

# Civil War and Foreign Influence\*

Facundo Albornoz<sup>†</sup>      Esther Hauk<sup>‡</sup>

August 1, 2011

## 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.

---

\*We thank Sami Berlinski, Benjamin J. Cohen, Matt Cole, Robert Elliott, Sebastián Galiani, Juan Carlos Hallak, Toby Kendall, Hannes Mueller, Gerard Padró i Miquel, James Reade, Sevi Rodríguez Mora, Martín Rossi, Jaydeep Roy, and seminar participants at LACEA-PEG 12<sup>th</sup> Meeting, Edinburgh, LSE and Universidad de San Andrés for valuable comments and discussions. We also thank Tim Besley and Torsten Persson for sharing their data on political conflict. Hauk thanks the LSE for its hospitality and acknowledges financial support from the Programa de Movilidad de Profesorado project PR2009-0375, from CICYT project number ECO2009-12695 and from the Barcelona GSE research and the government of Catalonia. Albornoz acknowledges funding from the ESRC (RES-062-23-1360).

<sup>†</sup>Department of Economics, Birmingham University; email: f.albornoz@bham.ac.uk

<sup>‡</sup>Instituto de Análisis Económico (IAE-CSIC), Campus UAB, Bellaterra (Barcelona); email: esther.hauk@iae.csic.es.

# 1 Introduction

There is a large and growing recent economic literature on the motives and consequences of civil wars. In general, the focus is almost exclusively on domestic determinants. The empirical research emphasizes diverse country-specific factors that affect the risk of civil conflict. Examples include 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). At the same time, theory is devoted to understanding why costly conflicts are not deterred. Different forms of information and commitment problems are therefore intensively studied. This paper complements both, the theory and the empirical literature, by developing a systematic investigation of the role of foreign influence, taking empirical form of U.S. interventions in third countries, as a determinant of civil (domestic) conflicts.

Many civil wars are characterized by the involvement of foreign governments supporting one of the sides in conflict.<sup>1</sup> The number of examples is large, even before and after the end of the Cold War.<sup>2</sup> However, identifying the effect of foreign influence on civil conflicts is a challenging task. Inter-

---

<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).

<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.

ventions in foreign conflicts 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 governments to intervene in domestic 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 involved as well in the civil war. But even if the “right” measure of foreign influence was available, it would be difficult to identify causality.

Our empirical strategy consists in identifying and quantifying systematic domestic U.S. political factors as determinants of the incidence of civil war around the world. As we show in our theoretical analysis, these factors determine the U.S. government’s willingness to intervene abroad. Thus, their changes constitute an exogenous source of variation of foreign influence from the perspective of a country potentially in conflict. We find that the incidence of civil war increases under Republican administrations and decreases in the level of presidential approval. These results show how the risk of civil war is affected by the political situation in the U.S. and suggest 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 benefits. 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. Also, at least some U.S. interventions aimed at protecting the interests of U.S. corporations abroad (Dube, Kaplan, and Naidu, Forthcoming), which might be associated with more generous campaign contributions. In either case, successful interventions abroad may spur 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

---

<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.

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.

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 that occurred from 1935 to 2006, 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>4</sup> Third, the U.S. is characterized by a two-party system and, importantly, the two parties, Republican and Democratic, have different views on the role of the U.S. in the international arenas. These 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>5</sup> This framework for foreign policy is rooted

---

<sup>4</sup>We mentioned examples in footnote 2.

<sup>5</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

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).<sup>6</sup> 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 (often distant and barely known) countries.<sup>7</sup>

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 (Forthcoming) and estimate the effect of a Republican

---

*“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, against overt armed aggression from any nation controlled by International Communism.”*  
Eisenhower (1957).

<sup>6</sup>In many of these cases, these regimes changes involved civil conflicts like in Iran (1953), Guatemala (1954), Nicaragua (1936).

<sup>7</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.

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. The Republican and presidential approval effects withstand several robustness checks. Their impact is quantitatively important: the estimates imply that the incidence of civil war increases in 60 % under Republican administrations. Also, a decrease of 10 percentage points in the presidential approval rating increases the incidence of civil war in 2 percentage points. Overall, our results suggest that US foreign influence is a sizable driver of conflict around the world. Similar results are obtained in a time-series analysis where we estimate the number of ongoing and new civil wars per-year.

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.

## 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.<sup>8</sup> This possi-

---

<sup>8</sup>A foreign country could do both, an open peace intervention and providing covert support to one of the sides in conflict. Our empirical results suggest that war interventions dominate the peace interventions.



bility 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.<sup>9</sup> 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.<sup>10</sup>

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 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

---

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

<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.

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

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).<sup>12</sup> 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 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 time-varying explanatory variables by their cross-sectional mean. Consequently,

---

<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.

