External Threats, Political Turnover and Fiscal Capacity

Hector Galindo-Silva*

Abstract

In most of the recent literature on state capacity, the significance of wars in state-building assumes that threats from external countries generate common interests among domestic groups, leading to larger investments in state capacity. However, many countries that have suffered external conflicts don’t experience increased unity. Instead, they face factional politics that often lead to destructive civil wars. This paper develops a theory of the impact of interstate conflicts on fiscal capacity in which fighting an external threat is not always a common-interest public good, and in which interstate conflicts can lead to civil wars. The theory identifies conditions under which an increased risk of external conflict decreases the chance of civil war, which in turn results in a government with a longer political life and with more incentives to invest in fiscal capacity. These conditions depend on the cohesiveness of institutions, but in a non-trivial and novel way: a higher risk of an external conflict that results in lower political turnover, but that also makes a foreign invasion more likely, contributes to state-building only if institutions are sufficiently incohesive.

*Department of Economics, Pontificia Universidad Javeriana. Email: galindoh@javeriana.edu.co. I am grateful to Ruben Enikolopov, Raphael Godefroy, David Karp, Nicolas Lillo, Guillermo Diaz, Alessandro Riboni, Didac Queralt for their extremely helpful comments and suggestions. I also thank the hospitality of the Barcelona Institute for Political Economy and Governance (IPEG) at the Universitat Pompeu Fabra, École Polytechnique and the University of Montreal, where part of this work was written. Any remaining errors are my own.
1 Introduction

There is a large and growing literature on the impact of war on state-building.\(^1\) Much of this literature builds on Charles Tilly’s famous phrase, “War made the state and the state made war” (Tilly, 1975, p. 42). In most of this literature, which includes an important series of papers that attempt to unify some essential theories about state-building (Besley and Persson, 2008, 2009, 2010, which I will refer to from now on as B&P), the significance of war relies on the assumption that threats from external countries generate common interests among domestic groups, leading to larger investments in state capacity.

The idea that interstate wars have a positive effect on state-building because of their contribution to the provision of a public good (e.g. national defense) has helped explain many crucial fiscal innovations in Europe from the 17th to 19th centuries.\(^2\) However, important issues remain. For instance, Gennaioli and Voth (2015) show that during the period of initial European state building, interstate warfare was mostly a private good for princes in pursuit of glory and personal power. Pincus and Robinson (2013) argue that this thesis does not apply to Britain, noting that critical elements of state-building (such as a monopoly on violence) were not associated with interstate wars but rather were either uncorrelated with wars or associated with civil wars.

If we extend the hypothesis to other regions and more recent times, the idea that interstate conflicts generate common interests among groups seems even less plausible. In the last century, many countries that experienced external conflicts were also affected by factional politics that drove them to destructive civil wars. Figure I shows the partial correlation between civil war and interstate conflict by plotting the share of years with a civil war against the share of years with an interstate dispute between 1946 and 2000.\(^3\) The figure shows a significant positive correlation, meaning that countries that experienced more interstate disputes also experienced more civil wars. This pattern is confirmed when we look at each interstate dispute and civil war in detail. Between 1946 and 2000, 56% of countries that experienced an interstate dispute also experienced a civil war. In addition, more than 80% of civil wars occurred within five years following an interstate conflict.\(^4\)

An abundant literature on conflict has documented close links between civil wars and conflicts between states that suggests there might be an important causal relationship.\(^5\) These

---

\(^1\)See Tilly (1975, 1990) and, more recently, Besley and Persson (2008, 2009, 2010, 2011). Also see Dincecco (2011), Dincecco and Prado (2012), O’Brien and Yun-Casalilla (2012), Gennaioli and Voth (2015) and Ko et al. (2018) for European cases, and Lopez-Alves (2000), Centeno (2002) and Thies (2005) for Latin America.

\(^2\)See Hoffman and Rosenthal (1997), Dincecco (2011), and O’Brien and Yun-Casalilla (2012).

\(^3\)The data on civil wars is from the UCDP/PRIO. The data on interstate disputes is from the Correlates of War (COW) project, and measures whether a given country is engaged in a militarized interstate dispute (MID) of high intensity (with at least a display of force) in a given year. The underlying regression controls for executive constraints (between 1946 and 2000), ethnic fractionalization and legal origin.

\(^4\)This percentage is lower if instead of looking at high intensity militarized interstate disputes, we look at interstate “wars,” defined as militarized interstate disputes with a minimum of 1,000 battle-related combatant fatalities within a 12-month period (see the COW project). This appears to be the definition used by B&P in their empirical analysis. However, even when we focus on these very high-intensity conflicts, between 1946 and 2000 at least 15% of civil wars occurred within five years following an interstate war.

\(^5\)See Gleditsch and Beardsley (2004); Hegre and Sambanis (2006); Gleditsch (2007); Salehyan (2008); Gleditsch et al. (2008); Cunningham (2010); Salehyan et al. (2011); and Morelli and Pischedda (2013).
examples include post-independence and Cold War periods in Latin America, sub-Saharan Africa and southeast Asia. Two notable examples, which I discuss in more detail later, are Mexico following its independence, and the Democratic Republic of the Congo (DRC) during Mobutu Sese Seko’s rule. In both cases, the risk of an external conflict — with Spain and the US (in Mexico’s case), or with the Soviet Union (in the DRC’s case) — played a crucial role in the occurrence, intensity and persistence of the internal conflicts that these countries experienced during several stages of their history. Other examples include the risk of a US invasion seeking to prevent “a second Cuba” in Chile playing a role in the 1973 Chilean coup d’état (see Collier and Sater, 2004, chs. 11-13), and the risk of a US trying to overthrow the “Marxist Sandinistas” in Nicaragua affecting the development of the Nicaraguan Contra conflict (see Prevost and Vanden, 1999).

If the risk of an external conflict can potentially affect whether a country suffers a civil war, the hypothesis that interstate conflicts generate common interests among domestic groups, resulting in more state-building, should be re-examined. This paper provides an alternative explanation of the impact of interstate conflicts on state capacity that accounts for the possibility that the likelihood of a civil war depends on the risk of an interstate conflict, and that does not assume that fighting an interstate conflict is always a common-interest public good. My aim is to shed light on the process of state-building (or lack thereof) when countries experience a high risk of an external conflict, as well as the potential for a related civil war.

The paper focuses on fiscal capacity, understood as the capacity of a state to generate tax revenue. It uses B&G’s basic framework, which is extended and modified in several respects. It starts by proposing a baseline scenario where a government can lose power for three reasons: by losing an external conflict with a foreign country, or by losing an internal

---

6Tilly considers the possibility of a close relationship between interstate disputes and civil wars in scenarios in which the nationalization and specialization of the military was very weak (see Tilly, 1990, p. 186). He associates this possibility with European countries before dynasties typically controlled states, and does not directly relate this idea with the analysis of the impact of war on state-building.
conflict or an election to the domestic opposition. Crucially, the opposition and government face different payoffs if the country loses in an external conflict. The opposition must decide whether to initiate a civil war, knowing that a civil war may also weaken the government against the foreign country. The government must decide whether or not to invest in fiscal capacity without knowing whether the opposition will trigger a civil war. The papers focuses on how an increased risk of external conflict affects the incentives of the government to invest in fiscal capacity.

The first main result shows that an increased risk of external conflict may either increase or decrease investment in fiscal capacity. The outcome depends on whether the higher risk of external conflict provides the domestic opposition with enough incentives not to contest the government. If the heightened risk of an external conflict significantly strengthens the government domestically, so that it outweighs the higher risk of a foreign administration, and the probability of political turnover decreases, it provides the government with incentives to invest in fiscal capacity insofar as it can extract rent.

In the baseline scenario, whether the domestic opposition decides to start a civil war crucially depends on the size of the transfer the opposition expects to receive if the government is controlled by a foreign country, relative to the transfer it will receive if the existing government remains in power. The first main result shows that the government has incentives to invest in fiscal capacity if it expects the domestic opposition to receive a relatively small transfer if the government were controlled by the foreign country.

In the model, the transfer that the opposition expects to receive when the existing government remains in power is interpreted as the level of cohesiveness of institutions: the bigger the transfer, the less rents the government can extract because it has to share revenues with the opposition. This reveals an important trade-off between cohesiveness and fiscal capacity: although more cohesive institutions may contribute to fiscal capacity because they reduce political turnover and lengthen the political life of the government, they also limit the government’s capacity to extract rents, thereby reducing the government’s incentives to invest in fiscal capacity.

This trade-off is made explicit and summarized in a second main result: if as a result of an increased risk of external conflict, the chance that the incumbent stays in power increases, the government does not always decide to invest in fiscal capacity. The exact relationship depends on how cohesive institutions are. This result contributes to the important debate about whether more political stability leads to better public policies (see Acemoglu et al., 2011), and provides a novel mechanism through which this may not be the case: when the greater political stability results from a higher risk of an external conflict.

The baseline model is then extended to include an endogenously chosen level of cohesiveness of institutions. In this extension, institutional cohesiveness results from a constitutional stage in which government and opposition play a simple “divide-the-dollar” game, with the government offering the opposition a certain level of cohesiveness of institutions, and the opposition deciding whether or not to accept the offer. If the opposition accepts the offer, the proposed level of cohesiveness of institutions is implemented and the opposition does not start a civil war. If the opposition rejects the offer, institutions are expected to be non-cohesive, and a civil war may occur. Besides establishing the conditions under which there is a positive level of institutional cohesiveness, and providing an explicit formula for this level,
this extension confirms the results previously mentioned.

The paper also examines case studies from Mexico and the DRC. These cases illustrate some of the trade-offs that are formalized in the model. In particular, in some critical periods of these countries’ histories, government decisions about institutions were significantly affected by the possibility of a civil war, which in turn depended on the risk of a foreign intervention.

This paper expands on B&P’s framework in a variety of ways. I do not assume that interstate warfare is necessarily a common-interest public good, and I introduce a link between internal and external conflicts. Besley and Persson (2008) is similar in that it also studies the impact of internal and external conflicts on fiscal capacity. They argue that investment in fiscal capacity is lower when there is a greater risk of future internal conflict, and higher when there is a greater risk of future external conflict. As external conflicts can also occur in the present, which reduces investment in state capacity, they argue that the possibility of external conflict has an ambiguous effect. However, their model and results crucially depend on internal and external conflicts being independent. In particular, they assume that internal conflicts only occur when there is no external conflict. My model removes this assumption.

This paper also shares similarities with Gennaioli and Voth (2015) and Ko et al. (2018), who also study the impact of war on fiscal capacity. Gennaioli and Voth (2015) focus on initial European state-building (1600-1800). By proposing a model and providing empirical evidence, Gennaioli and Voth argue that war’s impact on state capacity (which they define as a centralized revenue-collection system) depends on the cost of war and on the initial level of political fragmentation. In their model, war does not necessarily lead to state-building when the costs of war are sufficiently low and fragmentation is sufficiently high. In such a case, it is better for rulers not to invest in centralized revenue collection because it is expensive, they would have more to lose (in terms of tax revenue) in the event of defeat, and war can be a cheaper alternative.

Ko et al. (2018) focus on comparing long-term institutional development in China and Europe. They develop a Hotelling-style model to show how one-sided and two-sided external threats affect rebellion, political fragmentation, military investments, fiscal viability and taxation. They find that a bigger external threat always leads to military investments and decreases the probability of rebellion; whether the threat is one- or two-sided affects the levels of political fragmentation, fiscal viability and taxation.

Although the design of Gennaioli and Voth (2015) and Ko et al. (2018) share some similarities with my model, there is one crucial difference. In their models, groups that form a country or continent act as a single entity when facing a external threat, and fighting this threat is still a common-interest public good in the sense that losses are equally distributed when a country loses a war (Gennaioli and Voth) or a continent leaves a significant part of its territory unprotected (Ko et al.). In my model, a country’s government and opposition can, a priori, support or oppose a foreign threat, which reinforces or diminishes the impact of the external threat.

The structure of this paper is as follows. In the next section, I discuss the case studies of Mexico and the DRC, with a particular emphasis on how the risk of external conflicts affected decisions about institution-building. Section 3 presents the model, and Section 4 concludes.
2 Illustrative Cases

This section briefly discusses two country cases, post-independence Mexico and the DRC, which illustrate how the risk of external conflict, and government and opposition responses to that risk, helps explain important aspects of these countries’ early state-building processes. The objective of this section is to set the stage for a possible mechanism, which will be formally developed in section 3.

2.1 Mexico, 1821-1848

During the first decades of its independence, Mexico experienced a number of episodes that exemplify two previously described roles of external threats in the state-building process: a high risk of external conflict (with Spain in 1829 and the United States from 1846-48) followed by either a decrease in political turnover and the implementation of key fiscal reforms, or by an increase in political turnover and the lack of much-needed reforms. Below I discuss in more detail two episodes that exemplify these two possibilities: Vicente Guerrero’s presidency in 1829 and the Mexican-American war between 1846 and 1848.7

Vicente Guerrero’s Presidency. In April 1829, at the beginning of his mandate, Mexican president Vicente Guerrero encountered serious challenges, including a series of domestic political conflicts and an empty treasury. A crucial moment during his presidency was the Spanish government’s second reconquest attempt in July 1829. The specific timing was motivated by an international environment favorable to the reconquest and rich emigrants’ promises to pay for the invasion plans (Sims, 1984, p. 59).

Another crucial characteristic of Guerrero’s presidency was the occurrence, in August 1829, of a temporary respite in domestic political conflicts because of the Spanish threat. As Jan Bazant explains, “the long-awaited invasion by Spanish troops came at the end of July 1829, and it served to cause a temporary lull in the factional political conflict as the nation rallied to the call for unity” (Bazant, 1985, p. 433). This respite was preceded by two mass expulsions of Spaniards, who were believed to “represent a threat to Mexican independence” (Sims, 1990, p. 9).

In the context of these events, at the end of August 1829, Vicente Guerrero requested and obtained extraordinary powers from the Mexican Congress to enact a tax reform (see Serrano, 2002; Serrano and Vazquez, 2010). As a result, a national income tax was established in September 1829, for the first time in the history of independent Mexico (Serrano, 2005). This fiscal reform constituted “one of the most radical transformations to the tax structure inherited from colonial times” (Serrano, 2005, p. 273).8 As Jose Serrano says:

On August 18, President Guerrero informed Congress that he considered the constitutional powers to which the government could appeal to confront the Spanish invasion insufficient ... The Congress ... authorized the Executive Branch to adopt as many measures as are necessary ... Under the protection of extraordinary powers, Zavala [Guerrero’s minister of finance] promoted

7For other periods and alternative mechanisms that emphasize the role of domestic factors in building fiscal capacity in Mexico, see Garfias (2018a) for post-revolutionary Mexico and Garfias (2018b) and Arias (2013) for late colonial Mexico.

8See also Jauregui (2003a,b, 2005) and Serrano (2002).
a broad reform of the country’s tax system ... under this law lawyers, doctors, surgeons, scribes and all ‘professionals’ would spend $24, and civil and military employees, both from the Federation and from the states, would contribute a part of their salary (Serrano, 2002, p. 106).

Although the income tax was reversed two years later, this case illustrates how the risk of external conflict can result in investments in fiscal capacity: the support from the domestic opposition, which in this case occurred through a respite in internal conflicts and was preceded by a mass expulsion of Spaniards, gave the government incentives to propose and implement key fiscal reforms. The model in Section 3 will propose one way to formalize this mechanism that emphasizes the role of the decrease in political turnover in providing the government with incentives to increase fiscal capacity.

The Mexican-American war. The Mexican-American war occurred from 1846 to 1848. It had its origins in the decree of the US Congress annexing Texas in February 1845, which also made explicit America’s intention to control California and all territory north of the Rio Grande. A puzzling characteristic of this period was that, unlike what had happened two decades prior during the second Spanish reconquest attempt, Mexicans were divided and lacked commitment to their country (Vázquez, 1997, p. 40; Bringas, 2008, pp. 184-201; Cárdenas, 2015, pp. 142-143). Enrique Cardenas mentions the relevance of the rebellion led by the commander of the reserve army, General Paredes, who “marched towards Mexico City ... to take power, instead of going to the border to reinforce the defense” (Cárdenas, 2015, p. 142). Peter Guardino also notes this division in the context of late February 1847’s civil war, in which

[Mexican] National Guard units of differing political sympathies confronted each other in Mexico City beginning in late February 1847. Many Mexicans understood this as the worst moment of the war, one in which Mexico’s fractions politics undercut its defense just as the Americans threatened the center of the country. The conflict made it much easier for the Americans to launch the invasion of central Mexico that eventually defeated the country (Guardino, 2017, p. 175).

Numerous diaries of American soldiers also reported a constant astonishment at the warm welcome received by the invading army from the majority of Mexicans, who expressed their desire that the occupying troops remain (Bringas, 2008, pp. 185 and 190). The reason seems to be that “local populations thought that they would get rid of the abuses of the local military and receive economic benefits from the sale of various products or from providing services” (Bringas, 2008, p. 190), and that “the loyalties of the inhabitants, especially those living on the northern border, had been conditioned by a series of local and regional alliances, economic ties, and political interests that increasingly linked them to the United States” (Reséndez, 1999).

