## Civil War and Foreign Influence\*

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#### Abstract

We use different variations of the canonical bargaining model of civil war to illustrate why a potential alliance with a third (foreign) party that affects the probability of winning the conflict can trigger or prolong an already existing civil war. We explore both political and economic incentives for a third party to intervene. The explicit consideration of political incentives leads to two predictions that allow for identifying the influence of foreign intervention on civil war incidence. Both predictions are confirmed for the case of the U.S. as a potentially intervening nation: (i) civil wars around the world are more likely under Republican governments and (ii) the probability of civil wars decreases with U.S. presidential approval rates. These results withstand several robustness checks and, overall, show that foreign influence is a sizable driver of conflict around the world.

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## 1 Introduction

There is a large and growing recent economic literature on the motives and consequences of civil wars. The empirical research has focused on diverse domestic determinants like slow income growth, proportion of natural resources, secondary school attainment (Collier and Hoeffler, 2004; Collier, Hoeffler, and Sambanis, 2005), income inequality (Sambanis, 2005), poverty (Djankov and Reynal-Querol, 2008), ethnic polarization (Montalvo and Reynal-Querol, 2005) or even the effect of diseases (Cervellati, Sunde, and Valmori, 2010). The theory has concentrated on understanding why costly conflicts are not deterred. The emergence and the effects of information asymmetries, uncertainty and lack of commitment are therefore intensively studied. Yet, a key feature of civil war is the involvement of foreign governments supporting one of the sides in conflict. The examples are many, even after the end of the cold war.<sup>2</sup> Such interventions are often secretive and indirect and therefore unlikely to be fully reflected in available data. As an additional difficulty, many are the ways for foreign states to intervene in civil wars. They can provide covert encouragement, allow for (and promote) arms transactions, supply war intelligence and resources, and give sanctuary to rebels or support a third state that is providing support in the civil war.

<sup>&</sup>lt;sup>1</sup>The possibility of foreign influence has typically been overlooked in economic studies. As a reflection, foreign involvement is not even mentioned in the most recent and influential economic literature reviews on civil war (Collier and Hoeffler, 2007; Blattman and Miguel, 2009). However, there is a political science literature on the subject (see Gleditsch (2007) for a good overview) which we will discuss in detail in section 2.

<sup>&</sup>lt;sup>2</sup>Historical examples include U.S support to factions in war in Angola (1972-1980s), Nicaragua (1980s), Afghanistan (1979-1992), Peru (1980-2000), Congo (1996-1997) or Liberia (1999-2003), among other examples; France involvement in the Algerian (1991-2002) or Rwandan Civil Wars; or the Arab revolt against the Ottoman Empire (1916-1918) instigated by the U.K. Regan (2000) identifies 89 unilateral foreign interventions into civil wars between 1944 and 1994; a period where 138 intrastate conflicts took place. In a recent paper on the economic effects of U.S. interventions, Berger, Easterly, Nunn, and Satyanath (2010) find that more than 30 % of countries were subject to CIA "successful" covert interventions between 1947 and 1989. The interventions were "successful" in the sense that they installed a new leader or preserved the power of an existing one.

In this paper, we develop an identification strategy to estimate the effect of foreign intervention on civil war by explicitly modeling the incentives of a foreign government to intervene abroad. This way, we can also uncover covert and indirect interventions. We identify the channels through which intervention of a foreign country can trigger and prolong domestic conflicts and take our predictions to the data for the case of the U.S. as a potentially intervening country. Our results show how domestic conflicts are affected by the political situation in the U.S. and emphasize that the international dimension of domestic conflicts is very relevant to understand civil wars.

The starting point of the present paper is the canonical bargaining model of war where war - modeled as a costly lottery - is the outside option in the bargaining game. The bargaining process might occur during peace but also during an on-going war. The domestic motive for conflict is the allocation of the country's spoils between the incumbent government and the opposition. In situations with no information or commitment problems (and no foreign intervention), the government can always propose an allocation that would deter the opposition from involving in a conflict. The fundamental assumption for the emergence or continuation of civil war is the existence of a third party - closer to one of the domestic groups - which we identify as a foreign government who can affect the probability of winning the conflict via, for example, monetary transfers or fighting operations in favor of one of the domestic parties. We first argue that potential foreign interventions are likely to induce information asymmetries which trigger war with a positive probability. More importantly, these information asymmetries are persistent over time and hence might be part of an explanation for long-lasting civil wars. We then illustrate how a foreign intervention might destroy a possible peace agreement even under symmetric information if the foreign country is interested in investing in the country but is only willing to invest if his ally is sufficiently strong. The domestic party that makes the coalition with the foreign government will not want peace, if the spoils destroyed by the ongoing war are less than the new expected economic opportunities created by the alliance. War results if the post-conflict value of society increases after a successful foreign intervention. This assumption captures situations where the victory of a foreign sponsored party is followed by foreign investment, aid, access to international financial institutions, opening of the economy, international trade or any other measure seen as enhancing economic growth. But even without this assumption war might result due to a foreign induced commitment problem which allows the foreign country to confiscate some of the domestic spoils by interchanging them for a higher win probability thereby inducing a shift in power which is reverted if the alliance does not take place. Even if commitment were possible, the alliance with the foreign government does not really have to increase the post-conflict spoils of the country: it is sufficient if it increases the personal spoils of the decision makers among its allies thereby inducing a political or personal bias a la Jackson and Morelli (2007) causing (the prolongation of) war.

The model contains an explicit analysis of the cost and benefits for the foreign government to be involved in civil wars abroad. The economic benefit is represented by a share of post-conflict resources, provided the supported faction wins and opens the economy. This involves, for example, corporation returns to investment or access to unexploited natural resources or increased gains from trade.<sup>3</sup> The economic cost is basically that of supporting a fighting group, for instance, the costs of sending war assistance, guns or even soldiers. We also model the political incentives to intervene. The political costs and benefits for the government of the foreign (intervening) country have two components. First, there is an ideological cost which captures how war prone the government is. Second, there are political costs and bene-

<sup>&</sup>lt;sup>3</sup>Dube, Kaplan, and Naidu (Forthcoming) show how CIA regime change operations raise profits of U.S. multinational corporations. Berger, Easterly, Nunn, and Satyanath (2010) show that after successful CIA interventions the US used its influence to create a larger foreign market for American products. These increased imports of US products mainly arose through direct government purchases.

fits. Funding civil wars are operations that do not receive full support from society. In fact, these operations are generally secret and organized by intelligence agencies like the CIA in the U.S. They involve diverting resources from other public goods like education or health. And also, these operations imply that the intervening country contributes with spread of civilian casualties and suffering. Thus, it is costly for the government to be perceived as spreading civil wars. However, successful interventions are accompanied with political benefits: supporting winning factions in conflict expands the influence of the country in foreign affairs and permits the head of the government to be seen as a global leader, which in turns spurs support among the population. The present analysis shows that civil wars may exist as a consequence of changes in the domestic political affairs in the potential intervening country by changing the political incentives to intervene. First, the existence of a foreign influenced civil war depends on the ideological cost of the government in office in the intervening nation. If this cost varies across political parties then the incidence of civil war has to be influenced by what political party holds the foreign government. Second, as the incentives to intervene abroad depend on the need for the intervening government to gain political support then civil war incidence should depend on the level of approval received by the intervening government. Hence, our model predicts that ideology and approval of the government of the potential intervening country matters for the likelihood of civil war.

Importantly, the political situation in the intervening country is an exogenous source of variation for the potential civil war in a country abroad. Thus, estimating the influence of the political party in office and the government approval in the potentially intervening country provides a strategy for identification of the effect of foreign influence on civil war. Such an identification strategy is useful due to the fact that foreign interventions are typically secretive and might not be directly observable in the data.<sup>4</sup> It is therefore

<sup>&</sup>lt;sup>4</sup>For example, CIA operations are typically classified as top secret and declassification

likely that the data on "internationalized" civil wars<sup>5</sup> (defined as civil wars where either the government and the opposition receives support from the government of other states) understates foreign influence because it probably misses covert support at least partially.

