



Rethinking Third-Party Interventions into Civil Wars: An Actor-Centric Approach

Author(s): Michael G. Findley and Tze Kwang Teo

Source: The Journal of Politics, Vol. 68, No. 4 (Nov., 2006), pp. 828-837

Published by: The University of Chicago Press on behalf of the Southern Political Science

Association

Stable URL: https://www.jstor.org/stable/10.1111/j.1468-2508.2006.00473.x

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at https://about.jstor.org/terms



The University of Chicago Press and Southern Political Science Association are collaborating with JSTOR to digitize, preserve and extend access to The Journal of Politics

# Rethinking Third-Party Interventions into Civil Wars: An Actor-Centric Approach

**Michael G. Findley** University of Illinois at Urbana-Champaign **Tze Kwang Teo** University of Illinois at Urbana-Champaign

Studies of the decision to intervene into ongoing civil wars should focus on those making the decision, not the conflict. We adopt such an "actor-centric" approach and discuss third-party intervention by emphasizing convergent and divergent interests and the connections between potential interveners, actual interveners, and civil war states. Our model furthermore differentiates between interventions on the side of the government and opposition and takes the sequence of interventions in the same conflict into account. The results from estimation of a mixture cure survival model support our theoretical framework and expectations. This paper thus advances our understanding not only of the effects of intervention, but also the motivation and decision to intervene.

Prior to the late 1970s, the United States attached little strategic importance to Afghanistan. Its attitude towards the Afghan conflict, however, changed rapidly in the wake of Soviet intervention on the side of the Afghan government. U.S. policy makers agreed that the Soviet occupation represented a new strategic and economic threat to American interests in the Middle East and Persian Gulf (Scott 1996, 42–43). The United States subsequently "balanced" against the Soviets by intervening on the side of the Afghan rebels. It sought to destabilize the Soviet Union, not necessarily to end the civil war, nor alleviate human suffering. The United State's motives were primarily geopolitical, seeking to repel communism and preserve its national security.

This example suggests the following interrelated questions about interventions into civil wars: Why do certain kinds of states intervene into ongoing civil wars? When do they decide to intervene? With whom do they side? Although third-party intervention plays a key role both in foreign policy decision making and civil conflict evolution, it has been analyzed only indirectly in data-based studies. This problem is hardly one of intellectual neglect. Researchers have, after all,

specified intervention as a key explanatory variable in models of civil conflict duration (e.g., Regan 2002) and outcome (e.g., DeRouen and Sobek 2004). More relevant, there is no lack of quantitative research on the conditions under which civil wars experience intervention (Regan 2000). So why would we claim the bulk of studies address intervention only indirectly?

Our justification centers on rejecting the common analytical approach adopted in these studies: specification of the civil war as the unit of analysis, which we henceforth refer to as the "phenomenon-centric" approach. This means theoretical and substantive interest lies, by construction, in "what happens to" the conflict. We agree that the phenomenon-centric approach is appropriate for addressing under what conditions civil wars are more or less likely to terminate, be prolonged, or experience intervention. This approach, however, is ill-prepared to answer "who intervenes, why, and on whose side?" because these questions are framed in terms of the third party, not the conflict. Thus, we contend that third-party decisions to intervene and civil wars experiencing intervention are separate—albeit related—outcomes of interest for analytical purposes.1

<sup>1</sup>All references to intervention, hereafter, refer strictly to decisions to intervene into ongoing civil wars by "third party"/"outside"/"potential intervener" states, as opposed to, say, nonstate actors. We refer to the former as simply "states" whenever appropriate.

The Journal of Politics, Vol. 68, No. 4, November 2006, pp. 828-837

© 2006 Southern Political Science Association

ISSN 0022-3816

The analysis of decisions to intervene requires an additional actor-centric approach, in which potential interveners are theoretically central and therefore specified as the units of analysis. We articulate an interests-based explanation of intervention, which differs from previous works focusing on relations between potential interveners and the civil war country (Lemke and Regan 2004; Regan 2000). We emphasize that strategic relations between potential and actual interveners influence the entries of multiple interveners into the same conflict. Of the 60% of post-WWII civil conflicts that experienced intervention, three-fifths involved more than one intervener. We posit that states pursue intervention as a foreign policy tool in response to either convergent or divergent geopolitical and strategic interests of other states (Saideman 2002) and apply our theoretical framework by modeling interventions targeted at either the government or opposition forces.

Neither the actor- nor the phenomenon-centric approach is complete on its own. The integration of both facets paints a clearer and more vivid picture of the civil war intervention process. The crux of this assertion is that potential interveners (the actors) undertake evaluations of the changing civil war context (the phenomenon), which is constituted not only by ground conditions, but more importantly, the sequences of decisions by other third parties as well. This in turn informs if and when they will intervene. Thus, making the interveners theoretically central enables us not only to ask new questions about dynamics of civil war interventions, it also enables us to integrate actorand phenomenon-centric concerns into a unified model.