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 exploits 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 (Forthcoming) 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 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 appease 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

---

<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.

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 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 parties. 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. More importantly, the exact amount of foreign resources depends on

---

<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.

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 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

---

<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.

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  $(1 - p_x) \geq (1 - p)$  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 appeasing the opposition if  $\frac{(1-\sigma)}{1-p_x}\Pi < x$*

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

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

or equivalently if

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

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 appeased by the domestic government if  $z > \frac{(1-\sigma)}{p_f}\Pi$*

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

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

or equivalently if

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

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.<sup>16</sup> 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 ex post 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 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

---

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

<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.

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.<sup>18</sup> 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 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 appeasement 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:

---

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

**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 appeasement 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.

Importantly, Proposition 3 implies the following corollary:

**Corollary 4** *Due to foreign-induced commitment problems, civil war will be the equilibrium outcome 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 trigger conflict without any growth-enhancing investments and 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  $f(r)$  where  $r$  are the resources dedicated to the intervention. Let  $f(0) = 0$  and  $f'(r) > 0$ ,  $f''(r) \leq 0$ . 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.

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  $u$ .

We assume that after a successful civil war the popularity jumps up to  $\bar{u} > u$ . Of course, this assumption implies the connection between the presidential approval and the willingness to intervene in foreign domestic conflicts. In the end, the answer about the realism of this assumption is an empirical matter. If the link we posit is empirically relevant, and U.S. influence affects the risk of civil war, we should obtain statistical support for this assumption, as we do. There are many potential micro-foundations for this assumption. A successful ending of the civil war may spur 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. 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 pro-corporation 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 enhance business opportunities

around the world.<sup>19</sup>

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

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

or equivalently

$$p_f(\bar{u} - u) - \delta(1 - p_f)(u - \underline{u}) > 0 \quad (1)$$

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

**Proposition 5** *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

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

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 oppo-

---

<sup>19</sup>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.

sition. Let  $\Pi_F$  be the total economic gains from a successful intervention. Then the foreign government is willing to intervene if

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

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

$$p'_f (\Pi_F + (\bar{u} - u) + \delta(u - \underline{u})) = f'(r) \quad (3)$$

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

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

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

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



and

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

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

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

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

**Proposition 6** *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

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

■

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.

These predictions are important since they relate politics in the potentially intervening foreign country to the probability of civil war around the world.

## 5 Empirical Exercises

Our analysis shows that ideology and popularity both affect the incentives to intervene in conflicts abroad. We focus now on the case of the U.S. as the source of foreign intervention. If U.S. foreign intervention is a determinant of civil war abroad, and the U.S. propensity to intervene depends on domestic political factors, then we should observe that political changes in the U.S. are systematically associated with the incidence of civil war around the world. Political changes in the U.S. constitute an exogenous variation 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 there might be other countries willing to intervene in conflicts abroad. However, the reasons for focusing on the U.S. are obvious. As

discussed in the introduction, (i) the U.S. is a global leader with massive economic and political interests all over the world; (ii) there is an extensive and well documented record of U.S. interventions; (iii) the Democratic and Republican government may differ in their foreign policies, and thus in their willingness to intervene in foreign conflicts;<sup>20</sup> and (iv) it is very likely that the U.S. citizens vote without these interventions in mind.<sup>21</sup>

## 5.1 Data

We exploit panel data covering 181 countries during the 1935 - 2006 period. We use a measure of civil war based on the new version of the Correlates of War (COW) database, which takes the value of 1 if a country  $j$  was involved in civil war in a given year. Civil war requires a domestic conflict with a cumulated death toll of more than 1000 people. As a robustness, we use the UCDP/PRIO civil-war incidence measure. Although fairly equivalent<sup>22</sup>, we prefer using the COW measure as it covers a larger period that include years before and after the Cold-War.

The measure of natural disasters is constructed by Besley and Persson (Forthcoming) 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.

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 ( $PA_t$ ).

---

<sup>20</sup>Republican and Democrats differ in their position vis-a-vis isolationism as well. It is important to clarify that isolationism refers to the U.S. reluctance to be involved in European inter-state conflicts, which is no indicator of their willingness to intervene in foreign conflicts. In fact, and perhaps, paradoxically, isolationism is strongly associated with the origin of U.S. interventions in Latin America, as exemplified by the Monroe Doctrine where it is established that Europe should refrain from influencing the Americas. See Sexton (Forthcoming).

<sup>21</sup>We refer the reader to the introduction for a justification of these claims.

<sup>22</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.

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

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,

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

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>23</sup>

## 5.2 Preliminary evidence

In order to provide 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 (below 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.