While our theoretical model applies to any country, our identification strategy is only useful if it provides us with sufficient observations. We therefore need to identify a country that has sufficient resources and might have sufficient interests to intervene widely. As we concentrate on civil wars during the second half of the 20th century, a natural candidate for a potential intervening country is the U.S. First, its superpower status and the size of its economy provides it with sufficient resources to intervene. Second, the data on observed foreign interventions tells us that the U.S. has extensively intervened in civil wars.<sup>6</sup> Third, the U.S. is characterized by a two-party system and, importantly, the two parties, Republican and Democratic, have differences are epitomized by diverse Republican approaches to foreign policy like the Roosevelt corollary of the Monroe's doctrine, and principles present in the Eisenhower or Bush doctrines.<sup>7</sup> This framework for foreign policy is

<sup>-</sup> if it occurs at all - only happens a long time after these operations took place. Moreover, it is likely that the declassification is incomplete.

<sup>&</sup>lt;sup>5</sup>as provided for example by the Uppsala/Prio data and the Correlates of War projects (see Gleditsch (2007)).

<sup>&</sup>lt;sup>6</sup>We mentioned examples in footnote 2.

<sup>&</sup>lt;sup>7</sup>These doctrines basically justify interventions abroad by emphasizing the defense of American values and the moral mandate of preserving (and installing) freedom around the world. The doctrine elaborated by Monroe, and amended under Roosevelt's presidency, was more oriented to preserve American interests in the western hemisphere (Sexton, Forthcoming); While both the democrat Truman and the republican Eisenhower justified the right to intervene abroad as a measure to halt communism, Eisenhower was more precise on the goals of U.S. foreign policy. In Truman's words "..it must be the policy of the United States to support free peoples who are resisting attempted subjugation by armed minorities or outside pressures." Truman (1947). In contrast, Eisenhower said that the United States would give economic and military aid to Middle Eastern Nation as it was essential to preserve this region from communism. As he put it U.S. intervention would "include the employment of the armed forces of the United States to protect and secure the territorial integrity and political independence of such nations requesting such aid,

rooted in the Republican ideology which differs from the general approach of the Democratic Party. As a consequence, the two parties systematically differ in their propensities to intervene in foreign affairs. For example, most (known) CIA regime change operations (sponsoring of a military coup) took place under Republican presidency (Kinzer, 2006). Fourth, there is accurate data on presidential approval for the case of the U.S. Last but not least, given the secretive nature of interventions in civil wars abroad and the salience of domestic issues during election campaigns, U.S. citizens are unlikely to decide their vote based on domestic conflicts in other countries.

Following recent empirical studies, we exploit panel data to identify a causal link between the politics in the U.S. and the incidence of civil war relying on within-country variation. We adopt the empirical strategy developed in Besley and Persson (2009) and estimate the effect of a Republican government in office and the level of presidential approval. The results are striking and support our predictions. The incidence of civil war increases under Republican governments and decreases with U.S. presidential approval. Overall our results suggest that US foreign influence is a sizable driver of conflict around the world. The Republican and approval effects withstand several robustness checks.

The remainder of the paper is organized as follows. In section 2, we discuss the related literature. The variations of the canonical bargaining models are proposed and studied in section 3. Section 4 contains the explicit cost and benefit analysis of the foreign government to intervene abroad and derives our main predictions for endogenous foreign interventions. Section 5 reports the empirical exercises conducted to test the predictions of the model. Section 6 concludes.

against overt armed aggression from any nation controlled by International Communism." Eisenhower (1957).

<sup>&</sup>lt;sup>8</sup>In many of these cases, these regimes changes involved civil conflicts like in Iran (1953), Guatemala (1954), Nicaragua (1936).

## 2 Related Literature

Notwithstanding the economics focus on almost exclusively domestic determinants, the political science literature on foreign interventions and transnational aspects of civil wars has been growing considerably in recent years. The earlier literature used the term foreign interventions mainly as referring to peace interventions in ongoing wars (Regan, 2000; Walter, 1997; Gartzke and Gleditsch, 2006). This clearly is complementary to our approach where the foreign interventions trigger or prolong an already existing war. This possibility was already mentioned by Gleditsch (2007), who argues that motives for interventions in ongoing wars should be related to interventions causing war onset. He provides empirical evidence of the importance of ethnic, political and economic transnational linkages among neighboring countries: the probability of conflict in a given state is increasing in transnational ethnic links with the neighboring states, decreasing in the democratic degree of political institutions of neighboring countries and decreasing in trade integration with surrounding states. Gleditsch (2007) hypothesizes that the link is via external support of insurgencies whereas we propose models that can also explain support to the incumbent government. Moreover, we move away from neighboring countries in the strict spatial sense and consider the possibility of politically / economically motivated foreign interventions in general both theoretically and empirically. This is complementary to empirical studies when civil wars spread which point to conflict in neighboring states, (Hegre and Sambanis, 2006) and the presence of refugees (Salehyan and Gleditsch, 2006) as a potential cause for civil war.

Foreign interventions in civil wars somehow blur the boundary between civil and intra-state wars. The question when a state prefers to support insurgencies instead of going to war and which type of rebel organizations receive and accept foreign support has been analyzed by Salehyan (2010) and by Salehyan, Gleditsch, and Cunningham (2010). This literature takes for granted that the foreign state wants some type of war but does not explain

why. Our paper abstracts from the trade-off foreign intervention versus direct war only allowing for the former but we derive conditions for the endogenous occurrence of foreign interventions.

In order to do so, we explicitly take the motives of politicians into account. We do not only look at purely economical motives but also at political and personal costs and benefits. One of the personal motives we put forward is related to the "diversionary theory of war" literature. A "diversionary war" is a war instigated by a country's leader in order to distract its population from their own domestic strife. This option is especially attractive to leaders facing a near inevitable removal from office since exercising the war option might enable them to signal a high military or foreign policy ability. This incentive to gamble for resurrection is also present in our model, however, the risk of the gamble is considerably reduced due to the secretive nature of a foreign intervention. Since the public is unlikely to observe a failed foreign intervention but can be made aware of (or perceive the effects of) successful ones, one might expect that domestic problems have a stronger effect on interventions in civil wars than on open aggressions towards other countries. Indeed, we provide very robust empirical evidence of a positive link between low presidential approval rates in the U.S. and incidences of civil wars around the world while the enormous body of empirical studies on the diversionary theory of war provides rather mixed evidence. 10

Another personal motive we put forward is the personal cost of going to war which we identify with being Republican or Democrat when taking the model to the data. Our paper thereby adds to the open controversy on whether the U.S. foreign policy is based on a bipartisan foreign policy consensus or is partisan (that is, conditional on whether the government is

<sup>&</sup>lt;sup>9</sup>For theoretical models on the diversionary theory of war see e.g. Hess and Orphanides (1995); Smith (1996); Tarar (2006).

<sup>&</sup>lt;sup>10</sup>For example, Ostrom and Job (1986); Morgan and Bickers (1992); Hess and Orphanides (1995); Miller (1995, 1999) find evidence for the diversionary theory while Meernik and Waterman (1996); Gowa (1998); Mitchell and Moore (2002) find evidence against it. Many of these papers look also at empirical evidence of acts short of war.

Republican or Democrat)<sup>11</sup> by providing support for the latter.

We heavily draw on the existing literature of the canonical bargaining model of war (as e.g. in Dal Bo and Powell (2009)) and its variations to explain why a foreign intervention can trigger or prolong an already existing civil war into which we introduce a third party. We show that the possibility of a third-party intervention is sufficient to induce longer civil wars by affecting the expected conflict spoils. Also, we use different existing models showing that foreign involvement can cause asymmetric information (Fearon, 1995; Esteban and Ray, 2008), new commitment problems (Fearon, 1995; Powell, 2004, 2006), and induce a political bias (Jackson and Morelli, 2007). The foreign induced commitment problem we identify is another version of Powell's argument that rapid shifts in the distribution of power lie at the heart of war resulting from commitment problems. Salehyan (2007) provides an additional argument: external sanctuaries in neighboring countries can complicate the underlying bargain between states and rebels.

Our paper is also related to the recent literature on foreign influence on domestic policy choices (Antràs and Padró i Miquel (2008); Aidt and Hwang (2008)) and the influence of foreign countries on the dynamics of domestic political institutions. Aidt and Albornoz (Forthcoming) argue that foreign countries may have an economic interest in sponsoring coups, stabilizing dictatorships and facilitating constrained democratization abroad in order to protect their foreign direct investment. Easterly, Satyanath, and Berger (2008) estimate that (declassified) US and Soviet interventions abroad have caused a decline in democracy across the world of about 33 percent. In Bonfatti (2010) a key trading partner may be interested to keep an incumbent in power because the incumbent can be controlled more easily from the exterior

<sup>&</sup>lt;sup>11</sup>See, for example, Rourke (1984); Wittkopf and McCormick (1998); McCormick and Wittkopf (1990); Meernik (1993); Souva and Rohde (2007); Gowa (1998).

