, the leading towns might look to the king for charters of liberties for individual towns . . . If the monarchy was weak, as in thirteenth- and fourteenth-century Scotland and Germany, then towns might have to join together in leagues and sometimes wage war to gain or to defend the privileges they valued" (Myers 1975, 22).

This observation corresponds with our theoretical finding that, rather than promote a contractual relationship with a monarch via a parliament, high external threats can reduce elite willingness and trigger the exit option for an elite with mobile wealth (Lemma 9).[21] To apply this logic, 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). Militarily weak princes with limited domains could not solve the large external threat that confronted merchants: numerous points along a trading route where a rival state could expropriate or extort them. Instead, cities could band together into leagues not controlled by nobles, which provided a viable exit option.

The Hanseatic League was the most prominent trading league. It formed in the thirteenth century after the town of Lübeck threw off Danish rule and became an imperial city within the Holy Roman Empire. Elites in Lübeck struck deals with neighboring towns to jointly resist highway robbers along high-volume river routes and to share a currency (Rörig 1967, 35–40). These towns did not

[21] A reinforcing condition in the model for this behavior is low Δ. In such a case, funding the government does not greatly bolster the war effort even if the ruler uses the money responsibly. This formalizes the "weak" monarchies described by Myers (1975, 22), in particular with regard to the specific problems faced by trading towns.

form a new territorial state with centralized governance institutions, such as financial organizations or a military. Instead, consistent with exiting, the towns remained loosely aligned to pursue their "shared desire for peace, for economic properity" (Leuschner 1980, 146). The Hanseatic League remained powerful for roughly two centuries, including a successful war against Denmark in 1370 (Rörig 1967, 40). Thus, this organization provided a means for merchants to protect their wealth while exiting from the tax demands of feudal nobles (Spruyt 1996, 109–29).

6.2 Parliamentary Reversals During the Age of Absolutism

During subsequent centuries, Western Europe experienced a wave of parliamentary reversals. As shown in Figure 10, many parliaments lost their powers over taxation, and the frequency of their meetings plummeted between the sixteenth century and 1789. During the Military Revolution and Age of Absolutism, existing scholarship links wars to parliamentary reversals. Cox, Dincecco and Onorato (2021) study 103 polities within nine composite monarchies that each had the following institutional arrangement in 1500: parliamentary control over taxation and royal control over expenditures. By 1789, only 39% of these polities retained this constitutional arrangement. The majority, 52%, transitioned to fiscally absolute regimes in which the crown controlled both; and the remaining 9% transitioned to regimes with parliamentary supremacy. In their sample, recent participation in international war correlates with a higher probability of transitioning to absolutism. Qualitative observations elsewhere in the literature support this relationship (Downing 1993; Van Zanden, Buringh and Bosker 2012).

We contend that in many countries, elite willingness dropped relative to the medieval period. Wars were more expensive (higher τ), and the credibility of parliamentary constraints diminished (lower $\overline{q}$). Changes in military technology meant that the mode of military organization that was most effective at winning wars also could empower the ruler over domestic rivals. When funded, standing armies provided rulers with an alternative option to negotiating with parliament: coercing elites for revenues to override recalcitrant parliamentary elites. These changes lowered elite willingness (Remark A.3). We highlight these conditions with examples from Brandenburg-

Prussia and England, while also drawing on existing arguments that their contrasting geostrategic positions contributed to divergent outcomes.

Factors undermining elite willingness. For many European countries, the Military Revolution beginning around 1500 changed the conditions that earlier had underpinned a positive relationship between war and parliament. Improvements in applications of gunpowder technology necessitated building new fortresses that could absorb cannon fire as well as hiring professional and armed infantry troops, hence supplanting feudal levies and mounted knights. Effective armies became much larger and more expensive than in the past. The largest armies for the major states in the seventeenth century were 2.8 times (England), 3.8 times (France), or 15 times (Spain) larger than in the 1470s; and the annual cost of Spain's wars in the 1590s was 4.5 times larger than in the 1540s (Parker 1976, 206, 211).

By making wars more expensive and facilitating the rise of standing armies, the Military Revolution undermined elite willingness in two ways for many states. First, the typical outlay needed to fund an effective war effort, τ, was higher than in the past. Even if elites were willing to provide some war financing, the amount was usually lower than what the ruler desired, amid a period in which financing became a stronger predictor of success in battle than in the past (Gennaioli and Voth 2015). Consequently, monarchs' relationships with their parliaments were often characterized by gridlock. Parliaments that lacked control over expenditures were wary of granting large sums to the ruler that could potentially be used in outright irresponsible ways, or for wars in which they were uninterested.

Second, monarchs had more viable means of reneging on deals with parliament. The shift to standing professional armies reduced monarchs' ability to commit to promises, which lowered $\overline{q}$. A specific way in which the ruler could use the funds irresponsibly, from the perspective of elites, was to build a professional military and then use the army to coerce taxes from recalcitrant elites. This latent source of monarchical strength contributed to parliamentary gridlock by making elites less willing to provide funds, yet also provided the ruler with the means to coerce parliament if negotiations broke down.

Coercing parliament in Brandenburg-Prussia. In Brandenburg-Prussia, the ruler initially delegated to parliament, who funded the military. However, later, the ruler used a standing army to renege on the deal with parliament while fighting an external war. The ruler used coercion because elite willingness failed for a war deemed outside the elites' interests.

Initially, a contractual relationship held between ruler and parliament. Similar to many European rulers emerging from the medieval period, in the sixteenth century, the margrave of Brandenburg was merely "the largest landowner in a society dominated by landowners' interests" with a weak state military: "... the feudal services had fallen into desuetude during a longer period of peace, and the hiring of mercenaries was prevented by the margraves' impecuniousness" (Carsten 1954, 174-5). Before the "Great Elector" Frederick William gained strong coercive means, he had no alternative but to negotiate with parliament for revenues. Thus, he initially delegated privileges to parliament in return for elite funding for the government. Carsten (1954, 189) argues that a famous bargain struck in 1653 yielded clear benefits for both sides (see also the citation to Craig 1964 in Section 1 for more details on what the elites gained):

> "Frederick William had got his money grant, but he had to buy it with concessions which not only confirmed the social privileges of the nobility but also the political power of the Estates. From their point of view the granting of supply, although for six years,[22] probably weighted lightly compared with the important points which they had scored, in particular as the noblemen themselves did not contribute towards the grant."

Later, Frederick William reneged on the deal. The six-year tax grant enabled him to build a stronger standing army, which lowered $\overline{q}$ in subsequent interactions with parliament. An unexpected opportunity arose in 1655: a war broke out between nearby Sweden and Poland.[23] This opportunity enabled the Elector to put his standing army in the field and to demand more from the Brandenburg

[22]Specifically, in return for gaining substantial privileges, the Estates "promised the comparatively large sum of 500,000 talers payable over six years and a smaller amount for two years, while it was more usual to grant money for a shorter period only" (Carsten 1954, 186).

[23]Carsten (1954, 189) uses language that helps to motivate the Nature move in the model that determines whether the ruler can renege: "Nor does it seem at all likely that [Frederick William] made these concessions with the idea of revoking them as soon as he was strong enough to do so. It was very doubtful whether he would ever be able to turn the scales against the nobility, and it was only thanks to the war between Sweden and Poland from 1655 to 1660 that he could gain the upper hand against the Estates: otherwise his position would have been the same as before when the six years' grant expired in 1659."

Estates.

The Brandenburg Estates refused to countenance new demands to prosecute an external war that they considered beyond their interests. Thus, if we considered the interaction between the Elector and the Estates in 1655 in its own right, this episode would exemplify a failure of elite willingness in response to high τ. The problem is that the Estates was in a weaker position than before, which enabled the Elector to renege on the original deal. He reacted to parliamentary intransigence by using the standing army to enforce collection of new taxes, hence reneging and gaining additional consumption from elites (as proposed in our coercion extension). "At the end of the war he had gained great strength and a standing army, capable of breaking any resistance against the collection of taxes required for its maintenance. Thus the Estates were never able to regain the ground which they had lost" (Carsten 1954, 189).

Failed coercion in England. England is an exception to the general pattern of absolutism in the centuries preceding the French Revolution. The English Parliament instead defended, and eventually expanded, its traditional prerogatives. This outcome was not predetermined by the relatively strong historical foundations for the English Parliament, as James II almost gained a similar opportunity as Frederick William to overrun Parliament. However, we highlight how England's distinct geopolitical position helped to counteract pro-absolutist pressures unleashed by the Military Revolution.

Throughout English history, its insular island location hardened elite credibility. Reflecting the mechanisms in our extension for offensive wars, elites in Parliament could refuse to fund wars that furthered only royal interests, such as regaining lost continental lands.[24] In the seventeenth century, the Stuart kings repeatedly ran up against the limits of parliamentary tolerance. "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

[24]Many scholars cite England's geostrategic position as favorable to the maintenance of a strong parliament, for example, Ferejohn and Rosenbluth (2016, 109-10).

seemed to have little to do with the national interest" (Graves 2001, 124). The king attempted to raise revenues despite parliamentary opposition to his foreign adventures by levying ship money: the right for the Crown to require the maritime towns and counties to furnish ships in time of war, or commute the duty with a monetary payment. However, after ship money proved insufficient, Charles returned to Parliament in 1641 and conceded demands such as the Triennial Act (followed shortly thereafter by the English Civil War).

In the 1680s, James II nearly escaped the constraints faced by his father and replicated the outcome in Brandenburg-Prussia. Similar to Frederick William, James' initial interaction with parliament was favorable. He gained lifetime control over ordinary revenue sources: customs, excise, and hearth taxes. Although customary, this grant represented a conscious choice by Parliament to fund the government in anticipation that James would uphold basic civil liberties and promote good governance. The problem for Parliament was that these ordinary taxes yielded unexpectedly large revenue amounts because of booming colonial trade and plunder (Pincus 2009, 160). Thus, James attempted to renege on his initial bargain with Parliament by building a 40,000-strong standing army without parliamentary approval. Members of Parliament were well aware of the dangers of a standing army, but powerless to stop it: "Many MPs complained vociferously in the parliamentary session that autumn that England now had an army which threatened 'to give up all our liberties at once"' (144). In response, James attempted to pack the Parliament with pliant supporters (185).

Yet ultimately, James' attempt to renege on Parliament failed. James' opportunity to coerce Parliament was less viable than Frederick William's in Brandenburg-Prussia, that is, the de facto credibility of parliamentary constraints $\overline{q}$ was higher in England.[25] The sprawling Hohenzollern domains on the continent gave Frederick William his opportunity to intervene in a war, in contrast to England's insulated defensive position. This geopolitical reality also undermined domestic popular support for James' army, which he forcibly garrisoned across the country and created broad grievances (Pincus 2009, 145–6, 182–3). James' attempts to use coercion to renege on his bargain

[25]To simplify the model, we assume that the ruler knows for sure whether they can successfully renege when she reaches that information set. However, the intuitions would be qualitatively similar if there was uncertainty.

with Parliament yielded a divergent outcome: a popularly supported invasion by William III and the end of the Stuart dynasty (Pincus 2009, ch. 8).

7 Conclusion

We analyze a key question in historical European political development: did external wars promote parliamentary delegation? We provide a new theory to explain the varied consequences of international wars. Consistent with conventional implications, external threats make rulers more willing to trade parliamentary privileges in return for revenue. But wars often do not induce elites to trade taxes for privileges. Elites with immobile assets (e.g., landed elites) fear invasion, which hinders their credibility to refuse funding for an unconstrained ruler. Elites with mobile assets (e.g., merchants) can exit rather than fund a hopeless war effort, which makes them unwilling to fund even a constrained ruler. Only under specific conditions do external threats promote parliament, and under other conditions, the relationship goes in the opposite direction. We apply these theoretical conditions to understand waves and reversals in European parliamentary development.