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

---

<sup>23</sup><http://www.ggd.net/maddison/>

Table 1: Number of Civil Wars, 1950-2000

	Democratic Administration	Republican Administration
Ongoing conflicts	6.88 (8.26)	9.88 (10.04)
Outbreaking conflicts	1.23 (1.36)	1.56 (1.35)
	High Presidential Approval	Low Presidential Approval
Ongoing conflicts	6.08 (6.77)	11.84 (6.02)
Outbreaking conflicts	0.94 (1.28)	2.03 (1.21)

Standard errors in parentheses.

### 5.3 Time series evidence

Another way to show the association between the political situation in the U.S. and the number of conflicts around the world is to regress the number of ongoing and emerging civil conflicts at  $t$  on  $REP_t$  and  $PA_t$ . In table 2, we display the results. In columns (1), (2) and (3) we observe that the number of conflicts is significantly higher under Republican governments and negatively associated with the level of presidential approval. In columns (4), (5) and (6), we observe a similar result, although smaller in magnitude, for the number of civil war outbreaks in a year. Observe that in columns (2) and (5) we control for the growth of gross world product ( $\Delta \log GWP_t$ ) and the results remain unchanged. Finally, we control for shocks in oil prices ( $\Delta \log \text{Oil Prices}_t$ ) in columns (3) and (6). In this way, we control for potential demand and productivity global shocks that might be associated with the incidence and onset of civil war around the world.

Table 2: Number of Conflicts per Year

	(1)	(2)	(3)	(4)	(5)	(6)
	Ongoing conflics	Ongoing conflics	Ongoing conflics	New conflics	New conflics	New conflics
$REP_t$	6.031*** (1.535)	5.953*** (1.556)	5.762*** (1.555)	0.722** (0.320)	0.694** (0.325)	0.786*** (0.318)
$PA_t$	-0.154** (0.0592)	-0.152** (0.0598)	-0.149*** (0.0590)	-0.028** (0.014)	-0.028** (0.014)	-0.030** (0.014)
$\Delta \log GWP_t$		0.455*** (0.154)			0.162*** (0.0353)	
$\Delta \log \text{Oil Prices}_t$			0.016 (0.016)			-0.004 (0.003)
Constant	14.30*** (3.712)	14.24*** (3.744)	13.205*** (3.829)	2.738*** (0.897)	2.717*** (0.902)	3.001*** (0.959)
Observations	64	64	64	64	64	64
R-squared	0.265	0.268	0.275	0.136	0.144	0.152

Robust standard errors clustered by year in parentheses.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

## 5.4 Panel data evidence

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 (Forthcoming). Consequently, we use a variable of natural disasters ( $Natural\ Disaster_{j,t}$ ) as an instrument for wage or income shocks.<sup>24</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 (Forthcoming), Brückner and Ciccone (2010) or Miguel, Satyanath, and Sergenti

<sup>24</sup>These constitute exogenous variations in the evolution of the wage/income rate.

(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  $PA$  are 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 ( $\Delta \log \text{Oil Price}_t$ ). 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. We also carry out a great variety of robustness checks tackling specific concerns and showing that our predictions do not hold in situations where we expect them to fail.

To summarize, we test estimations of the following type:

$$conflict_{jt} = \alpha_1 \text{Natural Disaster}_{jt} + \alpha_2 REP_t + \alpha_3 PA_t + x'_t \beta + \gamma_j + \mu_{jt}, \quad (5)$$

where  $x'$  is a vector of additional (country invariant) year variables like the mentioned  $\Delta \log GWP_t$ ,  $\Delta \log GWP_{US,t}$  or  $\Delta \log \text{Oil Price}_t$ .

As we follow Besley and Persson (Forthcoming) 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  $\alpha_3$ .

## 5.5 Main Results

Table 3 reports our baseline results. We estimate different variations of (5) using OLS. We cluster the error terms both at the country and presidential mandate levels. Alternatively, we also estimate conditional logits which are unreported here to save space but available in Albornoz and Hauk (2010). 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 (Forthcoming). Importantly, the coefficient associated with  $REP_t$  is positive and significant. The magnitude of the estimated effect is far from trivial: with an unconditional probability of conflict of around 5%, this corresponds to an increase of about 60%. We can also observe the significantly negative coefficient associated with our U.S presidential approval variable ( $PA_t$ ). This coefficient indicates that a decrease of  $PA_t$  in 1 scale point raises the incidence of civil war by 2%.

The effects of these two variables are robust to any modification we perform on the basic specification. In the remaining specifications we include  $\Delta \log GWP_t$ . 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  $\Delta \log GWP_{US,t}$ , which controls for GDP growth in the U.S. 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 our main variables. 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 statistically significant positive effect of variations in oil prices, a result interesting in itself, the inclusion of this additional year (country-invariant) variable does not affect our main



results.

## 5.6 Robustness

We perform a multiplicity of robustness checks, which we expose according to different potential concerns.