A further advantage conferred by analyzing decisions to intervene is a more accurate conceptualization of intervention as a foreign policy tool, which has been "black boxed" in phenomenon-centric studies. Second, conceptualizing the civil war itself as context integrates the foreign policy aspect of intervention with considerations of relevant ground conditions. Inclusion of a second contextual component, the sequences of actions by other third parties, enables closer engagement of a key strand of the case study literature, which provides the insight that decisions to intervene are often based upon the strategic and geopolitical ramifications—perceived or otherwise—of others' decisions to intervene (e.g., Scott 1996). Finally, distinguishing between interventions for or against either the government or opposition forces clarifies important theoretical expectations, and better mirrors how interventions take place in reality.

## Perspectives and Approaches to Civil War Intervention

Scholars have advanced a variety of theoretical approaches while studying civil war intervention. One school of thought focuses on structural factors and views intervention as a response to civil war conditions. Within this, some have argued that conflicts with an ethnic component make intervention more probable, especially when ethnic affinities exist between the intervener and target state (e.g., Carment, James, and Rowlands 1997; Khosla 1999). Carment and James, furthermore, detail the conditions under which ethnic conflict most likely leads to intervention, by either states (1996) or the United Nations (1998).

A different set of studies emphasizes management and resolution of the conflict, where the posited objective of intervention is to alleviate humanitarian impacts in the shorter term, and resolve the underlying dispute in the longer term (e.g., Carment and Rowlands 1998). States carry out humanitarian intervention, for instance, when conflicts are "ripe for resolution" (Zartman 1989), or in an effort to "stop the killing" more quickly (Licklider 1993). Walter (1997) takes a longer-term perspective and views intervention as important for the successful implementation of peace agreements. Other studies analyze the effects of intervention on civil war duration, expecting intervention to hasten conflict termination (e.g., Balch-Lindsay and Enterline 2000), but sometimes finding that interventions tend to prolong the fighting instead (e.g., Regan 2002).

These studies speak more to the phenomenoncentric approach, whereas the actor-centric approach fits more closely with a foreign policy perspective. The latter views intervention as primarily a foreign policy tool motivated by (1) international influences and (2) domestic constraints. Scott (1996) provides case studies of U.S. interventions during the Reagan administration, which were undertaken to combat the communist threat. The Reagan Doctrine advocated intervention as a means to achieve strategic objectives abroad. Feste (1992) similarly sees intervention as a tool superpowers used. Balch-Lindsay and Enterline concur, noting that intervention has often been chosen as a foreign policy tool for strategic reasons: "... third parties intervene for less benevolent reasons...in order to distract, or drain the resources of rival states" (2000, 617). Peceny (1999) argues that democracies, in particular, often intervene to export their interests and thereby increase their own long-term security.

Scholars have also argued that domestic factors within the potential intervener are important. When ethnic affnities exist across borders, people pressure their leaders to intervene to aid their coethnics (Roy 1997; Saideman 1997). States also intervene more readily when they have not been mired in costly wars in the recent past (Pickering 2001). Regan argues that decisions to intervene are a function of the costs and benefits to "international reputation, national interests, and domestic constraints" (2000, 42–48). Although recent works have paid more attention to actor-centric concerns, few make the potential intervener's decisions theoretically and methodologically central.

# **Engaging the Actor-Centric Approach**

Regan admits his statistical analysis deviates markedly from the decision-theoretic framework: "There are conceptual problems in using the conflict as the unit of analysis because the emphasis of the empirical model shifts from the perspective of the individual decision maker to the aggregate case, asking in essence whether certain structural and contextual conditions increase the probability of an intervention" (2000, 52). This means the estimated covariate effects from Regan's statistical model cannot be interpreted substantively as the impact of domestic processes on the formulation of interventionist foreign policy. Regan's thoughtful reflections thus support our assertion that empirical tests relying on civil wars as the units of analysis provide only suggestive evidence regarding the decision processes of interveners.

Lemke and Regan's (2004) application of Singer's (1963) "internation influence" model to intervention into civil wars has emerged as a very promising synthesis of phenomenon- and actor-centric approaches. They address who the interveners are, and why they intervene, by analyzing sets of potential interveners for wars waged between 1944 and 1994. They find the factors associated with intervention include major power status, colonial history, and alliance ties with the civil war country (actor-centric), as well as refugee problems and casualties (phenomenon-centric).

Lemke and Regan's analysis stimulates two important lines of research. First, their cross-sectional setup neither captures the sequences of, nor models any dependencies between, interventions. Second, given their model does not distinguish between the targets of intervention, they cannot ascertain whether certain factors dispose a potential intervener towards inter-

vention on one side, but not the other. If, for example, a potential intervener is allied to the civil war state, we would expect intervention to occur on the side of the government—aiding one's ally—and not the opposition. As many civil wars have experienced multiple interventions—many of which occurred on opposing sides—we contend that a more complete model of intervention needs to incorporate the linkages between, and targets of, interventions. In the next section we detail an interests-based explanation of intervention that addresses these deficiencies.

# Interests in Interrelated and Opposing Interventions

The idea that states may intervene into a conflict to protect their interests is hardly profound. That interventions into the same conflict may occur on *opposite* sides, however, points to the need to distinguish between convergent and divergent interests with respect to other interveners, or parties within the civil war state. Our explanation, therefore, emphasizes three scenarios: (1) intervention in response to other interveners, (2) intervention based on convergent or divergent interests with the civil war state's government, and (3) structural factors in the civil war country from an interests perspective.