We conclude by considering how our findings interact with three different literatures. First, within Europe, we focus mainly on the period before the nineteenth century. Yet in the later period, parliaments not only re-emerged across Western Europe, they gained greater de facto powers than before, typically controlling expenditures. In Appendix C.2, we contend that external wars were relatively unimportant for these later changes. In our model, there are indeed narrow scope conditions under which war threats make rulers willing to countenance heavy restrictions on their royal prerogatives. However, it is more empirically plausible that changes in domestic conditions were pivotal for these later episodes. These cases thus create a historical segue from our theoretical framework—in which we analyze how external pressure creates top-down pressures for parliament—to the predominant focus in the formal democratization literature. These models analyze the consequences of bottom-up pressure based on domestic threats from below or intra-elite splits. Theoretical elaboration upon divided elites could also be helpful for explaining aspects of

earlier parliaments. Countries like England with a unitary structure of government differed those like France with fragmented regional institutions in which monarchs could more easily divide and rule (Boucoyannis 2021).

Second, we contribute to a broad, and largely recent, rethinking of the bellicose model of European state formation. To explain the rise of European parliaments, some focus on alternative factors such as urban development (Abramson and Boix 2019) or the Catholic Church (Grzymala-Busse 2020). Nor are these critiques limited to Europe. Recent research establishes that external wars were unimportant in the formation of major states in East Asia and its regional order. Japan and Korea emulated key components of China's bureaucratic institutions to ward off domestic competitors, rather than primarily to guard against an invasion threat by China (Huang and Kang 2021). The major states rarely fought each other, as wars tended to be confined to domestic challengers in the periphery (Kang 2020). Similar to the resurgence of European parliaments in the nineteenth century, these cases help us to understand alternative factors that are important for developing state institutions.

Finally, we also contribute to a broader formal-theoretic literature on whether external wars lead to gains in fiscal capacity. Among formal theories, Besley and Persson (2011) posit a positive relationship. Subsequent scholarship contends that the relationship depends on the nature of the wars (Hoffman 2015), their expense (Gennaioli and Voth 2015), or bureaucratic capacity (Lee and Paine 2022). By highlighting additional factors that mitigate the relationship among external wars, fiscal capacity, and parliaments, we highlight new considerations for understanding the bellicose origins of states.

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Appendix

CONTENTS

A Supplementary Information for Baseline Model

A.1 Summary of Notation

- $\omega \in [0, 1]$: Elite share of wealth, determined by ruler's initial choice of constraints
  - $\underline{\omega}$: Low constraints (absolutist rule)
  - $\overline{\omega}$: High constraints (delegation)
- $1 - \omega$: Ruler's share of wealth
- $\tau > 0$: Tax cost of security improvement
- $\overline{q} \in [0, 1]$: Probability the ruler is bound to provide security improvement if $\omega = \overline{\omega}$
- External threat
  - $\theta \geq 0$: Strength of external threat
  - $\pi_L(\theta) = \frac{1}{1+\theta}$: Baseline probability of resisting invasion
  - $\pi_H(\theta) = \frac{1+\Delta}{1+\Delta+\theta}$: Increased probability of resisting invasion if security improvement is provided
  - $\Delta > 0$: Increase in strength against outsider due to security improvement
- $\sigma \in (0, 1)$: Proportion of wealth kept by elite with mobile wealth in case of exit

A.2 Proof of Lemma 1

The result relies on the following facts about the ratio π_H/π_L.

Lemma A.1. *$\frac{\pi_H}{\pi_L}$ is strictly increasing in θ, and $\lim_{\theta\to\infty} \frac{\pi_H(\theta)}{\pi_L(\theta)} = 1 + \Delta$.*

Proof. To verify the first claim, we have

$$\frac{\pi_H(\theta)}{\pi_L(\theta)} = \frac{1+\Delta}{1+\Delta+\theta} \cdot (1+\theta) = 1 + \frac{\Delta\theta}{1+\Delta+\theta}$$

and thus

$$\frac{d}{d\theta}\left[\frac{\pi_H(\theta)}{\pi_L(\theta)}\right] = \frac{\Delta(1+\Delta)}{(1+\Delta+\theta)^2} > 0.$$

The second claim follows from L'Hopital's rule:

$$\lim_{\theta\to\infty} \frac{\pi_H(\theta)}{\pi_L(\theta)} = 1 + \Delta. \qquad \square$$

Lemma 1 (War threats promote security spending)**.** *Let the initial choice of ω be fixed. If institutional constraints do not bind, the ruler prefers to spend taxes on security if and only if $\theta \geq \hat{\theta}(\omega)$, where $0 < \hat{\theta}(\underline{\omega}) < \hat{\theta}(\overline{\omega}) < \infty$.*

Proof. The existence of a cutpoint above which Equation 1 holds follows from Lemma A.1. The claim that $\hat{\theta}(\omega) > 0$ follows from the fact that $\frac{\pi_H(0)}{\pi_L(0)} = 1 < 1 + \frac{\tau}{1-\omega}$. The claim that $\hat{\theta}(\overline{\omega})$ is finite follows from our assumption that $\Delta > \frac{\tau}{1-\overline{\omega}}$; using Lemma A.1, this implies $\lim_{\theta\to\infty} \frac{\pi_H(\theta)}{\pi_L(\theta)} > 1 + \frac{\tau}{1-\overline{\omega}}$. Finally, the claim that $\hat{\theta}(\underline{\omega}) < \hat{\theta}(\overline{\omega})$ follows because $\frac{\tau}{1-\underline{\omega}} < \frac{\tau}{1-\overline{\omega}}$. □

A.3 Proof of Lemma 2

We begin by proving an important property of equilibria in which the ruler delegates: the elite must accept the tax along the path of play, and must reject if the ruler were to deviate to absolutist rule. In other words, the only reason for the ruler to delegate to parliament is that doing so will induce the elite to pay taxes when it would not do so otherwise.

Lemma A.2. *In any equilibrium in which the ruler chooses $\omega = \overline{\omega}$, the elite rejects the tax if $\omega = \underline{\omega}$ and accepts the tax if $\omega = \overline{\omega}$.*

Proof. To prove the first claim, consider an equilibrium in which the elite accepts the tax if $\omega = \underline{\omega}$. This implies

$$\begin{aligned}\mathbb{E}[U_R(\underline{\omega})] &= \max\left\{\pi_H(\theta)\cdot(1-\underline{\omega}), \pi_L(\theta)\cdot(1-\underline{\omega}+\tau)\right\} \\ &> \max\left\{\pi_H(\theta)\cdot(1-\overline{\omega}), \pi_L(\theta)\cdot(1-\overline{\omega}+\tau)\right\} \\ &\geq \mathbb{E}[U_R(\overline{\omega})].\end{aligned}$$

Therefore, $\omega = \underline{\omega}$ in this equilibrium.

To prove the second claim, consider an equilibrium in which the elite rejects the tax if $\omega = \overline{\omega}$. This implies

$$\begin{aligned}\mathbb{E}[U_R(\underline{\omega})] &\geq \pi_L(\theta)\cdot(1-\underline{\omega}) \\ &> \pi_L(\theta)\cdot(1-\overline{\omega}) \\ &= \mathbb{E}[U_R(\overline{\omega})].\end{aligned}$$

Therefore, $\omega = \underline{\omega}$ in this equilibrium. □

Lemma 2. *If the ruler willingness condition does not hold, then there is no equilibrium in which the ruler delegates to parliament.*

Proof. Consider an equilibrium in which $\omega = \overline{\omega}$. By Lemma A.2,

$$\mathbb{E}[U_R(\underline{\omega})] = \pi_L(\theta) \cdot (1 - \underline{\omega}),$$
$$\mathbb{E}[U_R(\overline{\omega})] = \max\left\{\pi_H(\theta) \cdot (1 - \overline{\omega}), \overline{q} \cdot \pi_H(\theta) \cdot (1 - \overline{\omega}) + (1 - \overline{q}) \cdot \pi_L(\theta) \cdot (1 - \overline{\omega} + \tau)\right\}.$$

Therefore, the equilibrium requirement that $\mathbb{E}[U_R(\overline{\omega})] \geq \mathbb{E}[U_R(\underline{\omega})]$ is equivalent to Equation 2, the ruler willingness condition. □

A.4 Proof of Lemma 3

Lemma 3. *If the elite credibility condition does not hold, then there is no equilibrium in which the ruler delegates to parliament.*

Proof. Consider an equilibrium of the game. Suppose the elite credibility condition, Equation 3, fails. Because $\theta > \hat{\theta}(\underline{\omega})$, Lemma 1 implies that the ruler would choose to spend taxes on security following an initial choice of $\omega = \underline{\omega}$. Because $\mu(\theta) \cdot \underline{\omega} < \pi_H(\theta) \cdot (\underline{\omega} - \tau)$, sequential rationality implies that the elite would accept the tax demand following an initial choice of $\omega = \underline{\omega}$. Finally, then, Lemma A.2 implies $\omega \neq \overline{\omega}$ on the path of play. □

A.5 Proof of Lemma 4

Lemma 4. *If the elite willingness condition does not hold, then there is no equilibrium in which the ruler delegates to parliament.*

Proof. Consider an equilibrium of the game. Suppose the elite willingness condition, Equation 4, fails. Sequential rationality then implies that the elite would reject the tax demand following an initial choice of $\omega = \overline{\omega}$.[26] Lemma A.2 then implies $\omega \neq \overline{\omega}$ on the path of play. □

A.6 Proof of Proposition 1

Proposition 1. *There is an equilibrium in which the ruler delegates to parliament if and only if ruler willingness, elite credibility, and elite willingness hold. If all three conditions hold strictly, parliamentary delegation is the unique equilibrium outcome.*

[26] If $\theta = \hat{\theta}(\overline{\omega})$, then security and consumption are both best responses for the ruler following an initial choice of $\omega = \overline{\omega}$. Failure of Equation 4 implies

$$\mu(\theta) \cdot \overline{\omega} > \pi_H(\theta) \cdot (\overline{\omega} - \tau) \geq [\overline{q} \cdot \pi_H(\theta) + (1 - \overline{q}) \cdot \pi_L(\theta)] \cdot (\overline{\omega} - \tau),$$

so the sequential rationality claim holds regardless of the ruler's final choice.

Proof. The "only if" direction follows from Lemma 2, Lemma 3, and Lemma 4. To prove the "if" direction, suppose all three conditions hold, and consider the following strategy profile:

- The ruler's initial choice of constraints is $\omega = \overline{\omega}$.
- If $\omega = \underline{\omega}$, then the elite rejects the tax demand. If the elite accepts the tax demand, then the ruler chooses security if $\theta > \hat{\theta}(\underline{\omega})$ and chooses consumption otherwise.
- If $\omega = \overline{\omega}$, then the elite accepts the tax demand. If the elite accepts the tax demand and the constraints on the ruler do not bind, then the ruler chooses security if $\theta \geq \hat{\theta}(\overline{\omega})$ and chooses consumption otherwise.