<sup>&</sup>lt;sup>12</sup>Another determinant of civil war is the emergence of strategic risk due the uncertainty associated with the payoffs of conflict Chassang and Padró i Miquel (Forthcoming). We do not elaborate on this, although it is easy to show that the possibility of foreign intervention may cause strategic risk.

than the challenger using the threat of trade sanction. Aidt, Albornoz, and Gassebner (2010) show the influence of IMF and World Bank programmes on political regime transitions.

As explained by Blattman and Miguel (2009), most of the empirical civil war literature uses cross-sectional data and fails to exploit within-country variation in panel data which leads to biased estimates by replacing timevarying explanatory variables by their cross-sectional mean. Consequently, cross-country variation in these explanatory observable variables are confounded with cross-country averages in unobserved parameters. To avoid this problem, our empirical strategy only exploit within-country variations. This way, we follow a new series of papers using panel data, mainly concerned by the effect of different economic shocks on civil conflicts. This literature proposes different instruments to capture income growth or wage shocks in order to address potential endogeneity problems. Miguel, Satyanath, and Sergenti (2004) use rainfall variation to show a negative relationship between income and civil war in Africa.<sup>13</sup> Brückner and Ciccone (2010) and Dube and Vargas (2008) study the effect of changes in commodity prices in Sub-Saharan countries and Colombia, respectively. Besley and Persson (2009) use both instruments in a more general study on the determinants of political violence, which includes civil war and state repression. They also show how the effect of income shocks depend on political institutions. Our paper builds on this last paper, albeit our focus on civil war, and includes the novel dimension of foreign intervention.

## 3 Theoretical Background

In this section we will use several models to illustrate how foreign influence might affect civil war incidence. Our starting point is the simplest canonical

 $<sup>^{13}</sup>$ In a recent paper, Ciccone (2010) contends that this result is incorrect and finds that rainfall increases the incidence and onset of civil war.

bargaining model of war where "conflict situations are essentially bargaining situations" (Schelling, 1960) and war - modeled as a costly lottery - is the outside option in the bargaining game. In this model an incumbent government has to decide how to divide the spoils  $\Pi$  - the country's pie - with the opposition. The incumbent makes a take-it-or-leave-it offer to appear the opposition who might already be fighting or considering to start a civil war. If the opposition accepts, the opposition receives the proposed share of the spoils  $y\Pi$  and peace prevails / returns to the country. If the opposition rejects, there will be civil war. This might be a new war or the continuation of an existing war after a failed peace agreement. Fighting destroys part of the initial pie and results in a lottery over the surviving spoils  $\sigma\Pi$  with win probabilities (1-p) and p for government and opposition respectively. It is easy to see that in this model with complete information a purely domestic civil war is always deterred (or an ongoing civil war comes to an end once there is complete information). The incumbent will prefer to buy off the opposition if  $(1-y)\Pi \geq (1-p)\sigma\Pi$ , hence is willing to offer  $y \leq 1-(1-p)\sigma$ , which will be accepted by the opposition as long as  $y\Pi \geq p\sigma\Pi$ . Since fighting is costly,  $p\sigma \leq y < 1 - (1-p)\sigma$  and the opposition can always be bought off. Offering the opposition exactly its certainty equivalent payoff  $p\sigma\Pi$  allows the government to keep whatever is saved by the war.

We now introduce a third party, a foreign country with economic interests in the domestic country. These economic interests can take many different forms e.g. foreign direct investment, trading opportunities, interest in natural resources, or interests grounded in geopolitical motives. We now propose a series of models - some of which are reinterpretation of existing models - in which this third country has an interest in striking either a deal with the government or with the opposition and thereby destroys a possible peace agreement either causing or prolonging a civil war. These models are not meant as competing theories but might apply simultaneously and describe different political and economical situations.

## 3.1 Foreign-caused information asymmetries

Information asymmetries are a central theme in the literature on rationalist explanations of war (see e.g. Jackson and Morelli (Forthcoming)). Information asymmetries are accepted as causes of war, but it is generally argued that asymmetric information cannot fully explain long lasting conflicts because both sides will learn the true information over time (Fearon (2004)). In what follows we will argue that the existence of a potential intervening country destroys this insight: the possibility of foreign interventions is likely to lead to asymmetric information which might not only cause but also explain long lasting civil wars.

Information asymmetries may come in several forms: there might be private information about the spoils of the country (Dal Bo and Powell (2009)), about fighting resources involved<sup>14</sup> or the cost of fighting and hence the willingness to fight. The better informed side has incentives to misrepresent its information due to a trade-off between avoiding costly war and doing well in the bargaining situation. Under complete information the opposition is bought off by  $p\sigma\Pi$ , which indicates that successfully exaggerating the win probability would lead to a better deal. Similarly, asymmetric information concerning the spoils of the country comes with incentives to understate the size of the spoils. To discipline the informed party to reveal the truth, the uninformed party will fight with a positive probability.

A foreign country with economic interests in the domestic country is likely to cause information asymmetries that might lead to (or cause the continuation of) war. If the foreign country is able to strike a deal with the incumbent government this will affect the spoils of the country. Since the government learns about the investment plans, technology and other factors of the foreign country, it is likely to be better informed about the resulting spoils than the opposition which as Dal Bo and Powell (2009) have shown leads to

<sup>&</sup>lt;sup>14</sup>See e.g. Esteban and Ray (2008) for a model where asymmetric information about the fighting resources involved may initiate a conflict.

war with a positive probability. Moreover, the alliance with a foreign country causes asymmetric information about the win probabilities and fighting resources involved between the domestic party. The party with whom the foreign country is allied will have better information about the amount of resources the foreign country is willing to provide in case of a conflict. Moreover, and more importantly, the exact amount of foreign resources depends on political factors in the foreign country that are highly uncertain and better understood within an alliance since they are not directly observable from the domestic country.<sup>15</sup> These fluctuations are exogenous to the domestic parties in conflict and might lead to long lasting information asymmetries, which change over time and cannot (rapidly and evenly) be learned. This way, foreign interventions generate persistent uncertainty over the fighting resources available for each party in conflict which might explain even long-lasting conflicts.

# 3.2 Foreign caused (prolongations) of war under symmetric information

In the previous section we argued that the possibility of a foreign alliance can generate persistent asymmetric information and thereby explain long-lasting conflicts. Now we will show that a foreign alliance might prolong a civil war that would have ended otherwise even if there is full information. Imagine a domestic civil war that had been caused by some information asymmetries but both sides have learned the true information over time. Hence, we are back to our canonical bargaining model and both sides would be willing to sign a peace agreement. However, there is a third country with economic interests in the domestic country who is willing to team up with one of the

<sup>&</sup>lt;sup>15</sup>This will be shown in Section 4 where we identify two important potential variations. The head of government in the foreign country might change and hence also the personal costs of going to war. Approval rates vary over time and change the incentives to intervene abroad.

sides in exchange for certain economic favors like, for example, opening the economy for foreign investment. These economic favors are growth enhancing. The foreign country wants to ensure the returns to its investment and is therefore only willing to add to the growth of the domestic country if the party in power - his ally - is sufficiently strong. In other words, it is reasonable to assume that the foreign country only increases the home country's pie after the faction it supported won the war. The following analysis shows that such an alliance might prolong the civil war. This will be the case for an alliance with the incumbent government but also with the opposition. Whom the alliance is offered to will depend on ideological and geopolitical reasons. Such an alliance is attractive for the foreign government whenever one of the domestic groups has a somehow hostile attitude towards the foreign country.