#### **Interrelations between Interveners**

Some interventions are themselves reactions to earlier instances of third-party entry into the same conflict. Regan's model (2000) does not capture this dynamic because it models *only* the first case of intervention experienced by the civil war country.<sup>2</sup> Although Lemke and Regan (2004) analyze all potential interveners, they still do not model any sequences of multiple interveners, thereby missing a crucial nuance: "The impact of third-party interventions on the evolution of intrastate conflicts is often a function of the involvement of *other third parties*" (Balch-Lindsay and Enterline 2000, 617; emphasis added). Russia and Uzbekistan, for example, intervened against Afghanistan in the Tajik civil war. It is unlikely that this was coincidental, given Russia and Uzbekistan's hostile

<sup>2</sup>Regan's (2002) subsequent model of civil war duration includes opposing intervention as a covariate. But because duration, not intervention, is the outcome of interest, he cannot answer the question of who the interveners are, and toward which side each opposing intervention is directed.

relations with Afghanistan, and fear of the long-term consequences of the latter supporting a regime hostile to the former.

Interrelated interventions are reflections of the interaction between a potential intervener's interests and the interests of other states. Scholars have begun to call for more attention to interrelationships among actors in intra- and interstate conflict (Balch-Lindsay and Enterline 2000; Croco and Teo 2005, respectively). With respect to civil war intervention, the states that have already intervened become concurrent structural and strategic factors, whose interests subsequent interveners *in turn* have to consider before they, too, get involved.

This highlights the directional quality to intervention necessary to counter the opposing interests of rivals or to protect the common interests of allies. Strategic and geopolitical interests necessitate siding with whichever party (government or opposition) best supports the potential intervener's interests, in relation to other interveners. States that attach strategic importance to the civil war country risk damaging their interests, if they allow their strategic rivals to intervene without a commensurate response. If a rival has already picked a side, the logical response would be to establish a foothold via the opposing party, be it the government or opposition. The United States and USSR, for example, intervened on opposite sides in the Nicaraguan and Afghan civil conflicts during the Cold War. Yoon (1997) notes that the United States would even intervene in response to the interventions of Soviet allies. As rivals (e.g., Diehl and Goertz 2000) often counter one another, we hypothesize:<sup>3</sup>

H1: A potential intervener's hazard of intervention on the sides of the government and opposition decreases and increases, respectively, if a rival has already intervened on the side of the civil war country's government.

Alliances—usually thought of as regimes to deter interstate conflict—may also reflect common interests and domestic affinities, and facilitate collective action. Saideman (2002), for instance, notes that alliance ties encouraged the coordination of U.S. and European interventions into the 1990s Yugoslav conflicts. Accordingly, we posit:

H2: A potential intervener's hazard of intervention on the sides of the government and opposition

increases and decreases, respectively, if an ally has already intervened on the side of the government.

Thus potential interveners are acting *alongside* others with common interests, or *against* external threats. This is analogous to the ideas of bandwagoning and balancing, respectively, in the security studies literature. Saideman (2002) advocates that scholars pay more attention to the reasons states take different sides in internal conflicts. He suggests that general extensions of balance of power/threat theory could be developed to explain interventions into internal conflicts. Our approach informs this line of thought by explicitly theorizing and testing such propositions.

# Relations between Interveners and the Civil War Country

We also posit that states decide to intervene based on convergent or divergent interests they hold with the government involved in civil war. This contrasts with Regan who states that the decision to intervene is not a function of what is happening in the target country (2000, 42). His view neglects the possibility that states can intervene on the side of the government or opposition, depending on their interests. We expect a potential intervener to support the government if they share convergent interests.

H3: A potential intervener's hazard of intervention on the sides of the government and opposition increases and decreases, respectively, if it is allied with that country's government.

We also expect that rival states will attempt to balance the capability structure between the parties in the war. During civil wars, governments normally monopolize the state's means of coercion, whereas the rebels rely on other sources of capability, either domestic or international. Interested states—seeking to destabilize a rival—will likely attempt to balance the capability structure by giving aid to the rebels.

H4: A potential intervener's hazard of intervention on the side of the government and opposition decreases and increases, respectively, if it is engaged in rivalry with that country's government.

<sup>3</sup>We couch the hypotheses in terms of direction of effect on the hazard, as we will be modeling the effects of factors on the timing of intervention using hazard metric survival models.

<sup>4</sup>We are not interested in alliance formation in response to power or threat, but rather, how states in alliances and rivalries behave based on their underlying common or divergent interests.

#### Structural Factors from an Interests Perspective

We have emphasized actor-centric factors thus far; here we also argue that structural factors can be subsumed within an actor-centric, interests-based framework. We identify three sets of structural factors: (1) "fixed" characteristics of the outside state that affect the probability it will intervene, (2) "fixed" characteristics of the conflict that also influence the probability of intervention, and (3) changing conditions of the conflict that affect the timing of interventions.

Research has found that states contiguous to, or in the same region as, the civil war country are more probable interveners (Heraclides 1990; Khosla 1999). These states may resort to intervention as preemption against the danger of conflict spillover. Furthermore, a number of civil wars occur in former colonies, and warring factions often have strong ties to their former colonizers. Likewise the former colonial powers may maintain interests in their former colonies, thereby increasing the probability they will return to aid their favored groups (Lemke and Regan 2004). Scholars have also posited that more powerful states have a higher probability of intervening into civil wars to pursue their interests, because they are more capable of committing resources (Pearson, Baumann, and Pickering 1994).