The ruler's final choices between security and consumption are best responses by construction (see Lemma 1). The elite's rejection of the tax demand in case $\omega = \underline{\omega}$ is then sequentially rational by the assumption that elite credibility holds. Its acceptance of the tax demand in case $\omega = \overline{\omega}$ is sequentially rational by the assumption that elite willingness holds. Finally, the ruler's initial choice to delegate ($\omega = \overline{\omega}$) is sequentially rational by the assumption that ruler willingness holds. To prove the uniqueness claim, observe that strict elite credibility implies that the elite rejects following $\omega = \underline{\omega}$ in all equilibria, and strict elite willingness implies that the elite accepts following $\omega = \overline{\omega}$ in all equilibria. Strict ruler willingness then implies that the ruler selects $\omega = \overline{\omega}$ in all equilibria. □

A.7 Proof of Lemma 5

Lemma 5 (War threats promote ruler willingness)**.** *The ruler willingness condition holds if and only if $\theta \geq \theta^{rw}$, where $\theta^{rw} > 0$ if and only if $\tau < \frac{\overline{\omega}-\underline{\omega}}{1-\overline{q}}$ and where $\theta^{rw} < \infty$ if and only if $\Delta > \frac{\overline{\omega}-\underline{\omega}}{1-\overline{\omega}}$.*

Proof. The ruler willingness condition (Equation 2) is equivalent to

$$\max\left\{\pi_H(\theta)\cdot(1-\overline{\omega}),\ \overline{q}\cdot\pi_H(\theta)\cdot(1-\overline{\omega})+(1-\overline{q})\cdot\pi_L(\theta)\cdot(1-\overline{\omega}+\tau)\right\}\geq\pi_L(\theta)\cdot(1-\underline{\omega}),$$

which in turn is equivalent to

$$\max\left\{\frac{\pi_H(\theta)}{\pi_L(\theta)}\cdot(1-\overline{\omega}),\ \overline{q}\cdot\frac{\pi_H(\theta)}{\pi_L(\theta)}\cdot(1-\overline{\omega})+(1-\overline{q})\cdot(1-\overline{\omega}+\tau)\right\}\geq 1-\underline{\omega}. \tag{A.1}$$

The LHS of the above expression is strictly increasing in θ, proving the existence of a cutpoint θ^{rw} above which ruler willingness holds and below which it fails. If $\theta = 0$, the ruler willingness condition is equivalent to

$$1-\overline{\omega}+(1-\overline{q})\cdot\tau\geq 1-\underline{\omega},$$

which proves that $\theta^{rw} > 0$ if and only if $\overline{\omega} - \underline{\omega} > (1 - \overline{q}) \cdot \tau$. Finally, Lemma 1 and Lemma A.1 imply

$$\begin{aligned}
&\lim_{\theta \to \infty} \max \left\{ \frac{\pi_H(\theta)}{\pi_L(\theta)} \cdot (1 - \overline{\omega}), \overline{q} \cdot \frac{\pi_H(\theta)}{\pi_L(\theta)} \cdot (1 - \overline{\omega}) + (1 - \overline{q}) \cdot (1 - \overline{\omega} + \tau) \right\} \\
&\quad = \lim_{\theta \to \infty} \left\{ \frac{\pi_H(\theta)}{\pi_L(\theta)} \cdot (1 - \overline{\omega}) \right\} \\
&\quad = (1 + \Delta) \cdot (1 - \overline{\omega}).
\end{aligned}$$

We thus have $\theta^{rw} < \infty$ if and only if $(1 + \Delta) \cdot (1 - \overline{\omega}) > 1 - \underline{\omega}$, which is equivalent to $\overline{\omega} - \underline{\omega} < (1 - \overline{\omega}) \cdot \Delta$. □

A.8 Proof of Lemma 6

Lemma 6 (War threats reduce immobile elite credibility)**.** *Assume the elite's outside option is to refuse. The elite credibility condition holds if and only if the external threat is weak enough:* $\theta \leq \theta^{ec}_{\text{refuse}}$*, where* $\theta^{ec}_{\text{refuse}} \geq \hat{\theta}(\underline{\omega}) > 0$*.*

Proof. By definition (Equation 3), elite credibility holds if $\theta \leq \hat{\theta}(\underline{\omega})$. For $\theta > \hat{\theta}(\underline{\omega})$, the elite credibility condition with immobile wealth is equivalent to

$$\underline{\omega} \geq \frac{\pi_H(\theta)}{\pi_L(\theta)} \cdot (\underline{\omega} - \tau).$$

If $\underline{\omega} \leq \tau$, then the claim holds trivially with $\theta^{ec}_{\text{refuse}} = \infty$. Otherwise, the RHS of the above inequality is strictly increasing in θ (per Lemma A.1), proving the existence of a (potentially infinite) cutpoint $\theta^{ec}_{\text{refuse}} \geq \hat{\theta}(\underline{\omega})$ below which elite credibility holds and above which it fails. □

A.9 Proof of Lemma 7

Lemma 7 (War threats promote immobile elite willingness)**.** *Assume the elite's outside option is to refuse. The elite willingness condition holds if and only if the external threat is strong enough:* $\theta \geq \theta^{ew}_{\text{refuse}}$*, where* $\theta^{ew}_{\text{refuse}} > 0$*.*

Proof. For an elite with immobile wealth, the willingness condition (Equation 4) is equivalent to

$$\overline{\omega} \leq \begin{cases} \left[\overline{q} \cdot \dfrac{\pi_H(\theta)}{\pi_L(\theta)} + (1 - \overline{q}) \right] \cdot (\overline{\omega} - \tau) & \theta < \hat{\theta}(\overline{\omega}), \\ \dfrac{\pi_H(\theta)}{\pi_L(\theta)} \cdot (\overline{\omega} - \tau) & \theta \geq \hat{\theta}(\overline{\omega}). \end{cases}$$

By Lemma A.1 and the fact that $\frac{\pi_H}{\pi_L} \geq 1$, the RHS of the above expression is strictly increasing in θ, proving the existence of a cutpoint $\theta^{ew}_{\text{refuse}}$ above which elite willingness holds and below which it fails. At $\theta = 0$, the condition is equivalent to $\underline{\omega} \leq \underline{\omega} - \tau$, which does not hold, proving $\theta^{ew}_{\text{refuse}} > 0$. □

A.10 Proof of Lemma 8

Lemma 8 (War threats and mobile elite credibility)**.** *Assume the elite's outside option is to exit. If $\sigma \geq \hat{\sigma} \equiv \pi_H(\hat{\theta}(\underline{\omega})) \cdot (1 - \frac{\tau}{\underline{\omega}})$, then the elite credibility condition holds for all θ. Otherwise, if $\sigma < \hat{\sigma}$, then the elite credibility condition holds if and only if $\theta \notin (\hat{\theta}(\underline{\omega}), \theta^{ec}_{\text{exit}})$, where $\hat{\theta}(\underline{\omega}) < \theta^{ec}_{\text{exit}} < \infty$.*

Proof. By definition (Equation 3), elite credibility holds if $\theta \leq \hat{\theta}(\underline{\omega})$. For $\theta > \hat{\theta}(\underline{\omega})$, the elite credibility condition with mobile wealth is equivalent to

$$\sigma \cdot \underline{\omega} \geq \pi_H(\theta) \cdot (\underline{\omega} - \tau).$$

The RHS of the above inequality is strictly decreasing in θ. Therefore, if the inequality holds at $\theta = \hat{\theta}(\underline{\omega})$, which is equivalent to $\sigma \geq \hat{\sigma}$, then elite credibility holds for all θ. Otherwise, if $\sigma < \hat{\sigma}$, then there is a cutpoint $\theta^{ec}_{\text{exit}} > \hat{\theta}(\underline{\omega})$ such that elite credibility fails if and only if $\hat{\theta}(\underline{\omega}) < \theta < \theta^{ec}_{\text{exit}}$. Finally, the claim that $\theta^{ec}_{\text{exit}} < \infty$ follows from the fact that $\lim_{\theta \to \infty} \pi_H(\theta) = 0$. □

A.11 Proof of Lemma 9

To prove the lemma, we first provide a complete characterization of elite willingness when the elite's wealth is mobile.

Lemma A.3. *Assume the elite's outside option is to exit. There exist $\tilde{\theta}^{ew}_{\text{exit}} \leq \hat{\theta}(\overline{\omega})$ and $\theta^{ew}_{\text{exit}} < \infty$ such that the elite willingness condition holds if and only if $0 \leq \theta \leq \tilde{\theta}^{ew}_{\text{exit}}$ or $\hat{\theta}(\overline{\omega}) \leq \theta \leq \theta^{ew}_{\text{exit}}$. (We allow $\tilde{\theta}^{ew}_{\text{exit}} < 0$ and $\theta^{ew}_{\text{exit}} < \hat{\theta}(\overline{\omega})$, so that either or both subintervals may be empty.)*

Proof. For an elite with mobile wealth, the willingness condition (Equation 4) is equivalent to

$$\sigma \cdot \overline{\omega} \leq \begin{cases} [\overline{q} \cdot \pi_H(\theta) + (1 - \overline{q}) \cdot \sigma] \cdot (\overline{\omega} - \tau) & \theta < \hat{\theta}(\overline{\omega}), \\ \pi_H(\theta) \cdot (\overline{\omega} - \tau) & \theta \geq \hat{\theta}(\overline{\omega}). \end{cases}$$

The RHS of this inequality is strictly decreasing on $[0, \hat{\theta}(\overline{\omega}))$, jumps discontinuously at $\theta = \hat{\theta}(\overline{\omega})$, and then strictly decreases again on $(\hat{\theta}(\overline{\omega}), \infty)$. This verifies the claim about the cutpoints $\tilde{\theta}^{ew}_{\text{exit}}$ and $\theta^{ew}_{\text{exit}}$. To prove that $\theta^{ew}_{\text{exit}} < \infty$, it suffices to observe that $\hat{\theta}(\overline{\omega}) < \infty$ (per Lemma 1) and that $\lim_{\theta \to \infty} [\pi_H(\theta) \cdot (\overline{\omega} - \tau)] = 0 < \sigma \cdot \overline{\omega}$. □

The result in the text follows as an immediate corollary.

Lemma 9 (War threats reduce mobile elite willingness)**.** *Assume the elite's outside option is to exit. The elite willingness condition holds only if the external threat is weak enough:* $\theta \leq \theta^{ew}_{\text{exit}}$*, where* $\theta^{ew}_{\text{exit}} < \infty$*.*

Proof. Immediate from Lemma A.3. □

A.12 Proof of Proposition 2

Proposition 2 (Delegation equilibrium with immobile wealth)**.** *Assume the elite's outside option is to refuse. There is an equilibrium in which the ruler delegates to parliament if and only if the external threat is moderate:* $\max\{\theta^{rw}, \theta^{ew}_{\text{refuse}}\} \leq \theta \leq \theta^{ec}_{\text{refuse}}$.

Proof. Immediate from Proposition 1 and Lemmas 5–7. □

A.13 Proof of Proposition 3

Proposition 3. *Assume the elite's outside option is to exit. If* $\sigma \geq \hat{\sigma}$*, then there is an equilibrium in which the ruler delegates to parliament only if* $\theta^{rw} \leq \theta \leq \theta^{ew}_{\text{exit}}$*. Otherwise, if* $\sigma < \hat{\sigma}$*, then there is an equilibrium in which the ruler delegates to parliament only if* $\theta^{rw} \leq \theta \leq \min\{\theta^{ew}_{\text{exit}}, \hat{\theta}(\underline{\omega})\}$ *or* $\max\{\theta^{rw}, \theta^{ec}_{\text{exit}}\} \leq \theta \leq \theta^{ew}_{\text{exit}}$.