Consider first the case when the foreign country offers an alliance to the incumbent government. Suppose that the present value of the spoils is  $\Pi$  as before and the domestic government has to decide whether to appease the opposition by offering a share y of these spoils. Alternatively, it could make an alliance with the foreign country exchanging certain economic favors against support in the civil war and total (expected) benefits x of the new economic opportunities arising from the investment of the foreign country. Let  $(1 - p_x) \ge (1 - p)$  be the win probability of the incumbent government resulting from a successful alliance with a foreign country. Then

**Proposition 1** The incumbent government will prefer the alliance with the foreign country to appearing the opposition if  $\frac{(1-\sigma)}{1-p_x}\Pi < x$ 

**Proof.** The incumbent government is willing to appear the opposition if

$$(1-y)\Pi \ge (1-p_x)(\sigma\Pi + x)$$

or equivalently if

$$y \le 1 - \sigma + p_x \sigma - (1 - p_x) \frac{x}{\Pi}$$

On the other hand the opposition is willing to accept if

$$y\Pi > p_x \sigma \Pi$$

The bargaining range is empty if

$$1 - \sigma - (1 - p_x) \frac{x}{\Pi} < 0$$

The intuition is as follows. The government continues the war if what is destroyed by the war, namely  $(1 - \sigma)\Pi$ , is less than the expected new economic opportunities for the government created by the war, namely  $(1 - p_x)x$ .

Now let's look at the case where the foreign country offers an alliance to the opposition. This alliance increases the win probability of the opposition to  $p_F > p$  and grants the opposition a total (expected benefit) z of the new economic opportunities arising from the investment in the foreign country. Then

**Proposition 2** The opposition will prefer the alliance with the foreign country to being appeared by the domestic government if  $z > \frac{(1-\sigma)}{p_f}\Pi$  **Proof.** The incumbent government is willing to appeare the opposition if

$$(1-y)\Pi \ge (1-p_f)\sigma\Pi$$

or equivalently if

$$y \le 1 - (1 - p_f)\sigma$$

On the other hand the opposition is willing to accept if

$$y > p_f \frac{(\sigma \Pi + z)}{\Pi}$$

The bargaining range is empty if

$$1 - (1 - p_f)\sigma - p_f \frac{(\sigma\Pi + z)}{\Pi} < 0$$

Hence, the opposition prefers to continue the war, if the expected new economic opportunities created for the opposition  $p_f z$  outweigh the cost of war, namely  $(1 - \sigma) \Pi$ .

A commitment problem prevents the possibility of the alliance to buy off the opposing domestic party. We assumed that the opposing domestic party has a somehow unfriendly attitude towards the foreign state. This could be due to ideological reasons or the attempt to preserve the status of being the main political and economic elite. Hence, keeping the foreign state out of the country implies some indivisible rents. Still, indivisibilities alone don't explain the occurrence of war because of the destruction it implies. Indeed, the following lottery which is based on a mechanism proposed by Powell (2006) would seem to dominate the war: the winner of the lottery keeps the spoils and decides whether or not to permit the opening of the economy to the foreign country. The win probabilities of the lottery correspond to the respective probabilities of winning the war. However, the loser of the gamble always has an incentive to renege because the returns from starting a civil war are higher than the returns from the expost allocation. The real impediment to agreement is not the indivisibility itself but the commitment problem that the indivisibility entails.<sup>17</sup>

The above result shows that if the alliance with a foreign government

<sup>&</sup>lt;sup>16</sup>The unfriendly attitude and bargaining indivisibilities might also be due to an alliance with another foreign country.

<sup>&</sup>lt;sup>17</sup>One might wonder why there is no credibility issue concerning the foreign government. Notice that the party allied with the foreign government will be in charge after winning the conflict, hence the real issue is why this party is credible. It has an incentive to stick to the deal because otherwise there will be no investments or aid which are necessary to increase the pie. The foreign government will stick to the deal to avoid expropriation.

increases the expected ex-post conflict spoils of a society the foreign third party decreases the bargaining range for peace and thereby forces a situation where peaceful agreements are more difficult to reach. Such a situation is likely to arise if the foreign alliance occurs during an ongoing war but the model where the alliance occurs with the opposition could also explain the initiation of war whenever the foreign investment after the war is big enough. If the foreign government can offer slightly more than  $z_{\min} = \frac{(1-\sigma)}{p_f}\Pi$  to the opposition, the domestic government can no longer match the offer and war prevails. We will show next, that even if the government could match the offer of the foreign state, war might not be prevented (terminated) due to a foreign caused commitment problem.

## 3.3 Foreign-caused commitment problems

Suppose the foreign government offers the opposition less than  $z_{\min}$  so that the domestic government can match the offer. Will the opposition accept this deal with the domestic government? This crucially depends on the nature of the potential alliance with the foreign government. If the foreign government is invariant in its interest in forming an alliance with the opposition, then the domestic government will deter conflict as long as  $z < z_{\min}$  and we are back to proposition 2. However, it is unlikely that the foreign government is invariant in its interest in forming an alliance with the opposition. First, the presence of a potentially intervening foreign country is exogenous to the domestic economy. Furthermore, the interests associated with interventions abroad change over time and are determined by factors that are not related to the country in conflict. 18 Moreover, the benefits of intervention are contingent to what the opposition will do once in office and clearly being rejected by the opposition deteriorates the foreign interest in intervention in that country because it reduces the possibility of future agreements. Therefore, it is reasonable to assume that there are situations in which the possibility

<sup>&</sup>lt;sup>18</sup>This will be shown in section 4.

of an alliance is restricted to the moment it takes place. Thus, rejecting an alliance with a foreign government makes any future alliance with the opposition unlikely. In this case, if the opposition accepts the appearament offer from the domestic government, the opposition constitutes less of a threat to the domestic government since its probability of winning the conflict drops from  $p_F$  to p. As a consequence, the domestic government will renege on any earlier agreement higher than  $p\sigma\Pi$ . This establishes the following result:

**Proposition 3** Due to commitment problems, any offer by the foreign government that gives the opposition more than  $p\sigma\Pi$  will trigger a civil war.

Two different forces are at play here. On the one hand, a successful foreign intervention increases the pie, which reduces the ex ante bargaining range for peace. On the other hand, the foreign intervention induces a power shift in the domestic country by increasing the win probability of the opposition. This allows us to link our occurrence of war to Powell (2004, 2006)'s argument that inefficient conflict is due to a commitment problem, which results from large, rapid shifts in the distribution of power. Accepting the government's appearement attempt requires foregoing this power shift by giving up the possible alliance with the foreign country. Hence, the government cannot credibly offer the opposition a peaceful allocation of pre-civil war resources because the government would have incentives to renege on any early agreement once the alliance did not take place. This is a new type of commitment problem our analysis uncovers.

Proposition 3 implies as a corollary that civil war will result even if the foreign intervention does not increase the post-conflict spoils of the country. To illustrate this observe that any offer  $(z, p_f)$  by the foreign government such that  $p\sigma\Pi < p_f(\sigma\Pi + z)$  triggers war. This is equivalent to  $z > \tilde{z} = \sigma\Pi(\frac{p}{p_f} - 1)$ . But  $\tilde{z} < 0$  since  $p < p_f$ . In other words, due to the induced power shift the foreign government can even confiscate some of the surviving spoils!

## 3.4 Personal gains and political bias

In this section we offer an alternative interpretation of the model which does not required an increase in the post-conflict spoils even if there was no commitment problem. We will discuss the alliance with the opposition. As before the foreign government offers support in the civil war in exchange for some economic favors. To make the offer more attractive, the foreign government provides extra benefits z to the opposition leaders only. Hence, the foreign party induces a political bias of their pivotal decision maker a la (Jackson and Morelli, 2007). The war is now worth more to the opposition leaders than to the opposition as a whole since it grants the leader additional benefits: the personal bribes from the foreign country allow the leader to keep a disproportional share of the gains from war and the backing of the foreign country leads to other personal gains like personal recognition and power. Proposition 2 now provides the minimum size of personal gains that make a peaceful settlement impossible / prolong a civil war abroad.

## 4 Endogenous foreign intervention

We now turn to the cost benefit analysis of the foreign intervention to investigate the condition under which the foreign government is willing to create/prolong a civil war abroad. The head of government of a foreign country is willing to take part in a civil war abroad if the total benefits outweigh the costs. Both benefits and costs have an economic and personal/ideological component. The different (interpretations of the) models suggested above lead to different economic costs and benefits, however the personal/ideological component is identical to all those models. In general we will denote the economic benefits by E(B) and the costs by by f(r) where r are the resources dedicated to the intervention. Let f(0) = 0 and f'(r) > 0,  $f''(r) \le 0$ . We will use the alliance with the opposition to illustrate the effect of the amount of resources on the win probability. We assume that  $p'_f(r) > 0$ 

and that  $p_f(r) \leq 1$  for  $\forall r$ . Also  $p_f(r=0) = p$ .