### Different samples

Our first question is whether our results withstand changes in sampling. Reassuringly, this is not the case. We begin by restricting the sample to OECD countries. Of course, we do not expect U.S. influence to matter for these countries, and that is what it shown in column 1 in table 4. In column 2, we restrict the sample to non-OECD countries. Clearly, this result in higher coefficients associated with  $REP_t$  and  $PA_t$ .

In column 3, we display the results of a counterfactual. We restrict our sample to former French colonies where we should not expect strong U.S. intervention.<sup>25</sup> If anything, these countries are influenced by France. Thus, our results should not hold. As shown in column 5, neither REP nor PA are associated with significant coefficients, strengthening our argument.

Finally, in column 4, 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

---

<sup>25</sup>We thank Benjamin Cohen for suggesting this check.

Table 3: Baseline results

	(1)	(2)	(3)	(4)
Natural Disaster <sub><i>j,t</i></sub>	0.031*** (0.014) [0.008]	0.031*** (0.014) [0.008]	0.029*** (0.014) [0.008]	0.029*** (0.014) [0.008]
REP <sub><i>t</i></sub>	0.033*** (0.009) [0.013]	0.034*** (0.009) [0.012]	0.034*** (0.009) [0.012]	0.032*** (0.009) [0.012]
PA <sub><i>t</i></sub>	-0.001*** (0.0004) [0.0004]	-0.001*** (0.0003) [0.0004]	-0.001*** (0.0004) [0.0004]	-0.001*** (0.0004) [0.0004]
$\Delta \log \text{GWP}_t$		-0.077*** (0.015) [0.020]	0.056 (0.076) [0.127]	0.06 (0.076) [0.136]
$\Delta \log \text{GDP}_{US,t}$			-0.0179 (0.053) [0.117]	-0.017 (0.053) [0.116]
$\Delta \log \text{Oil Prices}_t$				0.0001* (0.0001) [0.0001]
Constant	0.099*** (0.018) [0.029]	0.104*** (0.018) [0.029]	0.097*** (0.018) [0.033]	0.089*** (0.016) [0.029]
Sample	All	All	All	All
Observations	6,750	6,750	6,744	6,744
R-squared	0.302	0.303	0.298	0.298

Robust standard errors clustered by U.S. mandate in parentheses.

Robust standard errors clustered by country in brackets.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

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  $PA_t$ .

### Different Specifications

We explore different specifications in Table 5. In column 1, we report an estimation with decade fixed effects. This is important as there are decades associated with higher incidence of civil war (Besley and Persson, Forthcoming). We include a time trend in column 2. These modifications do not qualitatively affect the results, although the coefficient associated with  $REP$  gets smaller and loses some significance once both decades fixed effects and the trend are included. In column 3, we explore if the Republican effect is driven by any specific year of the presidential term. We do so by disaggregating  $REP$  in the first, second, third and fourth year of a Republican term. All the coefficients associated with  $REP_t^{Y1}$ ,  $REP_t^{Y2}$ ,  $REP_t^{Y3}$ ,  $REP_t^{Y4}$  are positive and significant as we expected. If anything, the coefficients of the last two years are higher, which might suggest that politically motivated intervention is weaker during the first years in office.

We finally explore whether our results are driven by the Cold War. In column 4, we add a dummy to differentiate this period. In line with the literature, we do not find a direct effect of the Cold War on civil war (Collier, Hoeffler, and Sambanis, 2005).<sup>26</sup> We also observe that our results remain unchanged.<sup>27</sup>

---

<sup>26</sup>The Cold War has other important effects on civil war. In a recent paper, Balcells and Kalyvas (2010) show that the effect of the Cold War is to shape the form, not the incidence, of civil war. For example, they show that insurgence (guerrillas or irregular wars) is the dominant form of conflict only during the Cold War.

<sup>27</sup>In Albornoz and Hauk (2010), we split the sample and run specific regressions for the Non-Cold-War and Cold-War periods. In both samples, the coefficients of  $REP$  and  $PA$  are both significant and appear with the same sign as in the baseline of the regressions.

## Alternative stories

Our results might be suffering from 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 ( $NCW_{EY}$ ). As reported in column 1 of table 6, the estimates of the Republican and Presidential Approval effects come out virtually the same.

We also control for the intensity of conflicts around the world by including the number of civil wars in the same year ( $NCW_t$ ). The results displayed in column 2 show that this comes out with no effect on our results.

Importantly, the Republican effect might be driven by particularly interventionist presidents independently of their party ideology. If particularly aggressive presidents happened to be republican, then we would be reflecting the spurious impression that republicans are more prone to intervene in foreign civil wars. For example, the U.S. presidential term during which the world suffered the highest number of civil war took place under Ronald Reagan. To control for this, we run all the regressions excluding one US president at the time. We don't report all the regressions to save space. In any case, none of these exclusions affected the results. We report in columns 3 and 4, the regressions excluding Ronald Reagan and Lyndon B. Johnson.