Proof. Immediate from Proposition 1, Lemma 5, and Lemmas 8–9. □

A.14 Additional Comparative Statics for Baseline Model

A.14.1 Ruler Willingness

Remark A.1 (Comparative statics on ruler willingness)**.**

(a) Increases in $\overline{\omega} - \underline{\omega}$ *undermine ruler willingness. If* $\overline{\omega} - \underline{\omega} \approx 0$*, then ruler willingness holds.*

(b) If $\theta \leq \hat{\theta}(\overline{\omega})$*, then increases in* $\overline{q}$ *undermine ruler willingness. Otherwise,* $\overline{q}$ *does not a ect ruler willingness.*

(c) Increases in Δ *enhance ruler willingness.*

Proof. Claim (a). The first condition of Equation 2 is then equivalent to

$$\overline{\omega} - \underline{\omega} \leq \left(1 - \frac{\pi_L(\theta)}{\pi_H(\theta)}\right) \cdot (1 - \underline{\omega}),$$

and the second condition is similarly equivalent to

$$\overline{\omega} - \underline{\omega} \leq \frac{\overline{q} \cdot (\pi_H(\theta) - \pi_L(\theta)) \cdot (1 - \underline{\omega}) + (1 - \overline{q}) \cdot \pi_L(\theta) \cdot \tau}{\overline{q} \cdot \pi_H(\theta) + (1 - \overline{q}) \cdot \pi_L(\theta)}.$$

As ruler willingness is equivalent to either of these conditions holding, they prove that greater $\overline{\omega} - \underline{\omega}$ undermines ruler willingness. Additionally, the RHS of each condition is positive, proving that ruler willingness is sure to hold when $\overline{\omega} - \underline{\omega} \approx 0$.

Claim (b). If $\theta \leq \hat{\theta}(\overline{\omega})$, then the LHS of Equation A.1 is strictly decreasing in $\overline{q}$. Otherwise, the LHS of Equation A.1 is constant in $\overline{q}$.

Claim (c). The claim follows immediately from the fact that the LHS of Equation A.1 is strictly increasing in Δ. □

A.14.2 Elite Credibility

Remark A.2 (Comparative statics on elite credibility)**.**

(a) Increases in τ facilitate elite credibility.

(b) Assume $\pi_H(\theta) > \mu(\theta)$.[27] Increases in $\underline{\omega}$ may facilitate or undermine elite credibility.

Proof. Claim (a). It follows from Equation 1 that $\hat{\theta}(\underline{\omega})$ increases in τ. Additionally, the RHS of the second condition in Equation 3 is strictly decreasing in τ. Both of these effects make it easier for elite credibility to hold, all else equal.

Claim (b). It follows from Equation 1 that $\hat{\theta}(\underline{\omega})$ increases in $\underline{\omega}$, which facilitates elite credibility. However, under the assumption here, the second condition in Equation 3 is equivalent to

$$\underline{\omega} \leq \frac{\pi_H(\theta) \cdot \tau}{\pi_H(\theta) - \mu(\theta)},$$

which becomes more difficult to maintain as $\underline{\omega}$ increases. □

A.14.3 Elite Willingness

Remark A.3 (Comparative statics on elite willingness)**.**

(a) Increases in τ undermine elite willingness.

(b) Assume $\pi_H(\theta) > \mu(\theta)$. If $\theta < \hat{\theta}(\overline{\omega})$, increases in $\overline{q}$ facilitate elite willingness. Otherwise, $\overline{q}$ does not a ect elite willingness.

[27] This holds trivially if the elite's wealth is immobile.

Proof. Claim (a). This holds because the RHS of Equation 4 is strictly decreasing in τ.

Claim (b). Under the stated assumption, this holds because the RHS of Equation 4 is strictly increasing in $\overline{q}$ if $\theta < \hat{\theta}(\overline{\omega})$ and constant in $\overline{q}$ otherwise. □

B Extensions

B.1 Hybrid Outside Option

We consider how the incentive compatibility conditions would change for a hybrid elite, whose wealth is divided between immobile and mobile assets. Generalizing the baseline model, let $\gamma \in [0, 1]$ represent the fraction of the elite's assets that are mobile. If the elite exercises its outside option or the ruler reneges, the immobile fraction of wealth remains in the ruler's domain and is potentially subject to expropriation by the outsider, while the mobile fraction is moved outside the domain at a proportional cost of $1 - \sigma$. Altogether, the proportion of wealth that the elite retains in this case is $\mu(\theta) = (1 - \gamma) \cdot \pi_L(\theta) + \gamma \cdot \sigma$. The baseline model with immobile wealth is the special case of the hybrid model where $\gamma = 0$, while the baseline model with mobile wealth is the one where $\gamma = 1$.

We focus on the behavior of the elite conditions at extreme values of the external threat. First, we consider when there is no external threat: $\theta = 0$, so that $\pi_L(\theta) = \pi_H(\theta) = 1$. In the baseline model, we saw that elite credibility always holds in this case, regardless of whether the elite's wealth is immobile or mobile (Lemma 6 and Lemma 8). Meanwhile, elite willingness fails for an elite with immobile wealth (Lemma 7), but can sometimes hold for an elite with mobile wealth (see footnote 17). We find analogous results in the hybrid case. When there is no external threat, elite credibility holds trivially, while elite willingness holds only if the fraction of mobile wealth potentially lost by exiting is high enough relative to the tax demand.

Lemma B.1. *If $\theta = 0$ in the model with hybrid elite wealth, then elite credibility always holds, and elite willingness holds if and only if $\gamma \cdot (1 - \sigma) \geq \frac{\tau}{\overline{\omega} - (1 - \overline{q}) \cdot (\overline{\omega} - \tau)}$.*

Proof. The claim about elite credibility follows from the definition of this condition (Equation 3), as $0 \leq \hat{\theta}(\underline{\omega})$ (per Lemma 1). To prove the claim about elite willingness, first note that $\theta = 0$ implies $\mu(\theta) = 1 - \gamma \cdot (1 - \sigma)$ in the hybrid model. Elite willingness (Equation 4) is then equivalent to

$$1 - \gamma \cdot (1 - \sigma) \leq \frac{\overline{q} \cdot (\overline{\omega} - \tau)}{\overline{\omega} - (1 - \overline{q}) \cdot (\overline{\omega} - \tau)},$$

which in turn is equivalent to the condition in the lemma. □

Next, we consider the nature of the conditions when an elite with hybrid wealth faces a sizable external threat. In the baseline model with immobile wealth, a sufficiently large external threat causes elite credibility to fail and elite willingness to hold. The opposite is true in the baseline model with mobile wealth, where large threats hinder elite willingness but bolster elite credibility. In the model with hybrid wealth, the findings are similar to the baseline model with mobile wealth: elite credibility holds and elite willingness fails when the outsider is extremely strong.

Lemma B.2. *Assume $\gamma > 0$ in the model with hybrid elite wealth. For all su ciently large θ, elite credibility holds and elite willingness fails.*

Proof. With hybrid elite wealth and $\gamma > 0$, we have

$$\lim_{\theta\to\infty} \frac{\pi_H(\theta)}{\mu(\theta)} = \lim_{\theta\to\infty} \frac{\pi_H(\theta)}{(1-\gamma)\cdot\pi_L(\theta) + \gamma\cdot\sigma} = \frac{0}{\gamma\cdot\sigma} = 0.$$

It is then immediate from Equation 3 that elite credibility holds for sufficiently large θ. Meanwhile, Equation 4 implies that elite willingness is equivalent to

$$\overline{\omega} \leq \frac{\pi_H(\theta)}{\mu(\theta)} \cdot (\overline{\omega} - \tau)$$

for all $\theta \geq \hat{\theta}(\overline{\omega})$. Therefore, elite willingness fails for sufficiently large θ. □

This result shows that a key substantive finding of our baseline analysis continues to hold when the elite's wealth is a mixture of immobile and mobile assets: strong outside threats do not promote states that are both strong and limited, as elite incentives preclude an equilibrium with delegation when θ is large.

B.2 External Threats Affect Exit Option

In this section, we extend the model to allow the value of the exit option for mobile wealth to vary with θ, the strength of external threats. As such, θ may represent not only the magnitude of a particular threat to the domestic government, but also the level of systemic conflict and thus lack of safe harbors for mobile assets.[28] In this strategic environment, the inside and outside options both become worse for an elite with mobile wealth as the war threat grows—similar to what we saw for elites with immobile wealth in the baseline model. At certain margins, an increase in threat strength may affect an elite with mobile wealth differently than in the baseline model, weakening their credibility while strengthening their willingness to fund the ruler. Nevertheless, the strategic dynamics with very strong outside threats are the same as for an elite with mobile wealth in the baseline model, so long as the elite is guaranteed to retain *some* fraction of its wealth on exiting. Even with a diminished outside option value, a mobile elite that faces a strong outside threat can credibly threaten to withhold funds from an absolutist ruler, but will be unwilling to fund a ruler who delegates. The outcome of the interaction, as in the baseline model, will be for the ruler to choose absolutism and the elite to refuse her tax demand.

[28] We thank an anonymous referee for drawing our attention to this possibility.

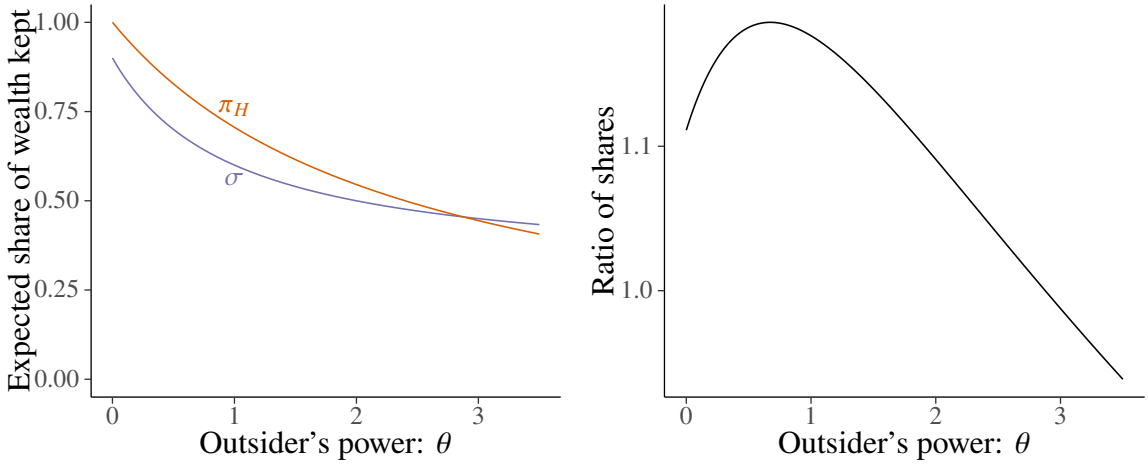
In the extended model, let $\overline{\sigma}$ and $\underline{\sigma}$ represent, respectively, the maximum and minimum fraction of wealth that the elite may retain upon exiting, where $0 < \underline{\sigma} < \overline{\sigma} < 1$.[29] We now assume that a greater external threat not only increases the chance of a successful invasion, but also reduces the extent of safe harbors available to move or hide wealth. We thus make the expected share of wealth retained upon exit a strictly decreasing function of external threat strength, denoted $\sigma(\theta)$. We parameterize the relationship between external threats and moveable wealth as follows:

$$\sigma(\theta) = \frac{\overline{\sigma} + \underline{\sigma}\theta}{1 + \theta}.$$

For no external threat, we have $\sigma(0) = \overline{\sigma}$. For an arbitrarily large threats, $\lim_{\theta \to \infty} \sigma(\theta) = \underline{\sigma}$. In between, $\sigma(\theta)$ strictly decreases with θ, as illustrated in Figure B.1(a). We assume $\underline{\sigma}$ is small enough that the external threat makes a meaningful difference in the cost of exiting: $\underline{\sigma} < \frac{\Delta\overline{\sigma}}{1+\Delta}$.[30]

Figure B.1: Elite options when outside threats affect exit value.

(a) Expected share of wealth retained. (b) Ratio of shares: π_H/σ.



Parameters: $\Delta = 1.4$, $\underline{\sigma} = 0.3$, $\overline{\sigma} = 0.9$.

