Third-Party Intervention and the Civil War Process*

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What effect do third parties have on the evolution of civil wars? The authors argue that intervention by third parties is central to the civil war process, a process that is characterized by the duration of hostilities and the type of outcome. The authors examine empirically the effect of third-party intervention into civil wars during the period 1816–1997, using the event history framework of competing risks. From the perspective of competing risks, as a civil war endures, it is at risk of experiencing a transition to one of three civil war outcomes in our sample: military victory by the government, military victory by the opposition group, and negotiated settlement. The competing risks approach provides considerably better leverage on the dynamic qualities of civil wars and, in particular, the influence of interventions by third parties. The analysis suggests that third-party interventions can be decisive in the evolution of civil wars and that third-party interventions have a different effect on the duration than different civil war outcomes. The results show that third-party intervention decreases the time until the supported group achieves military victory. Furthermore, third-party interventions, on both the government and opposition sides, increase the time until a negotiated settlement.

Introduction

What effect do third parties have on the evolution of civil wars? This question is central to an ongoing debate among policymakers regarding whether, and by what means, third parties can influence the course of these conflicts. This debate often turns to how policy advocates view the influence of third-party interventions on two properties of civil war: (1) duration and (2) outcome. Some policy advocates argue that third parties are bound by moral imperative to intervene in civil wars to stop the bloodshed. Furthermore, these advocates argue that a rapid cessation of hostilities, as well as a negotiated settlement, can be fostered through third-party involvement (Holbrooke, 1998). Conversely, other policy advocates argue that third parties should refrain from intervening in civil wars, because such interventions are likely to be costly to the intervener and lengthen civil wars. From this latter perspective, there is little hope that third parties will achieve a lasting peace through a negotiated settlement, because settlements preclude the decisive outcomes necessary for long-term stability in the post-civil war state (Luttwak, 1999).

The theoretical literature on civil wars bears on this policy debate. In particular, this literature underscores the dynamic qualities of civil wars, such that various conflict outcomes compete with one another (Rosenau, 1964; Pillar, 1983), a competition that can be strongly influenced by third-party involvement. Despite these longstanding theoretical foundations, recent research fails to address this dynamism, with studies frequently examining the duration and outcome of civil wars separately. For example, Balch-Lindsay & Enterline (2000), Collier, Hoeffler & Söderbom (2004), Elbadawi & Sambanis (2000), Fearon (2004), and Regan (2002) each examine the causes of civil war duration, but do not incorporate civil war outcome into their studies of duration. Conversely, Mason & Fett (1996), Mason, Weingarten & Fett (1999), and Walter (2002)

examine civil war outcomes, but the duration of the civil war is not integral to the competition between outcome types; rather, duration is a *post hoc* predictor of civil war outcome.

In this article, we argue that, in order to bring the scholarly study of civil wars in line with the aforementioned theoretical foci and issues of contemporary policy, it is necessary to employ an approach that explicitly incorporates the competition between civil war outcomes. To do so, we begin with the assumption that these two dimensions of civil war – duration and outcome – are observable manifestations of the *civil war process* and are causally interdependent. Throughout this process, the probability of different types of outcomes is a function of various political, economic, and social factors. This approach to studying civil wars can be facilitated empirically from the perspective of 'competing risks' in the event history literature (Box-Steffensmeier & Jones, 2004). We believe that a competing risks approach to civil wars not only furnishes insights into the influence of third parties, but also provides an example of an econometric technique that meshes well with longstanding theoretical claims about civil war.

In the following section, we review the literature as it bears on the termination of conflicts and civil wars, before discussing the role of third parties in the civil war process. Next, we introduce the framework of competing risks and then turn to formulating a set of hypotheses about the influence of interventions by third parties, as well as the effects of several factors identified in the current literature as relevant to the civil war process. Thereafter, we discuss our research design and carry out our empirical analysis. We close the article with a discussion of the implications of our analysis.

Conflicts as Processes

Scholars often conceptualize interstate conflicts as processes, rather than discrete events. Early research on conflict termination

differentiated between the types, or 'modes', of conflict termination (Carroll, 1969; Holsti, 1966; Phillipson, 1916). Other scholars developed predictive models of war termination based on the attributes of conflicts, such as casualties (Klingberg, 1966). World War II stimulated several reflections on the dynamic process of victory and defeat in conflicts. For example, Calahan (1944) argues that the loser dictates the terms of the peace, a theme reasserted by Coser (1961). In a controversial assessment, Kesckemeti (1958) suggests that the manner in which a conflict concludes is nearly predetermined. Other research resorts to formal methods to model the process by which conflicts terminate, through rational decisionmaking (Porsholt, 1966; Wright, 1965). This decision-theoretic approach is further developed in recent approaches to studying conflict, with Wittman (1979), for example, proposing that war endings are the culmination of a process between war participants who are constantly updating their expectations regarding the eventual outcome of a conflict. Similarly, Pillar (1983: 345) argues that 'the decision to negotiate is thus not so much a choice of a discrete alternative but rather the selection of one moment along an anticipated continuum of time in which the military situation constantly changes'.

These formal approaches provided a fruitful foundation for the subsequent study of civil wars. For instance, Mason & Fett (1996: 548) rely on Wittman (1979) to argue that the choice by civil war combatants of whether to seek an end to a civil war through a negotiated settlement or continue fighting 'is a function of the difference in each party's expectations concerning the eventual outcome of the conflict if a negotiated settlement is not reached immediately'. Each combatant's expected utility for continuing a conflict is a function of its subjective estimate of the probabilities for victory and defeat and their attendant utility for these two outcomes. In turn, this expected utility calculation is conditioned by the 'rate at which [a] party absorbs costs of

continued conflict' (Mason & Fett, 1996: 548). The first half of the authors' formal model is balanced by each party's expected utility for a negotiated settlement.