A second characteristic of this period was that the Mexican government decided to raise revenue “by mortgaging or selling property belonging to various Catholic Church organizations” (Guardino, 2017, p. 176), instead of introducing new direct taxes (as Vicente Guerrero had done two decades prior). The government and Congress emphasized how important it was that “the executive will be authorized only to take over the assets of the Catholic Church”

See also Serrano and Vázquez (2010, p. 417).
(Sordo, 1997, p. 64), and the main reason seems to be, as Mexican vice-president Gomez Farias explained to Mexico’s president, Antonio Lopez de Santa Anna, “the distrust [associated to] the misuse of funds and ruinous contracts” (Sordo, 1997, p. 64).

Facing a high risk of invasion by the US and an associated increase in the risk of an internal conflict, the Mexican government opted for a policy through which it could only take over the assets of the Catholic Church, instead of widespread and potentially state-building fiscal reforms. This policy was seen by the government and Congress as the best alternative given the distrust associated with the very likely misuse of funds.

This second case illustrates another mechanism through which the risk of external conflict can affect investment in fiscal capacity. If the domestic opposition, in response to an increased risk of external conflict, decides not to support the incumbent government and instead exploits the situation and starts an internal conflict, then the increased chances of political turnover, as well as concerns about increased opportunities for rent extraction by a future government, could disincentivize the current government from implementing capacity-building reforms.

2.2 Democratic Republic of the Congo (DRC), 1965-1979

DRC’s early years as an independent country were a chaotic period. In 1965, a new regime took power led by President Mobutu, which sought to distance itself from the previous regime. Mobutu’s regime would last for nearly 32 years. It progressed through various phases, all having two elements in common: the occurrence of several conflicts closely tied to the Cold War, and patrimonial predatory practices with almost no effort toward building strong economic institutions (Young and Turner, 1985, chs. 2, 10-12.; Nzongola-Ntalaja, 2002, ch. 5.). Below I discuss in more detail one of these phases: a period characterized by two rebellions known as the Shaba wars.

The Shaba wars. The Shaba wars occurred between 1977 and 1978, after a decade during which Mobutu had been “relatively successful in reuniting most of the country, and ending previous disorder” (Young, 1984, p. 733). The wars were triggered by a militia in the Shaba province (today named Katanga), led by former Katangan gendarmes exiled to Angola. The militia crossed back into the DRC seeking not only to conquer the region but also to remove Mobutu from power (Ndikumana and Emizet, 2005, pp. 71-75).

These wars coincided with a peak in US and Soviet Union interventionism (Westad, 2005, p. 4). In particular, they occurred when there was a significant risk of Soviet intervention, following Soviet involvement in the Ethiopian and Angolan Civil Wars in 1974 and 1975. (Young and Turner, 1985, pp. 376-378 and p. 389). The Shaba wars were a major challenge to Mobutu’s rule (Ndikumana and Emizet, 2005, pp. 71), so much so that “his dominion had nearly collapsed twice with the Shaba interventions” (Hesselbein, 2007, p. 33).

This period was also characterized by the establishment of a complex patrimonial system in which economic resources and key offices were exchanged for personal loyalty and service to the president (Young and Turner, 1985, ch. 6). Besides ending a decade of relative order

---

10Young and Turner note, “The scale of the Soviet-Cuban intervention in Ethiopia just before Shaba II supplied new arguments for globalists in the U.S. policy community, who argued that Shaba II bore the hallmark of Soviet machinations and required direct confrontation” (Young and Turner, 1985, pp. 389).
and unity, Crawford Young sees the period as a turning point at which Mobutu began to appear predatory:

Until that point ... [Mobutu] appeared to cling to the illusion that he could at once realize the grandiose dreams for the country that he ceaselessly proclaimed ... past this point, personal rule became what Juan Linz, borrowing a Weberian term, labels ‘sultanism’, whereby 'personalistic and particularistic use of power for essentially private ends of the ruler and his collaborators makes the country essentially like a huge domain’ (Young, 2012, p. 188).  

The establishment of Mobutu’s patrimonial system coincided with the beginning of DRC’s relentless economic decline (Hesselbein, 2007, p. 33). Importantly, the patrimonial system seems to have led to the decline by undermining any alternative policy that could have built economic institutions. The DRC faced a grave economic and financial crisis, and Mobutu sought relief from international financial institutions. These institutions made their relief conditional on the DRC implementing measures that could have strengthened government institutions: “reduce corruption, rationalize and control expenditures, increase tax revenues, limit imports, boost production, improve the transportation infrastructure, eliminate arrears on interest payments, ensure that principal payments were made on time, and improve financial management and economic planning” (Meditz and Merrill, 1994, p. xiv), However, as Meditz and Merrill observe:

The thorough implementation of changes and reforms required by the World Bank, the IMF, and other Western donors was perceived as a threat to the very basis of the elite’s power-access to and free use of the nation’s resources. If the president were to execute effectively the reforms his foreign partners demanded, the heart of his authority: complete personal discretion and the fiscal privileges and corruption that bound the system together, would be undermined. As a result, Mobutu and the political elite used their control of government institutions to sabotage economic change (Meditz and Merrill, 1994, p. 146).

In the end, Mobutu obtained resources by “manipulating [the regime’s] donors’ economic interests against one another and by exploiting foreign anxieties about the instability that might result from a collapse of the regime” (Meditz and Merrill, 1994, p. 146). Thus, despite the high risk of an external conflict, the existence of a closely related domestic conflict, which coincided with the establishment of an extreme form of patrimonialism, blocked any effort that should been put into building economic institutions (Kaiser and Wolters, 2012, pp. 76-77).

As was the case with the Mexican-American war, this third episode illustrates a mechanism through which the risk of external conflict can reduce incentives to invest in fiscal capacity: the risk of a Soviet intervention and the closely associated Shaba wars seem to have reduced the chances of state-building reforms insofar as they made a collapse of Mobutu’s regime more likely. This instability seems to have been key in the establishment of a patrimonial regime bent on holding onto power by any means possible.

See also Hesselbein (2007), who says that during this period, Mobutu “increasingly became the point of reference for all sorts of rules and decisions ... All sorts of ad-hoc decisions in politics and economics were justified simply with reference to his authority” (Hesselbein, 2007, p. 33).
2.3 Discussion of the Case Studies

These three cases show that the relationship between war and state-building goes beyond a simple association between external conflicts and state-building, and internal wars and state decay. The cases show that although a high risk of external conflict can increase unity and result in investment in fiscal capacity (as was the case in Mexico during the second Spanish reconquest attempt), they can also create division and state failure (as was the case in Mexico during the Mexican-American war and in the DRC during the Shaba wars). In the next section, I propose a model to help understand each of these scenarios in a more formal way, and shed light on the conditions under which the government and opposition have incentives to behave in the ways they did in the case studies.

3 Model

3.1 Basic Model Setup

There are two countries, $D$ (domestic) and $F$ (foreign), and two time periods, $s = 1, 2$. Country $D$ is composed of two groups, $A$ and $B$, each of which make up half of the population in every time period.\(^{12}\) $F$ is homogeneous, and is ruled by the same group in both periods, also denoted by $F$. The analysis focuses on $D$. However, $F$ is crucial to the analysis: through the threat of an intervention, $F$ affects decision-making in country $D$.

At the beginning of period 1, one of the domestic groups in $D$ ($A$ or $B$) is chosen at random to be the government. The government decides on a set of policies to be implemented during this period. This includes a uniform income tax rate, $t_1$, which is applied to individuals from groups $A$ and $B$, and a set of group-specific transfers, $r_1 = \{r^A_1, r^B_1, r^F_1\}$, awarded to $A$, $B$ and $F$. The government in $D$ also determines, through investment, the period-2 stock of fiscal capacity, $\tau_2$.\(^{13}\)

Let $I_1 \in \{A, B\}$ be the government in period 1, and $O_1 \in \{A, B\}$ its domestic opposition. After $I_1$ chooses the period-1 policies and investment, $O_1$ decides whether or not to contest $I_1$’s leadership by triggering a civil war. If $O_1$ decides not to trigger a civil war, elections occur. Irrespective of $O_1$’s decision, an interstate conflict between $F$ and $D$ occurs with probability $\alpha$, which I assume to be exogenous.\(^{14}\) The outcome of the interstate conflict, the domestic dispute, and/or elections determines the government in the second period, denoted by $I_2 \in \{A, B, F\}$. The case $I_2 = F$ occurs if $F$ wins the interstate conflict, and therefore rules $D$. In the second period, $I_2$ decides on a new set of policies.\(^{15}\)

Political turnover occurs when $O_1$ wins an election or the civil war, or when $F$ establishes a foreign administration. I assume that conditional on the occurrence of a civil war, the

---

12 This is without loss of generality for the main results, and simplifies the exposition (see footnote 22).
13 As will be specified below, this is a model of pure redistribution since individuals do not derive utility from the consumption of public goods, and government revenue is only spent on transfers.
14 Endogenizing $\alpha$ goes beyond the scope of this paper. A justification may be that external conflicts are endogenous responses to civil wars mostly when governments under siege call on allied states to assist them internally against the rebels (see Blainey, 1988), and this paper focuses on scenarios in which governments face threats against both domestic and external adversaries.
15 Note that since there are only two periods, there is no investment in fiscal capacity in the second period.
probability of any of these events is exogenous.\textsuperscript{16} However, whether $O_1$ triggers a civil war is endogenous; therefore, the ex-ante probability of political turnover (which will be key the main result) will be endogenous.\textsuperscript{17}

Let $\rho$ be the probability that $F$ gains power in $D$ when $O_1$ triggers a civil war and there is an external conflict, let $\omega$ denote the probability that $O_1$ wins a civil war if at the same time $D$ is involved in an external conflict with $F$, let $\delta$ be the probability that $O_1$ wins the civil war when there is a civil war but not an external conflict, and let $\epsilon$ denote the probability that $O_1$ gains power in period 2 if there is neither civil war nor external conflict.

I make four main assumptions that will simplify the exposition and allow the analysis to focus on interesting cases. First, I assume that $\rho$ is larger than the probability that $F$ holds power in $D$ when instead of triggering a civil war, $O_1$ decides to compete in elections.\textsuperscript{18}

Second, I assume that given a civil war, $O_1$ is more likely to hold power if there is also an external conflict:

$$\omega > \delta$$

Note that (1), together with the assumption that $F$ is more likely to hold power if there is a civil war, imply that internal and external conflicts reinforce each other: to secure victory, it is a good idea for both $O_1$ and $F$ to be more aggressive when their common enemy ($I_1$) is already involved in a conflict.\textsuperscript{19}

Third, I assume that $\epsilon$ is larger than $O_1$’s probability of winning the elections when there is an external conflict.\textsuperscript{20} This last assumption reflects the idea that leaders are more likely to be re-elected when there is an international conflict, either because war provides them with unique opportunities to deal with their opposition (Chiozza and Goemans, 2004), or because they engage in a “gamble for resurrection” (Downs and Rocke, 1994).

Fourth, I assume that

$$(1 - \alpha) \epsilon < 1/2$$

which is plausible since each group makes up half of the population.\textsuperscript{21}

\textsuperscript{16}Endogenizing these probabilities is left for future work. Perhaps the stronger assumption is that the model does not allow for $O_1$ and $I_1$ to invest resources to increase their chances of victory. Thus, taxes will be used only for redistribution (i.e. they won’t be used to finance the military). Note that this idea differs from Tilly’s main thesis that war makes states because of the need for these states to pay for the costs of war (although he considers this possibility in Tilly, 1990, pp. 99-103). As we will see later, this assumption allows for tractable expressions for the effect of an increase in the risk of external conflict on political turnover and fiscal capacity, thus enabling us to identify each effect and establish a meaningful relationship between them. In addition, as will be specified below, the conditional probabilities of victory of each group are assumed to satisfy some restrictions that are consistent with a scenario where some resources could be used to finance the military. Thus, it is possible to interpret these probabilities as affected by other resources.

\textsuperscript{17}As will be clearer later, the significance of war will come from its effects on political turnover, so whether there are investments in state capacity depends on how much rent the incumbent expects to capture and whether the incumbent receives the support of the domestic opposition. This idea is also present in B&P’s model, and is only peripherally addressed in Tilly’s work.

\textsuperscript{18}To simplify the exposition, this last probability is set to zero. Since $F$ can come to power in $D$ only by winning an interstate conflict, the probability that $F$ governs $D$ if there is no external conflict is also zero.

\textsuperscript{19}Of course, this does not mean that $O_1$ will always prefer to attack $I_1$ when there is an interstate conflict; the analysis will focus on the conditions under which this happens.

\textsuperscript{20}To simplify the exposition, this last probability is set to zero.

\textsuperscript{21}This last assumption is also without loss of generality for the main results.
Timing

The timing of the game is as follows:

1. Nature decides the initial stock of fiscal capacity \( \tau_1 \), and \( I_1 \in \{A, B\} \).
2. \( I_1 \) chooses a set of period-1 policies \( \{t_1, r_1 = \{r^A_1, r^B_1, r^F_1\}\} \) and determines (through investment) the period-2 stock of fiscal capacity, \( \tau_2 \).
3. \( O_1 \) observes \( \tau_2 \) and decides whether or not to start a civil war. At the same time, an interstate conflict between \( F \) and \( D \) occurs with probability \( \alpha \).
   - If there is an interstate conflict and a civil war, \( O_1 \) is the new government with probability \( \omega \), \( F \) establishes a foreign administration with probability \( \rho \) and \( I_1 \) remains in power with probability \( 1 - \omega - \rho \).
   - If there is an interstate conflict but not a civil war, \( I_1 \) remains in office.
   - If there is no interstate conflict but there is a civil war, \( O_1 \) forms the new government with probability \( \delta \), and \( I_1 \) remains in office with probability \( 1 - \delta \).
   - If there is no interstate conflict or civil war, \( O_1 \) wins the election with probability \( \epsilon \) and \( I_1 \) remains in office with probability \( 1 - \epsilon \).
4. \( I_2 \in \{A, B, F\} \) chooses a set of period-2 policies \( \{t_2, r_2 = \{r^A_2, r^B_2, r^F_2\}\} \).

Preferences

The utility function of a typical member of group \( J \in \{A, B\} \) in period \( s \) is

\[
  u^J_s = (1 - t_s)m + r^J_s
\]

where \( m \) is an exogenous income, \( t_s \) is the income tax rate and \( r^J_s \) is the government transfer.

The utility function of a typical individual in group \( F \) in period \( s \) is

\[
  u^F_s = r^F_s
\]

where \( r^F_s \) is the transfer. Note that since \( F \) is a foreign group, members of \( F \) are not taxed.

Government budget constraint

The income tax rate, \( t_s \), is constrained by the existing fiscal capacity, \( \tau_s \), such that \( t_s \leq \tau_s \). In addition, \( \tau_s \), initially set to \( \tau_1 \), can be augmented by non-negative investment in period 1, with increasing and strictly convex costs \( C(\tau_2 - \tau_1) \), where \( C_\tau(0) = 0 \), with \( C_\tau \) denoting the partial derivative. Finally, the total population size in both \( D \) and \( F \) is normalized to one. Thus, the government budget constraint is:\footnote{For a more general case in which \( D \) is composed of groups with different population shares, the budget constraint will be \( t_1m = C(\tau_2 - \tau_1) + \beta^A r^A_1 + \beta^B r^B_1 + r^F_1 \) in period 1 and \( t_2m = \beta^A r^A_2 + \beta^B r^B_2 + r^F_2 \) in period 2, where \( \beta^J \) is the population share of group \( J \in \{A, B\} \). As previously mentioned, that \( \beta^A = \beta^B = 1/2 \) is without loss of generality for the main results. Results for the general case are available upon request.}

\[
  \text{Budget constraint} \equiv \begin{cases} t_1m = C(\tau_2 - \tau_1) + (r^A_1 + r^B_1)/2 + r^F_1 & \text{in period } s = 1 \\ t_2m = (r^A_2 + r^B_2)/2 + r^F_2 & \text{in period } s = 2 \end{cases}
\]
Allocation of transfers

In the baseline model, I assume that the opposition must receive a fixed share of the government’s transfers to its own members. I distinguish between two cases: one in which the government is one of the domestic groups, $A$ or $B$, and the other in which the government is the foreign country, $F$. For the first case, I assume that

$$r_s^{O_s} = \sigma^D r_s^{I_s}$$

(6)

where $I_s, O_s \in \{A, B\}$, and where $\sigma^D \in [0, 1]$ denotes the fixed share of $I_s$’s transfers that must be given to the domestic opposition, $O_s$.

This extremely simple way of modelling the allocation of transfers, which closely follows B&PP’s framework, tries to capture the existence of institutional arrangements that make policymakers internalize the preferences of a larger share of the population. In this respect, $\sigma^D$ can be interpreted as the level of cohesiveness of institutions. One real-world example might be the level of protection for minorities resulting from constraints on the executive (e.g. a constitutional separation of powers). Another example might be the strength of the opposition’s political representation in policy decisions, such as through proportional representation elections.