In the baseline model, the effect of the war threat on the elite incentive compatibility conditions is determined by its effect on the ratio $\frac{\pi_H(\theta)}{\mu(\theta)}$. For an elite with immobile wealth ($\mu(\theta) = \pi_L(\theta)$), the ratio is strictly increasing with θ, meaning a stronger outside threat reduces elite credibility while increasing elite willingness. For an elite with mobile wealth ($\mu(\theta) = \sigma$ (constant)), the ratio is instead strictly decreasing, so sufficiently strong threats enhance elite credibility while reducing elite willingness. In the present extension, where $\mu(\theta) = \sigma(\theta)$ (variable), the ratio is $\cap$-shaped. At low levels, starting from no external threat, the ratio is increasing: a marginal increase in outside

[29] We consider the limiting case $\underline{\sigma} = 0$ separately at the conclusion of this section.

[30] If instead $\underline{\sigma} \geq \frac{\Delta\overline{\sigma}}{1+\Delta}$, then $\frac{\pi_H(\theta)}{\sigma(\theta)}$ is strictly decreasing for all values of the external threat, and the effects of external threats on elite conditions are broadly similar to those in the baseline model with mobile wealth.

threat makes for a smaller proportional reduction in the home defense probability π_H than in the exit share σ. But eventually this reverses, and the reduction in security becomes dominant, as illustrated in Figure B.1(b).

Lemma B.3. *$\frac{\pi_H(\theta)}{\sigma(\theta)}$ is strictly increasing on $[0, \breve{\theta})$ and strictly decreasing on $(\breve{\theta}, \infty)$, where $\breve{\theta} \equiv \sqrt{\frac{\Delta(\overline{\sigma}-\underline{\sigma})}{\underline{\sigma}}} - 1 > 0$.*

Proof. Taking the derivative of the ratio, we have

$$\frac{d}{d\theta}\left[\frac{\pi_H(\theta)}{\sigma(\theta)}\right] = \frac{1+\Delta}{[(1+\Delta+\theta)(\overline{\sigma}+\underline{\sigma}\theta)]^2}\left[\Delta(\overline{\sigma}-\underline{\sigma}) - \underline{\sigma}(1+\theta)^2\right], \tag{B.1}$$

which is positive for all $\theta < \breve{\theta}$ and negative for all $\theta > \breve{\theta}$. The claim that $\breve{\theta} > 0$ follows from our assumption that $\underline{\sigma} < \frac{\Delta\overline{\sigma}}{1+\Delta}$. □

When external threats affect the value of exiting, their relationship with the elite credibility condition is subtly different than in the baseline model with mobile wealth (see Lemma 8). In both cases, elite credibility is guaranteed to hold when the outside threat is so low that an absolutist ruler would expropriate rather than provide security (i.e., $\theta < \hat{\theta}(\underline{\omega})$). The difference comes when the external threat is just above this threshold. In the baseline model with mobile wealth, once the outside threat is strong enough for an absolutist ruler to voluntarily provide security, further increases in θ strengthen elite credibility. This is because the value of funding the ruler is decreasing with θ, while the value of exiting remains constant. In the extended model, by contrast, there may be an intermediate range where the value of exiting is decreasing at a faster rate than that of relying on the ruler for security. Marginal increases in war threats now *hinder* elite credibility in this intermediate range, as the elite is pushed to rely on an absolutist ruler rather than exit. Eventually, though, the same logic kicks in as in the baseline model. When the outside threat is strong enough that the domestic regime has virtually no chance of surviving the invasion ($\pi_H(\theta) \leq \underline{\sigma}$), the elite prefers to exit, and elite credibility holds.

Lemma B.4 (Elite credibility when threats affect exit)**.** *In the model where external threats a ect the exit option:*

(a) Elite credibility holds for all $\theta \leq \hat{\theta}(\underline{\omega})$.

(b) If $\hat{\theta}(\underline{\omega}) < \breve{\theta}$, then increases in θ within this range make elite credibility harder to hold. Formally, there exists $\underline{\theta}^{ec}_{\text{vexit}} \in [\hat{\theta}(\underline{\omega}), \breve{\theta}]$ such that elite credibility holds for $\theta \in [\hat{\theta}(\underline{\omega}), \underline{\theta}^{ec}_{\text{vexit}})$ and fails for $\theta \in (\underline{\theta}^{ec}_{\text{vexit}}, \breve{\theta}]$.

(c) There exists $\overline{\theta}^{ec}_{\text{vexit}} < \infty$ such that elite credibility holds for all $\theta \geq \overline{\theta}^{ec}_{\text{vexit}}$.

Proof. Claim (a). Immediate from the definition of elite credibility (Equation 3).

Claim (b). For $\theta > \hat{\theta}(\underline{\omega})$, the elite credibility condition in this extension is equivalent to

$$\underline{\omega} \geq \frac{\pi_H(\theta)}{\sigma(\theta)} \cdot (\underline{\omega} - \tau). \tag{B.2}$$

The RHS of this expression is increasing on $[0, \breve{\theta})$ per Lemma B.3, proving the claim.

Claim (c). L'Hopital's rule gives

$$\lim_{\theta\to\infty} \frac{\pi_H(\theta)}{\sigma(\theta)} = \lim_{\theta\to\infty} \left[\frac{1+\Delta}{1+\Delta+\theta} \cdot \frac{1+\theta}{\overline{\sigma} + \underline{\sigma}\theta} \right] = \lim_{\theta\to\infty} \frac{1+\Delta}{\overline{\sigma} + (1+\Delta)\underline{\sigma} + 2\underline{\sigma}\theta} = 0, \tag{B.3}$$

so the claim follows from Equation B.2. □

Next, we consider how external threats affect elite willingness when the value of exiting also decreases with θ. At low levels of outside threat ($\theta < \breve{\theta}$), a marginal increase in θ has a larger proportional reduction in the value of exiting than in the value of security provided by the ruler. Consequently, increases in war threats from a low level tend to promote elite willingness. This pattern runs contrary to the baseline model with mobile wealth (see Lemma 9), in which marginal increases in the outside threat hinder ruler willingness, as the value of security provided by the ruler decreases while the exit option remains constant. But once the war threat grows large enough ($\theta > \breve{\theta}$), we see the same pattern in both the baseline model and the extension: further increases in the war threat hinder elite willingness. The only exception to this broad pattern, again in both models, is that elite willingness might discontinuously jump up at the cutpoint where the ruler provides security voluntarily even when constraints do not bind her *ex post* ($\theta = \hat{\theta}(\overline{\omega})$). Nevertheless, once the outside threat is strong enough, elite willingness is sure to fail.

Lemma B.5 (Elite willingness when threats affect exit)**.** *In the model where external threats a ect the exit option:*

(a) Increases in θ make elite willingness easier to hold on $[0, \breve{\theta})$. Formally, there exists $\underline{\theta}^{ew}_{\text{vexit}} \in [0, \breve{\theta}]$ such that elite willingness fails on $[0, \underline{\theta}^{ew}_{\text{vexit}})$ and holds on $(\underline{\theta}^{ew}_{\text{vexit}}, \breve{\theta}]$.

(b) Increases in θ make elite willingness harder to hold on $(\breve{\theta}, \infty)$ as long as they don't change the ruler's choice to voluntarily abide. Formally, there exists $\overline{\theta}^{ew}_{\text{vexit}} > \hat{\theta}(\overline{\omega})$ such that elite willingness holds on $(\hat{\theta}(\overline{\omega}), \overline{\theta}^{ew}_{\text{vexit}})$ and fails on $(\overline{\theta}^{ew}_{\text{vexit}}, \infty)$. Additionally, if $\breve{\theta} < \hat{\theta}(\overline{\omega})$, there exists $\tilde{\theta}^{ew}_{\text{vexit}} \in [\breve{\theta}, \hat{\theta}(\overline{\omega})]$ such that elite willingness holds on $(\breve{\theta}, \tilde{\theta}^{ew}_{\text{vexit}})$ and fails on $(\tilde{\theta}^{ew}_{\text{vexit}}, \hat{\theta}(\overline{\omega}))$.

(c) Elite willingness eventually fails: $\overline{\theta}^{ew}_{\text{vexit}} < \infty$.

Proof. Claim (a). Elite willingness (Equation 4) in this extension is equivalent to

$$\underline{\omega} \leq \begin{cases} \left[\overline{q} \cdot \dfrac{\pi_H(\theta)}{\sigma(\theta)} + (1-\overline{q})\right] \cdot (\overline{\omega} - \tau) & \theta < \hat{\theta}(\overline{\omega}), \\ \dfrac{\pi_H(\theta)}{\sigma(\theta)} \cdot (\overline{\omega} - \tau) & \theta \geq \hat{\theta}(\overline{\omega}). \end{cases} \tag{B.4}$$

The ratio $\frac{\pi_H}{\sigma}$ is strictly increasing on $[0, \check{\theta})$ per Lemma B.3. Because $\frac{\pi_H(0)}{\sigma(0)} = \frac{1}{\overline{\sigma}} > 1$, this implies $\frac{\pi_H}{\sigma} > 1$ throughout this range. Therefore, the RHS of Equation B.4 is strictly increasing on this range (with a discontinuous jump upward at $\theta = \hat{\theta}(\overline{\omega})$ in case $\hat{\theta}(\overline{\omega}) < \check{\theta}$), which proves the claim.

Claim (b). The ratio $\frac{\pi_H}{\sigma}$ is strictly decreasing on $(\check{\theta}, \infty)$ per Lemma B.3. Therefore, Equation B.4 is strictly decreasing on this interval, except with a discontinuous jump upward at $\theta = \hat{\theta}(\overline{\omega})$ in case $\check{\theta} < \hat{\theta}(\overline{\omega})$. The claims about cutpoints then follow from Lemma A.3, *mutatis mutandis*.

Claim (c). The claim that $\overline{\theta}^{ew}_{\text{vexit}} < \infty$ follows from combining Equation B.3 and Equation B.4. □

To conclude, we observe some important exceptions from the baseline model with mobile wealth when the value of exiting depends on outside threat strength, specifically the marginal effects of relatively low levels of threat ($\theta < \check{\theta}$). Contrary to the baseline model predictions, we see that an increase in outside threat from an initially low level might reduce a mobile elite's credible threat to withhold funds from an absolutist, while strengthening its willingness to fund a ruler who has delegated to parliament. The greater the reduction in safe harbors for wealth due to outside threats (i.e., the difference $\overline{\sigma} - \underline{\sigma}$), the greater the range in which the comparative statics of outside threats differ from the baseline model with mobile wealth. That said, the equilibrium in case of very large war threats continues to resemble the baseline setting. When θ is high enough that the worst-case scenario under exit is preferable to the best-case scenario funding the ruler ($\pi_H(\theta) \leq \underline{\sigma}$), elite credibility will hold while elite willingness will fail. The equilibrium outcome, as in the original model with mobile wealth, is that the ruler will choose absolutist rule, and the elite will exit rather than accept the tax demand. The state will be neither strong nor limited.

B.2.1 When the lower bound is zero

We now briefly consider the limiting case of $\underline{\sigma} = 0$, which substantively represents situations in which all possible outlets to move or hide mobile wealth disappear as war threats grow sufficiently strong. In this case, the logic of the extended model comes to closely resemble that of the baseline model with *immobile* wealth. When facing a dangerous outside world without any safe harbor for their wealth, the elites' least bad option will be to fund the ruler even if she does not delegate to parliament. Consequently, an increase in external threat strength will always hinder elite credibility (mirroring Lemma 6), but will strengthen elite willingness (mirroring Lemma 7). When θ is high

enough, the equilibrium outcome is for the ruler to choose absolutist rule, and for the elite to accept her tax demand nonetheless.