We now turn to the personal costs and benefits of causing a civil war abroad. These have two components:

- An ideological component capturing the strictly personal cost  $c_i$  of provoking a civil war.
- The level of approval enjoyed by the government.

We assume that the head of government cares about his approval because he derives personal rents from being popular: these rents can be interpreted as future rents due to re-election possibility or simply as ego-rents. We will denote the rents resulting from the head of government's popularity before deciding whether or not to finance an intervention in another country by u. A successful ending of the war will spurt the head of government's popularity because of the possibility of signaling (e.g. by a state visit) global leadership and the new economic benefits associated with friendlier governments around the world.

To keep the model simple we assume that after a successful civil war the popularity jumps up to  $\overline{u} > u$ . An unsuccessful foreign intervention will only affect the head of government's approval if discovered by the public resulting in a drop in approval to a minimum level  $\underline{u} < u$ . We assume a fixed probability  $\delta$  that the public discovers the covert support for an unsuccessful civil war. With these assumptions sponsoring a civil war can improve the head of government's ego-rents if

$$p_f \overline{u} + (1 - p_f) \delta \underline{u} + (1 - p_f) (1 - \delta) u > u$$

or equivalently

$$p_f(\overline{u} - u) - \delta(1 - p_f)(u - \underline{u}) > 0 \tag{1}$$

where we illustrate the ego rents for an alliance with the opposition.

**Proposition 4** For  $p_f > \frac{\delta}{1+\delta}$  condition (1) is easier to satisfy the lower is u.

**Proof.** The left hand side of (1) is decreasing in u if  $p_f > \frac{\delta}{1+\delta}$ 

Hence, if the probability to be discovered is sufficiently small relative to the probability of success in the civil war, initiating a civil war abroad serves unpopular politicians as a way to gamble for resurrection at home. The lower their initial popularity, the less there is to lose in case of a failed intervention and the more there is to gain in case of a successful intervention.

Joining economic and personal incentives the head of government in the foreign country will be willing to go to war allied with the opposition if and only if

$$E(B) + p_f(\overline{u} - u) - \delta(1 - p_f)(u - \underline{u}) > c_i + f(r)$$
(2)

For illustrative purposes we will use the model without commitment problems where the foreign government has to offer  $z_{\min} = \frac{(1-\sigma)}{p_f}\Pi$  to the opposition. Let  $\Pi_F$  be the total economic gains from a successful intervention. Then the foreign government is willing to intervene if

$$p_f\left(\Pi_F - \frac{(1-\sigma)}{p_f}\Pi\right) + p_f(\overline{u} - u) - \delta(1-p_f)(u - \underline{u}) > c_i + f(r)$$

Any interior r has to satisfy the following first order condition:

$$p_f'(\Pi_F + (\overline{u} - u) + \delta(u - \underline{u})) = f'(r)$$
(3)

The politician will choose this interior r if and only if it satisfies (2). Otherwise he will refrain from the intervention.

For illustrative purposes we use the following particular functional forms for  $p_f$  and f(r) in the remainder of the section. Let

$$p_f = \frac{r_o + r}{r_I + r_o + r}$$

where  $r_I$  and  $r_o$  are the resources devoted to fighting by the incumbent and the opposition respectively and

$$f(r) = r$$

Under these assumptions (3) becomes

$$\frac{r_I}{(r_o + r_I + r)^2} \left( \Pi_F + (\overline{u} - u) + \delta(u - \underline{u}) \right) = 1$$

So the optimal resources r dedicated by the foreign government towards the civil war are

$$r = \sqrt{r_I \left(\Pi_F + (\overline{u} - u) + \delta(u - \underline{u})\right)} - r_o - r_I$$

and

$$p_f = 1 - \frac{\sqrt{r_I}}{\sqrt{(\Pi_F + (\overline{u} - u) + \delta(u - \underline{u}))}}$$

Substituting the resulting expressions for f(r) and  $p_f$  into equation 2 and simplifying yield

$$\Psi = \left(\sqrt{(\Pi_F + (\overline{u} - u) + \delta(u - \underline{u}))} - \sqrt{r_I}\right)^2 + r_o - \Pi(1 - \sigma) - \delta(u - \underline{u}) > c_i$$
(4)

After inspection of  $\Psi$ , we obtain the following result:

**Proposition 5** The foreign politicians willingness to sponsor a civil war abroad is increasing in  $\Pi_F$ ,  $r_o$  and  $\sigma$  and decreasing in  $\delta$ ,  $r_I$ ,  $c_i$ ,  $\Pi$  and u.

**Proof.** The comparative static results for  $\Pi_F$ ,  $\Pi$ ,  $\sigma$ ,  $r_o$ ,  $r_I$  and  $c_i$  are immediate from condition (4). Simple calculations show that the left hand side of (4) decreases in  $\delta$ . The change with respect to u is given as

$$\frac{\partial \Psi}{\partial u} = (-1 + \delta) \frac{\sqrt{(\Pi_F + (\overline{u} - u) + \delta(u - \underline{u}))} - \sqrt{r_I}}{\sqrt{(\Pi_F + (\overline{u} - u) + \delta(u - \underline{u}))}} - \delta < 0$$

Hence, the war is more attractive, the bigger the economic gains after a successful intervention, the higher the war resources of the ally, the less destructive the war, the lower the domestic country's spoils, the lower the war resources of the non-ally and the lower the probability that the intervention is discovered, the lower the personal cost of going to war and the lower the foreign politician's popularity.

This result implies two testable predictions of our model:

**Prediction 1** Ideology matters: the probability of civil war should increase if the head of the foreign government has a more pro-war ideology and hence lower personal costs  $c_i$  to initiate a civil war.

**Prediction 2** Approval matters: The probability of civil war decreases with the approval of the foreign government within its own country.

Prediction 2 might be surprising. Since involvement in civil wars is secretive, how can this depend on presidential approval rates? It is exactly this secretive nature of foreign interventions that make them a safe bet. An unsuccessful involvement in a civil war is likely to go unnoticed by the public, while the president always has ways and means to get credit for new economic opportunities after a successful intervention even if the public does not know whether or not their country was involved. The downside is low risk and is smaller for governments with low approval than for popular governments while the upside is bigger. The secretive nature of the intervention encourages the gamble.

Alternatively, we can interpret  $c_i$  and u as determined by lobbying from corporations.  $c_i$  may capture differences in how sensitive political parties are to lobbying or care about corporation business opportunities. A more procorporation party should be associated with a lower (or even a negative)  $c_i$ . Indeed, there is evidence that this is the case for the U.S. where the Republican Party seems to be more influenceable by lobbies than the Democratic

Party (see, for example, Jayachandran (2006)). Similarly, if the probability of re-election is associated with campaign contributions, then a government with low approval will increase its re-election probabilities by relying more on the support from corporations. This in turns makes the government more likely to intervene abroad to improve corporations business opportunities. For example, Dube, Kaplan, and Naidu (2008) show that CIA operations to depose leaders abroad increase stock market values of corporations benefiting from the perspective of a new friendlier government in the foreign country.

These predictions are important since they relate politics in the potentially intervening foreign country to the probability of civil war around the world. Obviously, this depends on the actual foreign country we consider. We turn to this in the implementation of the empirical analysis.

## 5 Empirical Exercises

Our analysis shows that ideology and popularity both affect the incentives to intervene in conflicts abroad. If foreign intervention determines civil war, these time-varying characteristics of the political situation in a potentially intervening country should affect the probability of observing civil war around the world. Political changes in an intervening country constitute exogenous variations from the perspective of the country potentially in conflict. Therefore, our predictions provide a way to identify the effect of foreign intervention on the incidence of civil war. Of course, as our analysis shows, not every country will intervene in other countries' conflicts. Implementation of our strategy requires identifying a potentially intervening country.