Since both interpretations of $\sigma^D$ suggest that it represents the domestic rules under which decisions are made, it is crucial to have an intuition for where it comes from. In Section 3.4, I propose an extension of the baseline model in which $\sigma^D$ results from a bargaining process between the domestic government and opposition. In this specific context, $\sigma^D$ can be interpreted as the institutional arrangement that guarantees that in period 2, when the government is a domestic group, and $I_1$’s probability of reelection is sufficiently high, $O_1$ will receive a large enough transfer to dissuade it from triggering a civil war in period 1.

When $F$ holds power in period 2, the opposition consists of two groups ($A$ and $B$), and it is reasonable to expect that their transfers are group-specific. In this scenario, I assume that $O_1$ will receive a larger share of $F$’s transfers. A justification may be that since $D$ is governed by $I_1$ when the interstate conflict takes place, $F$ might see $I_1$ as its main enemy. Thus, when there is a foreign administration, we can expect that $I_1$ will be hit the hardest.

To simplify the exposition, $I_1$’s share of transfers are set to zero, i.e., $r_2^{I_1} = 0 \times r_2^{F}$. As for $I_1$, I define

$$r_2^{O_1} = \sigma^F r_2^{F}$$

(7)

where $\sigma^F \in [0, 1]$ denotes the fixed share of $F$’s transfers that must be given to $O_1$. I assume that $\sigma^F$ is known to both $O_1$ and $F$, but not to $I_1$, which only knows that $\sigma^F$ is uniformly distributed over the interval $[0, 1]$, with a mean of $\overline{\sigma^F}$.

For an intuition about where $\sigma^F$ comes from, first note that $\sigma^F$ regulates the allocation of transfers between a foreign country occupying $D$, and a domestic group in $D$. This suggests that it may not be appropriate to think of $\sigma^F$ as constitutional checks and balances. To keep the model simple and tractable, I do not propose any process to derive $\sigma^F$; I simply assume

\[\text{Note that for the case } I_2 = O_1, \text{ (6) implies that the period-2 government must give } \sigma^D \text{ to the opposition regardless of whether } O_1 \text{ came to power through a civil war. This assumption is inconsistent with a successful revolution by the domestic opposition affecting the level of institutional cohesiveness in the country (as in Acemoglu and Robinson (2000, 2001)). In the online appendix, I consider an extension of the basic model in which } \sigma^D = 0 \text{ when } I_2 = O_1 \text{ after a civil war. Most results hold.}\]
that $\sigma^F$ is exogenous. A very high-level intuition is possible: $\sigma^F$ may result from a previous bargaining process between $O_1$ and $F$, the outcome of which may be based on a shared trait (e.g., ethnicity, ideology, or geography). The literature on the transnational dimensions of civil wars suggest that these kind of aspects can play an important role in explaining military decisions (see Davis and Moore, 1997; Gleditsch, 2007; Gleditsch et al., 2008; Cederman et al., 2009, 2013; Cunningham et al., 2011).

3.2 Equilibrium Policy

I will now solve the game by backward induction. I start with a given stock of fiscal capacity, and then I characterize policy choices. After this characterization, I examine earlier stages of the game, first determining $O_1$’s decision about whether or not to start a civil war, and then determining $I_1$’s decision about the period-2 stock of fiscal capacity.

Policy-making in period 2

I start by studying the optimal policy chosen by the government in period 2 (stage 4). There are two possible cases: one in which the government is one of the domestic groups (i.e. $I_2 \in \{A, B\}$), and the other in which the government is the foreign power (i.e. $I_2 = F$).

For $I_2 \in \{A, B\}$, $I_2$ chooses $\{t_2, r_2 = \{r_2^A, r_2^B, r_2^F\}\}$ to maximize (3), subject to (5), (6) and $t_2 \leq \tau_2$. It is easy to see that we have a corner solution with $r_2 = 0$ and $r_2^F = 2\tau_2m/(1 + \sigma^D)$. For $I_2 = F$, $F$ chooses $\{t_2, r_2 = \{r_2^A, r_2^B, r_2^F\}\}$ to maximize (4) subject to $t_2 \leq \tau_2$, (5) and (7). In this case we have that $t_2 = \tau_2$, $r_2^I = 0$, $r_2^O = \sigma^F r_2^F$, and $r_2^F = 2\tau_2m/(2 + \sigma^F)$.

Civil war

I now study $O_1$’s decision about whether or not to start a civil war. Let $W^{O_1}(\tau_2 | I_2 = K)$ be $O_1$’s period-2 indirect utility if group $J \in \{I_1, O_1, F\}$ is the government in period 2.\(^{24}\)

For $I_2 \in \{A, B\}$, replacing $r_2 = 2\tau_2m/(1 + \sigma^D)$ and $r_2^O = \sigma^D r_2^I$ in (3), we have that $O_1$’s period-2 indirect utility given that $O_1$ is the government in period 2 (i.e. $I_2 = O_1$) is

$$W^{O_1}(\tau_2 | I_2 = O_1) = (1 - \tau_2)m + 2\tau_2m/(1 + \sigma^D)$$

When $I_1$ remains in power in period 2 (i.e. $I_2 = I_1$), $O_1$’s period-2 indirect utility is given by

$$W^{O_1}(\tau_2 | I_2 = I_1) = (1 - \tau_2)m + 2\sigma^D \tau_2m/(1 + \sigma^D)$$

For $I_2 = F$, substituting $r_2^F = 2\tau_2m/(2 + \sigma^F)$ into $r_2^O = \sigma^F r_2^F$, and using the result in (3), we have that $O_1$’s period-2 indirect utility is

$$W^{O_1}(\tau_2 | I_2 = F) = (1 - \tau_2)m + 2\sigma^F \tau_2m/(2 + \sigma^F)$$

When deciding whether to trigger a civil war, $O_1$ evaluates its expected (indirect) utility based on each possible outcome. Comparing $O_1$’s expected utilities depending on whether

\(^{24}\)Note that in this stage $O_1$ already knows $\tau_2$. 

Electronic copy available at: https://ssrn.com/abstract=3301563
there is civil war or internal peace, we find that \( O_1 \) decides to trigger a civil war when

\[
(\alpha \omega + (1 - \alpha) \delta - (1 - \alpha) \epsilon) [W^{O_1}(\tau_2|I_2 = O_1) - W^{O_1}(\tau_2|I_2 = I_1)] > \alpha \rho [W^{O_1}(\tau_2|I_2 = I_1) - W^{O_1}(\tau_2|I_2 = F)]
\]

(11)

Note that the left side of (11) is always greater than or equal to zero, and that the sign of the right side of (11) depends on the sign of \( W^{O_1}(\tau_2|I_2 = I_1) - W^{O_1}(\tau_2|I_2 = F) \), with \( W^{O_1}(\tau_2|I_2 = I_1) < W^{O_1}(\tau_2|I_2 = F) \) meaning that \( O_1 \) is better off under a foreign regime than under the existing government’s regime.

Replacing (8), (9) and (10) in (11), and solving for \( \sigma^F \), we find that \( O_1 \) decides to trigger a civil war when

\[
\sigma^F > \frac{2(\sigma^D \alpha \rho - (1 - \sigma^D)(\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon))}{\alpha \rho + (1 - \sigma^D)(\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon)}
\]

(12)

provided that the denominator is positive. Note that when \( \sigma^D = 0 \), (12) is always satisfied, so internal peace is only possible when \( \sigma^D > 0 \). Also note that when \( \sigma^D = 1 \), (12) is never satisfied, so when institutions are perfectly cohesive, there is no civil war. More generally, a civil war is more likely for low values of \( \sigma^D \).\(^{26}\) This is consistent with the finding that countries with many checks and balances tend to be less prone to civil wars (Reynal-Querol, 2002, 2005).

It is also possible to show from (12) that an increased risk of external conflict may increase or decrease the chance of civil war. Whether the chance increases or decreases depends on how the probability that \( O_1 \) gains power in period 2 changes in the absence of an external conflict: when a civil war is very attractive when there is no risk of external conflict, then an increased risk of external conflict makes civil war less attractive.\(^{27}\)

Since \( \sigma^F \) is unknown to \( I_1 \), we can define the probability of civil war as seen by \( I_1 \), i.e., the probability that (12) is satisfied from \( I_1 \)’s perspective. This probability, denoted by \( \gamma \), is given by\(^{28}\)

\[
\gamma = Pr\left(\sigma^F > \frac{2(\sigma^D \alpha \rho - (1 - \sigma^D)(\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon))}{\alpha \rho + (1 - \sigma^D)(\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon)}\right)
\]

(14)

Policy-making in period 1

The optimal policy is similar to period 2. The only difference is that the budget constraint in period 1 includes the costs associated with investment. \( I_1 \) chooses \( t_1, r_1 = \{r_1^A, r_1^B, r_1^F\} \)

\(^{25}\)See the Appendix for a derivation of this equation and the next.

\(^{26}\)To see this, we can differentiate the left side in (12) with respect to \( \sigma^D \), and rearrange to get

\[
-\left(\frac{2\alpha \rho (\alpha \rho + 2(\alpha \omega + (1 - \alpha)\delta))}{(\alpha \rho + (1 - \sigma^D)(\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon))^2}\right) < 0.
\]

(13)

\(^{27}\)That is to say, the derivative of the left side of (12) with respect to \( \alpha \) is negative when \( \delta > \epsilon \), and it is positive when \( \epsilon > \delta \). See the proof of Proposition 1 in the Appendix.

\(^{28}\)Note that (12) does not depend on \( \tau_2 \), so there is no inconsistency in the beliefs \( I_1 \) and \( O_1 \) hold about the civil war, nor it is needed an additional assumption about these beliefs: \( I_1 \) assigns the probability \( \gamma \) to a civil war, and whether or not \( O_1 \) decides to trigger a civil was does not depend (directly or indirectly) on this probability.
to maximize (3), subject to (5) and \( t_1 \leq \tau_1 \). It is easy to see that we have a corner solution, with \( t_1 = \tau_1, r^F_1 = 0, r^{O_1}_1 = \sigma D r^{I_1}_1 \) and \( r^{I_1}_1 = 2(\tau_1 m - C(\tau_2 - \tau_1))/(1 + \sigma D) \).

**Investment in fiscal capacity**

I now study the decision to invest in fiscal capacity. First, I compute \( I_1 \)'s first- and second-period indirect utilities. When \( I_1 \) remains in power in period 2 (i.e. \( I_2 = I_1 \)), \( I_1 \)'s period-2 utility is

\[
W^{I_1}(\tau_2|I_2 = I_1) = (1 - \tau_2)m + 2\tau_2 m/(1 + \sigma D)
\]  
(15)

When \( O_1 \) gains power in period 2 (i.e. \( I_2 = O_1 \)), \( I_1 \)'s period-2 utility is

\[
W^{I_1}(\tau_2|I_2 = O_1) = (1 - \tau_2)m + 2\sigma D \tau_2 m/(1 + \sigma D)
\]  
(16)

And when \( F \) governs in period 2 (i.e. \( I_2 = F \)), \( I_1 \)'s period-2 indirect utility is

\[
W^{I_1}(\tau_2|I_2 = F) = (1 - \tau_2)m
\]  
(17)

And \( I_1 \)'s first-period indirect utility is

\[
W^{I_1}(\tau_1, C(\tau_2 - \tau_1)) = (1 - \tau_1)m + 2(\tau_1 m - C(\tau_2 - \tau_1))/(1 + \sigma D)
\]  
(18)

I now characterize \( I \)'s choice of \( \tau_2 \) at the beginning of period 1. To simplify notation and analysis, I define the unconditional probability of political turnover from \( I_1 \)'s perspective, i.e. the probability that, from \( I_1 \)'s perspective, \( I_2 \neq I_1 \). Let \( \phi \) denote this probability, where

\[
\phi = \gamma(\alpha \omega + (1 - \alpha)\delta + \alpha \rho) + (1 - \gamma)(1 - \alpha)\epsilon
\]  
(19)

As shown in the Appendix (see proof of Proposition 1), calculating \( I_1 \)'s expected utility as seen from period 1, and differentiating it with respect to \( \tau_2 \), the first-order condition is

\[
2/(1 + \sigma D)C_\tau(\tau_2^* - \tau_1) \geq m(2(1 - \phi + \sigma D (\phi - \gamma \alpha \rho))/(1 + \sigma D) - 1)
\]  
(20)

with the complementary slackness (c.s.) condition associated with \( \tau_2^* - \tau_1 \geq 0 \). The interpretation of (20) is straightforward. The left side is the marginal cost weighted by \( 2/(1 + \sigma D) \), representing the marginal value of forgone period-1 tax revenue. The right side is the marginal benefit of fiscal capacity, which has two parts: \(-m\), the loss of private earnings because taxation has increased, and \( m2(1 - \phi + \sigma D (\phi - \gamma \alpha \rho))/(1 + \sigma D) \), the future value of public revenue due to increased fiscal capacity.

Note that for \( \tau_2^* > \tau_1 \), the c.s. condition implies that (20) can be written as

\[
\tau_2^* = C^{-1}_\tau(m[-\phi + \sigma D (\phi - \gamma \alpha \rho) + (1 - \sigma D)/2] + \tau_1
\]  
(21)

Since this paper focuses on the effect of the risk of external conflict on investment in fiscal capacity, I look at \( \partial \tau_2^*/\partial \alpha \), for which it is possible to find an explicit form. Differentiating (21) with respect to \( \alpha \) and rearranging, we have that the sign of \( \partial \tau_2/\partial \alpha \) depends on the sign of

\[
-(1 - \sigma D)\frac{\partial \phi}{\partial \alpha} - \sigma D \alpha \rho \left( \frac{\gamma}{\alpha} + \frac{\partial \gamma}{\partial \alpha} \right)
\]  
(22)

The analysis of the expression in (22) allows us to obtain the first main result of the paper. It establishes the conditions under which an increase in the risk of external conflict increases or decreases investment in fiscal capacity.

---

29See proof of Proposition 1 in the Appendix for a step-by-step procedure.
Proposition 1. Consider the above-described game. Then:

(1.A) For $\gamma = 0$ and $\sigma^D < 1$, an increase in the risk of external conflict increases investment in fiscal capacity. For $\gamma = 0$ and $\sigma^D = 1$, an increase in the risk of external conflict does not affect investment in fiscal capacity.

(1.B) For $\gamma \in (0, 1)$, there is a unique threshold for $\sigma^F$ such that if $\sigma^F$ is below this threshold, an increase in the risk of external conflict increases investment in fiscal capacity, and if $\sigma^F$ is above this threshold, an increase in the risk of external conflict decreases investment in fiscal capacity.

(1.C) For $\gamma = 1$, an increase in the risk of external conflict decreases investment in fiscal capacity.

Proof. See the Appendix.

Proposition 1 states that an increase in the risk of external conflict can either increase or decrease the government’s incentives to invest in fiscal capacity. The intuition is as follows. The period 1 government, $I_1$, has incentives to invest in fiscal capacity if it expects to be in power in period 2, so it can extract rents in that period. How are these incentives affected when the risk of external conflict increases? Basically, the probability of political turnover, as seen by $I_1$, is expected to change. How? It depends on $I_1$’s expectations about how the domestic opposition, $O_1$, will react to the increased risk of external conflict.

Proposition 1.A considers the case where $I_1$ expects to receive full support from $O_1$ (i.e. $\gamma = 0$). In this scenario, a heightened risk of an external conflict significantly strengthens $I_1$ domestically, which outweighs the higher probability that $F$ gets into power, so the probability of political turnover decreases (i.e. $\partial \phi / \partial \alpha < 0$). The lower probability of turnover, as seen by $I_1$, that results from $\gamma = 0$, along with a $\sigma^D < 1$, provide $I_1$ with enough incentives to increase period-2 fiscal capacity.

In Proposition 1.B, $I_1$ does not expect full support from $O_1$, but civil war is also not a certainty (i.e. $\gamma \in (0, 1)$). In this scenario, $I_1$’s incentives to invest in fiscal capacity depend on how strong it expects $O_1$’s support will be. Specifically, it depends on whether $I_1$ expects that this support is strong enough to outweigh the higher probability of a foreign invasion, so that $I_1$ believes that the gains (through rent extraction) associated with the greater political stability will be larger than the losses if there is an invasion. By focusing on $\sigma^F$, the transfer that $I_1$ expects $O_1$ to receive if $F$ is in power, Proposition 1.B. identifies how strong this expected support should be to guarantee an increase in investment in fiscal capacity. If $I_1$ expects $\sigma^F$ to be sufficiently small (or big), this means getting sufficient (insufficient) support from $O_1$, so we would expect an increase (or decrease) in investment in fiscal capacity as a consequence of the increased risk of external conflict.

---

Note that in (22), for $\gamma = 0$, (22) is equivalent to $-(1 - \sigma^D) \frac{\partial \phi}{\partial \alpha}$, which is strictly greater than zero when $\partial \phi / \partial \alpha < 0$ and $\sigma^D < 1$.