Subsequently, Mason, Weingarten & Fett (1999) assess the effects of factors similar to those included in Mason & Fett (1996) on three civil war outcomes: government military victory, rebel military victory, and negotiated settlement. The authors find that interventions by third parties reduce the probability of a negotiated settlement; yet, as a civil war endures, third-party intervention increases the probability of such a settlement. Walter (2002) examines whether the costs of the civil war, the balance of power between the disputants, the domestic political institutions of the civil war state, ethnicity issues, the stakes, mediation, and credible commitments influence the probability of negotiations, signed peace bargains, and the success of peace settlements. Walter's empirical analysis of civil wars during the post-WWII period indicates that outside security guarantees and power-sharing pacts are significantly related to peaceful civil war settlements.

Finally, DeRouen & Sobek (2004) formulate and test empirically a model of the dynamics of civil war duration and outcome grounded in the capacity of the civil war state. The authors examine four outcomes: government victory, rebel victory, truce, and treaty. DeRouen & Sobek find that state capacity, in the form of an effective state bureaucracy, reduces the odds that anti-government rebel groups will achieve victory. The authors conclude that 'duration decreases the probability of a government victory and increases the probability of treaty' (2004: 315). This conclusion generally supports Zartman's (1985, 1993) notion of a hurting stalemate, in which a government that is unable to defeat a rebel group rapidly is less likely to do so successfully as time passes. The authors also find that the longer a civil war endures, the greater the costs to the government for prosecuting it further, and the more likely the government will seek

to settle a conflict through peaceful means. However, DeRouen & Sobek (2004) model is decidedly state-centric, thereby excluding involvement by third parties independent of United Nations' sponsored interventions.

Third Parties and the Civil War Process

Despite a traditional emphasis on national-level causes and consequences of civil wars, recognition of the international dimensions of these conflicts is longstanding. For example, Modelski (1964) asserts that internal conflicts are part and parcel of the international system, an argument reiterated in Deutsch (1964). Rosenau (1964) theorizes that the type and evolution of a civil war influences third-party intervention, and he argues that the goals of third parties condition the way in which civil wars end. Drawing explicitly or implicitly on this early work, current research on the role of third parties divides into three roughly defined research agendas: (1) the causes of third-party intervention in civil wars, (2) the effect of third-party intervention on civil war outcomes, and (3) the effect of third-party intervention on the duration of civil wars.

The first research agenda explores the conditions that lead third parties to join ongoing civil wars. For example, Suhrke & Noble (1977) rely on case studies to demonstrate that third parties often intervene in ethnic civil wars for reasons entirely exogenous to the wars themselves, and, thus, civil wars are often fought against a backdrop of multiple levels of interest, allegiance, and involvement by third parties. Holl (1993) argues that third parties are more likely to enter civil wars as these conflicts approach termination, thereby introducing the complicating factors associated with multiple preferences and coalition formation, and, ultimately, when and how civil wars end. Finally, Regan's (2000) analysis of third-party involvement in civil wars during the post-WWII period suggests that third parties are less likely to intervene when

the intensity of a civil war is high and more likely to intervene when a humanitarian crisis is imminent. Despite some disagreement, a central thrust of this first agenda is that third parties are frequent interveners in civil wars and these interventions are more often than not grounded in self-interested motives, motives that are central to the evolution of intrastate conflicts.

The second agenda focuses on the effect of third parties on the outcome of civil wars. For example, Zartman (1993) concludes that civil war belligerents rely on third parties, not only for resources and sanctuary, but also for leverage, both on the battlefield and at the negotiating table, a condition that he refers to as 'triangulation'. In his empirical analysis of civil wars in the post-WWII period, Regan (1996, 2000) finds that third parties are more likely to be successful in their interventions in civil wars when they resort to a strategy mixing economic and military policies. Carment & James (1998: 591) report that, while 'more intensive initial interventions are more likely to result in cooperative outcomes', non-conflictual outcomes are also a function of the rebel group's salience for the conflict and its military capability. Mason, Weingarten & Fett (1999) find that third-party interventions make a negotiated settlement less likely, unless this intervention occurs once a civil war becomes protracted, at which point the likelihood of a negotiated settlement increases, a finding that is bolstered by Walter's (2002) analysis of third-party guarantees.

The third research agenda focuses on the effect of third-party intervention on the duration of civil wars. Several studies of civil war outcomes develop theoretical arguments linking the outcomes of these conflicts to their duration. Generally, the arguments advanced in these studies tie civil war duration to the costs of fighting, whereby long wars increase the costs to the combatants and, in turn, increase the likelihood that a civil war will end in a specific way. Indicative of these

studies is reliance on *post hoc* knowledge of civil war duration to inform statistical models intended to predict civil war outcomes. Alternatively, several studies examine the effect of third parties on civil war duration itself, without explicitly incorporating the manner in which civil wars end. For example, Collier, Hoeffler & Söderbom (2004) conclude that civil war states that are ethnically fractionalized are likely to experience longer civil wars, yet the authors do not consider the role of third parties. Balch-Lindsay & Enterline (2000) explore the effect of simultaneous interventions on the government and opposition sides in a civil war and conclude that these interventions result in longer civil wars, a finding corroborated in Elbadawi & Sambanis (2000) and Regan (2002). Third parties, therefore, are central to the civil war process. Even decisions by third parties not to intervene overtly in a civil war has meaningful consequences for the manner in which civil wars evolve.

Clearly, a central theme in the aforementioned literatures is that third parties are central to the civil war process. We study this issue further in the remainder of this section by assuming that third-party intervention in civil wars manifests itself in three ways: (1) third-party intervention on behalf of the government of the civil war state; (2) third-party intervention on behalf of the opposition group challenging the government; and (3) simultaneous third-party interventions on behalf of both the government and opposition sides.