The formal logic behind these results is a consequence of how the ratio $\frac{\pi_H(\theta)}{\sigma(\theta)}$ behaves when $\underline{\sigma} = 0$. Equation B.1 implies that the ratio is always strictly increasing in this special case. Graphically, the quantities in B.1 would closely represent their counterparts in 1. Effectively, we have $\breve{\theta} = \infty$. We can then follow the logic of Lemmas B.4 and B.5 to conclude that elite credibility falters with θ, while elite willingness strengthens.

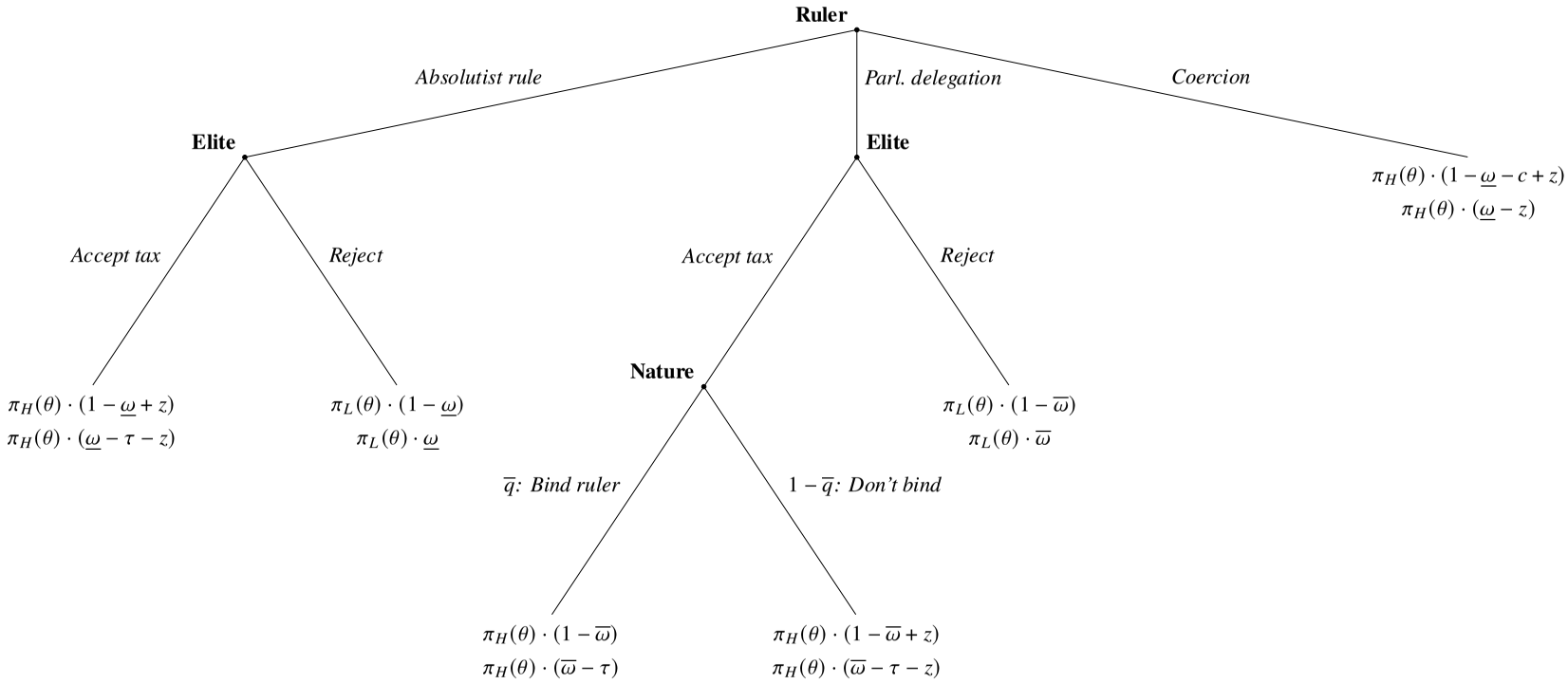
B.3 Coercion

To examine how the introduction of a coercive standing army alters the core strategic tradeoffs in bargaining between the ruler and elite, we extend the model in two ways. First, we alter the payoffs in case the ruler's tax demand is accepted to reflect the coercive use of the standing army. Unless the ruler chooses to delegate and is bound (by the Nature move) to use the monies exclusively for outside security, the ruler receives an additional transfer of z from the elite, where $0 < z < \underline{\omega} - \tau$. We think of this as additional revenue that the ruler coerces from the elite. Second, we give the ruler an additional option at the beginning of the game to fund a coercive military on her own, and thus bypass the process of bargaining with the elite. To do this, the ruler must pay an upfront cost of c. We assume that the ruler's domestic benefit from building the coercive army does not exceed its cost ($c > z$). Additionally, we assume the cost of building the coercive army exceeds what the ruler gives up by delegating to parliament ($c > \overline{\omega} - \underline{\omega}$); otherwise, there would be no parameters under which the ruler choose fiscal constraints.

The game tree for the extension appears in Figure B.2. In its construction, we implicitly assume that the ruler prefers to build the standing army and use it for coercion over either (1) building it and refraining from coercion, or (2) not building it and instead directly expropriating the tax monies. (1) always holds, and a sufficient condition for (2) is $z \geq \tau - (1 - \frac{\pi_L(\theta)}{\pi_H(\theta)})(1 - \overline{\omega})$. To ease the statement of results and ensure boundary conditions do not bind, we also assume $\Delta > \frac{\tau+z}{\underline{\omega}-\tau-z}$. This ensures finite thresholds on θ beyond which elite credibility fails and elite willingness holds.

Elite incentives change slightly when we introduce the possibility that the military buildup will be used for domestic coercion. The elite factors expected expropriation into its decision to fund the ruler, so the effective tax cost goes up by z under absolutist rule, or $(1-\overline{q})z$ if the ruler has delegated, compared to the baseline model. The increase in the effective cost of funding the ruler strengthens elite credibility but weakens elite willingness. However, there is a countervailing effect: the elite is now guaranteed greater security against the external threat whenever the ruler is funded. Overall, if the war threat is extremely weak or strong—specifically, strong enough that the ruler would have voluntarily provided security in the baseline setting—then the elite's incentives to fund the ruler

Figure B.2: Game tree for coercion extension.



are lower here than in our main model. For more moderate threats, depending on the elite's wealth and the extent of coercive expropriation, the incentive to fund the ruler may be stronger or weaker than before. Nonetheless, the basic relationship between external threat strength, elite credibility, and elite willingness remains the same as before. As the war threat θ grows, the credibility of the elite's threat to withhold funding from an absolutist ruler weakens, while the elite's willingness to fund a ruler who has delegated strengthens.

The introduction of coercion has a starker effect on the ruler's incentives, particularly when the war threat is relatively weak. When the threat is strong enough for elite credibility to fail, the ruler can get her first-best without having to pay the costs associated with delegation or *ex ante* coercion. In this case, just as in the baseline model with immobile wealth, the ruler chooses absolutist rule but receives tax funding nonetheless. If the war threat is moderate, elite credibility and willingness hold, so the ruler can get access to tax funds if and only if she delegates authority to parliament. A further reduction in the war threat may cause a failure in elite willingness (if $\overline{q}$ is low) or in ruler willingness (if $\overline{q}$ is high). The ruler then chooses either coercion, or simply to eschew any chance of funding the standing army. Conditional on ruler willingness or elite willingness failing, greater external threats and greater ruler wealth tend to push the ruler towards choosing coercion, as these are the conditions under which the benefits of the standing army are greatest relative to the fixed cost. The following result states the equilibrium outcomes as a function of external threats and the ruler's wealth.

Proposition B.1 (Equilibrium outcomes with coercion)**.** *In equilibrium in the model with a coercive standing army:*

(a) If the external threat θ is large, elite credibility fails. The ruler chooses absolutist rule, and the elite accepts the tax demand.

(b) If the external threat θ is moderate, elite credibility and elite willingness hold. If the ruler's wealth is high ($\underline{\omega}$ low), then she chooses absolutist rule, and the elite rejects the tax demand. Otherwise, if the ruler's wealth is low ($\underline{\omega}$ high), then she chooses to delegate, and the elite accepts the tax demand.

(c) If the external threat θ is small, elite willingness fails. If the ruler's wealth is high ($\underline{\omega}$ low), then she chooses coercion in this case. Otherwise, if the ruler's wealth is low ($\underline{\omega}$ high), she chooses absolutist rule, and the elite rejects the tax demand.

Proof. Claim (a). The elite credibility condition for the model with coercion is $\pi_L(\theta) \cdot \underline{\omega} \geq \pi_H(\theta) \cdot (\underline{\omega} - \tau - z)$, which is equivalent to

$$\frac{\pi_H(\theta)}{\pi_L(\theta)} \leq \frac{\underline{\omega}}{\underline{\omega} - \tau - z}.$$

The LHS of this expression strictly increases with θ, so there is a cutpoint θ_{co}^{ec} above which elite credibility fails and below which it holds. The condition holds at $\theta = 0$, so $\theta_{\text{co}}^{ec} > 0$; our assumption on Δ ensures that $\theta_{\text{co}}^{ec} < \infty$. If elite credibility fails, then the ruler prefers absolutist rule over delegation by the same logic as in the main model. The last thing to confirm is that the ruler prefers absolutist rule with an accepted tax demand over coercion, which follows from the assumption $c > z$.

Claim (b). The elite willingness condition for the model with coercion is

$$\overline{q} \cdot \pi_H(\theta) \cdot (\overline{\omega} - \tau) + (1 - \overline{q}) \cdot \pi_H(\theta) \cdot (\overline{\omega} - \tau - z) \geq \pi_L(\theta) \cdot \overline{\omega},$$

which is equivalent to

$$\frac{\pi_H(\theta)}{\pi_L(\theta)} \geq \frac{\overline{\omega}}{\overline{\omega} - \tau - (1 - \overline{q})z}. \tag{B.5}$$

The LHS of this expression strictly increases with θ, so there is a cutpoint θ_{co}^{ew} above which elite willingness holds and below which it fails. The condition fails at $\theta = 0$, so $\theta_{\text{co}}^{ew} > 0$. Moreover, we have $\theta_{\text{co}}^{ew} < \theta_{\text{co}}^{ec}$ because

$$\frac{\underline{\omega}}{\underline{\omega} - \tau - z} > \frac{\overline{\omega}}{\overline{\omega} - \tau - z} \geq \frac{\overline{\omega}}{\overline{\omega} - \tau - (1 - \overline{q})z}.$$

Combined with the proof of the previous claim, this shows that elite credibility and willingness both hold if and only if $\theta \in [\theta_{\text{co}}^{ew}, \theta_{\text{co}}^{ec}]$. The elite will thus reject the tax demand in case of absolutist rule, but accept it in case of delegation. Because $c > \overline{\omega} - \underline{\omega}$, the ruler prefers delegating and having the tax demand accepted over coercion. The condition for the ruler to prefer delegating and having the tax demand accepted over absolute rule with the tax demand rejected is $\pi_H(\theta) \cdot (1 - \overline{\omega} + (1 - \overline{q})z) \geq \pi_L(\theta) \cdot (1 - \underline{\omega})$, which is equivalent to