Note in (22) that whether fiscal capacity increases not only depends on whether $\partial \phi / \partial \alpha < 0$ but also on $\sigma^D$ being sufficiently small. This will be crucial to the relationship between political turnover and investment in fiscal capacity, which I will examine in the next section.
Proposition 1.C considers the case where $I_1$ expects little support from $O_1$. In this scenario, $O_1$ sees an opportunity to weaken $I_1$ by triggering an internal conflict. The consequence is that investment in fiscal capacity decreases.\textsuperscript{32}

The results in Proposition 1 are very intuitive.\textsuperscript{33} However, when we analyze the role of political turnover in detail, a less intuitive and more interesting characteristic of the process of state-building emerges: although political turnover crucially affects the incentives for state-building, less political turnover does not always imply more state-building. This second main result is formulated in the next section.

3.3 The role of political turnover

In the last section I argued that the level of support that the government expects to receive from the domestic opposition, and the resulting probability of political turnover, was key to the intuition behind Proposition 1. In this section, I develop this idea by specifying the relationship between political turnover and investment in fiscal capacity.

I start by identifying the conditions under which an increased risk of external conflict increases or decreases $I_1$’s expectation of political turnover (i.e. $\phi$). The following proposition summarizes the main result.

**Proposition 2.** Consider the above-described game. Then:

(2.A) For $\gamma = 0$, an increased risk of external conflict decreases $\phi$.

(2.B) For $\gamma \in (0, 1)$, there is a unique threshold for $\sigma^F$, such that if $\sigma^F$ is below the threshold, an increased risk of external conflict decreases $\phi$, and if $\sigma^F$ is above the threshold, an increased risk of external conflict increases $\phi$.

(2.C) For $\gamma = 1$, an increased risk of external conflict increases $\phi$.

**Proof.** See the Appendix.

Proposition 2 is similar to Proposition 1, but it focuses on political turnover instead of fiscal capacity. It states that an increased risk of external conflict can either increase or decrease $\phi$, and that this depends on the size of the transfers that $O_1$ is expected to receive if there is a foreign administration. Importantly, Proposition 2 shows that a higher risk of

\textsuperscript{32}Note in (19) that when $\gamma = 1$, $\partial \phi / \partial \alpha > 0$, (22) becomes $-(1 - \sigma^D) \frac{\partial \phi}{\partial \alpha} - \sigma^D \rho$, which is always negative.

\textsuperscript{33}The results are also consistent with the case studies in Section 2. In the early months of Guerrero’s presidency, there was a high risk of reconquest by Spain, and most Mexicans sided with the government in strongly opposing Spain (recall that the Mexican government had massively expelled people that could have eventually sided with Spain). This unity may have decreased the risk of political turnover, giving Guerrero incentives to insist, successfully, on the introduction of a national income tax. The results are also consistent with the Mexican-American War and the Shaba wars: the absence of any strong sense of unity could have increased the risk of a coup, which in turn could have given the Mexican and DRC governments incentives to raise revenues by means other than direct taxation.
external conflict can decrease $\phi$, and that this happens because the higher risk of external conflict makes $I_1$ expect that $O_1$ will be less belligerent.34

When $\gamma \in (0,1)$, Propositions 1 and 2 establish the existence of two thresholds for $\sigma^F$, below which the effect of an increase in the risk of an external conflict decreases $\phi$ (Prop. 2) and increases $\tau_2$ (Prop. 1), and above which $\phi$ should increase and $\tau_2$ should decrease. However, the thresholds are not identical. This suggests that although $\phi$ plays a crucial role in explaining the impact of external threats on fiscal capacity, it is not the only factor. In the next proposition, I establish the conditions under which an increase in political turnover implies (or not) an increase in investment in fiscal capacity.

**Proposition 3.** Consider the above-described game. Then:

(3.A) For $\gamma = 0$, an increased risk of an external conflict implies a decrease in $\phi$ and, when $\sigma^D > 0$, also implies an increased investment in fiscal capacity.

(3.B) For $\gamma \in (0,1)$, there is a $\sigma^* \in (0,1)$ such that for all $\sigma^D \geq \sigma^*$, if an increased risk of external conflict implies an increase in $\phi$, then it also implies a decreased investment in fiscal capacity, and if an increased risk of external conflict implies a decrease in $\phi$, then it does not necessarily imply an increased investment in fiscal capacity.

(3.C) For $\gamma = 1$, an increased risk of external conflict implies an increase in $\phi$ and a decreased investment in fiscal capacity.

*Proof.* See the Appendix.

The results in Proposition 3.A (and 3.C) state that when $I_1$ expects to receive full support (or no support at all) from $O_1$, then if, as a consequence of an increased risk of external conflict, the chance that $I_1$ continues in power in period 2 increases (or decreases), then $I_1$ has more (or less) incentive to increase fiscal capacity for the next period.

A less intuitive result is established in Proposition 3.B. It states that if as a result of an increased risk of external conflict, the chances that $I_1$ stays in power increase, $I_1$ does not always decide to invest more in fiscal capacity. This result crucially depends on whether $\sigma^D$ is sufficiently high.

The explanation for this novel result is as follows. The only benefit to $I_1$ of a higher probability of staying in power in period 2 that results from an increased risk of external conflict is that second-period rent extraction becomes more likely. However, the amount of rents $I_1$ expects to capture depends on the level of cohesiveness of institutions (i.e. $\sigma^D$): the stronger the government institutions, the less rents can be captured. So, if rent extraction

---

34Interestingly, this result can be interpreted as specifying how a sense of national identity that creates common interests can be actively fostered: when $\sigma^F$ is sufficiently small, a foreign invasion is more likely to be perceived as a common threat, so when that threat increases, national cohesiveness, reflected in a lower probability of civil war, also increases. This interpretation is consistent with the literature on endogenous social identity (for example, see Shayo, 2009), providing an alternative mechanism through which a sense of identity and belonging to a polity can be reinforced.
becomes more likely, but the value of the rents that can be captured is relatively low, then 
$I_1$'s marginal benefit from investing more in fiscal capacity can be relatively small.  

Proposition 3 is consistent with the important but still scarce literature on the relationship 
between greater political stability and weaker public policies, particularly an interesting result by 
Acemoglu et al. (2011): greater stability might harm the party in power because when power finally shifts, the new government is more likely to remain in power, keeping a bigger 
share of rents and leaving less to the former government. Proposition 3.B contributes to 
this idea by providing a novel mechanism through which more political stability might be 
associated with worse outcomes, and in which the origin of the greater political stability is 
key: when greater political stability results from an increased risk of external conflict, the 
higher chance that the government loses power to the foreign country means that the costs 
associated with more fiscal capacity in period 2 are higher, so only non-cohesive institutions 
can give the government enough incentives to invest in fiscal capacity.  

3.4 Endogenous political institutions

In this section, I expand the choices in the baseline model to include the level of cohesive- 
ness of institutions, $\sigma^D$. I consider a very simple way in which this parameter can change: it 
results from a bargaining process between the period-1 government and the opposition. 

In the new scenario, the level of cohesiveness of institutions is specific to each period, so 
we have $\sigma^D_1$ for period 1 and $\sigma^D_2$ for period 2. As for $\sigma^F$, it is still exogenous, but is now 
assumed to be known by both the government and opposition. 

The analysis focuses on $\sigma^D_2$. I assume that $\sigma^D_2$ reflects a constitutional change made one 
period ahead, and that an agreement, if reached, deters the domestic opposition from starting a civil war and ensures the period-2 government does not use its power to modify $\sigma^D_2$.  

This assumption is weaker than in the baseline model, and although it could be still 
regarded as a strong assumption, it is not uncommon in the literature on endogenous in- 
stitutions. A possible intuition is an agreement that includes, on the one hand, signific-
ant transaction costs in unilaterally changing future key political institutions (for instance, 
through entrenched clauses that impose constitutional limits on the government) and, on the 
other hand, refraining from the use of violence for political purposes (for example, through 
the disarmament of $O_1$). 

The bargaining process is modeled as a very simple “divide-the-dollar” game. First, the 
period-1 government, $I_1$, offers a certain value of $\sigma^D_2$ to the opposition, $O_1$. $O_1$ then chooses 
whether to accept the offer, taking into account that if it accepts, the proposed value of $\sigma^D_2$ 

35This can be seen in (22): interpreting the term $-(1 - \sigma^D)\partial\phi/\partial\alpha$ as the marginal benefit for investing 
more in fiscal capacity means that even with $\partial\phi/\partial\alpha \ll 0$, this benefit can be very small if $\sigma^D$ is sufficiently 
big.  
36Note that this result cannot be deduced from B&P's model, since for them an increase in the risk of external conflict always increases the value of a common interest public good, so greater political stability that results from a higher risk of external conflict always implies more incentives to invest in fiscal capacity. 
37The new timing of the game differs from that of the baseline model in that at stage 2, the second-period 
political institutions $\sigma^F_2$ are chosen (in addition to $\tau_2$). In addition, at stage 1, nature decides the initial level of cohesiveness of institutions, $\sigma^D_1$ (in addition to the initial stock of fiscal capacity). 
38In addition to B&P, see Aghion et al. (2004), Ticchi and Vindigni (2010) and Acemoglu et al. (2013).
will determine both $O_1$’s and $I_1$’s transfers in the second period provided that one of the domestic groups is in power in period 2. If $O_1$ accepts the offer, the constitution will be implemented in period 2 if there is no foreign administration, and each domestic group will receive a transfer determined by (6). If $O_1$ rejects the offer, $\sigma^D_2$ is set at its lowest level, i.e. $\sigma^D_2 = 0$, which can be interpreted as a situation in which $\sigma^D_1 = 0$, and the status quo is maintained. Finally, if $O_1$ accepts the offer, it commits to not starting a civil war.\footnote{The opposition takes into account its commitment not to start a civil war when determining whether or not to accept the offer. As previously mentioned, the commitment can be interpreted as resulting from a peace deal in which the opposition may have turned over its weapons in exchange for a certain level of cohesiveness of institutions protected by a set of entrenched clauses.}

To solve this variation of the model, I proceed by backward induction, first considering $O_1$’s choice at stage 2, and then the conditions under which it is optimal for $I_1$ to offer something that $O_1$ will accept. The following proposition summarizes the main result:

**Proposition 4.** Consider the above-described game with $\sigma^D_2$ resulting from a bargaining process between the period-1 government and the opposition. Consider the inequalities

\[
\alpha \omega + (1 - \alpha)\delta + \alpha \rho \sigma^F/(2 + \sigma^F) \leq 1/2 \tag{23}
\]

\[
(1 - \alpha)\epsilon < \alpha \omega + (1 - \alpha)\delta + \alpha \rho \sigma^F/(2 + \sigma^F) \tag{24}
\]

Then,

(4.A) if (23) and (24) are satisfied, the period-1 government will offer $\sigma^D_2^* > 0$, and the opposition will accept it, where

\[
\sigma^D_2^* = \frac{\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon + \alpha \rho \sigma^F/(2 + \sigma^F)}{1 - \alpha \omega - (1 - \alpha)\delta - (1 - \alpha)\epsilon - \alpha \rho \sigma^F/(2 + \sigma^F)} \tag{25}
\]

(4.B) if (23) is satisfied but (24) is not satisfied, the period-1 government will offer a $\sigma^D_2^* = 0$ and the opposition will accept the offer.

(4.C) if (23) is not satisfied, the period-1 government will offer $\sigma^D_2^* = 0$, and the opposition will reject this proposal.

**Proof.** See the Appendix. \qed

The expression in (23) establishes the condition under which $I_1$ will make an offer that $O_1$ will accept. It guarantees that there won’t be an internal conflict. When (23) holds, (24) determines whether or not the level of cohesiveness of institutions is greater than zero.

The intuition for these results is the following. First, note that when (23) holds, the probability that $O_1$ takes power through civil war (i.e. $\alpha \omega + (1 - \alpha)\delta$) and $O_1$’s marginal benefit in case of a foreign conflict (i.e. $\alpha \rho \sigma^F/(2 + \sigma^F)$) cannot be very high. The reason why this implies that $O_1$ will accept the offer is that these expressions are directly proportional to $O_1$’s bargaining power, so when they are sufficiently small, so is this power. When (24) holds too (Prop. 4.A), the condition can also be related to $O_1$’s bargaining power, but now implies that it cannot be extremely low. Since in this scenario the probability of political turnover is small (given that $\gamma = 0$), $O_1$ expects that $I_1$ is in power in period 2, so $O_1$’s bargaining power implies that $I_1$ has to propose a positive but not necessarily high level of checks and balances.
for period 2. When (24) does not hold (Prop. 4.B), O₁’s bargaining power is extremely low, so O₁ will accept any proposal, including I₁’s most preferred alternative, σ_{2}^{D∗} = 0.

Note that σ_{2}^{D∗} in (25), which matters when (23) and (24) hold, increases with σ^F and α.⁴⁰ The intuition is similar to that previously mentioned: having a higher σ^F or a higher α increases O₁’s reservation utility, so I₁ has to propose more checks and balances in period 2 so that O₁ has sufficient incentive to accept the offer.

As for the effect of the risk of external conflict on investment in fiscal capacity, note that Proposition 1 may not apply to this scenario because now σ_{2}^{D∗} can increase in α. The following proposition summarizes this effect:

**Proposition 5.** Consider the above-described game with σ_{2}^{D} resulting from a bargaining process between the period-1 government and the opposition. Then:

(5.A) if (23) and (25) are satisfied, an increase in the risk of external conflict does not increase investment in fiscal capacity.

(5.B) if (23) is satisfied but (24) is not satisfied, an increase in the risk of external conflict increases investment in fiscal capacity.

(5.C) if (23) is not satisfied, an increase in the risk of external conflict decreases investment in fiscal capacity.

**Proof.** See the Appendix.

The intuition for 5.A is the following. First, note that a higher risk of external conflict improves O₁’s outside option since it makes more likely that O₁ takes power in the event of a civil war. Second, note that the increase in O₁’s reservation utility makes an agreement more costly for I₁ in terms of having to accept more checks and balances in period 2 (since ∂σ_{2}^{D∗}/∂α > 0). Third, note that if an agreement is reached, there won’t be civil war and I₁’s probability of re-election will increase in case of an external conflict. In this scenario, Proposition 5.A states that I₁ has no incentive to invest in fiscal capacity because the costs associated with its decreased capacity to extract rents in period 2 are now too high.⁴¹

Importantly, note that Proposition 5.A holds even though when an agreement is reached, I₁ expects a decrease in political turnover.⁴² This allows us to ask about the role of political turnover in this new result. In this respect, note that the result in Proposition 5.A is consistent

---

⁴⁰That ∂σ_{2}^{D∗}/∂σ^F > 0 follows directly from the fact that σ^F/(2 + σ^F) is strictly increasing in σ^F. As for ∂σ_{2}^{D∗}/∂α > 0, differentiate (25) with respect to α to get

\[
\frac{∂σ_{2}^{D∗}}{∂α} = \frac{ω − δ + ϵ − 2ω + ρ(1 − 2ϵ)σ^F/(2 + σ^F)}{(1 − αω − (1 − α)δ − (1 − α)ϵ − αρσ^F/(2 + σ^F))^2} \tag{26}
\]

Note that the numerator can be written as (ω − δ + ρσ^F/(2 + σ^F)(1 − 2ϵ(1 − α)) + ϵ(1 − 2(αω + (1 − α)δ + 2\rhoσ^F/(2 + σ^F))). Thus, by (1) and 1/2 > (1 − α)ϵ, we know that the first term in this sum is strictly positive. As for the second term, the condition in (24) guarantees that it is non-negative. Since the numerator in (26) is strictly positive, ∂σ_{2}^{D∗}/∂α > 0.

⁴¹For the same reason, when σ_{2}^{D∗} = 1, I₁ does not have an incentive to increase fiscal capacity either. We also don’t expect an increase in investment in fiscal capacity when there is no agreement and σ_{2}^{D∗} = 0 and γ = 1: the increased likelihood of turnover is so big that it outweighs the high capacity for rent extraction.

⁴²To see this, note that in this case γ = 0, so by (19) φ = (1 − α)ϵ, with which ∂φ/∂α = −ϵ < 0.
with the most important result in Proposition 3: a decrease in \( \phi \) may not result in increased investment in fiscal capacity when the decrease in \( \phi \) is a consequence of an increased risk of external conflict. The intuition here is the same, the only difference being that now \( \sigma_2^D \) is endogenous. So, in some sense, Proposition 5.A generalizes Proposition 3.B.\(^{43}\)

Proposition 5.B shows it is possible that an increased risk of external conflict increases investment in fiscal capacity. This occurs when \( O_1 \)’s bargaining power is very small, so \( I_1 \) can get support from \( O_1 \) even though \( \sigma_2^D \neq 0 \) and \( I_1 \) expects to be re-elected. This result sheds light on what adds the variation proposed in this section to Proposition 1. Note that when \( \sigma_2^D \) results from a bargaining process between \( I_1 \) and \( O_1 \), an increased risk of external conflict implies less investment in fiscal capacity because \( I_1 \), through a decrease in its capacity to extract rents in period 2, internalizes the costs associated with support from \( O_1 \) being more difficult to get. Crucially, note that the internalization of costs through a higher \( \sigma_2^D \) occurs only when \( \sigma_2^D \in (0,1). \) When \( \sigma_2^D = 0 \) and \( O_1 \)’s bargaining power is ex ante extremely low, as it is the case in Proposition 5.B, \( \sigma_2^D = 0 \) is not affected by an increased risk of external conflict, and changes to investment in fiscal capacity only depend on the relationship between the other parameters (including \( \sigma^F \)). This last situation is very similar to the situation considered by Proposition 1.\(^{44}\)

4 Conclusion

In most of the recent literature on state capacity, the significance of wars in state-building relies on the assumption that threats from external enemies generate common interests among groups in society, leading to larger investments in state capacity. In addition, external and internal disputes are viewed as being independent of each other by this literature. However, a large number of cases and some cross-country correlations suggest that this might not be the case. In particular, this assumption seems inconsistent with state-building processes during post-independence and Cold War periods in several countries in Latin America, sub-Saharan Africa, and southeast Asia.