Research also suggests that ethnic conflicts face a higher probability of attracting intervention (Khosla 1999). An ethnic presence within the potential intervener pressures the government to intervene on behalf of coethnics abroad. Civil wars fought over factional ideological differences, too, have provided an attractive target for intervention (Regan 2000), as evident from the superpower interventions into the ideological conflicts in Nicaragua, Mozambique, and Angola during the Cold War.

Finally, worsening conditions in the civil war become directly relevant to potential interveners when they threaten to affect the latters' interests. We concur with Regan (2000) on this point. A state may initially not deem casualties and refugees from the conflict as strategically important concerns, until the growing intensity of the conflict threatens to spread across state boundaries into its territory.

# Research Design and Methodology

In this section we describe our empirical test of actorand phenomenon-centric factors on the timing of interventions on the side of the government or opposition. Our unit of analysis is the potential intervener, in accordance with our actor-centric approach. Like Lemke and Regan, we define potential interveners for each civil war as all members of the state system during the conflict other than the civil war country—civil war outbreak creates "intervention opportunit[ies] for [these states]" (2004, 155). Lemke and Regan's crosssectional data set is unsuitable for investigating how earlier interventions affect the timing of subsequent interventions by other states into the same conflict. So we create new cases of intervention opportunities using Regan's (2002) longitudinal data set on post-WWII civil war durations, which codes the timings of interventions, and the side on which they occur. We are thus able to identify the sequence of interventions in each conflict and test our arguments about interrelations between potential and actual interveners.

### Statistical Approach: Mixture Cure Model Survival Analysis

Survival analysis is the appropriate statistical technique for modeling the timing of intervention. States begin to be at risk of intervention upon conflict onset; cases are right-censored if intervention has yet to occur by the end of the conflict. Each case may consist of multiple observations, each corresponding to a portion of the potential intervener's total time at risk. The current observation ends, and a new one begins, whenever some other state begins involvement in the conflict the context has changed. This mirrors the time-varying composition of actual interveners in each civil war, which changes according to the sequence of interventions. 6 As interventions on the side of the government and opposition are nominal but unordered outcomes, we estimate "competing risks" models, the survival analysis analog to polytomous choice models.<sup>7</sup>

<sup>5</sup>We did not include the conflict in Malaya (now Malaysia) from 1948 to 1950 ("The Malayan Emergency"), because data for most of our covariates are not available. Prior to 1957 Malaya was a direct colony of Great Britain, not an independent state. Even though we are not including it in the analysis, two of the interventions support our model and none contradict it.

"We specify a *continuous*-time setup because the time-lengths between successive interventions vary both within and between conflicts. A discrete-time setup (i.e., strictly annual or monthly observations) is inappropriate because multiple interventions may occur within each year, or even each month.

<sup>7</sup>In competing risks models, all outcomes except for the current outcome of interest are treated as right-censored reference categories. Thus, for example, nonintervention and intervention on the side of the opposition are the joint reference categories, if intervention on the side of the government is the current outcome of interest.

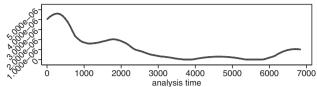
Furthermore, and perhaps more importantly, we do not assume standard survival models like the Cox and Weibull are appropriate for our purposes. We define all states other than the civil war country as potential interveners, but a substantial proportion perhaps even the majority—of states may not even view an ongoing civil war as an intervention opportunity. These states may simply lack the capability and/or motivation to intervene in what they regard as another sovereign state's domestic affairs. This empirical insight has crucial consequences for the choice of survival model, because standard models assume all cases will eventually experience the event, given enough time (Box-Steffensmeier and Jones 2004, 148–49). For our purposes, this is tantamount to neglecting the issue of whether states will intervene or not—because it is assumed all will do so eventually. The fact, however, that most states do not intervene means we should be concerned jointly with whether they intervene or not, and with the timings of the interventions for those that do.

Thus we estimate, instead of standard survival models, "mixture cure" models (e.g., Sposto 2002; see the online appendix at http://journalofpolitics.org/ for technical details and additional references).8 These models contain an additional binary regression component to model the probability of the event occurring eventually and to correct the hazard/duration model portion. Estimating the mixture cure model with competing risks confers two major advantages: (1) We avoid having to address the above-mentioned problematic assumption of standard survival models by first defining, then analyzing only "relevant" states. This approach would invariably have resulted in exclusion of cases of intervention by "nonrelevant" states. (2) We are able to ascertain simultaneously what factors affect the probability of intervention, the hazard/timing of the intervention (given the decision to intervene), and the side on which the intervention occurs.