We focus on the case of the U.S. as a source of foreign intervention. The reasons are obvious. The U.S. is a global leader with massive economic and political interests all over the world. As discussed in the introduction, there are numerous episodes of civil war where one of the sides was supported by the U.S. Importantly for our purpose, the Democrat and Republic govern-

ment may differ in their foreign policy and willingness to intervene in foreign affairs. As argued above, Republican foreign policy is more interventionist and more explicit about the benefits and obligations of spreading U.S. values and influence over the world. Last, as civil war foreign operations are mainly secret, U.S. citizens vote without these interventions in mind.<sup>19</sup>

As a proxy for personal costs and benefits from supporting a civil war abroad we use the president's party affiliation and his approval rates  $(PA_t)$ .

To illustrate the plausibility of a Republican effect on civil war, we define a dichotomic variable indicating whether the U.S. incumbent party is Republican or not. That is,

$$REP_t = \begin{cases} 1, & \text{if U.S. government is Republican in year t} \\ 0, & \text{Otherwise} \end{cases}$$

In order to provide some preliminary evidence of the Republican and Presidential approval effects, table 1 reports the average number of ongoing and outbreaking civil wars (based on the Uppsala/PRIO data set) under Democratic and Republican administrations for the period 1950-2006. We also differentiate between years where the incumbent enjoyed from low (be-

<sup>&</sup>lt;sup>19</sup>The voting behavior of Americans has been intensively studied (see Bartels (Forthcoming) for an overview). While early studies claimed that votes were only determined by domestic issues - stressing the importance of economic factors (see e.g. Lewis-Beck, Nadeau, and Elias (2008) and references therein), - a more recent literature also emphasizes the importance of international issues (see Aldrich, Sullivan, and Borgida (1989)). Kessel (2004) analyzes the presidential elections from 1952 to 2000 using the American National Election Studies whose open-ended questions provide a measure of valence towards candidate, party and issue objects in the elections. He shows that in all 13 elections economic and general issues were extremely important, but international issues also mattered in 11 of these 13 elections.

While there is evidence that consistent with the spirit of our model presidential approval is linked to foreign issues (e.g. Aldrich, Gelpi, Feaver, Reifler, and Sharp (2006); Hurwitz and Peffley (1987)), foreign policy issues only influence votes in so far as the public has coherent attitudes about foreign policy and the political parties uphold distinct foreign policy platforms and the foreign policy issue is made salient e.g. by the media (Aldrich, Gelpi, Feaver, Reifler, and Sharp, 2006). There is no indication that a civil war in another country becomes such a salient issue to affect the election of presidential candidates in the US.

low the median) or high (above the median) presidential approval rates. The incidence of civil war is 50% higher under Republican administrations. It is also 34% higher when only the number of outbreaking conflicts are considered. In the second panel, we observe that ongoing and outbreaking civil wars are around twice as numerous in years in which the U.S incumbent suffers from approval rates that are below the median over the whole period (1950-2000).

Table 1: Number of Civil Wars, 1950-2000

	: Ivanisei ei eivii vvais	, 1000 2000
	Democratic	Republican
	Administration	Administration
Ongoing conflicts	6.88	9.88
	(8.26)	(10.04)
Outbreaking conflicts	1.23	1.56
	(1.36)	(1.35)
	High	Low
	Presidential Approval	Presidential Approval
Ongoing conflicts	6.08	11.84
	(6.77)	(6.02)
Outbreaking conflicts	0.94	2.03
	(1.28)	(1.21)

Standard errors in parentheses.

Naturally these figures, while consistent with U.S. influenced civil wars, may reflect other factors playing a role. Therefore, we now investigate our predictions in more detail.

#### 5.1 The main estimation

We estimate the incidence of civil war; that is, the probability of observing civil war in country j in year t ( $conflict_{jt}$ ).

To put our results in context, we replicate the empirical strategy developed in Besley and Persson (2009). Consequently, we use a variable of

natural disasters (Natural Disaster<sub>j,t</sub>) as an instrument for wage or income shocks.<sup>20</sup> As discussed in Section 2, most of the empirical civil war literature fails to exploit within-country variation in panel data, which leads to biased estimates. To avoid this problem, we only exploit within country variations. Thus, country fixed effects ( $\gamma_j$ ) are used in all of our main estimations as in Besley and Persson (2009), Brückner and Ciccone (2010) or Miguel, Satyanath, and Sergenti (2004). To this specification, we include our  $REP_t$  and  $PA_t$  variables.

The main difficulty with our empirical strategy is that both REP and PAare year (country-invariant) variables, which makes it difficult to distinguish the effects of Republican governments or presidential approval from any other country invariant year effect, like, for example, aggregate shocks taking place at the world level in a given year. In principle, this should not be a serious source of concern as long as the processes followed by the political cycle or the evolution of preferential approval in the U.S. are independent from the process governing the evolution of the other relevant year fixed effects, like global and U.S. productivity or demand shocks or oil prices. In any case, to mitigate this unlikely but potential problem, we include the growth of gross world ( $\Delta log GWP_t$ ) product to capture aggregate demand or productivity shocks. Furthermore, we also include in some specifications the U.S. gross domestic product to control for economic shocks specific to the U.S.  $(\Delta log GWP_{US,t})$ . Finally, we also control for changes in oil prices  $(\Delta log Oil)$ Price<sub>t</sub>). This way we control for the most plausible potential sources of civil war that may be omitted behind our  $REP_t$  or  $PA_t$  variables.

To summarize, we test estimations of the following type:

$$conflict_{jt} = \alpha_1 \text{Natural Disaster}_{jt} + \alpha_2 REP_t + \alpha_3 PA_t + x_t'\beta + \gamma_j + \mu_{jt},$$

where x' is a vector of additional (country invariant) year variables like the

<sup>&</sup>lt;sup>20</sup>These constitute exogenous variations in the evolution of the wage/income rate.

mentioned  $\Delta log GWP_t$ ,  $\Delta log GWP_{US,t}$  or  $\Delta log Oil Price_t$ .

As we follow Besley and Persson (2009) we expect  $\alpha_1$  to be significantly positive. More importantly for our purposes, Predictions 1 and 2 imply a positive  $\alpha_2$  and a negative  $\alpha_3$ .

#### 5.2 Data

We exploit panel data covering 181 countries and the years 1950 to 2006. Our basic data set is taken from Besley and Persson (2009). It uses the UCDP/PRIO civil-war incidence measure taking a value of 1 if a given country in a given year was involved in civil war - defined by a cumulated death toll of more than 1000 people. Alternatively, we use a measure of civil war based on the Correlates of War (COW) database, which runs up to 1997 only.<sup>21</sup>

The measure of natural disasters is constructed by Besley and Persson (2009) from the EM-DAT data set and includes the number of extreme temperature events, floods, slides and tidal-waves in a given country and year.

The presidential approval rates, our PA variable, are taken from Gallup. We use the total percentage of positive presidential approval per year.

Oil prices are taken from BP world energy statistics. They provide oil prices based on key crudes quotes from Brent, West Texas Intermediate (WTI), Nigerian Focados and Dubai expressed in US \$ per barrel. Last, statistics on World Population, GDP and Per Capita GDP are taken from Angus Maddison's dataset.<sup>22</sup>

 $<sup>^{21}</sup>$ The correlation between both datasets is very high (about 75% at country-year level) and their use make no difference in terms of our results, which are qualitatively the same and quantitatively very similar under both measures of civil war.

<sup>&</sup>lt;sup>22</sup>http://www.ggdc.net/maddison/

## 5.3 Results on the Republican Effect

We report the results of our basic specification in Table 2. To allow for country fixed effects, we estimate conditional logits. In column 1 we report the most basic specification. Reassuringly, negative shocks in the wage rate or income triggered by a natural disaster raise the probability of observing civil war in a similar way and order of magnitude than Besley and Persson (2009). Importantly, the coefficient associated with  $REP_t$  is positive and significant. The magnitude of the estimated effect is far from trivial: the coefficient implies an odd ratio of 1.56, which indicates that the probability of observing a civil war in a country is 56 % higher when the U.S. is under a Republican presidency.

The effects of these two variables are robust to any modification we perform on the basic specification. In the remaining specifications we include  $\Delta log \mathrm{GWP}_t$ . This way we control for aggregate productivity or demand shocks, which may be correlated with the U.S. political party in office. The associated coefficient is negative but insignificant. In the following estimation (columns 3), we add  $\Delta log \mathrm{GWP}_{US,t}$ , which controls for GDP growth in the U.S. Interestingly, this variable appears to have a negative effect on civil war incidence, which suggests that U.S. sponsored civil war might be likelier during recessions. Including these additional country invariant year variables has no qualitatively effect on neither the way in which Natural Disaster (as a proxy of wage rate or income shocks) or  $REP_t$  affect the probability of a civil war.