## Other robustness checks

We have also run a great variety of unreported additional regressions.<sup>28</sup> These are as follows: (i) we estimate conditional logits for all the specifications; (ii) we use the UCDP/PRIO measure of civil-war incidence; (iii) we try with different samples and run our regressions separately for Sub-Saharan and commodity exporters countries and (iv) we replaced  $NaturalDisaster_{j,t}$  by

---

<sup>28</sup>Most of these are reported in Albornoz and Hauk (2010) or available upon request.

the actual measure of GDP growth and (v) as in Collier and Hoeffler (2004), we control for the type of political regime by adding a new variable that takes the value of 1 for democratic countries defined using the Polity IV measures of democracy. The effect of U.S. political factors on the incidence of civil war withstand any of these robustness checks.

## 5.7 The Onset of Civil War

Our theoretical analysis shows that foreign intervention increases the occurrence of civil war by 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 7 our basic specification (columns 1-4). To give an idea of robustness we control for the number of conflicts around the world per year (column 5) and for the Cold War years (column 6).<sup>29</sup> 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>30</sup>

## 6 Concluding Remarks

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 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

---

<sup>29</sup>We leave the other controls unreported to save space. They are available upon request

<sup>30</sup>The fact that the results are relatively weaker was to be expected according to our theory and the constraint imposed by fewer observations.

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.

## References

- AIDT, T., AND F. ALBORNOZ (Forthcoming): “Political Regimes and Foreign Intervention,” *Journal of Development Economics*.
- AIDT, T., F. ALBORNOZ, AND M. GASSEBNER (2010): “The Golden Halo and Political Transitions,” mimeo.
- AIDT, T., AND U. HWANG (2008): “On the Internalization of Cross-National Externalities through Political Markets: The Case of Labour Standards,” *Journal of Institutional and Theoretical Economics*, 164, 509–533.
- ALBORNOZ, F., AND E. HAUK (2010): “Civil War and Foreign Influence,” UFAE and IAE Working Papers 836.10.
- ALDRICH, J., C. GELPI, P. FEAVER, J. REIFLER, AND K. T. SHARP (2006): “Foreign Policy and the Electoral Connection,” *Annual Review of Political Science*, 9, 477–502.
- ALDRICH, J., J. SULLIVAN, AND E. BORGIDA (1989): “Foreign Affairs and Issue Voting: Do Presidential Candidates ”Waltz Before A Blind Audience?,” *The American Political Science Review*, 83(1), 123–141.
- ANTRÀS, P., AND G. PADRÓ I MIQUEL (2008): “Foreign Influence and Welfare,” NBER Working Paper 14129.

- BALCELLS, L., AND S. KALYVAS (2010): “International System and Technologies of Rebellion: How the End of the Cold War Shaped Internal Conflict.,” *American Political Science Review*, 104(3), 415–429.
- BARTELS, L. (Forthcoming): “The Study of Electoral Behavior,” in *The Oxford Handbook of American Elections and Political Behavior*, ed. by J. Leighley. Oxford University Press.
- BERGER, D., W. EASTERLY, N. NUNN, AND S. SATYANATH (2010): “Commercial Imperialism? Political Influence and Trade During the ColdWar,” Mimeo.
- BESLEY, T., AND T. PERSSON (Forthcoming): “The Logic of Political Violence,” *Quarterly Journal of Economics*.
- BLATTMAN, C., AND E. MIGUEL (2009): “Civil War,” NBER Working Paper 14801.
- BONFATTI, R. (2010): “Foreign Influence and the Cold War History of Democracy in Latin America,” Mimeo.
- BRÜCKNER, M., AND A. CICCONE (2010): “International Commodity Prices, Growth and the Outbreak of Civil War in Sub-Saharan Africa,” *The Economic Journal*, 120(544), 519–534.
- CERVELLATI, M., U. SUNDE, AND S. VALMORI (2010): “Diseases and Conflicts,” .
- CHASSANG, S., AND G. PADRÓ I MIQUEL (Forthcoming): “Conflict and Deterrence under Strategic Risk,” *Quarterly Journal of Economics*.
- CICCONE, A. (2010): “Transitory Economic Shocks and Civil Conflict,” mimeo.
- COLLIER, P., AND A. HOFFLER (2004): “Greed and grievance in civil war,” *Oxford Economic Papers*, 56(4), 563–595.