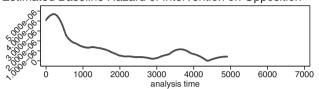
Before estimating the mixture cure model, we first graph how the underlying baseline hazards of intervention on the side of the government and opposition change over time, given the data. Examination of the graphs aids identification of an appropriate parametric distribution for the hazard portion, which determines what particular model we will estimate. The nonmonotonic hazards (see Figure 1) suggest that the lognormal distribution is more appropriate than the exponential and Weibull, which assume constant and monotonic

#### FIGURE 1 Estimated Baseline Hazards

Estimated Baseline Hazard of Intervention on Government



Estimated Baseline Hazard of Intervention on Opposition



hazards, respectively. Likelihood ratio and Akaike Information Criterion goodness-of-fit test statistics also indicate that the lognormal cure model fits better. Further, the graphs reveal that the hazards peak highest at around 300 days, suggesting that most interventions occur within a year of conflict onset. The multiple secondary peaks are crucial to our arguments, as they may reflect subsequent interventions by multiple states over the course of the conflict, thereby supporting our decision to model interrelated interventions.

We specify two sets of covariates in our model of intervention on the side of the government and opposition. The first set, which we posit affects the probability of an outside state eventually intervening, comprises: major power status, colonial history, capability ratio, whether the potential intervener is contiguous and/or in the same geographical region as the civil war country, rivalry and alliance ties, and the type of conflict (ethnic and ideological). We also control for joint democracy. The second set, which we posit influences the timing of intervention, comprises: rivalry and alliance ties with the civil war state and actual interveners, and casualty and refugee levels. Operational details are in the online appendix.

# **Discussion of Findings**

We detail our results in Table 1. Under the "Probability (Logit)" heading, we report two logit models of the probability that a state will intervene on the side of

<sup>9</sup>We also considered controlling for trading relations between the potential interveners and civil war states, but do not do so, because up to 50% of the bilateral trade data for the period covered by our study are missing. This proportion is even higher for African countries, which is especially problematic, given that several civil wars and interventions occur in Africa.

<sup>&</sup>lt;sup>8</sup>Box-Steffensmeier, Radcliffe, and Bartels (2005) and Hettinger and Zorn (2005) are applications of these models to American politics.

TABLE 1 Logit-Lognormal Mixture Cure Model of Third-Party Intervention

Covariate	Government			Opposition		
Probability (Logit)	Ŷ	S.E.	P	$\hat{oldsymbol{\gamma}}$	S.E.	P
Major Power	2.884	.478	<.001	1.814	.625	.002
log <sub>10</sub> Capability Ratio	1.231	.181	<.001	1.402	.268	<.001
Colonial History	2.730	.958	.002	4.851	1.222	<.001
Contiguity	2.605	.446	<.001	4.790	.656	<.001
Same Region	1.844	.407	<.001	2.200	.531	<.001
Rivalry	.488	1.039	.319	3.836	1.033	<.001
Alliance	168	.523	.374	-1.709	.848	.022
Ethnic Conflict	.858	.666	.099	2.407	1.152	.019
Ideological Conflict	1.127	.661	.044	1.604	1.181	.088
Cold War	1.065	.357	.002	2.523	.634	<.001
Joint Democracy	-1.177	.702	.047	-2.591	1.338	.027
Constant	-7.171	.816	<.001	-10.091	1.408	<.001
Hazard (Lognormal)	$\hat{m{eta}}$	S.E.	P	$\hat{m{eta}}$	S.E.	P
Rival on side of Govt.	684	1.293	.299	7.255	1.887	<.001
Rival on side of Opp.	3.229	1.682	.028	.416	1.738	.406
Ally on side of Govt.	4.405	1.328	.001	-3.644	2.056	.038
Ally on side of Opp.	2.151	1.660	.098	1.175	1.704	.245
Rivalry	-1.771	1.262	.081	1.690	.825	.020
Alliance	3.025	.934	.001	2.234	1.030	.015
log <sub>10</sub> Fatalities	.148	.157	.173	.205	.172	.117
log <sub>10</sub> Refugees	.355	.118	.002	.249	.117	.017
Constant	-12.370	1.358	<.001	-13.644	1.143	<.001
Shape Parameter $lpha$	-1.282	.136	<.001	-1.413	.104	<.001

N = 20,820; number of interventions = 116 (government), 92 (opposition). p-values are one-tailed.

the government and opposition, respectively; under the "Hazard (Lognormal)" heading, we report two lognormal hazard models of the two outcomes. Here the hazard is the potential intervener's risk of intervention at time T=t, given it has yet to do so until t. The hazard and expected duration are inversely related, and thus an increase in the hazard of intervention corresponds to a decrease in the expected duration until intervention, or equivalently, a hastening of entry into the conflict. To aid substantive interpretation and discussion, we also report each covariate's predicted effect in terms of percentage change in the probability and hazard (see Table 2).  $^{11}$ 

<sup>10</sup>The standard lognormal survival model is formulated as a loglinear duration metric model, where a positive coeffcient means an increase in the expected duration until event occurrence, or a decrease in the hazard (Box-Steffensmeier and Jones 2004, 31–35). But the lognormal mixture cure model we estimate is a hazard, not duration, formulation. This model does not impose the assumption of proportional hazards (Sposto 2002). Nor are we aware of diagnostic tests developed for such models.