Third-Party Support for Government or Opposition Third-party intervention on the side of the government alters a government's decision calculus – specifically, the cost and benefits to the government for pursuing specific policy choices (e.g. continued fighting) – and, in turn, the probability of specific outcomes occurring. The presence of third-party support enables the government to reduce the rent it extracts from its populace to

finance its civil war effort. In turn, the reduced necessity to exact resources from the population, as well as the potential for an increase in the degree of security enabled by third-party resources, allows a government to shore up political support, while at the same time reducing the ability of an opposition group to gain a foothold on popular allegiance. Additionally, third-party intervention on behalf of a government enables the latter to alter the probability of various civil war outcomes occurring, as the availability of greater military, political, and economic capability increases a government's odds of winning militarily, provides it with greater leverage over the terms of negotiation, and reduces its odds of losing militarily.

Similarly, third-party interventions on the side of an opposition group influence the behavior of the opposition group. Third-party intervention facilitates the ability of the opposition to impose costs on a government. An opposition group supported by a third-party is more likely to challenge the government with a capable military threat, thereby increasing the cost to the government of confronting the opposition, as well as increasing the opposition group's chances of achieving victory. Third-party support for the opposition enables the latter to demonstrate to the civil war state's populace that it presents a credible threat to the government. By providing resources to the opposition, third-party support increases the capacity of the opposition to disrupt a government's provision of security, goods, and services to its citizens. Indeed, third-party support may enable the opposition to bid for popular support by providing a rival source of goods and services and, in turn, challenging the government's monopoly over the 'hearts and minds' of its citizens. In general, third-party support increases the likelihood that a combatant will more rapidly win the conflict militarily.

H1: Third-party support increases the likelihood of a military victory by the supported

group, while decreasing the likelihood of a military victory by the unsupported group.

We anticipate that third-party intervention on the government or opposition side will have a differential effect on the likelihood of a negotiated settlement occurring at any point in time. This expectation is grounded in the assumption that the government is stronger than the opposition when a civil war commences (Mason & Fett, 1996; Mason, Weingarten & Fett, 1999). Given this initial condition, a third-party intervention on the side of the opposition might generate rough equality between the government and the opposition, thereby setting the conditions for a costly equilibrium between the disputants, a condition similar to Zartman's (1985, 1993) oft-cited notion of a 'hurting stalemate'. Under these conditions, as Licklider (1993a: 16) argues, 'a negotiated solution may be more likely if weapons are given to the weaker side, as that will create a balance which may lead to a hurting stalemate'. In other words, a government is more likely to press for a negotiated settlement rather than risk the consequences associated with a military defeat.

H2: Third-party support for the government decreases the likelihood of a negotiated settlement, while third-party support for the opposition increases the likelihood of a negotiated settlement.

Balanced Intervention   The effect of balanced third-party interventions on the civil war process is anchored to two lines of reasoning. The first line of reasoning suggests that the continued high cost of fighting a civil war, as well as the low probability of winning, increases the attractiveness to the combatants of ending a civil war in a negotiated settlement, much like Zartman's hurting stalemate. Following the logic of the hurting stalemate, negotiated settlements should occur more rapidly under conditions of balanced (Balch-Lindsay & Enterline, 2000), or

evenly distributed, third-party intervention, because this equilibrium signals an increased degree of conflict 'ripeness' in terms of the combatants' willingness to pursue a negotiated conclusion to a civil war.

H3: Balanced third-party intervention increases the likelihood of a negotiated settlement, while decreasing the likelihood of military victory by either combatant.

An alternative line of reasoning suggests that third parties are central to the issue of when and how civil wars are likely to end, because third parties are strategic and self-interested actors (Balch-Lindsay & Enterline, 2000). Civil wars provide windows of opportunity for third parties to pursue their national security interests, interests that are not necessarily benevolent, such that a rapid termination of a civil war is necessarily preferred. Conversely, third parties are often interested, for example, in exploiting the natural resources of the civil war state, or weakening a potential rival state by supporting continued civil war. Even under conditions wherein third parties have a genuine interest in terminating a civil war rapidly, the presence of balanced third-party interventions increases the number of actors that must come to agreement for a negotiated outcome to occur – a collective action problem that makes resolution of a civil war more difficult (Holl, 1993; Wagner, 1993). Ultimately, this reasoning leads to the expectation that a civil war characterized by balanced distribution of third parties across civil war combatants increases the odds of a stalemate, thereby reducing the likelihood of military victory or a negotiated settlement.

H4: A balanced intervention decreases the likelihood of government military victory, opposition military victory, and negotiated settlement occurring.

Civil Wars as Competing Risks
A fruitful framework from which to consider the influence of third parties on the civil war

process is through the competing risks approach (Box-Steffensmeier & Jones, 2004). This approach has two characteristics that make it particularly useful for studying civil wars. First, each civil war outcome is treated as part of the set of possible alternative outcomes available to the combatants during the course of a civil war. This set of possible outcomes forms the set of risks that are, in a sense, competing to be the first outcome that is observed in the historical record.

The second attractive property of the competing risks approach is its treatment of time. Rather than treating civil war outcomes as discrete phenomena, the competing risks approach treats each moment in a civil war as having some probability of terminating in some type of outcome. Therefore, a civil war does not end until one type of outcome is observed, and this outcome creates the observed duration.[1] As a result, the competing risks approach stands in marked contrast to statistical models presented in the current literature, wherein duration is relied upon to predict the probability of a given type of outcome, rather than considering duration as integral to the observed civil war outcome. Having laid out the theoretical underpinnings of our inquiry into the effect of third parties on civil war process, and identified the competing risks framework as the most appropriate for exploring this process, we turn now to discussing the logic underlying some additional causal factors.[2]

Additional Influences

Separatist Issues There are two general arguments in the literature regarding the effect of separatist issues on the outcome and duration of civil war. The first argument is that separatist civil wars should be more amenable to negotiated settlement, because separatist claims by definition do not require the government to relinquish power over the entire territory encompassed by the civil war state; rather, separatist groups demand the creation of a new state partitioned from the civil war state (Mason & Fett, 1996). Although partitioning the civil war state is likely not a government's most preferred outcome, it is likely more preferred than military defeat. Therefore, with their hold on the government, if not the entire geographic entity comprising the civil war state, intact, a government is more inclined to negotiate a partition with the opposition group, rather than pursue a military victory that will be costly to achieve and to maintain, given the resoluteness of separatist groups and the immutability of the religious and ethnic attributes that are often central to separatist demands.