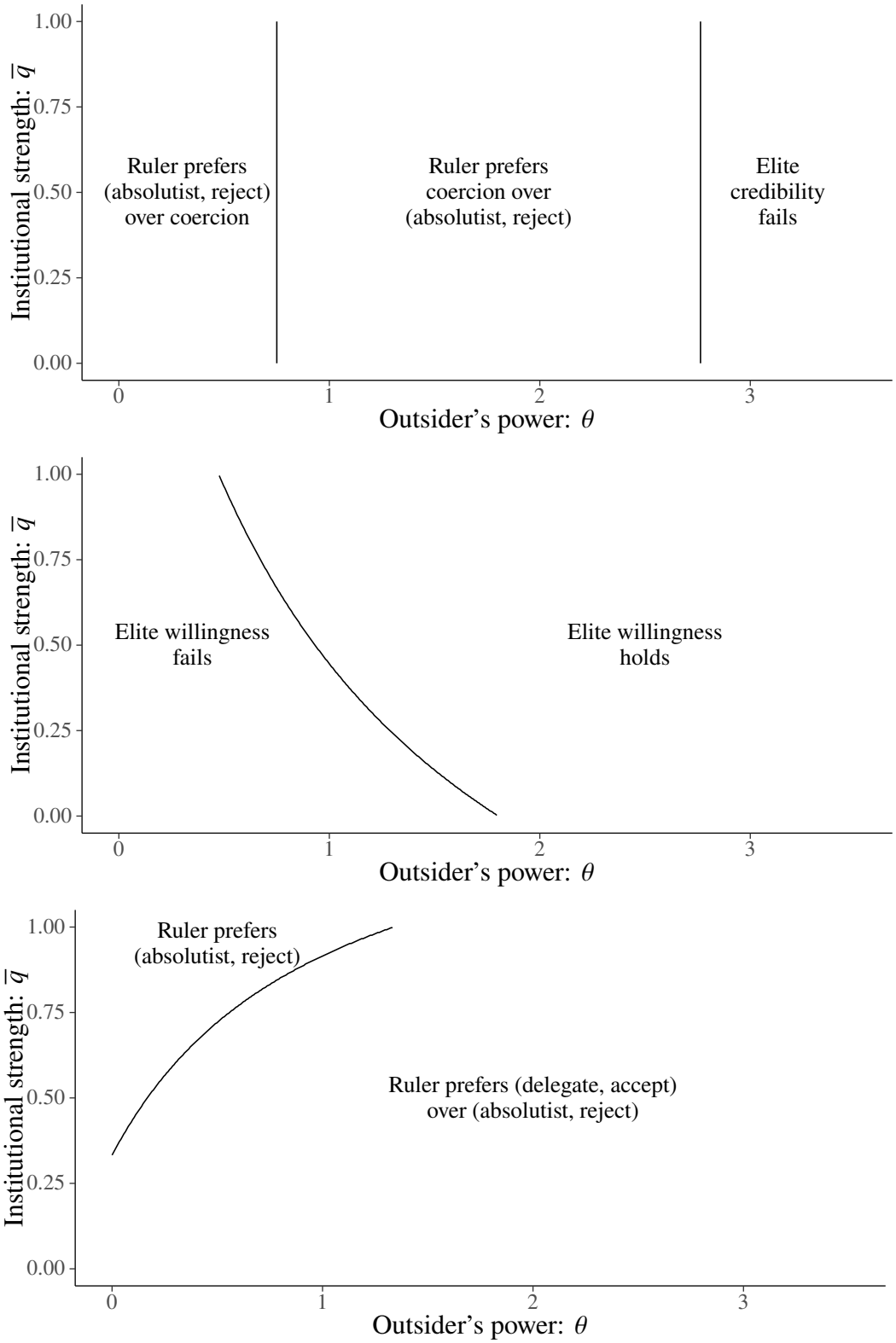
$$\underline{\omega} \geq 1 - \frac{\pi_H(\theta)}{\pi_L(\theta)}(1 - \overline{\omega} + (1 - \overline{q})z). \tag{B.6}$$

Claim (c). Per the last two parts, if $\theta < \theta_{\text{co}}^{ew}$, then elite willingness fails and elite credibility holds. This implies the elite will reject the tax demand regardless of the ruler's choice, so the ruler strictly prefers absolutist rule over delegation. The condition for the ruler to prefer absolute rule with a rejected tax demand over coercion is $\pi_L(\theta) \cdot (1 - \underline{\omega}) \geq \pi_H(\theta) \cdot (1 - \underline{\omega} - c + z)$, which is equivalent to

$$\underline{\omega} \geq 1 - \frac{\pi_H(\theta)}{\pi_H(\theta) - \pi_L(\theta)} \cdot (c - z). \quad \square \tag{B.7}$$

Figure B.3 illustrates the conditions that determine equilibrium behavior, breaking down Fig-

Figure B.3: Component conditions of Figure 9.



ure 9 from the main text into its individual components. The equilibrium outcome is (delegate, accept) if and only if all of the following hold:

- Elite credibility holds
- Elite willingness holds
- Ruler prefers (delegate, accept) over (absolutist, reject)

The incentive effects of institutional strength, $\overline{q}$, are similar to the baseline model. Conditional on elite credibility and willingness holding, delegation becomes more attractive for the ruler as institutional strength decreases. By the same token, a decrease in institutional strength makes it harder for elite willingness to hold, due to the increased likelihood of future expropriation by an empowered ruler. This incentive effect for elites is the same as in the baseline model (Remark A.3), but may have different consequences for equilibrium outcomes. If a decrease in institutional strength breaks elite willingness, then it could cause the ruler to choose coercion when she otherwise would have chosen to delegate—specifically, if the ruler's wealth is great enough to prefer coercion over eschewing the standing army, but not so great that she prefers absolutist rule even when delegation is productive. The following result formalizes the comparative statics on institutional strength in the model with coercion.

Remark B.1 (Comparative statics on $\overline{q}$ with coercion)**.** *In the model with a coercive standing army:*

(a) A decrease in the credibility of parliamentary constraints, $\overline{q}$, makes it harder for elite willingness to hold.

(b) If a decrease in $\overline{q}$ causes elite willingness to fail, this results in coercion as the equilibrium outcome only if the ruler's wealth is su ciently high.

(c) If elite willingness and credibility hold regardless, then a decrease in $\overline{q}$ expands the conditions for the ruler to choose absolutist rule over delegation.

Proof. Claim (a) holds because the RHS of Equation B.5 is strictly decreasing in $\overline{q}$. Because Equation B.7 is not a function of $\overline{q}$, claim (b) then follows from Proposition B.1. Finally, claim (c) holds because the RHS of Equation B.6 is strictly increasing in $\overline{q}$. □

B.4 Offensive Wars

To study offensive wars and the distinct strategic tradeoffs to which they give rise, we modify the model with coercion introduced above. The players' domestic wealth is no longer subject to outside appropriation.[31] Instead, there is an external prize whose value is $\beta > 0$. We assume the ruler

[31] Consequently, the nature of elite wealth (mobile or immobile) is now immaterial for the equilibrium.

cannot pursue the war unless she receives tax funds from parliament or builds an army through coercion; otherwise, each player simply consumes their domestic endowment. If the ruler does pursue the war, she consumes the entire prize herself except in one case—when she has delegated authority to parliament, and the constraints on her turn out to be binding. In this case, the ruler and elite share the outside prize in proportion to their domestic wealth.

The game tree for this extension appears in Figure B.4. To simplify the presentation of results, we set $z = 0$ in the model with offensive wars. The results would not substantively change if building the army also resulted in a domestic transfer ($z > 0$).

The shift to offensive war significantly alters elite incentives. First, elite credibility now holds trivially, regardless of the strength of the external actor or the value of the prize. An unconstrained ruler has no incentive to share the spoils of war, so funding such a war effort is all cost and no benefit for the elite. Second, elite willingness is now inversely related to the external actor's strength. In order for the elite to receive any benefit from funding the ruler, the constraints on the ruler's ability to allocate funds must end up binding, and the state must win the war against the outside actor. A stronger opponent thus reduces the expected benefit of funding the ruler; unlike the defensive war model with immobile elite wealth, there is not an offsetting decline in expected utility from rejecting the tax demand.

We analyze the ruler's decisions primarily with respect to the value of the external prize, β. Whereas the value of preparation for a defensive war in our baseline model depends primarily on the outsider's strength θ, the value of mobilizing for an offensive war is largely a function of the territory or resources at stake.[32] If the potential spoils of war are not very valuable, then the costs of delegation or coercion to the ruler are not worth the benefits; the ruler will make no concessions to parliament and will not pursue the war. At the other extreme, if the value of the external prize is great enough, the ruler will build the military through coercion even when she could have gotten tax funds by delegating. This behavior contrasts with the defensive war setting, where the ruler chooses *ex ante* coercion only when elite willingness fails. If the potential spoils of victory are great enough, the ruler is willing to bear a greater upfront cost in order to eliminate any possibility of having to share the prize with the elite. The following result summarizes the ruler's equilibrium choice as a function of the prize value.

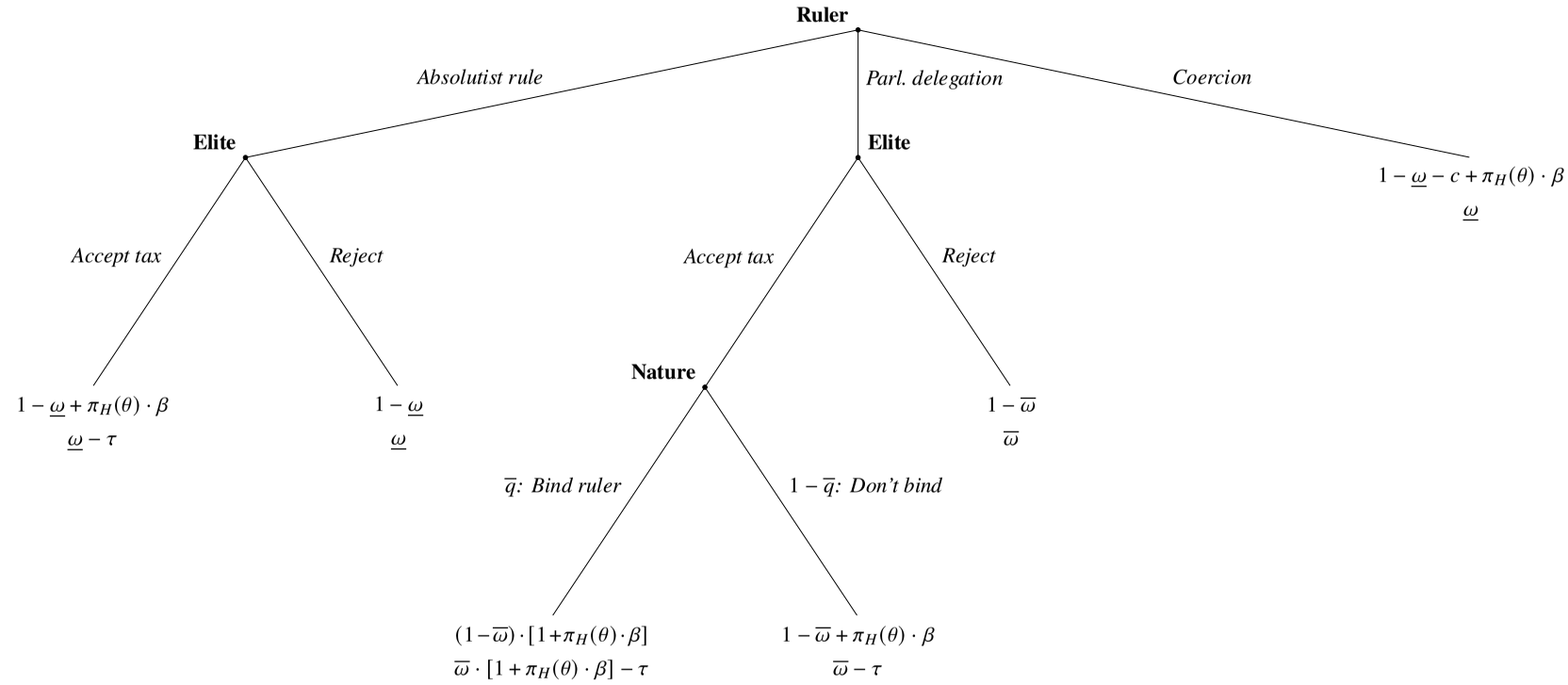
Proposition B.2. *In equilibrium in the model with offensive war:*

(a) Elite credibility always holds. Elite willingness holds if and only if the external prize β is sufficiently large.