<sup>11</sup>The covariate effects are in terms of percentage increase or decrease over the base probability or hazard, with all other cova-

With respect to Hypothesis 1, we find that when a rival has already intervened on the side of the government, the hazard of intervention on the side of the opposition increases by almost 1100% (or nearly 11 times) over the baseline. To return to our introductory example, clearly the Soviet intervention into the Afghan civil war on the side of the government hastened the U.S. intervention on the side of the opposition.

Likewise, when a rival intervenes on the side of the opposition, the hazard of intervention on the side of the government increases by 405% over the baseline. During the 1998 war in the Democratic Republic of Congo (DRC), Uganda intervened on the side of the opposition, followed by its rival Sudan on the side of

riates held constant. The base probability and hazard are defined as the values of the probability and hazard when all covariates are set to 0. Each covariate is then individually incremented: dummy variables from 0 to 1 (i.e., from "absent" to "present"), continuous variables from 0 to +1 standard deviation. The formula for the percentage change is (new value of prob. or hazard–base prob. or hazard)  $\div$  (base prob. or hazard)  $\times$  100.

TABLE 2 Predicted Percentage Changes in Probabilities and Hazards

Covariate	Government	Opposition $\%$ $\Delta$ in Prob.	
Probability (Logit)	% Δ in Prob.		
Major Power	1,663.34	513.00	
log <sub>10</sub> Capability Ratio	238.28	301.81	
Colonial History	1,410.73	12,602.29	
Contiguity	1,234.46	11,857.40	
Same Region	528.70	801.20	
Rivalry	62.50	4,522.66	
Alliance	-15.04	-81.86	
Ethnic Conflict	135.66	1,009.17	
Ideological Conflict	208.73	397.57	
Cold War	189.90	1,144.91	
Joint Democracy	-69.18	-92.50	
Hazard (Lognormal)	% ∆ in Hazard	% Δ in Hazard	
Rival on side of Govt.	-36.01	1,098.82	
Rival on side of Opp.	405.65	25.45	
Ally on side of Govt.	647.54	-91.14	
Ally on side of Opp.	221.82	84.76	
Rivalry	-52.35	10,798.59	
Alliance	295.23	-45.73	
log <sub>10</sub> Fatalities	46.29	58.92	
log <sub>10</sub> Refugees	173.41	93.28	

the government. Sudan is not allied to the DRC, but it may have gotten involved due to Uganda's earlier intervention—the Ugandan and Sudanese governments had multiple disputes in 1998, both accusing the other of invading one's own territory. U.S. intervention into Nicaragua on the side of the opposition in the early 1980s is another case in point. The Soviets, concerned about the effect this would have on the Sandinista government, later intervened to bolster the Sandinistas.

We find partial support for Hypothesis 2. A potential intervener's hazard of intervention on the side of the government increases by almost 6.5 times if an ally has already intervened on the same side. As a hypothetical example, if the situation in Iraq were to worsen, our model would predict that allies of the United States, even France and Germany, will intervene and support the U.S.-backed government in an effort to save the fledgling Iraqi democracy. Turkey, too, will be inclined to support the Iraqi government, especially if the Kurds stood to gain from the conflict. Kurdish control of Iraq would threaten Turkish interests, as irredentist claims may pressure Turkey to give up the Kurdish-controlled area, which is abundant in water resources.

The positive relationship between an ally's intervention on the side of the opposition and the potential intervener's hazard of intervening on the side of the government, is contrary to our expectations. We expected a negative relationship, given our arguments about shared interests between allies. Our data set contains nine instances of intervention on the side of the government preceded by an ally's intervention on the side of the opposition. Of these nine cases, six involved alliance ties between the potential intervener and the civil war country's government; another two involved earlier intervention on the side of the opposition by a rival. This suggests that the surprising finding in question is in fact driven by allies deciding to back the civil war country's government, or states seeking to balance against rivals that have intervened on the side of the opposition.<sup>12</sup> Furthermore, rather than dismissing this result as simply a "data artifact," we see the need instead to theorize and investigate how potential interveners weigh the merits of multiple, possibly competing interests.

As expected, a potential intervener's hazard of intervention on the side of the government increases by nearly three times over the baseline when it is allied to the civil war country. The finding of a positive relationship between alliance ties with the government and intervention on the side of the opposition, however, is inconsistent with our expectation. More attention to uncovering the intervener's exact relations with the government and opposition factions may shed light on this. Our model does, however, predict a 46% decrease over the baseline hazard of intervention on the side of the opposition when the potential intervener and civil war country are allied, which is consistent with Hypothesis 3. Why does the parameter estimate suggest a positive relationship, while the prediction is in the opposite direction? Recall that the mixture cure model contains an additional logit component to estimate the probability of a state ever intervening. It turns out that an ally is less likely to intervene on the side of the opposition in the first place. So although alliance ties between the potential intervener and civil war country may increase the hazard of intervention on the side of the opposition, this effect is heavily negated by the same variable's negative effect on the probability of ever intervening on the side of the opposition.

We also find that rivalry with the civil war country increases the hazard of intervention on the side of the

<sup>12</sup>Note that we do expect an ally to aid the civil war country's government, and for a state to side with the government because a rival has intervened on the side of the opposition. These two possibilities are in fact supported by our results.

opposition by 108 times over the baseline. This supports Hypothesis 4. For example, in 1998 Uganda was a rival of the Democratic Republic of Congo and was among the first to intervene on the side of the opposition. In addition, there is some support for the expectation that increasing casualty and refugee levels hastens intervention. This suggests that worsening structural conditions in the civil war country also affect when an outside state decides to undertake intervention.