There are also incentives for a separatist group to prefer a negotiated settlement to military victory. First, unlike the government, a separatist group prefers, by definition, not to control the entire civil war state. In part, this preference for a negotiated settlement is grounded in a preference to control only the part of the civil war state corresponding to the location of a religious or ethnic group. Second, similar to the government, the separatist group is likely to realize that any military campaign to defeat the government will, in all likelihood, be costly, as the government will be resolute in its defense, and the people occupying the territory not corresponding to the separatist group will be unlikely to acquiesce to a government led by the separatist political leaders. Certainly, the separatist group would prefer a military victory over the

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[1] The competing risks approach is appropriate when the interest is the time to multiple events of *different* types. This approach is distinct from the repeated events approach used to study multiple events of the *same* type. While states may experience more than one civil war, we are not aware of any statistical technique that combines competing risks and repeated events. For a repeated events approach to civil wars see Box-Steffensmeier, De Boef & Sweeney (2005).

[2] As Fearon (2004: 386) notes, there is little theoretical motive underlying the many control variables that are often included in studies of civil war duration. The absence of theory leads us to include a small set of controls that we consider to be 'policy manipulable' (e.g. the emergence of separatist demands), rather than factors that are relatively immutable (e.g. terrain).

government that would secure a separate state over a negotiated settlement that might result in only partially fulfilling the separatist group's demand for a separate state, but the presence of a resolute government likely foreshadows a costly conflict. Ultimately, there is some basis for the argument that a government and its opposition will prefer a negotiated settlement to other outcomes. A central part of this argument is that the preferences of the combatants change over time, such that military victory is preferred to negotiated settlement initially, and later, as a civil war endures, this preference by the combatants is reversed.

The logic of the second argument is grounded in the assumption that, because separatist demands challenge the very basis of state sovereignty (i.e. territorial integrity), governments are extremely reluctant to surrender the prerogative to determine policy within the geographic boundaries of their states. Throughout the history of the interstate system, states rarely condone partition. Additionally, the preference to maintain territorial integrity is, in part, a product of government fear that allowing one region to gain autonomy establishes precedent for subsequent separatist demands. Therefore, separatist demands are likely to result in a concerted effort by the government to resist separatist demands. We expect that considerations of sovereignty and fear of demonstration effects increase government motivation to continue fighting, if only to forestall victory by the separatist opposition. Moreover, governments will likely thwart efforts for a negotiated settlement, as such an agreement would, by definition, require sovereignty to be compromised to some degree, again providing grounds for further demands for autonomy on the government. Under these conditions, a government's preference to continue fighting suggests that the government prefers its own military victory to virtually any other outcome, and the outcome is likely to be continued fighting and a longer civil war.

Civil War Costs   Central to much of the contemporary literature's treatment of the link between costs and the civil war process is the assumption that such costs are roughly evenly distributed across the combatants.[3] Although the destruction of government assets might suggest that an opposition group is increasing its odds of military victory, the core of government and opposition power (i.e. popular allegiance) is, in part, a function of the degree to which a civil war is costly. If this assumption of roughly equitable costs holds, the strategic decisions that are likely to flow from this assumption should translate into an increase in the probability of a negotiated settlement occurring at any given point in time, a linkage similar to the aforementioned notion of a hurting stalemate.

Bargaining Reputation   The theoretical literature suggests that civil war is a bargaining process (Pillar, 1983; Wagner, 1993; Licklider, 1995; Walter, 2002, 2004). The bargaining process between civil war combatants is carried out under varying degrees of incomplete information and uncertainty. Civil war combatants base their expectations, in part, on the war-fighting reputations of their opponents. Several studies demonstrate that such inter-civil war processes are likely at work within countries that experience civil war. For example, Licklider (1995) concludes that countries in which a civil war ends in a decisive military victory are less likely to experience subsequent outbreaks of civil war. Walter (2004: 385) concludes that civil war duration and outcome (i.e. short wars that end in partition) are likely to increase the odds that a civil war state will experience subsequent civil war.

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[3] In part, this assumption flows from the dearth of data on costs to rebel and opposition groups for prosecuting civil war. This is, of course, not particularly sound logic and will likely be rectified by the availability of such data in the future.

We follow this line of reasoning here. Specifically, we focus our attention on the actor for which we have consistent cross-time data on strategic choices during civil war: *the government.* We begin by assuming that states develop a single reputation for the strategic choices they pursue in civil war, even if the policymakers controlling a given state's government in one civil war are distinct from the policymakers influencing that same state's policy choices in a previous civil war. States with reputations for negotiating in civil wars do not necessarily prefer negotiated settlements relative to other outcomes at any point in time; in fact, we expect that governments prefer negotiated settlements only when military defeat by the opposition is imminent. However, many factors can handicap a government's ability to achieve an outcome more preferable then a negotiated settlement, thereby contributing to a reputation characterized by negotiated settlement as it appears in the historical record. In turn, government reputation provides a potential opposition group a basis for developing expectations about how a state's current government will respond to a challenge by the opposition. Given this logic, we anticipate that governments with reputations for negotiating settlements in civil wars will experience difficulties winning subsequent civil wars.

Economic Development   Several recent studies explore the link between economic development and civil war duration (e.g. Collier, Hoeffler & Söderbom, 2004; DeRouen & Sobek, 2004; Fearon, 2004; Walter, 2004). However, the causal logic underlying this relationship between development and civil war duration is not entirely evident; indeed, the plausible theoretical relationship between development and civil wars would appear to be in the *pre-civil war phase*, where greater levels of development act as a deterrent to the outbreak of hostilities, rather than once a civil war is under way.