- (2007): “Civil War,” in *Handbook of Defense Economics*, ed. by T. Sandler, and K. Hartley. Elsevier.
- COLLIER, P., A. HOEFFLER, AND N. SAMBANIS (2005): “The Collier-Hoeffler Model of Civil War Onset and the Case Study Project Research Design,” in *Understanding Civil War*, ed. by P. Collier, and N. Sambanis, pp. 1–33. The World Bank.
- DAL BO, E., AND R. POWELL (2009): “A Model of Spoils Politics,” *American Journal of Political Science*, 53(1), 207–222.
- DJANKOV, S., AND M. REYNAL-QUEROL (2008): “Poverty and Civil War: Revisiting the evidence,” CEPR Discussion Papers 6980.
- DUBE, A., E. KAPLAN, AND S. NAIDU (2008): “Coups, Corporations and Classified Information,” NBER Working Paper Series, 13992.
- (Forthcoming): “Coups, Corporations and Classified Information,” *Quarterly Journal of Economics*.
- DUBE, O., AND J. VARGAS (2008): “Commodity Price Shocks and Civil Conflict: Evidence from Columbia,” mimeo.
- EASTERLY, W., S. SATYANATH, AND D. BERGER (2008): “Superpower Interventions and their Consequences for Democracy: an Empirical Inquiry,” NBER WP13992.
- EISENHOWER, D. (1957): “The official monthly record of United States foreign policy,” *United States, Department of State, Bulletin*, XXXVI, 86–87.
- ESTEBAN, J., AND D. RAY (2008): “On the Saliency of Ethnic Conflict,” *American Economic Review*, 98(5), 2185–2202.
- FEARON, J. (2004): “Why do some civil wars last so much longer than others?,” *Journal of Peace Research*, 41(3), 275–301.



- FEARON, J. D. (1995): “Rationalist Explanations of War,” *International Organization*, 49(3), 379–414.
- GARTZKE, E., AND K. GLEDITSCH (2006): “Balancing, Bandwagoning, Bargaining and War: Signaling and Selection among Third-Party Joiners,” Columbia University.
- GLEDITSCH, K. (2007): “Transnational Dimensions of Civil War,” *Journal of Peace Research*, 44(3), 293–309.
- GOWA, J. (1998): “Politics at the Water’s Edge: Parties, Voters, and the Use of Force Abroad,” *International Organization*, 52(2), 307–324.
- HEGRE, H., AND N. SAMBANIS (2006): “A Sensitivity Analysis of the Empirical Literature on Civil War Onset,” *Journal of Conflict Resolution*, 50(4), 508–535.
- HESS, G. D., AND A. ORPHANIDES (1995): “War Politics: An Economic, Rational-Voter Framework,” *American Economic Review*, 85(4), 828–846.
- HURWITZ, J., AND M. PEFFLEY (1987): “The Means and Ends of Foreign Policy as Determinants of Presidential Support,” *American Journal of Political Science*, 31(2), 236–258.
- JACKSON, M., AND M. MORELLI (2007): “Political Bias and War,” *American Economic Review*, 97(4), 1353–1373.
- (Forthcoming): “The Reasons for Wars - an Updated Survey,” in *Handbook on the Political Economy of War*, ed. by C. Coyne. Elgar Publishing.
- JAYACHANDRAN, S. (2006): “The Jeffords Effect,” *Journal of Law and Economics*, 49(2), 397–425.

- KESSEL, J. (2004): “Views of the Voters,” in *Models of voting in presidential elections: the 2000 U.S. election*, ed. by H. Weisberg, and C. Wilcox. Stanford University Press.
- KINZER, S. (2006): *Overthrow: America’s Century of Regime Change from Hawaii to Iraq*. Times Books.
- LEWIS-BECK, M., R. NADEAU, AND A. ELIAS (2008): “Economics, Party, and the Vote: Causality Issues and Panel Data,” *American Journal of Political Science*, 52(1), 84–95.
- MCCORMICK, J. M., AND E. R. WITTKOPF (1990): “Bipartisanship, Partisanship, and Ideology in Congressional-Executive Foreign Policy Relations, 1947-1988,” *The Journal of Politics*, 52(4), 1077–1100.
- MEERNIK, J. (1993): “Presidential Support in Congress: Conflict and Consensus on Foreign and Defense Policy,” *Journal of Politics*, 55(3), 569–587.
- MEERNIK, J., AND P. WATERMAN (1996): “The Myth of the Diversionary Use of Force by American Presidents,” *Political Research Quarterly*, 49(3), 573–490.
- MIGUEL, E., S. SATYANATH, AND E. SERGENTI (2004): “Economic Shocks and Civil Conflict: An Instrumental Variables Approach,” *Journal of Political Economy*, 112(4), 725–753.
- MILLER, R. (1995): “Domestic Structures and the Diversionary Use of Force,” *American Journal of Political Science*, 39, 760–785.
- (1999): “Regime Type, Strategic Interaction, and the Diversionary Use of Force,” *Journal of Conflict Resolution*, 43, 388–402.
- MITCHELL, S., AND W. H. MOORE (2002): “Presidential Uses of Force During the Cold War: Aggregation, Truncation, and Temporal Dynamics,” *American Journal of Political Science*, 46, 438–452.