Finally, we control for changes in oil prices. The reason is that oil prices may affect both the political situation in the U.S., through its effects on U.S. inflation, and the incidence of conflict via inflation or, for oil producer countries, its effects on national income or revenues. Although we find a positive (not far from statistically significant) effect of variations in oil prices, the inclusion of this additional year (country-invariant) variable does not affect our main results.

Table 2: The Republican Effect on Civil War

	-			
	(1)	(2)	(3)	(4)
Natural Disaster <sub><math>j,t</math></sub>	0.445***	0.443***	0.432***	0.431***
	(0.063)	(0.063)	(0.063)	(0.063)
$\text{REP}_t$	0.528***	0.535***	0.515***	0.494***
	(0.112)	(0.112)	(0.114)	(0.115)
$\Delta log \mathrm{GWP}_t$		-0.382	2.640**	2.486*
		(0.344)	(1.312)	(1.301)
$\Delta log \mathrm{GDP}_{US,t}$			-2.337*	
			(1.363)	
$\Delta log Oil Prices_t$				0.002
				(0.001)
Sample	All	All	All	All
Observations	3,046	3,046	3,040	3,040
~		dedede	lede a see de	

Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## 5.4 Results on Presidential Approval

We investigate now whether the level of approval for the U.S. president has an impact on the probability of observing a civil war. We build on the previous results to undertake our second test. As discussed above, we expect U.S. presidents to be keener to intervene abroad under low level of approval. Thus, if foreign intervention is a determinant of civil wars we should expect a significantly negative coefficient associated with our U.S presidential approval variable  $(PA_t)$ . And that is what we observe in all our specifications. The coefficient of  $PA_t$  is always negative and significant. The implied odd ratio is around .95, This indicates that a decrease of  $PA_t$  in 1 percentage point raises the probability of civil war by 5%. Observe that the coefficient associated with  $REP_t$  is even bigger once  $PA_t$  is controlled for. This further reinforces the idea that the effect of Republican government is rather ideological (i.e. intrinsic to Republican ethos). It is interesting to notice that the effect of variations in oil prices becomes significant now. Again, this has no impact

on our main results.

Table 3: Basic Specification with Preferential Approval

Table 9. Dable	Specification	,	TOTOTIOIGI TI	pprovar
	(1)	(2)	(3)	(4)
Natural Disaster $_{j,t}$	0.340***	0.336***	0.324***	0.316
	(0.067)	(0.067)	(0.068)	(0.068)
$\text{REP}_t$	0.769***	0.780***	0.795***	0.745***
	(0.123)	(0.123)	(0.126)	(0.128)
$PA_t$	-0.026***	-0.026***	-0.026***	-0.024***
	(0.005)	(0.005)	(0.005)	(0.005)
$\Delta log \mathrm{GWP}_t$		-0.519	1.835	1.755
		(0.409)	(1.642)	(1.633)
$\Delta log \mathrm{GDP}_{US,t}$			-0.856	
,			(1.741)	
$\Delta log Oil Prices_t$				0.003**
				(0.001)
Sample	All	All	All	All
Observations	2,177	2,177	2,171	2,171

Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

#### 5.5 Robustness

We perform a multiplicity of robustness checks. In table 4 we report a series of variations on the samples we considered previously. In column 1, we restrict the sample to non-OECD countries. If any, the effect is to increase the coefficients associated with  $REP_t$  and  $PA_t$ . As a check, we focus on OECD countries in column 2. Reassuringly, the key coefficients loose significance. In columns 3 and 4, we concentrate on South-Saharan countries and Commodity Exporters, respectively. Both of our key results hold.

In column 5, we explore further the possibility that REP is capturing something else rather than variation in the propensity of the U.S. to intervene abroad. We can argue that party ideology of a foreign government should be

more important for the case of the U.S. than for other countries. That is, we should not observe that the probability of civil war is determined by which party is in office in countries like, for example, Sweden or even in the U.K. Interestingly, politics in those countries are also characterized by alternating political parties with different ideology so we can create variables like  $SOC_t^{SW}$  or  $CON_t^{UK}$ . These new variables take the value of 1 if the government is conservative in the U.K. and socialist in Sweden respectively, and 0 otherwise. Once we include these variables, only the coefficient associated with REP is significant (and still positive). This reinforces the view that civil wars are influenced by the U.S., specially under Republican terms. Notice as well that the inclusion of  $SOC_t^{SW}$  or  $CON_t^{UK}$  does not affect the effect of  $PA_t$ .

In column 6, we display the results of a counterfactual. We restrict our sample to former French colonies where we should not expect strong U.S intervention. As these countries are under the influence of France not the U.S., our results should not hold. As shown in column 5 neither REP nor PA are associated with significant coefficients, strengthening our argument.

In the last two columns of table 4, we investigate whether our results are driven by the confrontation between the U.S. and the Soviet Union. In columns 7 and 8 we report our basic specification years under and after the Cold War, respectively. Our results are similar under both periods, which suggests that the Republican and the Presidential Approval effects go beyond the cold war.<sup>23</sup> If any, the coefficients are stronger after the Cold War. This could be interpreted as further evidence of U.S intervention in conflicts abroad motivated mainly on U.S. domestic political situation.

We explore different specifications in Table 5. In column 1, we include a time trend, which turns out to be positive and significant. In column 2, we report an estimation with decade fixed effects. Column 3 displays the estimation where we replaced  $NaturalDisaster_{j,t}$  by the  $\Delta logGDP_{j,t}$  as in,

<sup>&</sup>lt;sup>23</sup>Notice that the literature does not find any direct effect of the Cold War on Civil War. See for example, Collier, Hoeffler, and Sambanis (2005).

Table 4: Robustness Checks, different samples

	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)
Natural Disaster <sub>i,t</sub>	0.322***	1.076**	0.864***	0.147	0.334***	0.001	0.176**	0.618***
Š	(0.0675)	(0.486)	(0.261)	(0.154)	(0.0676)	(0.01)	(0.089)	(0.146)
$\mathrm{REP}_t$	0.820***	0.0348	0.800***	0.824***	0.673***	0.012	0.708***	1.536***
	(0.126)	(0.617)	(0.225)	(0.195)	(0.131)	(0.011)	(0.165)	(0.285)
$\mathrm{SOC}^{SW}_t$	,				0.150		,	
۵					(0.141)			
$CON_t^{UK}$					$0.215^{'}$			
٥					(0.165)			
$\mathrm{PA}_t$	-0.027***	-0.001	-0.024**	-0.029***	-0.018***	-0.001	-0.027**	-0.034***
	(0.005)	(0.025)	(0.010)	(0.008)	(0.005)	(0.001)	(0.007)	(0.012)
$\Delta log \mathrm{GWP}_t$	-0.482	-12.93**	-1.130	2.716	-0.458	0.005	-1.219	-0.343
	(0.372)	(6.396)	(2.343)	(2.008)	(0.374)	(0.124)	(1.825)	(0.539)
Sample	Non-OECD	OECD	South-Saharan	Commodity	All	Francophone	Cold War	After
	countries	countries	countries	Exporters		Africa	Years	Cold War
Observations	2,055	122	501	940	2,153	888	1226	309
	Standard errors in parentheses.	s in parentl		*** p<0.01, ** p<0.05, * p<0.1	p<0.1			

for example, Collier and Hoeffler (2004). In column 4, we add a new variable that takes the value of 1 for democratic countries defined using the Polity IV measures of democracy. This way we add more time variant domestic determinants. This has no effect on the relevance of REP and PA on the incidence of civil war. In column 5, we explore the possibility of our results being influenced by the timing between the moment the decision is made and the actual implementation of the intervention. We do so by lagging PA by 1 year and disaggregating REP in the first, second, third and fourth year of a Republican term. All the coefficients associated with  $REP_t^{Y1}$ ,  $REP_t^{Y2}$ ,  $REP_t^{Y3}$ ,  $REP_t^{Y4}$  and  $PA_{t-1}$  have the sign and significance we expected.