Here, we posit that civil war states with relatively greater economic resources have two effects on the civil war process. First, civil war states with relatively greater economic development are capable of absorbing the costs of prosecuting a civil war, as well as offsetting the cost of the conflict for loyalist constituents, and, in doing so, blunting the 'hurting' component of the 'hurting stalemate'. Second, civil war states that are relatively more developed can bring greater force to bear on the battlefield, thereby increasing the chances of military victory or at least forestalling defeat.

Democracy   The theoretical reasoning underlying the inclusion of democracy in a model predicting civil war duration is similar to that described above with regard to economic development. Specifically, many of the causal arguments relating democratic institutions in the civil war state with the duration of hostilities are grounded in causal arguments tied to the pre-civil war phase, such that democracy deters fighting or increases the likelihood of a negotiated settlement. We argue that democratic states are, relative to non-democratic states, acutely aware of the detrimental effect of civil war breaking out, and they are even more acutely aware of the detrimental negative consequences of an opposition victory. For democratic polities, allowing constituents to achieve their policy preferences through a resort to arms, rather than through peaceful negotiation and compromise, incises the heart of the democratic process. Additionally, allowing an opposition group to succeed may set a dangerous precedent and pollute the democratic process by presenting resort to arms as a viable alternative mode of policy negotiation, rather than a nearly unthinkable alternative. In the light of this logic, we anticipate that civil war states with a democratic tradition will be relatively better able to mobilize resources against an opposition group, will fight harder to defeat opposition groups military, and will be reluctant to negotiate a settlement.

Research Design

We use the Correlates of War (COW) Intra-State War Data (Sarkees, 2000) to identify a sample of 213 civil wars for the period 1816–1997.[4] To code civil war outcome (i.e. government military victory, opposition military victory, and negotiated settlement), we rely on the COW data, the sources reported in Small & Singer (1982), and the case discussions and summary data reported in Clodfelter (2002), Pillar (1983), Licklider (1995), Mason & Fett (1996), and Hartzell, Hoddie & Rothchild (2001). Our sample contains 109 government military victories, 45 opposition military victories, 40 negotiated settlements, and 19 censored cases in which a civil war either remained ongoing at the termination point of our sample (31 December 1997), or in which a decisive outcome did not occur. Our unit of analysis is the *civil-war-day*. There are 249,462 civil-war-days in our analysis that are aggregated into 924 spells.

Independent Variables

Third Parties   We use the COW Intra-State War Participants Data (Sarkees, 2000) to identify third-party interventions.[5] *Intervention for government* is coded 1 when there is at least one intervention supporting the government and 0 otherwise. *Intervention for opposition* is coded 1 when there is at least one intervention supporting the opposition

and 0 otherwise. *Balanced intervention* is coded 1 when there is at least one third-party intervention supporting both the government and the opposition and 0 otherwise.[6] The three third-party intervention variables are time-varying covariates, while the rest of our explanatory variables are time-invariant covariates.

Separatist Issues   We rely on the sources identified in Small & Singer (1982), Bercovitch & Jackson (1997), and Clodfelter (2002), in addition to various historical monographs, to create a dichotomous variable, *separatist*, that is coded 1 when the goal of an opposition group in a civil war is separatist and 0 otherwise.[7]

War Costs   We create a variable, *war costs*, by dividing the total number of battle deaths sustained by all state participants at the end of the civil war, as reported in Sarkees (2000), by the prewar total population of the civil war state from the COW National Material Capability Data (Singer, Bremer & Stuckey, 1972). This normalization produces a per capita indicator of civil war costs. When third parties participated in the civil war we added their prewar total population to the prewar total population of the civil war state.

Government Reputation   We rely on our classification of civil war outcomes to generate a variable, *government reputation*, by dividing the prior frequency of negotiated settlements agreed to by a civil war state by the prior total frequency of civil war outcomes (i.e. negotiated, military victory, and military

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[4] Civil wars are those 'wars fought against the regime of a state member. An intra-state war is classified as a civil war if (a) military action was involved, (b) the central government at the time was actively involved, (c) effective resistance (as measured by the ratio of fatalities of the weaker to the stronger forces) occurred on both sides, and (d) at least 1,000 battle deaths resulted during the civil war' (Sarkees, 2000: 129).

[5] The COW definition of intervention rests solely on the overt military contributions of third parties. Specifically, Small & Singer (1982: 219) state that, in order for third-party involvement to be considered an intervention, 'direct military participation of such a magnitude that either 1,000 troops are committed to the combat zone or, if the force is smaller or the size unknown, 100 deaths are sustained'.

[6] Of the 213 civil wars, 29 (14%) had interventions in support of the government, 18 (9%) had interventions in support of the opposition, and 6 (3%) had interventions on both the side of the government and opposition.

[7] Of the 213 civil wars, 67 (32%) had an opposition group with separatist goals.

defeat) experienced by the civil war state. *Government reputation* ranges from 0 to 1.[8]

Economic Development We use the COW National Material Capability Data (Singer, Bremer & Stuckey, 1972) to create a measure of *economic development*, calculated as the natural log of the sum of energy consumption and iron/steel production. We create a pre-civil war level of *economic development* by lagging this variable one year prior to the civil war.

Regime Type We use the Polity IV Data (Marshall & Jaggers, 2002) to create a dichotomous variable, *democracy*, that is coded 1 if the civil war state's polity score in the year prior to the civil war was greater than 5 and 0 otherwise.

Competing Risks Model

Because a civil war can end in different ways, a covariate can potentially have a different effect on the time to different civil war outcomes. For example, a covariate may have a negative effect on the hazard (i.e. the risk of a civil war ending at a particular point in time given that the civil war has survived up to that point in time) of one risk and a positive effect on another. In order to account for the different effects a covariate can have on the time to different civil war outcomes, it is necessary to use a statistical model that can account for the duration of a civil war and the various ways a civil war can end. Toward that end we estimate a 'competing risks' event history model that treats time as a function of some underlying risk of an event occurring at each time point, as well as accommodating multiple outcomes.[9] In the competing risks framework each observation (i.e. a civil-war-day) is at risk of experiencing a transition to three different civil war outcomes: (1) military victory by the government, (2) military victory by the opposition, and (3) negotiated settlement. In this way, we can allow covariates to have different effects across the competing risks.