Motivated by these observations, this paper develops a model where interstate conflicts and civil wars can be related, and in which interstate wars are not always a common-interest public good. In the model, a government faces two threats: one from a foreign country,

\(^{43}\)However, there is one sense in which the results in Propositions 4 and 5 are not consistent with those in Proposition 3: an increased risk of external conflict also decreases the chance that (23) is satisfied. To see this, differentiate the left side of (23) with respect to \( \alpha \); we get \((\omega - \delta) + \rho \sigma^F/(2 + \sigma^F)\). Note that by (1), this expression is always positive, so a higher \( \alpha \) makes it less likely that (23) is satisfied.

\(^{44}\)To see this, note that when (24) is not satisfied, \(2((1-\alpha)e - (\alpha \omega + (1-\alpha)\delta)) \geq \sigma^F (\alpha \omega + (1-\alpha)\delta + \alpha \rho - (1-\alpha)e),\) where \(2((1-\alpha)e - (\alpha \omega + (1-\alpha)\delta)) > 0,\) and whether \( \alpha \omega + (1-\alpha)\delta + \alpha \rho - (1-\alpha)e \leq 0 \) determines if \( \sigma^F \) matters. When \( \alpha \omega + (1-\alpha)\delta + \alpha \rho - (1-\alpha)e < 0, \) \( O_1 \) will accept \( I_1 \)’s offer regardless of \( \sigma^F \). When \( \alpha \omega + (1-\alpha)\delta + \alpha \rho > (1-\alpha)e, \) (24) is not satisfied when

\[\sigma^F \leq \frac{2((1-\alpha)e - (\alpha \omega + (1-\alpha)\delta))}{\sigma^F (\alpha \omega + (1-\alpha)\delta + \alpha \rho - (1-\alpha)e)}\]  \( (27) \)

Note that the right side of (27) can be interpreted as a threshold for \( \sigma^F \), below which an increased risk of external conflict increases investment in fiscal capacity, and above which an increased risk of external conflict does not increase investment in fiscal capacity. This result is consistent with Proposition 1.B. (although with a different threshold).
and another from a domestic opposition. Crucially, the model allows for an opposition and government that place different values on a potential victory by the foreign country. A first main result establishes that in equilibrium, the risk of external conflict contributes to fiscal capacity only when the share of transfers that the internal opposition expects if it supports the government is sufficiently large relative to what it expects from a foreign administration.

The interplay between external threats, political turnover and investment in fiscal capacity leads to a second important result: while a greater likelihood of political turnover translates into less fiscal capacity, a lower probability of political turnover does not necessarily imply more state-building. The link between political turnover and state-building depends on the cohesiveness of institutions and on the fact the lower likelihood of political turnover results from an increased risk of external conflict. If institutions are sufficiently cohesive, the gains from lower political turnover might not outweigh the more probable losses resulting from a foreign administration, which means that decreased political turnover could actually lead to less state-building.

An extension of the baseline model that endogenizes the level of cohesiveness of institutions is also proposed. In this extension, the cohesiveness of institutions results from a constitutional stage in which the government and opposition play a simple “divide-the-dollar” game. The results in this extension are consistent with those in baseline model.

I view this paper as only a first step towards a systematic analysis of the process of state-building in scenarios where countries experience different but related conflicts. I develop a simple model to study a specific aspect of this process: the construction of two specific institutions in a country consisting of two domestic actors, which faces an exogenous external threat. I am aware that many aspects of this process have been left out. Two examples are the source of the external threat and how a foreign country behaves when it wins an interstate conflict. These are important and exciting areas for future research.
Appendix

Derivation of Equations (11) and (14). First, I compute $O_1$’s expected utility in the event of civil war and internal peace. Combining (8), (9) and (10), with $\alpha$ representing the probability of interstate conflict, we have that $O_1$’s expected utility (in period 2) in the event of civil war is

$$
\alpha \left[ \omega W^{O_1}(\tau_2|I_2 = O_1) + (1 - \omega - \rho)W^{O_1}(\tau_2|I_2 = I_1) + \rho W^{O_1}(\tau_2|I_2 = F) \right] 
+ (1 - \alpha) \left[ \delta W^{O_1}(\tau_2|I_2 = O_1) + (1 - \delta)W^{O_1}(\tau_2|I_2 = I_1) \right]
$$

and in the case of internal peace is

$$
\alpha \omega W^{O_1}(\tau_2|I_2 = I_1) + (1 - \alpha) \left[ \epsilon W^{O_1}(\tau_2|I_2 = O_1) + (1 - \epsilon)W^{O_1}(\tau_2|I_2 = I_1) \right]
$$

Note that $O_1$ decides whether or not to trigger a civil war by comparing (28) and (29). Rearranging these expressions, it is easy to see that $O_1$ triggers a civil war when (11) is satisfied.

Now I derive (14), i.e. the probability of civil war as seen by $I_1$. Replacing the expressions in (8), (9) and (10) in (11), and rearranging, we have that $O_1$ decides whether or not to trigger a civil war when

$$(\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon)(1 - \sigma^D)(2 + \sigma^F) > \alpha \rho (\sigma^D(2 + \sigma^F) - (1 + \sigma^D)\sigma^F)$$

which is equivalent to

$$\sigma^F (\alpha \rho + (\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon)(1 - \sigma^D)) > 2(\alpha \rho \sigma^D - (\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon)(1 - \sigma^D))$$

Note that when $\alpha \omega + (1 - \alpha)\delta \ll (1 - \alpha)\epsilon$, (31) is never satisfied, so $O_1$ does not trigger a civil war. When $(\alpha \rho + (\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon)(1 - \sigma^D)) > 0$, (31) is equivalent to (12), and from $I_1$’s perspective, (14) represents the probability that (12) is satisfied.

Proof of Proposition 1. First, I calculate $I_1$’s expected utility. Combining (15), (16), (17) and (18), we have that $I_1$’s expected utility when there is no civil war is

$$W^{I_1}(\tau_1, C(\tau_2 - \tau_1)) + \alpha \left[ W^{I_1}(\tau_2|I_2 = I_1) \right] 
+ (1 - \alpha) \left[ (1 - \epsilon)W^{I_1}(\tau_2|I_2 = I_1) + \epsilon W^{I_1}(\tau_2|I_2 = O_1) \right]
$$

In the case of a civil war, $I_1$’s expected utility is

$$W^{I_1}(\tau_1, C(\tau_2 - \tau_1)) + \alpha \left[ (1 - \omega - \rho)W^{I_1}(\tau_2|I_2 = I_1) + \omega W^{I_1}(\tau_2|I_2 = O_1) + \rho W^{I_1}(\tau_2|I_2 = F) \right] 
+ (1 - \alpha) \left[ (1 - \delta)W^{I_1}(\tau_2|I_2 = I_1) + \delta W^{I_1}(\tau_2|I_2 = O_1) \right]
$$
Combining the previous two expressions, and recalling that \( \gamma \) is the probability of civil war as seen by \( I_1 \), we have that \( I_1 \)’s expected utility as seen from period 1 is

\[
W^{I_1}(\tau_1, C(\tau_2 - \tau_1)) + \gamma \left[ (1 - \omega - \rho)W^{I_1}(\tau_2|I_2 = I_1) + \omega W^{I_1}(\tau_2|I_2 = O_1) + \rho W^{I_1}(\tau_2|I_2 = F) \right] + (1 - \alpha) \left[ (1 - \delta)W^{I_1}(\tau_2|I_2 = I_1) + \delta W^{I_1}(\tau_2|I_2 = O_1) \right] \\
+(1 - \gamma) \left[ \alpha \omega W^{I_1}(\tau_2|I_2 = I_1) + (1 - \alpha) \left( (1 - \epsilon)W^{I_1}(\tau_2|I_2 = I_1) + \epsilon W^{I_1}(\tau_2|I_2 = O_1) \right) \right]
\]

(34)

At the beginning of period 1, \( I_1 \) chooses \( \tau_2 \) by maximizing (34). Differentiating (34) with respect to \( \tau_2 \), and setting it equal to zero, the first-order condition is

\[
-W^{I_1}_C(\tau_1, C(\tau_2 - \tau_1))C_\tau(\tau_2 - \tau_1) \geq \gamma \left[ \alpha ((1 - \omega - \rho)W^{I_1}_C(\tau_2^*|I_2 = I_1) + \omega W^{I_1}_C(\tau_2^*|I_2 = O_1) + \rho W^{I_1}_C(\tau_2^*|I_2 = F)) \right] + (1 - \alpha) \left[ (1 - \delta)W^{I_1}_C(\tau_2^*|I_2 = I_1) + \delta W^{I_1}_C(\tau_2^*|I_2 = O_1) \right] \\
+(1 - \gamma) \left[ \alpha \omega W^{I_1}_C(\tau_2^*|I_2 = I_1) + (1 - \alpha) \left( (1 - \epsilon)W^{I_1}_C(\tau_2^*|I_2 = I_1) + \epsilon W^{I_1}_C(\tau_2^*|I_2 = O_1) \right) \right]
\]

(35)

with the complementary slackness condition associated to \( \tau_2^* - \tau_1 \geq 0 \). Using the definition of \( \phi \) in (19), replacing (15), (16), (17) and (18) in (35) and rearranging, (35) is equivalent to

\[
2C_\tau(\tau_2^* - \tau_1)(1 + \sigma_D) \geq \gamma \alpha (1 - \omega - \rho)(m(1 - \sigma_D)/(1 + \sigma_D)) + \omega(-m(1 - \sigma_D)/(1 + \sigma_D)) + \rho(-m) \\
+(1 - \alpha)((1 - \delta)(m(1 - \sigma_D)/(1 + \sigma_D)) + \delta(-m(1 - \sigma_D)/(1 + \sigma_D))) \\
+(1 - \gamma) \left[ \alpha(m(1 - \sigma_D)/(1 + \sigma_D)) + (1 - \alpha)((1 - \epsilon)(m(1 - \sigma_D)/(1 + \sigma_D)) - \epsilon m(1 - \sigma_D)/(1 + \sigma_D)) \right]
\]

which, rearranging, is equivalent to

\[
2C_\tau(\tau_2^* - \tau_1) \geq m \gamma (1 - \sigma_D) \alpha (1 - \omega - \rho) - \alpha \rho (1 + \sigma_D) + (1 - \sigma_D)(1 - \alpha)(1 - \delta) + m(1 - \gamma)(1 - \sigma_D)(1 - \alpha)
\]

(36)

which is equivalent to

\[
2C_\tau(\tau_2^* - \tau_1) \geq m(1 - \sigma_D) + 2m \gamma \left[ - \omega (1 - \sigma_D) \alpha - \alpha \rho - \delta (1 - \sigma_D)(1 - \alpha) \right] - 2m(1 - \gamma)(1 - \sigma_D)(1 - \alpha) \epsilon
\]

(37)

which is equivalent to

\[
2C_\tau(\tau_2^* - \tau_1) \geq m(1 - \sigma_D) + 2m \gamma \left[ \alpha \omega \sigma_D + (1 - \alpha) \delta \sigma_D \right] + 2m(1 - \gamma)(1 - \alpha) \epsilon \sigma_D \\
- 2m \gamma (\alpha \rho + \omega) + (1 - \alpha) \delta - 2m(1 - \gamma)(1 - \alpha) \epsilon
\]

(38)

Replacing the expression for \( \phi \) in (19) twice, and rearranging, we have

\[
2C_\tau(\tau_2^* - \tau_1) \geq 2m \left( 1 - \phi + \sigma_D[\phi - \gamma \alpha \rho] \right) - m(1 + \sigma_D)
\]

(39)

Rearranging (40), it is easy to see that it is equivalent to (20). Note that for \( \tau_2^* > \tau_1 \), the complementary slackness condition implies that (40) holds with equality. Solving for \( \tau_2^* \), we get (21). Note that differentiating again (34) with respect to \( \tau_2 \), and replacing (15), (16), and
(17) and (18), we get the second-order condition \(-2C_{rr}(r_2 - r_1) < 0\), which is always true, given that \(C(\cdot)\) is strictly convex; thus, (40) gives a maximum.

Differentiating (21) with respect to \(\alpha\), it is easy to see that, given the strict convexity of \(C(\cdot)\), and that \(m, \sigma^D\) and \(r_1\) are constants, the sign of \(\frac{\partial \tau}{\partial \alpha}\) depends on the sign of \(\frac{\partial}{\partial \alpha}(-\phi + \sigma^D(\phi - \gamma \alpha \rho))\), which is equivalent to

\[-(1 - \sigma^D)\frac{\partial \phi}{\partial \alpha} - \sigma^D \alpha \rho \left(\frac{\gamma}{\alpha} + \frac{\partial \gamma}{\partial \alpha}\right)\]  

(41)

which is equal to (22). Now we find \(\frac{\partial \tau}{\partial \alpha}\). Differentiating (14) with respect to \(\alpha\), we have that for \(\gamma \in (0, 1)\), and when \(\alpha \rho + (1 - \sigma^D)(\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon) > 0\), we get

\[
\frac{\partial \gamma}{\partial \alpha} = -\left(\frac{\rho(\delta - \epsilon)(1 - \sigma^D)(1 + \sigma^D)}{\Phi^F(\alpha \rho + (1 - \sigma^D)(\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon))^2}\right)
\]

(42)

where \(\Phi^F = 1/2\). Replacing (14) and (42) in (41), we have that (41) is equivalent to

\[
\frac{1}{\Phi^F} \left[ -\frac{\Phi^F}{\Phi^F} \Phi^F ((1 - \sigma^D)(\omega - \delta) + \rho) + \rho(\delta - \epsilon)(1 - (\sigma^D)^2) + (\sigma^D \alpha \rho - (1 - \sigma^D)(\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon))((1 - \sigma^D)(\omega - \delta + \epsilon) + \rho) \right]
\]

(43)

where, to simplify the notation I have defined \(\Phi = \alpha \rho + (1 - \sigma^D)(\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon)\). Rearranging, it is easy to see that the last expression is equivalent to

\[-\Phi^F ((1 - \sigma^D)(\omega - \delta) + \rho) - (1 - \sigma^D)(\omega - \delta + \epsilon) + \rho \sigma^D\]  

(44)

Thus, we have that \(\frac{\partial \tau}{\partial \alpha} \geq 0\) if and only if the expression in (44) is \(\geq 0\). Solving this inequality for \(\Phi^F\), we have that \(\frac{\partial \tau}{\partial \alpha} \geq 0\) if and only if

\[
\Phi^F \leq \frac{\sigma \rho - (1 - \sigma)(\omega - \delta + \epsilon)}{(1 - \sigma)(\omega - \delta) + \rho}
\]

(45)

Defining the right-hand-side of (45) as the threshold for \(\Phi^F\), we have the result in Proposition 1.B. I denote the threshold for \(\Phi^F\) by \(\Sigma^f\).

For \(\gamma = 0\), (41) is equivalent to \((1 - \sigma^D)\epsilon\), which is strictly greater than zero for \(\sigma^D < 1\). For \(\gamma = 0\) and \(\sigma^D = 1\), note that the first-order condition (20) becomes \(C_r(r_2^* - r_1) \geq 0\) with the c.s., which implies that \(r_2^* = r_1\) since \(C_r(0) = 0\) by assumption. Thus, for this case, an increased risk of external conflict does not affect investment in fiscal capacity. Finally, for \(\gamma = 1\), we have that (41) is equivalent to \(-\rho - (1 - \sigma^D)(\omega - \delta)\), which, from (1), is always negative.

\[\square\]

**Proof of Proposition 2.** For the case where \(\gamma \in (0, 1)\) (Prop. 2.B), we differentiate (19) with respect to \(\alpha\), with which we obtain

\[
\frac{\partial \phi}{\partial \alpha} = \gamma(\rho + \omega - \delta + \epsilon) + \frac{\partial \gamma}{\partial \alpha}(\alpha(\rho + \omega) + (1 - \alpha)(\delta - \epsilon)) - \epsilon
\]

(46)
Replacing (14) and (42) in (46), we have that (46) is equivalent to

\[
(1/(σ^F Θ^2)) \left[ Θ(H Θ σ^F - (σ^D α ρ - (1 - σ^D)(α ω + (1 - α) δ - (1 - α) ε)) H - ε Θ) \right]

\[-ρ(δ - ε)(1 - (σ^D)^2)(α H + δ - ε)]
\]

where to simplify the notation I have defined \(H = ω - δ + ρ + ε\) and \(Θ = α ρ + (1 - σ^D)(α ω + (1 - α) δ - (1 - α) ε)\). Rearranging (47) and simplifying, (47) is equivalent

\[
σ^F = \left[ \frac{σ^D α ρ}{(ω - δ) + α ρ} \right] \left[ 1 + \frac{(1 + σ^D)(α(ω - δ) + ε) α ρ + (1 - σ^D)(α ω + (1 - α) δ - (1 - α) ε)^2}{α ρ(1 - σ^D)(α ω + (1 - α) δ - (1 - α) ε)^2} \right]

\[\left[ \frac{α(ω - δ) + α ϵ}{(ω - δ) + α ρ} \right] + \frac{α(ω - δ) + α ε}{(ω - δ) + α ρ}\]
\]

(48)

We can define \(Σ^s\) as

\[
Σ^s = \left[ \frac{σ^D α ρ}{(ω - δ) + α ρ} \right] \left[ 1 + \frac{(1 + σ^D)(α(ω - δ) + ε) α ρ + (1 - σ^D)(α ω + (1 - α) δ - (1 - α) ε)^2}{α ρ(1 - σ^D)(α ω + (1 - α) δ - (1 - α) ε)^2} \right]

\[-\left[ \frac{α(ω - δ) + α ϵ}{(ω - δ) + α ρ} \right] - \frac{α(ω - δ) + α ε}{(ω - δ) + α ρ}\]
\]

(49)

with which we have \(\frac{∂φ}{∂α} < 0\) when \(σ^F < Σ^s\) and \(\frac{∂φ}{∂α} > 0\) when \(σ^F > Σ^s\). Take \(Σ^s\) as the threshold for \(σ^F\) mentioned in Proposition 2.B.