Moving on to discuss our analysis of the probability of intervention, our findings affirm several past studies, while casting further doubt on those we argue are suspect. First, major powers, or more powerful (i.e., high capability ratio) states in general, are more probable interveners. The two superpowers were able to intervene in several civil conflicts during the Cold War, due to their greater capabilities. Colonial powers, too, are highly probable interveners. Consider that France intervened into 14 different civil wars, 10 of which were taking place in its former colonies. Likewise all four of Belgium's interventions were into civil wars in its former colonies.

Consistent with our argument about the danger of conflict spillover, states that are either contiguous to, or in the same region as, the civil war country are highly probable interveners. This finding may seem intuitive, if not obvious, but scholars have found a negative relationship between the number of shared borders and intervention when adopting the phenomenon-centric approach (Pearson 1974; Regan 2000). Our findings support our assertion that it is necessary to adopt the actor-centric approach when questions about intervention pertain to the decisions and actions of the third parties.

Finally, states are more likely to intervene in ethnic or ideological conflicts. Subsequent research on interventions into ethnic conflicts, in particular, could adopt an actor-centric approach to further investigate the role of cross-border ethnic affinities in influencing a states's intervention on the side of coethnics.<sup>13</sup>

# **Concluding Thoughts**

In this paper we advocate an actor-centric approach to modeling third-party interventions into civil wars. We then demonstrate the potential of integrating it with the phenomenon-centric approach by modeling intervention as a function of both actor- and phenomenon-centric factors—the results support our interest-based arguments. Our joint focus on interrelationships among potential and actual interveners, and relations between potential interveners and the civil war country, heeds Balch-Lindsay and Enterline's call "to consider . . . the strategic and interdependent interests and behavior of third parties and potential third parties, as well as the geopolitical environment within which civil wars are embedded" (2000, 638; original emphasis). Our estimation of the mixture cure survival model enables us not only to model the timing of intervention, but also the probability of ever intervening. We are also able to avoid the problematic assumptions of standard survival models, but without resorting to potentially problematic definitions and analysis of only "relevant" states.

Our analysis augments others by accounting not only for factors important in previous studies, such as major power status, colonial ties, contiguity, and casualties, but also for other theoretically and substantively important features. Our finding that states with divergent interests are more prone to intervention is novel in the quantitative literature and extends earlier case study findings on superpower interventions during the Cold War (Feste 1992; Scott 1996) to other states in the international system. This is important because several interventions into African civil wars are undertaken by nonmajor-power rivals. This result, along with some of the findings on alliances, supports Saideman's (2002) contention that the ideas of "balancing" and "bandwagoning" may pertain not only to interstate alliance politics, but also to the geopolitics of civil war intervention. States do not seek exclusively to balance or bandwagon, but instead resort to one or the other depending on the situation (i.e., who has already intervened, and on what side). We show that it is crucial to distinguish between intervention on the side of the government and opposition, which is how interventions take place in reality. Future research could build on our approach and findings by examining the range of competing interests with governments and oppositions, such as ethnic affinities and economic ties. We think it is evident that these interests, and their manifestation in interventionist behavior, can neither be assumed static over the course of the conflict, nor independent of other interveners.

<sup>&</sup>lt;sup>13</sup>Carment, James, and Teydas (2005), too, call for more attention to third-party motivations in internationalized ethnic conflicts. We also find the Cold War period and joint democracy to be positively and negatively associated, respectively, with the probability of intervention. But we caution against reading too much into these findings; rather we think they are produced by the fact that the bulk of civil wars in our data occurred during the Cold War, and that most civil wars occur in nondemocracies, thus most intervener-civil war country pairs are nonjointly democratic.

## Acknowledgements

We thank Chris Achen, Ravi Bhavnani, Paul Diehl, John Geer, Michael Gilligan, Darren Hawkins, Patrick James, James Kuklinski, Douglas Lemke, Will Moore, Irfan Nooruddin, Peter Rudloff, James M. Scott, Dina Zinnes, the anonymous reviewers, and participants in the BYU Political Science Research Seminar for their valuable comments, suggestions, and encouragement. Allen Buxton, Yingwei Peng, and F. Peter Treasure patiently answered our questions about cure models; Patrick Regan generously shared, and answered our queries about, his data set. All errors remain our own.