We specify three separate models, one for each potential outcome, where failures due to the other two risks are treated as randomly censored. For example, we estimate a model where the outcome is military victory by the government and treat failures due to military victory by the opposition and negotiated settlement as randomly censored. This model makes the assumption that the risks are conditionally independent; that is, if an observation fails due to one risk, it could have experienced one of the other outcomes, had the civil war lasted long enough. For example, failure due to military victory by the government is independent of failure due to military victory by the opposition and negotiated settlement. Thus, there is a potential failure time associated with each of the civil war outcomes.[10] However, once a civil war ends, it exits the sample and is no longer at risk of experiencing any of the other civil war outcomes, that is, we only observe the occurrence of the first outcome.

We estimate three separate Cox proportional hazards models. We prefer the Cox model to the parametric alternatives because it makes no assumptions about the distributional form of the baseline hazard rate (Box-Steffensmeier & Jones, 2004). We test

[9] An introduction to competing risk event history models can be found in Box-Steffensmeier & Jones (2004: 166–181).

[10] If the outcomes, conditional on the covariates, are not independent, then the assumption that we can treat the other outcomes as randomly censored is violated. In this case, a dependent risks model is appropriate (Han & Hausman, 1990; Hill, Axinn & Thornton, 1993; Gordon, 2002).

[8] For cases in which civil war states did not experience a prior civil war, we recoded this variable with a value of 0, thereby capturing the fact that the opposition in these conflicts had no historical basis to expect the government to negotiate.

for violations of the proportional hazards assumption (Box-Steffensmeier, Reiter & Zorn, 2003) in each of our three Cox models and correct for non-proportionality by interacting the offending covariates with the natural log of time.

Analysis

The results of our Cox models of the duration to the three civil war outcomes are reported in Table I. Our first hypothesis anticipates that third-party support will increase the likelihood of the supported group achieving military victory, while decreasing the likelihood of the unsupported group achieving military victory. The positive and statistically significant coefficient for *intervention for government* in the Government Military Victory model indicates that third-party intervention on behalf of the government of the civil war state increases the risk that the civil war will end in a government military victory and, therefore, decreases the time until such a victory will occur. The interaction between this variable and the natural log of time is negatively signed and statistically significant, indicating that, as a civil war persists, the benefit of third-party support for the government decreases the risk of a civil war ending in a government military victory.

The coefficient for *intervention for government* in the Opposition Military Victory model is not statistically significant and is positive and statistically significant in the Negotiated Settlement model, suggesting that interventions on behalf of the government have no statistically significant effect on the time until an opposition military victory and decrease the time until a negotiated settlement. Interestingly, civil wars have a higher risk of ending in a negotiated settlement than a government military victory when a third-party intervenes on the side of the government. The results for this variable

demonstrate the advantage of the competing risks approach, namely, that the effect varies across the three civil war outcomes. Figure 1 presents the estimated baseline survivor function for each civil war outcome when there is an intervention on the side of the government.[11] This figure demonstrates that a third-party intervention on the side of the government has a different effect on the expected probability of a civil war surviving past a given point in time for each civil war outcome. Importantly, these differing effects would not be evident had we estimated a Cox model where we pooled the three civil war outcomes.

Turning to the results corresponding to *intervention for opposition*, the statistically significant coefficient for the Government Military Victory model indicates that third-party support for the opposition decreases the risk that a civil war will end in a government military victory. The positively signed and statistically significant coefficient for this variable in the Opposition Military Victory model suggests that third-party support increases the risk that a civil war will end in an opposition military victory and, thus, decreases the time until such a victory will occur. Finally, the positively signed and statistically significant coefficient in the Negotiated Settlement model suggests that intervention on behalf of the opposition increases the risk of a civil war concluding more rapidly in negotiated settlement, lending support to our second hypothesis, though the risk is smaller than military victory by the opposition (see Figure 2). We suspect that this final relationship is the result of third-party intervention making an opposition group a more credible and potentially

[11] For each figure, the estimated survivor function was calculated based on the mean values for continuous variables, modal values for discrete variables, and one for the intervention variable of interest.

Table I. Cox Competing Risks Model of Civil War Duration & Outcome, 1816–1997

	Government military victory	Opposition military victory	Negotiated settlement
Intervention for government	2.49†	1.93	5.67†
	(1.83)	(1.63)	(3.79)
Intervention for government × ln(time)	−0.63*	−0.43*	−0.75†
	(0.27)	(0.23)	(0.50)
Intervention for opposition	−1.64†	1.74**	1.39**
	(1.12)	(0.48)	(0.56)
Balanced intervention	1.75†	−32.60**	−2.63*
	(1.34)	(1.06)	(1.21)
Separatist	0.87	−0.10	8.16**
	(1.05)	(1.71)	(2.93)
Separatist × ln(time)	−0.22	−0.18	−1.23**
	(0.18)	(0.26)	(0.41)
War costs	108.67	171.25**	−211.75†
	(204.70)	(62.88)	(158.26)
War costs × ln(time)	−34.67	−33.56**	25.08
	(38.05)	(11.80)	(20.40)
Government reputation	−1.30**	−0.66	0.16
	(0.51)	(0.58)	(0.62)
Economic development	0.96**	0.93**	0.51†
	(0.15)	(0.22)	(0.37)
Economic development × ln(time)	−0.17**	−0.18**	−0.08†
	(0.02)	(0.04)	(0.05)
Democracy	0.33	−0.34	−1.19
	(0.33)	(0.53)	(1.22)
Civil wars	213	213	213
Civil war failures	109	45	40
Time at risk	249,462	249,462	249,462
Spells	924	924	924
Log-likelihood	−427.88	−174.45	−132.85
Wald $\chi^2_{(12,12,12)}$	80.54**	3,393.58**	36.16**

Significance (one-tailed): † = .1; * = .05; ** = .01.
Coefficients with robust standard errors in parentheses.

long-term opponent for the government and, in turn, making negotiated settlement an attractive outcome for a government.