- MONTALVO, J. G., AND M. REYNAL-QUEROL (2005): “Ethnic polarization, potential conflict and civil war,” *American Economic Review*, 95(3), 796–816.
- MORGAN, T., AND K. BICKERS (1992): “Domestic Discontent and the External Use of Force,” *Journal of Conflict Resolution*, 36, 25–52.
- OSTROM, C., AND B. JOB (1986): “The President and the Political Use of Force,” *American Political Science Review*, 80, 541–566.
- POWELL, R. (2004): “The Inefficient Use of Power: Costly Conflict with Complete Information,” *American Political Science Review*, 98(2), 231–241.
- (2006): “War as a Commitment Problem,” *International Organization*, 60, 169–203.
- REGAN, P. M. (2000): *Civil Wars and Foreign Powers: Outside Intervention in Intrastate Conflict*. University of Michigan Press.
- ROURKE, J. (1984): *Congress and the Presidency in U.S. Foreign Policy-making: A Study of Interaction and Influence*. Westview Press.
- SALEHYAN, I. (2007): “Transnational Rebels: Neighboring States as Sanctuary for Rebel Groups,” *World Politics*, 59(2), 217–242.
- (2010): “The Delegation of War to Rebel Organizations,” *Journal of Conflict Resolution*, 54(3), 493–515.
- SALEHYAN, I., AND K. GLEDITSCH (2006): “Refugees and the Spread of Civil War,” *International Organization*, 60, 335–366.
- SALEHYAN, I., K. GLEDITSCH, AND D. E. CUNNINGHAM (2010): “Explaining Transnational Support for Insurgent Groups,” University of North Texas.

- SAMBANIS, N. (2005): "Conclusion: Using Case Studies to Refine and Expand the Theory of Civil War," in *Understanding Civil War*, ed. by P. Collier, and N. Sambanis, pp. 303–334. The World Bank.
- SCHELLING, T. (1960): *The Strategy of Conflict*. Harvard University Press.
- SEXTON, J. (Forthcoming): *The Monroe Doctrine: Anti-colonialism, Imperialism and the Creation of an American Nation*.
- SMITH, A. (1996): "Diversionary Foreign Policy in Democratic Systems," *International Studies Quarterly*, 40(1), 133–153.
- SOUVA, M., AND D. ROHDE (2007): "Elite Opinion Differences and Partisanship in Congressional Foreign Policy, 1975-1996," *Political Research Quarterly*, 60(1), 113–123.
- TARAR, A. (2006): "Diversionary Incentives and the Bargaining Approach to War," *International Studies Quarterly*, 50, 169–188.
- TRUMAN, H. S. (1947): "The official monthly record of United States foreign policy," *United States, Department of State, Bulletin*, XVI(Supplement), 829–832.
- WALTER, B. (1997): "The Critical Barrier to Civil War Settlement," *International Organization*, 51(3), 335–364.
- WITTKOPF, E. R., AND J. M. MCCORMICK (1998): "Congress, the President, and the End of the Cold War: Has Anything Changed?," *The Journal of Conflict Resolution*, 42(4), 440–466.

Table 4: Different samples

	(1)	(2)	(3)	(4)
Natural Disaster <sub>j,t</sub>	0.006* (0.005) [0.002]	0.040*** (0.018) [0.012]	0.001 (0.010) [0.013]	0.030*** (0.014) [0.008]
REP <sub>t</sub>	-0.001 (0.001) [0.009]	0.042*** (0.011) [0.021]	0.012 (0.021) [0.016]	0.034*** (0.010) [0.018]
PA <sub>t</sub>	0.00003 (0.0002) [0.0003]	-0.001*** (0.0004) [0.0005]	-0.0004 (0.001) [0.001]	-0.001*** (0.0004) [0.0004]
SOC <sub>t</sub> <sup>SW</sup>				0.012 (0.011) [0.014]
CON <sub>t</sub> <sup>UK</sup>				0.012 (0.009) [0.009]
$\Delta \log \text{GWP}_t$	-0.133 (0.099) [0.058]	-0.075*** (0.016) [0.022]	0.005 (0.035) [0.069]	-0.078*** (0.015) [0.019]
Constant	0.016* (0.009) [0.020]	0.124*** (0.021) [0.034]	0.047 (0.032) [0.033]	0.101*** (0.019) [0.030]
Sample	Non-OECD countries	OECD countries	Francophone countries	all
Observations	1,242	5,508	889	6,750
R-squared	0.102	0.304	0.235	0.304
Robust standard errors clustered by U.S. mandate in parentheses.				
Robust standard errors clustered by country in brackets				
*** p<0.01, ** p<0.05, * p<0.1				