(b) If the external prize β is small, the ruler chooses absolutist rule, and the elite rejects the tax demand.

[32] The comparative statics on θ in the model with offensive war are simply the opposite of those on β.

Figure B.4: Game tree for offensive war extension.



(c) If the external prize β is large, the ruler chooses coercion.

(d) If τ and $\overline{q}$ are su ciently small, then there is a moderate range of β at which the ruler chooses to delegate, and the elite rejects the tax demand. Otherwise, the ruler chooses absolutist rule or coercion for all values of β.

Proof. Claim (a). Elite credibility always holds because $\underline{\omega} > \underline{\omega} - \tau$. The elite willingness condition here is $\overline{\omega} - \tau + \overline{q\omega}\beta\pi_H(\theta) \geq \overline{\omega}$, which is equivalent to

$$\beta \geq \frac{\tau}{\overline{q\omega}\pi_H(\theta)} \equiv \beta^{ew}.$$

Claim (b). This and the remaining parts of the proof rely on the following properties of equilibrium. Per the previous claim, the elite will always reject the tax demand following a choice of absolutist rule. Therefore, the ruler prefers to choose coercion over absolutist rule if and only if $1 - \underline{\omega} - c + \beta\pi_H(\theta) \geq 1 - \underline{\omega}$, which is equivalent to

$$\beta \geq \frac{c}{\pi_H(\theta)} \equiv \beta^{rca}.$$

(The rca superscript denotes that the $r$uler prefers $c$oercion over $a$bsolutism; analogous convention is used for the next two cutpoints.) If $\beta < \beta^{ew}$, then the previous claim implies that the elite will reject the tax demand following delegation as well. In this case, the ruler always prefers absolutist rule over delegation, as $1 - \underline{\omega} > 1 - \overline{\omega}$. On the other hand, if $\beta \geq \beta^{ew}$, then the elite will accept the tax demand following a choice of delegation. The ruler's expected utility from delegation in this case is $1 - \overline{\omega} + (1 - \overline{q\omega})\beta\pi_H(\theta)$. Consequently, if $\beta \geq \beta^{ew}$, then the ruler prefers delegation over absolutist rule if and only if

$$\beta \geq \frac{\overline{\omega} - \underline{\omega}}{(1 - \overline{q\omega})\pi_H(\theta)} \equiv \beta^{rda}.$$

Similarly, if $\beta \geq \beta^{ew}$, the ruler prefers coercion over delegation if and only if

$$\beta \geq \frac{c - (\overline{\omega} - \underline{\omega})}{\overline{q\omega}\pi_H(\theta)} \equiv \beta^{rcd}.$$

Altogether, we have that a sufficient condition for the ruler to prefer absolutist rule over both delegation and coercion is $\beta < \min\{\beta^{ew}, \beta^{rca}\}$, proving the claim.

Claim (c). Per the derivations in the previous part, a sufficient condition for the ruler to prefer coercion over both absolutist rule and delegation is $\beta > \max\{\beta^{ew}, \beta^{rca}, \beta^{rcd}\}$.

Claim (d). Per the derivations in part (b), the ruler prefers to choose delegation if and only if:

- Elite willingness holds: $\beta \geq \beta^{ew}$.

- The ruler prefers delegation over absolutist rule: $\beta \geq \beta^{rda}$.
- The ruler prefers delegation over coercion: $\beta \leq \beta^{rcd}$.

In order for there to be any β for which all of these conditions hold, we must have $\beta^{ew} \leq \beta^{rcd}$ and $\beta^{rda} \leq \beta^{rcd}$. The first of these conditions is equivalent to $\tau \leq c - (\overline{\omega} - \underline{\omega})$, and the second is equivalent to

$$\overline{q} \leq \frac{c - (\overline{\omega} - \underline{\omega})}{\overline{\omega} c}. \qquad \square$$

In the offensive war scenario, delegation is sustainable as an equilibrium outcome only if the prize is moderate. Even so, two additional conditions must hold in order for there to be any range of prize values for which delegation is the equilibrium outcome. First, the tax cost of funding the war effort, τ, must be small enough. Otherwise, the threshold for elite willingness will be so high that the ruler prefers coercion anytime that the elite would be willing to accept the tax demand. Second, institutional strength $\overline{q}$ must also be sufficiently small. If institutional constraints are too likely to bind, decreasing the ruler's expected winnings from an offensive war, then the ruler will always prefer either coercion or eschewing the war effort altogether over delegation. To be clear, while sufficiently low institutional strength is a necessary condition for delegation to ever be an equilibrium outcome, that does not mean decreases in $\overline{q}$ necessarily promote delegation *ceteris paribus*. Just as in the baseline model (Remark A.3), lower $\overline{q}$ makes elite willingness harder to hold. Therefore, the marginal effect of institutional strength on the likelihood of delegation depends on whether elite willingness or ruler willingness is closer to binding.

C Supplemental Empirical Information

C.1 Data Sources for Figure 10

In Figure 10, the sample of countries is the same as in Cox and Dincecco (2021), consisting of ten major territorial states in Europe: Austria, Denmark, England, France, Netherlands, Piedmont, Portugal, Prussia, Spain, and Sweden. For Panel A, we used data on taxation and spending power from three sources:

1. Stasavage (2010) provides information on taxation and spending power for all states through 1800, although mostly with approximate starting dates.

2. Cox et al. (2020) provide the first date with a parliamentary meeting for each state, which we use to revise the approximate dates from Stasavage.

3. Cox and Dincecco (2021) list periods in which parliaments had power over expenditures, which we also use as the date for the re-emergence of taxation powers if a country's parliament had previously lost those powers.

For Panel B, Abramson and Boix (2019) provide annual data through 1789 on whether a representative body was in session. We do not count as a parliamentary meeting any before the first year in which Cox et al. (2020) code participation by urban representatives.

C.2 Late Development of Parliamentary Powers Over Expenditures

In the article, we discussed changes over time in the *de facto* credibility of parliamentary constraints, $\overline{q}$. However, prior to the French Revolution, *de jure* parliamentary powers tended to be low. Even where parliaments gained powers to levy extraordinary taxes, they usually lacked any legal rights over how the monarch spent the money (except in England post-1688 and some Italian city-states). Only in the nineteenth century did parliamentary privileges become synonymous with taxation *and* expenditure powers (Cox and Dincecco 2021). We contend that external wars were relatively unimportant for these later changes. Important elements of these cases lie outside the scope conditions of a top-down approach to explaining parliamentary reforms. Instead, models based on bottom-up domestic pressure are more empirically applicable.

Various changes by the nineteenth century made highly credible parliamentary constraints feasible, $\overline{q} \approx 1$. Earlier, the generic constraint from traveling over long distances inhibited parliaments from gaining power over expenditures in larger territorial states. By contrast, approving taxes was logistically feasible because this could be done infrequently (Stasavage 2011). Later, higher rates of urbanization and emergent industrialization, as well as road, canal, and railroad networks, all made

distance less of an impediment to convening parliamentary meetings. Additionally, England's early reforms provided a template for designing institutions of ministerial responsibility with credible budgets, which other countries could emulate (Cox 2016).

Despite the *possibility* of creating stringent parliamentary constraints, should we expect that a strong external threat would compel a ruler to choose this option? Certainly, it is possible to find parameter values in the model such that higher θ would push a ruler to choose $\overline{q} = 1$ over no constraints. However, even if elite credibility and willingness both hold, *ruler willingness* is less likely to hold when $\overline{q}$ (and the shift in ω) is large (Remark A.1). Given the prospect of granting so much leverage to elites in return for revenues, rulers would typically either (a) be content with a lower probability of defeating the external threat or (b) try to find alternative source of funds (e.g., coercing elites). "Absolutist rulers were trading away control rights whose value they knew well. Indeed, the right to dispense public revenues was the foundation of their power . . . Given the immense and durable value of the control rights they were trading, monarchs needed a very good reason to alienate some of that power" (Cox 2016, 150).

A more compelling theoretical mechanism to explain the nineteenth-century parliamentary resurgence is that *domestic* conditions changed. The aforementioned factors that raised $\overline{q}$ also improved prospects for broader elements of society (including capitalist elites, urban liberals, and peasants) to organize and exert pressure against regimes that refused reforms (Collier 1999). Changes in military technology also enhanced the threat from below. As militaries incorporated broader elements of society during the nineteenth century (Onorato et al. 2014), standing militaries were no longer the reliable tools of absolutism as in the earlier period. Various formal models explain how threats from politically marginalized elites (Ansell and Samuels 2014) or from the masses (Boix 2003; Acemoglu and Robinson 2006) can compel democratic reforms.

These theoretical intuitions align with empirical patterns. Major domestic disturbances led by political outsiders, rather than external wars, typically precipitated major parliamentary reforms. Four transitions occurred in 1848 (Denmark, Netherlands, Prussia, and Piedmont), a year of major domestic uprisings across Europe, and Spain's followed a rebel victory in civil war in 1876. In cases where participation in international war conceivably played a role (Austria in 1867 and France in 1870), the mechanism differed from the conventional contention that international war stimulates rulers to make domestic concessions to raise revenues. Instead, in these cases, defeat in an international war destabilized the regime and compelled a weak ruler to offer concessions to stave off domestic uprisings.

In Table C.1, we demonstrate null correlations between participation in war and parliamentary reforms in the nineteenth century. Using the same sample of countries and data sources as in Figure 10, we ran several simple panel regressions of the onset of parliamentary control over expenditures on participation in international warfare (the latter using data from Correlates of War; Sarkees and

Wayman 2010). Years are restricted from 1815 to 1901, during which time nine of ten countries in this sample adopted parliamentary control over expenditures (England is not included in the sample because of their earlier adoption). Countries are coded as a 0 on the dependent variable in any year their parliament lacks powers over expenditures, 1 in the first year of such powers, and is set to missing afterwards.

The raw frequencies suggest a role for international wars, although the correlation lacks statistical significance in all specifications. Among countries that previously lacked parliamentary control over expenditures, participants in an international war adopted such institutions in 16.0% of years, compared to only 1.8% among non-war participants (difference of 14.2%). However, this difference is not statistically significant in a basic model with country-clustered standard errors (p=0.153). When adding country and year fixed effects to the model, the difference declines in magnitude by 68%, and again is not statistically significant (p=0.644). In fact, adding to the bivariate model a fixed effect only for the year 1848 cuts the magnitude of the coefficient estimate in half. We interpret these null correlations cautiously because of the small sample size (nine countries across 411 country-years). Yet overall, this evidence supports the contention that external wars were not a primary stimulus for parliamentary reforms in the nineteenth century. As noted, even in country-years where participation in an international war and parliamentary reform coincided, domestic uprisings (or the threat thereof) was the primary stimulus.

Table C.1: External Wars and Onset of Parliamentary Expenditure Powers

	DV: Onset of parliament		
	(1)	(2)	(3)
Intnat'l war participation	0.142	0.0459	0.0746
	(0.0900)	(0.0958)	(0.0424)
1848 FE			0.449**
			(0.177)
Country-years	411	411	411
R-squared	0.044	0.418	0.182
Year FE?	NO	YES	NO

Notes: OLS models with country-clustered standard errors in parentheses. $^{***}p < 0.01$,** $p < 0.05$,* $p < 0.1$.

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