In column 6 we report our basic specification but using an alternative variable of civil war instead, built on the Correlates of War (COW) database. Clearly, our results on the effect of the ideology and the support of a U.S. government are robust to any of these variations.<sup>24</sup>

In column 7 we discard a reverse causality problem: could it be the case that American citizens feel in danger if there are too many civil wars around the world and seek safety by voting for a Republican candidate? We address this potential problem by controlling for the number of civil wars taking place during presidential election years (NCW<sub>EY</sub>). As reported in column 7, the estimates of the Republican and Presidential Approval effects come out virtually the same.

We estimate a linear probability model using OLS (reported in appendix) instead of conditional logit. As shown in table 7, the results are similar and if anything of a smaller magnitude. For example, the coefficient associated with REP indicates that the unconditional probability of observing a civil war, which is around 15 %, raises about 20 % when Republicans are in office.

As a last concern, the error terms might be correlated across time for observations corresponding to the same presidential mandate. To correct

<sup>&</sup>lt;sup>24</sup>In fact, we have run the same regressions reported in tables 1, 2, 3 and 4 but on a measure of civil war incidence based on COW and all the results hold.

Table 5: Robustness Checks, different specifications

	(1)	(2)	(3)	(4)	(5)	(9)	(7)
Natural Disaster <sub><math>j,t</math></sub>	-0.004	0.119*			0.344***	0.478**	0.043
	(0.073)	(0.071)			(0.067)	(0.073)	(0.073)
$\mathrm{REP}_t$	0.462***	0.855***	.488***	0.472***		0.439***	0.584***
	(0.129)	(0.135)	(0.117)	(0.118)		(0.121)	(0.129)
$\mathrm{REP}_t^{Y1}$					0.519***		
c. V. C.					(0.176)		
$\operatorname{KEF}_t^{t}$					0.731***		
$\mathrm{REP}_t^{Y3}$					(0.152) $0.811***$		
۵					(0.177)		
$ ext{REP}_t^{Y4}$					0.729***		
$\mathrm{PA}_t$	-0.012**	-0.027***	-0.015***	-0.014***		-0.024***	-0.025***
	(0.006)	(0.006)	(0.005)	(0.005)		(0.005)	(0.000)
$\mathrm{PA}_{t-1}$					-0.018***		
			1	1	(0.005)	1	
$\Delta log \mathrm{GWP}_t$	-0.268	-0.326	-0.652	-0.625	-0.431	-1.549	-0.372
	(0.403)	(0.351)	(.509)	(0.496)	(0.366)	(1.475)	(0.452)
$\Delta log \mathrm{GDP}_{j,t}$			***220.0-	-0.073***			
			(.010)	(0.010)			
Democracy $_{j,t}$				$-0.729$ $^{\circ}$ $(0.148)$			
$\mathrm{NCW}_{EY}$							0.100***
							(0.010)
year Trend	yes						
Decade Fixed Effects		yes					
Observations	2,177	2,177	2,561	2,519	2,153	1,860	2,177
Standarc	Standard errors in parentheses.	arentheses.	*** p<0.01	*** p<0.01, ** p<0.05, * p<0.1	, * p<0.1		
	•		1	•	•		

for this potential drawback, we allow for an arbitrary covariance structure within presidential mandates by computing our bootstrapped standard errors clustered at the presidential mandate level. We rerun regressions for all the specifications and the results come out identical for the effect of REP. On the other hand, the estimates of the presidential approval, although relatively less precise, they are still significant.<sup>25</sup> This may reflect the fact that our presidential approval variable might suffer from a certain degree of serial correlation within each presidential term.

#### 5.6 The Onset of Civil War

Our theoretical analysis shows that foreign intervention increases the occurrence of civil war through triggering new conflicts and prolonging existing ones. For this reason, our main empirical investigation is on the incidence of civil war, which captures both dimensions of a civil war. We check now whether our insights persist once the onset of civil is considered instead. We report in table 6 our basic specification. Although weaker, the effect of our variables is robust to considering the onset of civil war, which we interpret as evidence of the influence of U.S. politics on the emergence of civil conflicts abroad.<sup>26</sup>

## 6 Concluding Remarks

Foreign interventions in civil wars are typically secretively in nature and therefore difficult to observe directly. In this paper, we use several variations of the canonical bargaining model of war to illustrate that civil wars might be triggered or prolonged by secretive foreign interventions. The explicit

<sup>&</sup>lt;sup>25</sup>To save space, we only report in table 8 (in the Appendix) our results with bootstrapped standard errors for the specifications displayed in table 3.

<sup>&</sup>lt;sup>26</sup>The fact that the results are relatively weaker was to be expected according to our theory and the constraint imposed by fewer observations.

Table 6: Basic Specification for the Onset of Civil War

	1			
	(1)	(2)	(3)	(4)
Natural Disaster $_{j,t}$	0.527*	0.535*	0.536*	0.540*
	(0.277)	(0.277)	(0.278)	(0.279)
$\text{REP}_t$	0.752**	0.739*	0.734*	0.700*
	(0.394)	(0.394)	(0.399)	(0.407)
$PA_t$	-0.0292**	-0.0263*	-0.0261*	-0.0260*
	(0.0139)	(0.0141)	(0.0145)	(0.0145)
$\Delta log \mathrm{GWP}_t$		4.023	4.044	3.940
		(3.027)	(3.039)	(3.051)
$\Delta log \mathrm{GDP}_{US,t}$			-0.205	-0.0155
			(3.160)	(3.128)
$\Delta log Oil Prices_t$				0.00160
				(0.00399)
Sample	All	All	All	All
Observations	909	909	909	909
~				

Standard errors in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

analysis of the incentives for a third party to intervene leads to two clear-cut predictions that provide an identification strategy for the relevance of foreign intervention on the incidence and onset of civil war. Both predictions are confirmed for the case of the U.S as a potential intervening country: (i) civil wars are more likely to take place when the U.S. is under a Republican government and (ii) the probability of civil wars decrease with U.S. presidential approval rates. These empirical results, relevant and novel in themselves, show that foreign influence is an important determinant of civil war around the world.

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## Appendix

Table 7: Various Specifications, Linear Probability Model

	(1)	(2)	(3)	(4)	(5)
Natural Disaster <sub><math>j,t</math></sub>	0.031***	0.031***	0.029***	0.040***	0.010
	(0.004)	(0.004)	(0.004)	(0.005)	(0.007)
$\text{REP}_t$	0.033***	0.034***	0.034***	0.041***	0.024***
	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)
$PA_t$	-0.001***	-0.001***	-0.001***	-0.001***	-0.001***
	(0.0002)	(0.0002)	(0.0002)	(0.0003)	(0.0002)
$\Delta log \mathrm{GWP}_t$		-0.077***	0.056	-0.075***	0.060
		(0.024)	(0.072)	(0.026)	(0.060)
$\Delta log \mathrm{GDP}_{US,t}$			-0.018		
			(0.069)		
Sample	All	All	All	Non-OECD	Commodity
				countries	exporters
Observations	6,750	6,750	6,744	5,502	4,115
R-squared	0.302	0.303	0.298	0.299	0.304

Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 8: Basic Specification with Bootstrapped Standard Errors

(1)	\ /	(3)	(4)
0.340**	0.336***	0.324**	0.316***
(0.150)	(0.125)	(0.161)	(0.112)
0.769***	0.780***	0.795***	0.745***
(0.061)	(0.120)	(0.121)	(0.106)
-0.026**	-0.026*	-0.026*	-0.024**
(0.013)	(0.016)	(0.015)	(0.013)
	-0.519	1.835	1.755
	(5.274)	(3.879)	(4.168)
		-0.856	-0.809
		(5.528)	(3.679)
		,	0.003
			(0.002)
All	All	All	All
2,177	2,177	2,171	2,171
	(1) 0.340** (0.150) 0.769*** (0.061) -0.026** (0.013)	(1) (2) 0.340** 0.336*** (0.150) (0.125) 0.769*** 0.780*** (0.061) (0.120) -0.026** -0.026* (0.013) (0.016) -0.519 (5.274)  All All	0.340**       0.336***       0.324**         (0.150)       (0.125)       (0.161)         0.769***       0.780***       0.795***         (0.061)       (0.120)       (0.121)         -0.026**       -0.026*       -0.026*         (0.013)       (0.016)       (0.015)         -0.519       1.835         (5.274)       (3.879)         -0.856       (5.528)    All All All All

Bootstrapped Standard errors clustered in presidential mandate in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1