In the third hypothesis, we anticipated that interventions of third parties on both the government and opposition sides in a civil war would decrease the likelihood of the civil war ending in a military victory and increase the likelihood of a negotiated settlement. However, the coefficient for *balanced*

intervention is positive and statistically significant in the Government Military Victory model and negative and statistically significant in the Negotiated Settlement model, suggesting that the presence of a balanced distribution of third parties increases the risk of a government military victory and decreases the risk of a negotiated settlement (see Figure 3), a finding supporting the reasoning of our fourth hypothesis, whereby
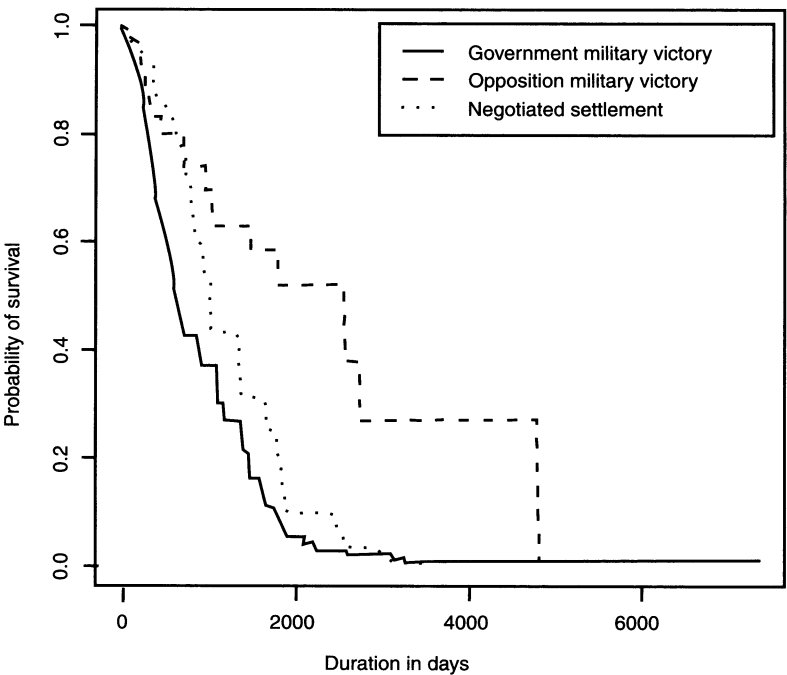
Figure 1.   Intervention for Government

Duration in days

Figure 2.   Intervention for Opposition
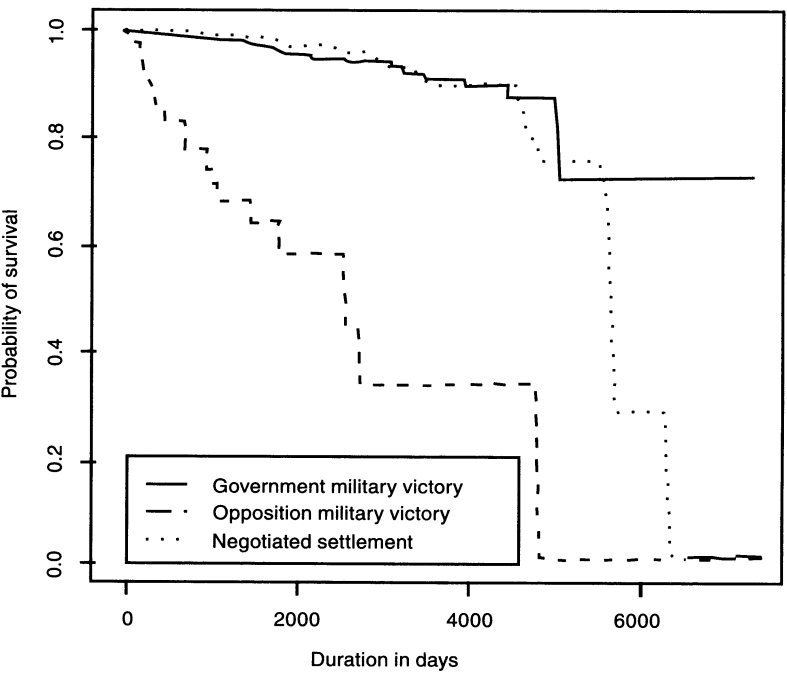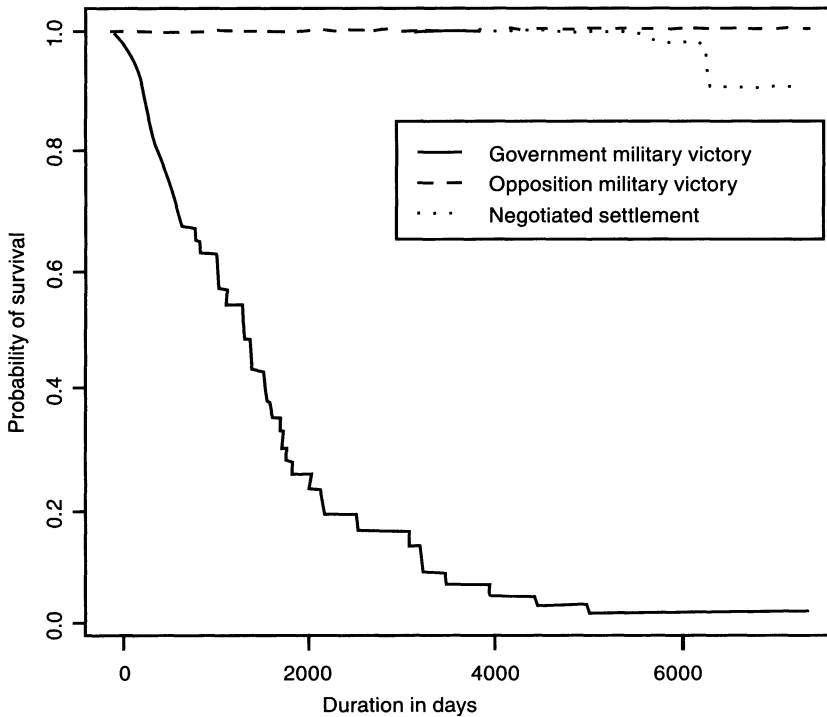