Finally, for the case where \(γ = 0\) (Prop. 2.A), differentiating (19) with respect to \(α\) gives us \(\frac{∂φ}{∂α} = -ε < 0\). For \(γ = 1\) (Prop. 2.C), we have \(\frac{∂φ}{∂α} = ω - δ + ρ > 0\) because of (1).

**Proof of Proposition 3.** For \(γ \in (0,1)\), we show that there is a \(σ^* ∈ (0,1)\) such that \(Σ^s > Σ^f\) for all \(σ^D ∈ (σ^*,1)\). Note that \(Σ^s > Σ^f\) implies Prop. 3.B. From (49) and (45), we have that

\[
Σ^s - Σ^f = \left[ \frac{σ^D ρ}{Θ^2 XY} \right] \left[ MY - Θ^2(σ^D(ω - δ) + (ω - δ + ε)) \right]
\]

(50)

where, to simplify the notation, we have defined \(X = α ω + (1 - σ)(ω - δ) + ρ\), \(Y = (1 - σ)(ω - δ) + ρ\), \(Θ = α ρ + (1 - σ^D)(α ω + (1 - α) δ - (1 - α) ε)\) and \(M = (1 + σ^D)(α(ω - δ + ε) α ρ + (1 - σ^D)(α ω + (1 - α) δ - (1 - α) ε)^2)\). I define

\[
g(σ^D) = MY - Θ^2(σ^D(ω - δ) + (ω - δ + ε))
\]

(51)

Note from (50) and (51) that \(Σ^s - Σ^f = \frac{σ^D α ρ g(σ^D)}{XY Θ^2}\), which implies that \(Σ^s > Σ^f\) when \(g(σ^D) > 0\) and \(σ^D > 0\) (note that \(X\) and \(Y\) are both greater than zero). We show now that there is an \(σ^* ∈ (0,1)\) such that \(g(σ^D) > 0\) for all \(σ^D > σ^*\). First, note that

\[
\lim_{σ^D → 1} g(σ^D) = α^2 ω^2 F_{law} ε > 0
\]

(52)

Note that (52) implies that we only have two scenarios. First, \(g(·)\) never crosses the x-axis. Since \(\lim_{σ^D → 1} g(σ^D) > 0\), and since \(g(·)\) is continuous, we have that \(g(σ^D) > 0\) for all \(σ^D ∈ (0,1)\). For this case, we can take as \(σ^*\) any value in \((0,1)\).
Second, consider the case where \( g(\cdot) \) crosses the x-axis at least once. I define \( \Xi \) as the set of points in which this happens (i.e. \( g(\sigma^D) = 0 \) for all \( \sigma^D \in \Xi \)). I now take the supremum of \( \Xi \), which I define as \( \Sigma^* = \sup(\Xi) \). Note that \( \sup(\Xi) \in \Xi \) if (52) is strict. Crucially, the definition of \( \Sigma^* \), the continuity of \( g(\cdot) \) and (52) imply that \( g(\sigma^D) > 0 \) for all \( \sigma^D \in (\Sigma^*, 1) \). Thus, if we just examine \( \sigma^* = \Sigma^* \), then \( g(\sigma^D) > 0 \) for all \( \sigma^D \in (\sigma^*, 1) \).

For \( \gamma = 0 \), from Propositions 1 and 2 together we have that an increase in the risk of external conflict always implies a decrease in political turnover and, when \( \sigma^D > 0 \), an increased investment in fiscal capacity. Finally, for \( \gamma = 1 \), from Propositions 1 and 2 together we have that an increased risk of external conflict always implies both an increase in political turnover and decreased investment in fiscal capacity.

\[ \]

**Proof of Proposition 4.** First, we consider \( O_1 \)'s choice given an offer \( \sigma^D_2^* \) by \( I_1 \). If \( O_1 \) rejects the offer, \( O_1 \) expects \( r^D_2 = 0 \) for \( I_2 \in \{A, B\} \) since \( \sigma^D_2 = 0 \). However, this does not mean that \( r^O_2 = 0 \) for all cases, since it could be that \( I_2 = \bar{F} \), with which \( O_1 \) could receive positive transfers from \( F \) in period 2. From (14), we know that if \( \sigma^D_2 = 0 \), \( O_1 \) will start a civil war with certainty. In this scenario, the reservation utility of \( O_1 \) will be

\[
(\omega + (1-\alpha)\delta + \alpha \rho - \omega - (1-\alpha)\delta)W^O_1(\tau_2|I_2 = O_1) + (1-\alpha)\rho - (1-\alpha)(1-\epsilon)W^O_1(\tau_2|I_2 = I_1) + \alpha \rho W^O_1(\tau_2|I_2 = F) = 0
\]

which, from (8), (9) and (10), is equivalent to

\[
2\tau^O_2 m(\omega + (1-\alpha)\delta + \alpha \rho \sigma^F / (2 + \sigma^F)) + (1-\tau^O_2) w
\]

If \( O_1 \) accepts \( I_1 \)'s offer, \( O_1 \) will not trigger a civil war, with which it expects to get

\[
(1-\alpha)\epsilon W^O_1(\tau_2|I_2 = O_1) + (\alpha + (1-\alpha)(1-\epsilon)W^O_1(\tau_2|I_2 = I_1)
\]

which, again from (8) and (9), is equivalent to

\[
2\tau^O_2 m((1-\alpha)\epsilon(1-\sigma^D_2^*) + \sigma^D_2^*) / (1+\sigma^D_2^*) + (1-\tau^O_2) w
\]

Thus, \( O_1 \) accepts the offer if the expression in (56) is greater than or equal to the expression in (54); this condition is equivalent to

\[
\omega + (1-\alpha)\delta - (1-\alpha)\epsilon + \alpha \rho \sigma^F / (2 + \sigma^F) \leq \sigma^D_2^* (1 - (1-\alpha)\epsilon - \omega - (1-\alpha)\delta - \alpha \rho \sigma^F / (2 + \sigma^F))
\]

Now we study under what conditions it is optimal for \( I_1 \) to offer a \( \sigma^D_2^* > 0 \) that \( O_1 \) will accept. Note that if \( I_1 \) offers a \( \sigma^D_2 \) such that (57) is satisfied, in the second period \( I_1 \) will get

\[
\alpha W^I_1(\tau_2|I_2 = I_1) + (1-\alpha)[(1-\epsilon)W^I_1(\tau_2|I_2 = I_1) + \epsilon W^I_1(\tau_2|I_2 = O_1)]
\]

Replacing (15) and (16) in (58), and rearranging, we have that (58) is equivalent to

\[
(1-\tau^I_2)m + 2\tau^I_2 m(1 / 1 + \sigma^D_2)^2 (\alpha + (1-\alpha)(1-\epsilon) + (1-\alpha)\epsilon \sigma^D_2)
\]

For the case in which \( I_1 \) chooses a \( \sigma^D_2 \) such that (57) is satisfied, we have several possibilities, depending on the sign of the terms on the left and right side of (57) (and on whether \( (1-\alpha)\epsilon \geq \).
1/2, but by (2) we assume that \((1 - \alpha)\epsilon < 1/2\). First, note that differentiating (59) with respect to \(\sigma_2^D\), we obtain the first-order condition

\[
2\tau_2 m ( (1 - \alpha) 2\epsilon - 1 ) / (1 + \sigma_2^D)^2 \leq 0
\]  

(60)

with the complementary slackness conditions associated with (57), \(\sigma_2^D \geq 0\) and \(\sigma_2^D \leq 1\). Note that by (57), the expression in (60) is strictly negative. If the term on the left side of (57) is strictly positive (i.e. \((\alpha \omega + (1 - \alpha)) \delta - (1 - \alpha) \epsilon + \alpha \rho \sigma_F / (2 + \sigma_F) > 0\)), then (57) implies that \((1 - (1 - \alpha)) \epsilon - \alpha \omega - (1 - \alpha) \delta - \alpha \rho \sigma_F / (2 + \sigma_F)\) should be also strictly positive. If we look at a solution in which \(\sigma_2^D > 0\), these conditions, as well as (60) and the complementary slackness conditions imply that (57) is binding, so we have (25), i.e. that

\[
\sigma_2^{D^*} = \frac{\alpha \omega + (1 - \alpha) \delta - (1 - \alpha) \epsilon + \alpha \rho \sigma_F / (2 + \sigma_F)}{1 - \alpha \omega - (1 - \alpha) \delta - (1 - \alpha) \epsilon - \alpha \rho \sigma_F / (2 + \sigma_F)}
\]  

(61)

To identify the cases in which \(\sigma_2^{D^*} < 1\) and \(\sigma_2^{D^*} = 1\), note that by (61) \(\sigma_2^{D^*} < 1\) occurs when \(\alpha \omega + (1 - \alpha) \delta + \alpha \rho \sigma_F / (2 + \sigma_F) < 1/2\). In this case, note also that \(\alpha \omega + (1 - \alpha) \delta + \alpha \rho \sigma_F / (2 + \sigma_F) < 1/2\) implies that \((1 - (1 - \alpha)) \epsilon - \alpha \omega - (1 - \alpha) \delta - \alpha \rho \sigma_F / (2 + \sigma_F) > 0\) is not relevant. As for \(\sigma_2^{D^*} = 1\), note from (61) that we must have \(\alpha \omega + (1 - \alpha) \delta + \alpha \rho \sigma_F / (2 + \sigma_F) = 1/2\).

The solution \(\sigma_2^{D^*} = 0\) is also possible. Note that this occurs when (57) is not binding. Note that this can only be true if \((1 - (1 - \alpha)) \epsilon - \alpha \omega - (1 - \alpha) \delta - \alpha \rho \sigma_F / (2 + \sigma_F) > 0\) and \((\alpha \omega + (1 - \alpha) \delta - (1 - \alpha) \epsilon + \alpha \rho \sigma_F / (2 + \sigma_F)) \leq 0\) (note that it cannot be true that both are negative or positive and (57) is not binding). In this case, \(\alpha \omega + (1 - \alpha) \delta + \alpha \rho \sigma_F / (2 + \sigma_F) < 1/2\) and \((1 - \alpha) \epsilon < 1/2\) imply that \((1 - (1 - \alpha)) \epsilon - \alpha \omega - (1 - \alpha) \delta - \alpha \rho \sigma_F / (2 + \sigma_F) > 0\), so we only need \(\alpha \omega + (1 - \alpha) \delta - (1 - \alpha) \epsilon + \alpha \rho \sigma_F / (2 + \sigma_F) \leq 0\).

Finally, note that when \(\alpha \omega + (1 - \alpha) \delta + \alpha \rho \sigma_F / (2 + \sigma_F) \geq 1/2\), (57) is not satisfied.

Now we examine under what additional conditions \(I_1\) will offer \(\sigma_2^{D^*} > 0\), and when it will offer \(\sigma_2^{D^*} = 0\) (or something that \(O_1\) will reject). First note that if \(O_1\) rejects the offer, \(I_1\) will get

\[
\alpha \left[ (1 - \omega - \rho) W^{I_1} (\tau_2 | I_2 = I_1, \sigma_2^D = 0) + \omega W^{I_1} (\tau_2 | I_2 = O_1, \sigma_2^D = 0) + \rho W^{I_1} (\tau_2 | I_2 = F) \right] \\
+(1 - \alpha) \left[ (1 - \delta) W^{I_1} (\tau_2 | I_2 = I_1, \sigma_2^D = 0) + \delta W^{I_1} (\tau_2 | I_2 = O_1, \sigma_2^D = 0) \right]
\]  

(62)

where the functions \(W^{I_1} (\cdot)\) are still defined by (15), (16) and (17), but now \(\sigma_2^D = 0\). Replacing (15), (16) and (17), and rearranging, we have that (62) is equal to

\[
(1 - \tau_2) m + 2 \tau_2 m \alpha (1 - \omega - \rho) + 2 \tau_2 m \alpha (1 - \omega - \rho)
\]  

(63)

Thus \(I_1\) prefers to offer \(\sigma_2^{D^*} > 0\) if the expression in (59) calculated at \(\sigma_2^{D^*}\) is greater than the expression in (63), which, rearranging, is equivalent to

\[
(\alpha \omega + (1 - \alpha) \delta + \alpha \rho - (1 - \alpha) \epsilon) \geq \sigma_2^{D^*} (1 - \omega - (1 - \alpha) \delta - \alpha \rho - (1 - \alpha) \epsilon)
\]  

(64)

For the case where \(\sigma_2^{D^*} \in (0, 1)\), note that the condition \(\alpha \omega + (1 - \alpha) \delta + \alpha \rho \sigma_F / (2 + \sigma_F) > (1 - \alpha) \epsilon\) implies that the left side in (64) is always greater than zero. Replacing \(\sigma_2^{D^*}\) from (61) in (64), and rearranging, we have that (64) becomes

\[
\alpha \rho \left( 1 - \frac{\sigma_F}{2 + \sigma_F} \right) (1 - \omega - (1 - \alpha) \delta - (1 - \alpha) \epsilon) \geq - \alpha \rho \left( 1 - \frac{\sigma_F}{2 + \sigma_F} \right) (\alpha \omega + (1 - \alpha) \delta - (1 - \alpha) \epsilon)
\]  

(65)
which is equivalent to \( 1 \geq 2(1 - \alpha)\epsilon \), which we assumed as true. Thus, for this case we can conclude that if \( \alpha \omega + (1 - \alpha)\delta + \alpha \rho / (2 + \sigma F) < 1/2 \) ((24) in the main text), we have that there is a unique \( \sigma^*_2 \in (0, 1) \) given by (61) ((25) in the main text) such that it will be proposed by \( I_1 \) and accepted by \( O_1 \).

For the case \( \sigma^*_2 = 1 \), note that (64) is equivalent to
\[
\alpha \omega + (1 - \alpha)\delta + \alpha \rho \geq 1/2
\]  
(66)

which is always satisfied since a set of possible conditions that guarantee that it is optimal for \( I_1 \) to offer \( \sigma^*_2 = 1 \) are \( (1 - (1 - \alpha)\epsilon - \alpha \omega - (1 - \alpha)\delta - \alpha \rho \sigma F/(2 + \sigma F)) > 0 \) and \( \alpha \omega + (1 - \alpha)\delta + \alpha \rho \sigma F/(2 + \sigma F) = 1/2 \), and the last of these expressions implies (66). Thus, for this case we can conclude that if \( (1 - (1 - \alpha)\epsilon - \alpha \omega - (1 - \alpha)\delta - \alpha \rho \sigma F/(2 + \sigma F)) > 0 \) and \( \alpha \omega + (1 - \alpha)\delta + \alpha \rho \sigma F/(2 + \sigma F) = 1/2 \), there is a unique \( \sigma^*_2 = 1 \) proposed by \( I_1 \) and accepted by \( O_1 \).