Table 5: Different Specifications

	(1)	(2)	(3)	(4)
Natural Disaster $_{j,t}$	0.022 (0.013) [0.008]	0.015 (0.013) [0.009]	0.031** (0.014) [0.008]	0.030*** (0.014) [0.008]
REP $_t$	0.037*** (0.010) [0.012]	0.012** (0.006) [0.006]		0.038*** (0.009) [0.016]
PA $_t$	-0.001*** (0.0003) [0.0003]	-0.001*** (0.0003) [0.0001]	-0.001** (0.0003) [0.0004]	-0.001** (0.0003) [0.0004]
$\Delta \log \text{GWP}_t$	-0.063*** (0.017) [0.026]	-0.064*** (0.014) [0.021]	-0.077*** (0.015) [0.020]	-0.072*** (0.016) [0.022]
REP $_t^{Y1}$			0.033*** (0.009) [0.016]	
REP $_t^{Y2}$			0.033*** (0.011) [0.018]	
REP $_t^{Y3}$			0.036*** (0.010) [0.017]	
REP $_t^{Y4}$			0.034*** (0.009) [0.021]	
Cold War $_t$				0.014 (0.012) [0.014]
Constant	0.118*** (0.021) [0.019]	-3.466* (2.065) [2.231]	0.104*** (0.018) [0.029]	0.115*** (0.017) [0.029]
Decade Fixed Effects	yes	yes		
Year Trend		yes		
Observations	6,750	6,750	6,750	6,750
R-squared	0.311	0.316	0.303	0.304

Robust standard errors clustered by U.S. mandate in parentheses.

Robust standard errors clustered by country in brackets.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$  46

Table 6: Alternative Stories

	(1)	(2)	(3)	(4)
Natural Disaster <sub><i>j,t</i></sub>	0.018* (0.013) [0.009]	0.020* (0.013) [0.009]	0.031** (0.014) [0.008]	0.031** (0.014) [0.009]
REP <sub><i>t</i></sub>	0.021** (0.008) [0.008]	0.015*** (0.007) [0.005]	0.033*** (0.010) [0.018]	0.034*** (0.010) [0.018]
PA <sub><i>t</i></sub>	-0.001** (0.0003) [0.0002]	-0.001* (0.0003) [0.0001]	-0.001*** (0.0004) [0.0004]	-0.001*** (0.0003) [0.0005]
$\Delta \log \text{GWP}_t$	-0.071*** (0.013) [0.018]	-0.080*** (0.016) [0.016]	-0.077*** (0.015) [0.020]	-0.074*** (0.015) [0.020]
NCW <sub><i>EY</i></sub>	0.004*** (0.001) [0.001]			
NCW <sub><i>t</i></sub>		0.004*** (0.001) [0.001]		
Constant	0.072*** (0.020) [0.012]	0.049** (0.022) [0.011]	0.104*** (0.018) [0.029]	0.105*** (0.017) [0.030]
Observations	6,750	6,750	6,750	6,562
R-squared	0.314	0.311	0.303	0.309

Robust standard errors clustered by U.S. mandate in parentheses.  
Robust standard errors clustered by country in brackets  
\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 7: The Onset of Civil War

	(1)	(2)	(3)	(4)	(5)	(6)
Natural Disaster <sub><i>j,t</i></sub>	0.007 (0.008)	0.007 (0.008)	0.007 (0.008)	0.007 (0.008)	0.007 (0.008)	0.006 (0.008)
REP <sub><i>t</i></sub>	0.004** (0.001)	0.004** (0.001)	0.003** (0.001)	0.003** (0.001)	0.004** (0.001)	0.004** (0.001)
PA <sub><i>t</i></sub>	-0.0002* (0.0001)	-0.0002* (0.0001)	-0.0002* (0.0001)	-0.0002* (0.0001)	-0.0002* (0.0001)	-0.0002* (0.0001)
$\Delta \log \text{GWP}_t$		0.054 (0.038)	0.077* (0.039)	0.077* (0.039)	0.051 (0.036)	0.053 (0.039)
$\Delta \log \text{GDP}_{US,t}$			-0.0397** (0.018)	-0.0398* (0.018)		
$\Delta \log \text{Oil Prices}_t$			0.00001 (0.00002)			
Cold War <sub><i>t</i></sub>					0.001 (0.004)	
Number of Conflicts <sub><i>t</i></sub>						0.0002 (0.0002)
Constant	0.029** (0.010)	0.025** (0.010)	0.024** (0.010)	0.023** (0.009)	0.024** (0.010)	0.023** (0.010)
Sample	All	All	All	All	All	All
Observations	4,128	4,128	4,128	4,128	4,128	4,128
R-squared	0.080	0.081	0.081	0.081	0.081	0.081

Robust standard errors in parentheses clustered by presidential mandates.

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1