Duration in days

Figure 3. Balanced Intervention

roughly distributed third-party support pre-cludes a negotiated settlement.[12] Ultimately, our empirical analysis of balanced third-party interventions suggests that balanced intervention appears to encourage the 'lock-in' of a civil war and increase the risk of the conflict continuing, a finding that we attribute to an equality in capability across the combatants, and an increase in the complexity of the bargaining process, given the additional preferences of the third parties.

The performance of the remaining covariates reported in Table I provides further insight into the civil war process. The coefficient corresponding to *separatist* in the Negotiated Settlement model suggests support for the expectation that civil wars characterized by the presence of separatist issues are likely to conclude rapidly through a negotiated settlement, but, as a civil war persists, the risk of termination in a negotiated settlement dissipates. The performance of this variable in the two military victory models suggests that the presence of separatist issues has no statistically significant effect on the risk of a government or opposition military victory. Nonetheless, our analysis of separatist issues is generally in line with our expectations that separatist civil wars are difficult to win militarily, but the likelihood of a negotiated settlement occurring at any given point in time is greater than in the absence of separatist issues.

[12] Since there are no balanced interventions that resulted in an opposition military victory, the hazard ratio tends toward infinity, and, thus, we are hesitant about drawing inferences for balanced interventions in this model.

Civil war costs are often argued to increase the likelihood that civil wars will end with a negotiated settlement. Here, we examine this relationship in the context of two additional outcomes that are probable in intrastate conflicts, military victory by the government or the opposition. The coefficients for *war costs* in our three models suggest that, as the costs of the civil war increase, the time until an opposition military victory significantly decreases, while the time until a negotiated settlement significantly increases. While we expected that costly civil wars were likely to increase the attractiveness of negotiated settlement to combatants, costly civil wars might also reflect conditions in which one combatant is winning the conflict rapidly by exacting tremendous cost on an opponent. Given that the COW civil war data measures only the battle-deaths suffered by the state participants in a civil war, we are unable to sort out the conditions that result in negotiated outcomes from those that result in military victory by either side.

The negative and statistically significant coefficient for *government reputation* in the Government Military Victory model suggests that states that have a reputation for negotiating in past civil wars are likely to have to fight longer to win future civil wars, a finding that underscores the relevance of long-term conflict behavior and the information this provides to combatants engaged in the civil war process.

The coefficients corresponding to *economic development* indicate that, as the economic development level of the civil war state increases, the time until a government or opposition military victory or a negotiated settlement decreases, but, as a civil war persists, the influence of economic development weakens. Thus, in general, more economically developed states are expected to fight shorter civil wars, and these civil wars have a higher risk of ending in a military victory for either side than a negotiated settlement.

Finally, while the coefficients corresponding to *democracy* indicate that democratic states are more likely to fight shorter civil wars and win them than either lose to the opposition group or negotiate a settlement, these coefficients are not statistically significant.

Conclusion

The competing risks approach provides considerably better leverage on the frequently cited dynamic qualities civil wars and, in particular, the influence of interventions by third parties. At the same time, this method of analysis reveals the limits of contemporary empirical studies of civil war in sorting and testing the bevy of theoretical claims regarding when, how, and why intrastate conflicts evolve and end, a criticism that we extend to our efforts in this article. For example, our analysis reveals that increases in economic development increase the time to all three outcomes. Albeit interesting, these empirical findings fail to provide much insight into the different effects of economic development on the time to different civil war outcomes. In part, this inconclusiveness is a function of the quality and richness of our data on civil wars, but it is also likely due to the precision of our theoretical expectations. Thus, while we argue that a competing risks approach is generally better than alternative methods, relying upon this method does not rectify shortcomings in theory and information pertaining to civil wars.

The differences in our findings with respect to third-party interventions emphasizes the importance of distinguishing between the time to different civil war outcomes. While third-party intervention increases the likelihood of the supported group achieving military victory, third-party intervention on behalf of the government or the opposition also increases the likelihood of a negotiated settlement. However, third-party interventions on the side of both the government

and opposition decrease the likelihood of a negotiated settlement. The results highlight the important differences in the dynamics of civil wars and underscores the importance of considering civil wars as processes, rather than static events. In doing so, we anticipate the emergence of better theory, better empirical tests of these theories, and better policy recommendations.

With respect to policy, our study provides insight into recent civil wars. For example, in the Balkans, efforts by the North Atlantic Treaty Organization (NATO) to isolate Yugoslavia from third-party support (principally, Russia) were an important element in the allied strategy to aid the Albanian Kosovars and limit the duration of this conflict. The central thrust of our study suggests that, had NATO allies failed in their efforts to deter Russia from overt intervention on the side of Yugoslavia, the civil war in Kosovo most likely would have raged for much longer than it did. Conversely, in central Africa, the success or failure of peace settlement talks in the former Zaire hinge primarily on coordinating the preferences of a half-dozen intervening African states, a very convincing example of the central importance of collective action problems in intrastate conflicts, multiple sets of preferences, and civil war duration and outcome. Indeed, with several states overly committed to aiding the government and opposition combatants, our model suggests conditions of stalemate in which a negotiated settlement is not likely in the near term.

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