**Proof of Proposition 5.** First, note that since in this scenario it may be the case that \( \sigma^*_2 \neq \sigma^*_1 \), we need to generalize the expression for \( \tau^*_2 \) in (21) to include this possibility. Repeating the procedure through which we got (21) (see the proof of Proposition 1) but distinguishing between \( \sigma^*_1 \) and \( \sigma^*_2 \), we get
\[
\tau^*_2 = C^{-1}_\sigma \left( m \frac{(1 + \sigma^*_1 D)}{(1 + \sigma^*_2 D)} [-\phi + \sigma^*_2 D (\phi - \gamma \rho \sigma) + (1 - \sigma^*_2 D)/2] \right) + \tau_1
\]  
(67)

Now we examine the effect of an increase in the risk of external conflict on \( \tau^*_2 \). First, we examine the case in which (23) and (24) hold and \( \sigma^*_2 D^* < 1 \). From the proof of Prop. 4, note that \( \sigma^*_2 D^* < 1 \) when the inequality in (23) is strict. In this scenario, \( \gamma = 0 \) and \( \sigma^*_2 D^* \) is given by (61) (or (25) in the main text). Also note that by assumption, \( \sigma^*_1 D = 0 \). Differentiating (67) with respect to \( \alpha \), we have that the sign of \( \partial \tau^*_2 / \partial \alpha \) depends on the sign of
\[
-\frac{\partial \phi}{\partial \alpha}(1 - \sigma^*_2 D^*) - (1/2 - \phi) \frac{\partial \sigma^*_2 D^*}{\partial \alpha} \frac{(1 - \sigma^*_2 D^*)(1/2 - \phi)}{(1 + \sigma^*_2 D^*)^2} - \frac{\sigma^*_2 D^*}{(1 + \sigma^*_2 D^*)^2}
\]  
(68)

which rearranging, is equivalent to
\[
\frac{1}{(1 + \sigma^*_2 D^*)^2} \left( - (1 - (\sigma^*_2 D^*)^2) \frac{\partial \phi}{\partial \alpha} - (1 - 2\phi) \frac{\partial \sigma^*_2 D^*}{\partial \alpha} \right)
\]  
(69)

Now note from (19) that when \( \gamma = 0 \), \( \phi = (1 - \alpha)\epsilon \), and \( \partial \phi / \partial \alpha = -\epsilon \). Also note that \( \sigma^*_2 D^* \) and \( \partial \sigma^*_2 D^*/\partial \alpha \) are given by (25) and (26), respectively. Replacing all these expressions in (69), and rearranging, we have that (69) is equivalent to
\[
\left( 1 - 2(1 - \alpha)\epsilon \right) \frac{1}{(1 + \sigma^*_2 D^*)(1 - \alpha \omega - (1 - \alpha)\delta - \alpha \rho \sigma F/(2 + \sigma F))} \left( \omega - \delta + \rho \sigma F/(2 + \sigma F) \right)
\]  
(70)

which is less than zero since \( \omega - \delta > 0 \) by (1). This shows that when (23) and (24) hold, and the inequality in (23) is strict, \( \partial \tau^*_2 / \partial \alpha < 0 \), so an increased risk of external conflict does not increase investment in fiscal capacity.
Note that from the proof of Prop. 4, $\sigma_{D}^{r*} = 1$ occurs when (23) and (24) hold, and (23) binds. As argued in the proof of Prop. 1.A, the first-order condition (20) is $C_{\tau}(\tau_{2}^{*} - \tau_{1}) \geq 0$ (with the c.s.), which implies that $\tau_{2}^{*} = \tau_{1}$ since $C_{\tau}(0) = 0$. Thus, when $\sigma_{D}^{r*} = 1$, an increased risk of external conflict does not affect investment in fiscal capacity.

Now we examine the case in which (23) holds but (24) is not satisfied. Note that we also have that $\gamma = 0$, but this time $\sigma_{D}^{r*} = 0$. Replacing these values in (67), and differentiating with respect to $\alpha$, we have that the sign of $\partial\tau_{2}^{*} / \partial\alpha$ depends on the sign of $-\partial\phi / \partial\alpha$. Note from (19) that when $\gamma = 0$, $\phi = (1 - \alpha)\epsilon$, and $\partial\phi / \partial\alpha = -\epsilon$, with which $-\partial\phi / \partial\alpha = \epsilon > 0$. Thus, in this case we have that an increased risk of external conflict increases investment in fiscal capacity.

Finally, when (23) is not satisfied, $\gamma = 1$ and $\sigma_{D}^{r*} = 0$. In this scenario, differentiating $\tau_{2}^{*}$ with respect to $\alpha$ we also have that the sign of $\partial\tau_{2}^{*} / \partial\alpha$ depends on the sign of $-\partial\phi / \partial\alpha$, but this time we have that $\partial\phi / \partial\alpha = \omega - \delta$, which by (1) is strictly positive. So, $-\partial\phi / \partial\alpha = -(-\omega - \delta) < 0$. Thus, in this case we have that an increased risk of external conflict decreases investment in fiscal capacity.
References

Acemoglu, Daron and James A. Robinson, “Why Did The West Extend The Franchise? Democracy, Inequality, And Growth In Historical Perspective,” The Quarterly Journal of Economics, November 2000, 115 (4), 1167–1199.

_ and _, “A Theory of Political Transitions,” American Economic Review, September 2001, 91 (4), 938–963.

_ , _ , and Ragnar Torvik, “Why Do Voters Dismantle Checks and Balances?,” The Review of Economic Studies, 2013, 80 (3), 845–875.

_ , Mikhail Golosov, and Aleh Tsyvinski, “Power fluctuations and political economy,” Journal of Economic Theory, May 2011, 146 (3), 1009–1041.

Aghion, Philippe, Alberto Alesina, and Francesco Trebbi, “Endogenous Political Institutions,” The Quarterly Journal of Economics, 2004, 119, 565–611.

Arias, Luz Marina, “Building Fiscal Capacity in Colonial Mexico: From Fragmentation to Centralization,” The Journal of Economic History, September 2013, 73 (03), 662–693.

Bazant, Jan, “Mexico from Independence to 1867,” in L. Bethell, ed., The Cambridge History of Latin America, Vol. 3, Cambridge University Press, 1985.

Besley, Timothy and Torsten Persson, “Wars and State Capacity,” Journal of the European Economic Association, April 2008, 6 (2-3), 522–530.

_ and _, “The Origins of State Capacity: Property Rights, Taxation, and Politics,” American Economic Review, September 2009, 99 (4), 1218–44.

_ and _, “State Capacity, Conflict, and Development,” Econometrica, 01 2010, 78 (1), 1–34.

_ and _, Pillars of Prosperity: The Political Economics of Development Clusters, Princeton University Press, 2011.

Blainey, Geoffrey, The Causes of War, 3rd edition ed., London, Macmillan, 1988.

Bringas, Raul, La regeneracion de un pueblo pestilente: la anexion de Mexico a Estados Unidos 1846-1848, Miguel Angel Porrua, 2008.

Cederman, Lars-Erik, Kristian Skrede Gleditsch, Idean Salehyan, and Julian Wucherpfennig, “Transborder Ethnic Kin and Civil War,” International Organization, 2013, 67 (2), 389?410.

_ , Luc Girardin, and Kristian Skrede Gleditsch, “Ethnonationalist Triads: Assessing the Influence of Kin Groups on Civil Wars,” World Politics, 2009, 61 (3), 403?437.
Centeno, Miguel Angel, *Blood and Debt: War and the Nation-State in Latin America*, Penn State University Press, 2002.

Chiozza, Giacomo and H. E. Goemans, “International Conflict and the Tenure of Leaders: Is War Still “Ex Post” Inefficient?,” *American Journal of Political Science*, 2004, 48 (3), pp. 604–619.

Collier, Simon and William F. Sater, *A History of Chile, 1808-2002* Cambridge Latin American Studies, 2 ed., Cambridge University Press, 2004.

Cunningham, David E., “Blocking resolution: How external states can prolong civil wars,” *Journal of Peace Research*, 2010, 47 (2), 115–127.

_ , Kristian Skrede Gleditsch, and Idean Salehyan, “Explaining External Support for Insurgent Groups,” *International Organization*, 9 2011, 65, 709–744.

Cárdenas, Enrique, *El largo curso de la economía mexicana. De 1780 a nuestros días*, 1st edition ed., Fondo de Cultura Económica, 2015.

Davis, David R. and Will H. Moore, “Ethnicity Matters: Transnational Ethnic Alliances and Foreign Policy Behavior,” *International Studies Quarterly*, 1997, 41 (1), 171–184.

Dincecco, Mark, *Political Transformations and Public Finances. Europe, 1650-1913*, Cambridge University Press, 2011.

_ and Mauricio Prado, “Warfare, fiscal capacity, and performance,” *Journal of Economic Growth*, September 2012, 17 (3), 171–203.

Downs, George and David M. Rocke, “Conflict, Agency and Gambling for Resurrection: The Principal-Agent Problem Goes to War,” *American Journal of Political Science*, 1994, 38 (2), 362–380.

Garfias, Francisco, “Elite Competition and State Capacity Development: Theory and Evidence from Post-Revolutionary Mexico,” *American Political Science Review*, 2018, 112 (2), 339–357.

_ , “Limited Government, and Fiscal Capacity Development: Evidence from Bourbon Mexico,” *Journal of Politics*, 2018, forthcoming.

Gennaioli, Nicola and Hans-Joachim Voth, “State Capacity and Military Conflict,” *The Review of Economic Studies*, 2015, 82 (4), 1409–1448.

Gleditsch, Kristian Skrede, “Transnational Dimensions of Civil War,” *Journal of Peace Research*, 2007, 44 (3), 293–309.

_ and Kyle Beardsley, “Nosy Neighbors: Third-Party Actors in Central American Conflicts,” *The Journal of Conflict Resolution*, 2004, 48 (3), pp. 379–402.
_ , Idean Salehyan, and Kenneth Schultz, “Fighting at Home, Fighting Abroad: How Civil Wars Lead to International Disputes,” *Journal of Conflict Resolution*, 2008, 52 (4), 479–506.

Guardino, Peter, *The Dead March. A History of the Mexican-American War*, Harvard University Press, 2017.

Hegre, Hvard and Nicholas Sambanis, “Sensitivity Analysis of Empirical Results on Civil War Onset,” *Journal of Conflict Resolution*, 2006, 50 (4), 508–535.

Hesselbein, Gabi, “The Rise and Decline of the Congolese State: an analytical narrative on state-making,” Technical Report, Working Paper No. 21 (series 2), London, UK; Crisis States Research Centre 2007.

Hoffman, P. and J. L. Rosenthal, “The Political Economy of Warfare and Taxation in Early Modern Europe: Historical Lessons for Economic Development,” in J. Drobak and J. Nye, eds., *The Frontiers of the New Institutional Economics*, St. Louis: Academic Press, 1997.

Jauregui, Luis, “Las contribuciones directas en México. La colonia y el siglo XIX,” in “Ponencia Montevideo” 2003.

_ , “Vino viejo y odres nuevos. La historia fiscal en México,” *Historia Mexicana*, 2003, 52 (3), 725–771.

_ , “Los Orígenes de un Malestar Crónico: Los Ingresos y los Gastos Públicos de México, 1821?1855,” in Luis Aguilar and Luis Jauregui, eds., *Penuría sin fin: historia de los impuesto en México siglos XVIII-XX*, Instituto Mora, 2005.

Kaiser, Kai and Stephanie Wolters, “Fragile States, Elites, and Rents in the Democratic Republic of Congo (DRC),” in Steven B. Webb Barry R. Weingast Douglass C. North, John Joseph Wallis, ed., *In the Shadow of Violence: Politics, Economics, and the Problems of Development*, Cambridge University Press, 2012, pp. 70–111.

Ko, Chiu Yu, Mark Koyama, and Tuan-Hwee Sng, “Unified China and Divided Europe,” *International Economic Review*, 2018, p. forthcoming.

Lopez-Alves, Fernando, *State Formation and Democracy in Latin America, 1810-1900*, Duke University Press, 2000.

Meditz, Sandra W. and Tim Merrill, *Zaire, A Country Study*, American University of Washington, 1994.

Morelli, Massimo and Costantino Pischedda, “Oil, Federalism, and Third-Party Intervention: An Assessment of Conflict Risk in Iraqi Kurdistan,” Technical Report 2013.
Ndikumana, Leonce and Kisangani Emizet, “The Economics of Civil War: The Case of the Democratic Republic of Congo,” in Paul Collier and Nicholas Sambanis, eds., Understanding Civil War: Evidence and Analysis, Volume 1. Africa, Washington, DC: World Bank, 2005, pp. 63–87.

Nzongola-Ntalaja, Georges, The Congo from Leopold to Kabila: A People’s History, Zed Books, 2002.

O’Brien, Patrick K. and Bartolomé Yun-Casalilla, The Rise of Fiscal States: A Global History, 1500-1914, Cambridge University Press, 2012.

Pincus, Steven and James Robinson, “Do Wars Make States: the British Interventionist State,” Working Papers 2013.

Prevost, Gary and Harry E. (eds.) Vanden, The Undermining of the Sandinista Revolution, 1 ed., Palgrave Macmillan UK, 1999.

Reséndez, Andrés, “National Identity on a Shifting Border: Texas and New Mexico in the Age of Transition, 1821-1848,” The Journal of American History, 1999, 86 (2), 668–688.

Reynal-Querol, Marta, “Political systems, stability and civil wars,” Defence and Peace Economics, 2002, 13 (6), 465–483.

_ , “Does democracy preempt civil wars?,” European Journal of Political Economy, June 2005, 21 (2), 445–465.

Salehyan, Idean, “The Externalities of Civil Strife: Refugees as a Source of International Conflict,” American Journal of Political Science, 2008, 52 (4), pp. 787–801.

_ , Kristian Skrede Gleditsch, and David E. Cunningham, “Explaining External Support for Insurgent Groups,” International Organization, 10 2011, null, 709–744.

Serrano, Jose and Josefina Vazquez, “El nuevo orden, 1821-1848,” in Varios, ed., Nueva historia general de México, El Colegio de México, 2010.

Serrano, José, “Tensar hasta romperse, la política de Lorenzo de Zavala,” in Leonor Ludlow, ed., Los secretarios de Hacienda y sus proyectos, 1821-1933, Vol. 1, Universidad Nacional Autónoma de México, 2002.

_ , “Cadiz liberalism and public finances: the direct contributions in Mexico, 1810-1835,” in Jaime Rodríguez, ed., The Divine Charter: Constitutionalism and Liberalism in Nineteenth-Century Mexico, Rowman and Littlefield Publishers, 2005.

Shayo, Moses, “A Model of Social Identity with an Application to Political Economy: Nation, Class, and Redistribution,” American Political Science Review, 2009, 103 (2), 147–174.

Sims, Harold D., La reconquista de México. La historia de los antiguos atentados españoles, first edition ed., Fondo de Cultura Economica, 1984.
Sordo, Reynaldo, “El Congreso y la guerra con Estados Unidos de America, 1846-1848,” in Josefina Vázquez, ed., México al tiempo de su guerra con Estados Unidos (1846-1848), Fondo de Cultura Economica, 1997.

Thies, Cameron G., “War, Rivalry, and State Building in Latin America,” American Journal of Political Science, 2005, 49 (3), 451–465.

Ticchi, Davide and Andrea Vindigni, “Endogenous Constitutions,” Economic Journal, 03 2010, 120 (543), 1–39.

Tilly, Charles, “Reflections on the history of European state-making,” in Charles Tilly, ed., The Formation of National States in Western Europe, Harvard University Press, 1975.

Vázquez, Josefina, “México y la guerra con Estados Unidos,” in Josefina Vázquez, ed., México al tiempo de su guerra con Estados Unidos (1846-1848), Fondo de Cultura Economica, 1997.

Westad, Odd Arne, The Global Cold War: Third World Interventions and the Making of Our Times, Cambridge University Press, 2005.

Young, M. Crawford, “Zaire, Rwanda and Burundi,” in Michael Crowder, ed., The Cambridge History of Africa, Vol. 8 of The Cambridge History of Africa, Cambridge University Press, 1984, pp. 698–754.

- , The Postcolonial State in Africa. Fifty Years of Independence, 1960-2010, University of Wisconsin Press, 2012.

- and Thomas Edwin Turner, The Rise and Decline of the Zairian State, University of Wisconsin Press, 1985.
Online Appendix

In this Appendix, I extend the baseline model to include the possibility that a civil war affects the level of institutional cohesiveness. Specifically, I consider the case in which there is no redistribution of resources after a revolution, i.e., that \( \sigma^d = 0 \) if \( O_1 \) is in power in period 2 via a civil war. I proceed as in the main text, by first examining policy-making, then civil war and finally investment in fiscal capacity and political turnover.

**Policy-making**

We distinguish between a government led by \( O_1 \) via revolution, and one led by \( O_1 \) via elections. In both cases we still have a corner solution with \( t_2 = \tau_2 \), but now \( r^I_2 \) and \( r^O_2 \) depend on whether \( O_1 \) is in power in period 2 via a revolution. As previously mentioned, I assume that \( \sigma^d = 0 \) in the revolution scenario. From (5) and (6) it is easy to see that \( r^O_2 = 0 \) and \( r^I_2 = 2\tau_2 w \).