Manuscript submitted 15 April 2005 Manuscript accepted for publication 11 November 2005

## References

- Balch-Lindsay, Dylan, and Andrew Enterline. 2000. "Killing Time: The World Politics of Civil War Duration, 1820–1992." *International Studies Quarterly* 44 (4): 615–42.
- Box-Steffensmeier, Janet M., and Bradford S. Jones. 2004. *Event History Modeling: A Guide for Social Scientists*. New York: Cambridge University Press.
- Box-Steffensmeier, Janet M., Peter Radcliffe, and Brandon L. Bartels. 2005. "The Incidence and Timing of PAC Contributions to Incumbent U.S. House Members, 1993–94." *Legislative Studies Quarterly* 30: 549–79.
- Carment, David, and Patrick James. 1996. "Two Level Games and Third Party Intervention: Evidence from Ethnic Conflict in the Balkans and South Asia." *Canadian Journal of Political Science* 29 (3): 521–54.
- Carment, David, and Patrick James. 1998. "The United Nations at 50: Managing Ethnic Crises—Past and Present." *Journal of Peace Research* 35 (1): 61–82.
- Carment, David, Patrick James, and Dane Rowlands. 1997. "Ethnic Conflict and Third Party Intervention: Riskiness, Rationality, and Commitment." In *Enforcing Cooperation*, eds. Gerald Schneider and Patricia Weitsman. London: Macmillan, pp. 104–31.
- Carment, David, Patrick James, and Zeynep Taydas. 2005. "The Internationalization of Ethnic Conflict: State, Society and Synthesis." Unpublished Manuscript.
- Carment, David, and Dane Rowlands. 1998. "Three's Company: Evaluating Third Party Intervention in Intrastate Conflict." *Journal of Conflict Resolution* 42 (5): 572–99.
- Croco, Sarah E., and Tze Kwang Teo. 2005. "Assessing the Dyadic Approach to Interstate Conflict Processes: a.k.a. 'Dangerous' Dyad Years." Conflict Management and Peace Science 22 (1): 5–18.
- DeRouen, Karl Jr., and David Sobek. 2004. "The Dynamics of Civil War Duration and Outcome." *Journal of Peace Research* 41 (3): 303–20.
- Diehl, Paul F., and Gary Goertz. 2000. War and Peace in International Rivalry. Ann Arbor: University of Michigan Press.

- Feste, Karen. 1992. Expanding the Frontiers: Superpower Intervention in the Cold War. New York: Praeger.
- Heraclides, Alexis. 1990. "Secessionist Minorities and External Involvement." *International Organization* 44 (3): 341–78.
- Hettinger, Virginia A., and Christopher Zorn. 2005. "Explaining the Incidence and Timing of Congressional Responses to the U.S. Supreme Court." *Legislative Studies Quarterly* 30: 5–28.
- Khosla, Deepa. 1999. "Third World States as Intervenors in Ethnic Conflicts: Implications for Regional and International Security." *Third World Quarterly* 20 (6): 1143–56.
- Lemke, Douglas, and Patrick Regan. 2004. "Interventions as Influence." In *The Scourge of War: New Extensions on an Old Problem*, ed. Paul F. Diehl. Ann Arbor: University of Michigan Press, pp. 145–68.
- Licklider, Roy. 1993. Stopping the Killing: How Civil Wars End. New York: New York University Press.
- Pearson, Frederic. 1974. "Geographic Proximity and Foreign Military Intervention." *Journal of Conflict Resolution* 18 (3): 432–60.
- Pearson, Frederic, Robert Baumann, and Jeffrey Pickering. 1994. "Military Intervention and Realpolitik." In *Reconstructing Realpolitik*, eds. Frank Wayman and Paul F. Diehl. Ann Arbor: University of Michigan Press, pp. 205–25.
- Peceny, Mark. 1999. *Democracy at the Point of Bayonets*. University Park: Pennsylvania State University Press.
- Pickering, Jeffrey. 2001. "The Conflict-Prone and the Conflict-Weary: War Outcomes and Types of Military Intervention, 1946–1996." *Journal of Political and Military Sociology* 29 (2): 221–39.
- Regan, Patrick. 2000. Civil Wars and Foreign Powers: Interventions and Intrastate Conflict. Ann Arbor: University of Michigan Press.
- Regan, Patrick. 2002. "Third Party Interventions and the Duration of Intrastate Conflicts." *Journal of Conflict Resolution* 46 (1): 55–73
- Roy, A. Bikash. 1997. "Intervention Across Bisecting Borders." *Journal of Peace Research* 34 (3): 303–14.
- Saideman, Stephen. 1997. "Explaining the International Relations of Secessionist Conflicts: Vulnerability vs. Ethnic Ties." *International Organization* 51 (4): 721–53.
- Saideman, Stephen. 2002. "Overlooking the Obvious: Bringing International Politics Back into Ethnic Conflict Management." *International Studies Review* 4 (3): 63–86.
- Scott, James. 1996. *Deciding to Intervene: The Reagan Doctrine and American Foreign Policy*. Durham: Duke University Press.
- Singer, J. David. 1963. "Internation Influence: A Formal Model." American Political Science Review 57 (2): 420–30.
- Sposto, Richard. 2002. "Cure Model Analysis in Cancer: An Application to Data from the Children's Cancer Group." *Statistics in Medicine* 21: 293–312.
- Walter, Barbara. 1997. "The Critical Barrier to Civil War Settlement." *International Organization* 51 (3): 335–64.
- Yoon, Mi Yung. 1997. "Explaining US Intervention in Third World Internal Wars, 1945–1989." *Journal of Conflict Resolution* 41 (4): 580–602.
- Zartman, I. William. 1989. Ripe for Resolution: Conflict and Intervention in Africa. 2nd ed. New York: Oxford University Press.

Michael Findley and Tze Kwang Teo are Ph.D. candidates in political science at the University of Illinois at Urbana-Champaign, Urbana, IL 61801.