**Civil war**

First, I re-define \( O_1 \)’s period-2 indirect utility when \( O_1 \) is in power in period 2 via a revolution:

\[
W^{O_1}(\tau_2|I_2 = O_1, \sigma^d_2 = 0) = (1 - \tau_2)w + 2\tau_2 w
\]  

(71)

With this change, \( O_1 \)’s expected utility (in period 2) in the event of civil war is now

\[
\alpha \left[ \omega W^{O_1}(\tau_2|I_2 = O_1, \sigma^d_2 = 0) + (1 - \omega - \rho)W^{O_1}(\tau_2|I_2 = I_1) + \rho W^{O_1}(\tau_2|I_2 = F) \right] + (1 - \alpha) \left[ \delta W^{O_1}(\tau_2|I_2 = O_1, \sigma^d_2 = 0) + (1 - \delta)W^{O_1}(\tau_2|I_2 = I_1) \right]
\]  

(72)

and in the case of internal peace is

\[
\alpha \left[ \phi_{O_1 I_2} W^{O_1}(\tau_2|I_2 = O_1) + \phi_{I_1 I_2} W^{O_1}(\tau_2|I_2 = I_1) + \phi_{F_1 I_2} W^{O_1}(\tau_2|I_2 = F) \right] + (1 - \alpha) \left[ \epsilon W^{O_1}(\tau_2|I_2 = O_1) + (1 - \epsilon)W^{O_1}(\tau_2|I_2 = I_1) \right]
\]  

(73)

Rearranging, we have that \( O_1 \) triggers a civil war when

\[
\alpha \omega + (1 - \alpha)\delta \left[ W^{O_1}(\tau_2|I_2 = O_1, \sigma^d_2 = 0) - W^{O_1}(\tau_2|I_2 = I_1) \right] - (1 - \alpha)\epsilon \left[ W^{O_1}(\tau_2|I_2 = O_1) - W^{O_1}(\tau_2|I_2 = I_1) \right] > \alpha \rho \left[ W^{O_1}(\tau_2|I_2 = I_1) - W^{O_1}(\tau_2|I_2 = F) \right]
\]  

(74)

Replacing (8), (9), (10) and (71), and rearranging, this condition is equivalent to

\[
\sigma^F (\alpha \rho + (1 - \sigma^d_2) (\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon) + \sigma^d_2 \alpha \omega + (1 - \alpha)\delta) > 2(\alpha \rho \sigma^d_2 - (1 - \sigma^d_2) (\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon) - \sigma^d_2 \alpha \omega + (1 - \alpha)\delta)
\]  

(75)

As in the baseline model, I define the probability of civil war as seen by \( I_1 \) as

\[
\gamma_c = Pr \left( \sigma^F > \frac{2(\alpha \rho \sigma^d_2 - (1 - \sigma^d_2) (\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon) - (\alpha \omega + (1 - \alpha)\delta)\sigma^d_2)}{\alpha \rho + (1 - \sigma^d_2) (\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon) + (\alpha \omega + (1 - \alpha)\delta)\sigma^d_2} \right)
\]  

(76)

Comparing (14) and (76), note that \( \gamma_c > \gamma \), which is as expected, since now \( O_1 \) has a greater incentive to start a civil war.
\textit{Investment in fiscal capacity}

As for $I_1$’s decision to invest in fiscal capacity, $I_1$’s utility in the event of civil war is now

$$W^{I_1}(\tau_2|I_2 = O_1, \sigma^D = 0) = (1 - \tau_2)$$  \hfill (77)

Thus, in the event of civil war, $I_1$’s expected utility becomes

$$W^{I_1}(\tau_1, C(\tau_2 - \tau_1)) + \alpha \left[ (1 - \omega - \rho)W^{I_1}(\tau_2|I_2 = I_1) + \omega W^{I_1}(\tau_2|I_2 = O_1, \sigma^D = 0) + \rho W^{I_1}(\tau_2|I_2 = F) \right] + (1 - \alpha) \left[ (1 - \delta)W^{I_1}(\tau_2|I_2 = I_1) + \delta W^{I_1}(\tau_2|I_2 = O_1, \sigma^D = 0) \right]$$  \hfill (78)

Combining (32) and (78), we have that $I_1$’s expected utility as seen from period 1 is

$$W^{I_1}(\tau_1, C(\tau_2 - \tau_1)) + \gamma_c \left[ \alpha (1 - \omega - \rho)W^{I_1}(\tau_2|I_2 = I_1) + \omega W^{I_1}(\tau_2|I_2 = O_1, \sigma^D = 0) + \rho W^{I_1}(\tau_2|I_2 = F) \right] + (1 - \alpha) \left[ (1 - \delta)W^{I_1}(\tau_2|I_2 = I_1) + \delta W^{I_1}(\tau_2|I_2 = O_1, \sigma^D = 0) \right]$$  \hfill (79)

At the beginning of period 1, $I_1$ chooses $\tau_2$ by maximizing (34). Differentiating (34) with respect to $\tau_2$, and rearranging, the first-order condition is now

$$2C_{\tau}(\tau_2^* - \tau_1) \geq \frac{(1 + \sigma_1^D)}{(1 + \sigma_2^D)} \left[ 2w(1 - \phi_c + \sigma_2^D [\phi - \gamma_c (\alpha \omega + (1 - \alpha) \delta + \alpha \rho)]) - m(1 + \sigma_1^D) \right]$$  \hfill (80)

with the complementary slackness condition associated to $\tau_2^* - \tau_1 \geq 0$, and where $\phi_c \equiv \gamma_c (\alpha \omega + (1 - \alpha) \delta + \alpha \rho) + (1 - \gamma_c)(1 - \alpha) \epsilon$. For $\tau_2^* > \tau_1$, the complementary slackness condition implies that equality holds. Thus, solving for $\tau_2^*$, this condition can be written as

$$\tau_2^* = C^{-1}_\tau \left[ m \frac{(1 + \sigma_1^D)}{(1 + \sigma_2^D)} \left[ -\phi_c + \sigma_2^D (\phi_c - \gamma_c (\alpha \omega + (1 - \alpha) \delta + \alpha \rho)) + (1 - \sigma_2^D)/2 \right] \right] + \tau_1$$  \hfill (81)

Differentiating (81) with respect to $\alpha$ and rearranging, we have that the sign of $\frac{\partial \gamma_c}{\partial \alpha}$ depends on the sign of

$$\frac{\partial}{\partial \alpha} \left( -\phi_c + \sigma_2^D (\phi_c - \gamma_c (\alpha \omega + (1 - \alpha) \delta + \alpha \rho)) + (1 - \sigma_2^D)/2 \right)$$  \hfill (82)

which is equivalent to

$$- (1 - \sigma_2^D) \frac{\partial \phi_c}{\partial \alpha} - \sigma_2^D (\alpha \rho + \alpha \omega + (1 - \alpha) \delta) \left( \frac{\gamma_c}{\alpha} + \frac{\partial \gamma_c}{\partial \alpha} \right) + \sigma_2^D \delta \frac{\gamma_c}{\alpha}$$  \hfill (83)

Note that for $\gamma_c \in (0, 1)$ we now have:

$$\frac{\partial \gamma_c}{\partial \alpha} = -\frac{2\rho(1 + \sigma_2^D)((1 - \sigma_2^D)(\delta - \epsilon) + \sigma_2^D \delta)}{(\alpha \rho + (1 - \sigma_2^D)(\alpha \omega + (1 - \alpha) \delta - (1 - \alpha) \epsilon) + \sigma_2^D \alpha \omega + (1 - \alpha) \delta)^2}$$  \hfill (84)

Replacing (46) and (84) in (83), we have that it is equivalent to

$$-((1 - \sigma_2^D)(\omega - \delta) + \rho) - \sigma_2^D (\omega - \delta) - (1 - \sigma_2^D)(\omega - \delta + \epsilon)/\sigma^F + \rho \sigma_2^D/\sigma^F - \sigma_2^D (\omega - \delta)/\sigma^F$$  \hfill (85)
Rearranging (85) and solving for $\sigma^F$, we have that for $\gamma_c \in (0, 1)$, $\frac{\partial \gamma_c}{\partial \alpha} \geq 0$ if and only if

$$\sigma^F \leq \frac{\sigma_2^D \rho - (1 - \sigma_2^D)(\omega - \delta + \epsilon) - \sigma_2^D(\omega - \delta)}{(1 - \sigma_2^D)(\omega - \delta) + \rho + \sigma_2^D(\omega - \delta)}$$

(86)

For $\gamma_c = 0$, (83) is equivalent to $(1 - \sigma_2^D)\epsilon$, which is strictly greater than zero when $\sigma_2^D < 1$. For $\gamma_c = 1$, (83) is equivalent to $-\rho - (\omega - \delta)$, which, from (1), is always negative.

Defining $\Sigma^F$ as equal to the right side of (86), and combining it with the previous results $\gamma_c = 0$ and $\gamma_c = 1$, we can formulate an alternative version of Proposition 1, which establishes a similar condition for an increase in investment in fiscal capacity as a consequence of an increased risk of external conflict.

**Proposition 1a.** Consider the above-described game. Then:

(1a.A) For $\gamma_c = 0$ and $\sigma_2^D < 1$, an increase in the risk of external conflict increases investment in fiscal capacity.

(1a.B) For $\gamma_c \in (0, 1)$, there is a unique threshold $\Sigma^F$ such that if $\sigma^F < \Sigma^F$, an increased risk of external conflict increases investment in fiscal capacity, and if $\sigma^F > \Sigma^F$, an increased risk of external conflict decreases investment in fiscal capacity.

(1a.C) For $\gamma_c = 1$, an increased risk of external conflict decreases investment in fiscal capacity.

From (45) and (86), note that $\Sigma^F < \Sigma^F$. The intuition for this result is straightforward: since civil war and a foreign administration are now more likely, the conditions for more investment in fiscal capacity are more difficult to be satisfied.

**Political turnover**

As for the role of political turnover, I start again with the case where $\gamma_c \in (0, 1)$. Differentiating $\phi_c \equiv \gamma_c(\alpha \omega + (1 - \alpha)\delta + \alpha \rho) + (1 - \gamma_c)(1 - \alpha)\epsilon$ with respect to $\alpha$, we get

$$\frac{\partial \phi_c}{\partial \alpha} = \gamma_c(\rho + \omega - \delta + \epsilon) + \frac{\partial \gamma_c}{\partial \alpha}((\rho + \omega) + (1 - \alpha)(\delta - \epsilon)) - \epsilon$$

(87)

Replacing the expressions we previously found for $\gamma_c$ and $\frac{\partial \gamma_c}{\partial \alpha}$ and rearranging, we have that $\frac{\partial \phi_c}{\partial \alpha}$ is equivalent to

$$\frac{1}{\sigma^F \Theta_e} \left[ \Theta_e \left( \sigma^F H \Theta_e - (\sigma_2^D \alpha \rho - (1 - \sigma_2^D)(\omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon) - \sigma_2^D \alpha \omega + (1 - \alpha)\delta)H - \sigma^F \epsilon \Theta_e \right) - \left( (\rho + (1 + \sigma_2^D)(\delta - \epsilon) + \sigma_2^D \delta) \right)(\alpha H + \delta - \epsilon) \right]$$

(88)

where, to simplify the notation, I have defined $H = \rho + \omega - \delta + \epsilon$ and $\Theta_e = \alpha \rho + (1 - \sigma_2^D)(\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon) + \sigma_2^D \alpha \omega + (1 - \alpha)\delta$. Rearranging and simplifying, (88) is equivalent to

$$\sigma^F - \left[ \frac{\sigma_2^D \alpha \rho}{\alpha(\omega - \delta) + \alpha \rho} \right] \left[ 1 + \frac{(1 + \sigma_2^D)(1 - \alpha)\rho(\epsilon - \delta(1 - \alpha)\epsilon) + (1 - \sigma_2^D)(1 - \alpha)\epsilon^2}{(\alpha \rho + (1 - \sigma_2^D)(\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon) + \sigma_2^D \omega + (1 - \alpha)\delta)^2} \right]$$

$$+ \left[ \frac{\alpha(\omega - \delta) + \alpha \epsilon}{\alpha(\omega - \delta) + \alpha \rho} \right]$$

(89)
so we can define $\Sigma^{s'}$ as

$$
\Sigma^{s'} = \left[ \frac{\sigma_D^2 \alpha \rho}{\alpha (\omega - \delta) + \alpha \rho} \right] \left[ 1 + \frac{(1 + \sigma_D^2)(1 - \alpha)[\alpha \rho \omega - \delta(1 - \alpha)\epsilon] + (1 - (\sigma_D^2)^2)((1 - \alpha)\epsilon)^2}{(\alpha \rho + (1 - \sigma_D^2)(\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon) + \sigma \omega (1 - \alpha)\delta)} \right] - \left[ \frac{\alpha (\omega - \delta) + \alpha \epsilon}{\alpha (\omega - \delta) + \alpha \rho} \right]
$$

with which we have $\frac{\partial \phi_c}{\partial \alpha} < 0$ when $\sigma^c < \Sigma^{s'}$ and $\frac{\partial \phi_c}{\partial \alpha} > 0$ when $\sigma^c > \Sigma^{s'}$. Thus, $\Sigma^{s'}$ is a good threshold for $\sigma^c$ in this extension.

For the case where $\gamma_c = 0$, differentiating $\phi_c$ with respect to $\alpha$ gives us $\frac{\partial \phi_c}{\partial \alpha} = -(1 - \alpha)\epsilon < 0$, and for $\gamma = 1$, we have $\frac{\partial \phi_c}{\partial \alpha} = \omega - \delta + \rho > 0$ because of (1). Combining these results, we can formulate an alternative version of Proposition 2, which also establishes a similar condition for a decrease in $\phi$ as a consequence of an increased risk of external conflict.

**Proposition 2a.** Consider the above-described game. Then:

(2a.A) For $\gamma_c = 0$, an increased risk of external conflict decreases $\phi$.

(2a.B) For $\gamma_c \in (0, 1)$, there is a unique threshold for $\sigma^c$, denoted by $\Sigma^{s'}$, such that if $\sigma^c < \Sigma^{s'}$, an increased risk of external conflict increases $\phi$, and if $\sigma^c > \Sigma^{s'}$, an increased risk of external conflict decreases $\phi$.

(2a.C) For $\gamma_c = 1$, an increased risk of external conflict increases $\phi$.

Relation between political turnover and investment in fiscal capacity

Finally, I examine whether an alternative version of Proposition 3 also holds. To do this, I compare $\Sigma^{s'}$ and $\Sigma^{f'}$. I proceed as in the proof of Proposition 3: I examine if there is $\sigma^*$ such that $\Sigma^{s'} > \Sigma^{f'}$ for all $\sigma^2_D \in (\sigma^*, 1)$ by looking at whether $\lim_{\sigma \to 1}[\Sigma^{s'} - \Sigma^{f'}] > 0$.

First, to simplify the notation, I define $X \equiv \omega - \delta + \rho = Y = (1 - \sigma)(\omega - \delta) + \rho + \sigma(\omega - \delta)$, $M = (1 + \sigma)(1 - \alpha)[\alpha \rho \omega - \delta(1 - \alpha)\epsilon] + (1 - \sigma^2)((1 - \alpha)\epsilon)^2$ and $\Theta \equiv \alpha \rho + (1 - \sigma)(\alpha \omega + (1 - \alpha)\delta - (1 - \alpha)\epsilon) + \sigma \omega (1 - \alpha)\delta$. Using this new notation and rearranging, we can write $\Sigma^{s'} - \Sigma^{f'}$ as

$$
\Sigma^{s'} - \Sigma^{f'} = \frac{\sigma}{\Theta^2 X} \left( \rho M - \epsilon \Theta^2 \right)
$$

Thus, $\lim_{\sigma \to 1}[\Sigma^{s'} - \Sigma^{f'}] > 0$ when $\lim_{\sigma \to 1}[\rho M - \epsilon \Theta^2] > 0$. Replacing $M$ and $\Theta$ in this expression and rearranging, we have that

$$
\lim_{\sigma \to 1}[\rho M - \epsilon \Theta^2] = \epsilon \left[ \rho (\alpha^2 (\rho) - 2\alpha^3 (\rho) - 2\alpha \omega + (1 - \alpha)\delta + 2(1 - \alpha)\alpha \omega) - (\alpha \omega + (1 - \alpha)\delta)^2 \right]
$$

Note that $\lim_{\sigma \to 1}[\rho M - \epsilon \Theta^2] > 0$ when

$$
\rho (\alpha^2 (\rho) - 2\alpha^3 (\rho) - 2\alpha \omega + (1 - \alpha)\delta + 2(1 - \alpha)\alpha \omega) > (\alpha \omega + (1 - \alpha)\delta)^2
$$

which is equivalent to

$$
(1 - 2\alpha)\alpha \rho > 2(\alpha \omega + \delta(1 - \alpha)/\alpha) + (\alpha \omega + (1 - \alpha)\delta)^2/\alpha \rho
$$

Unlike Proposition 3, an additional condition is necessary to obtain a similar result. Specifically, note that (94) is satisfied only when $\rho$ is sufficiently big. When (94) is satisfied, a similar result to Proposition 3 is possible, as stated in the following proposition.
Proposition 3a. Consider the above-described game. Then:

(3a.A) For $\gamma_c = 0$, an increased risk of an external conflict always implies decreased political turnover and, when $\sigma^D > 0$, also implies an increased investment in fiscal capacity.

(3a.B) For $\gamma_c \in (0, 1)$, if $\rho$ is sufficiently big such that (94) is satisfied, there exists $\sigma^* \in (0, 1)$ such that for all $\sigma^D \geq \sigma^*$, if an increased risk of external conflict implies an increase in political turnover, then it also implies a decrease in investment in fiscal capacity, and if an increased risk of external conflict implies a decrease in political turnover, then it does not necessarily imply an increase in investment in fiscal capacity.

(3a.C) For $\gamma_c = 1$, an increased risk of external conflict always implies an increase in political turnover and a decrease in investment in fiscal capacity.