

## Settling Civil Wars

### *Armed Opponents' Fates and the Duration of the Peace\**

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Two different positions regarding the impact the fate of factions has on the duration of the peace appear in theories of civil war termination. One holds that the peace will be long-lived when the organizational structures of all but one of the factions that compete in a war are destroyed or dismantled at the conflict's end. The other position maintains that the peace can best be preserved when rival groups agree to share state power at the war's end. I examine the evidence for these competing arguments, drawing on a new dataset on the fate of factions that participated in civil wars between 1945 and 1999. The results of this analysis indicate that although destroying opposing groups' organizations has little effect on the duration of the peace, an agreement among rivals to share power can help to prolong the peace.

**KEYWORDS:** civil war settlements; factions; outcomes

The fate of armed factions figures centrally in theories attempting to explain how a stable peace can best be secured following the end of civil war. Beginning from the premise that war-ending agreements that reduce uncertainty and stabilize expectations will prove most stable, scholars have developed rival arguments regarding the impact the fate of armed factions has on the duration of the peace. One school of thought hypothesizes that settlements that destroy the organizational structures of all but one of the factions that fight in a war will prove long-lived because they leave rivals with little doubt as to who will win a future military encounter (Wagner, 1993; Licklider, 1995; Quinn et al., 2007).<sup>1</sup> A second school of thought posits that agreements that preserve adversaries' organizations and call for them to

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<sup>1</sup> I use the terms *settlement*, *agreement*, and *bargain* interchangeably to refer to the terms agreed to by civil war adversaries at the conflict's end. Virtually all civil wars, whether they are ended via military victory, negotiated settlement, or negotiated truce, see adversaries agree to terms of some kind at the war's end. See Kecskemeti (1958), Iklé (1991), Wagner (1993), and Reiter (2003).

share power will stabilize the peace by providing rivals with a stake in the state and by making it difficult for opponents to use force to alter war-ending bargains (Sisk, 1996; Hartzell and Hoddie, 2003, 2007). I examine the evidence for these competing arguments, drawing on a new dataset on the fate of factions following 108 civil wars fought and ended between 1945 and 1999.

Students of civil war have long assumed that wars ending in military victory destroy the organizational structures of rival groups while those ending in negotiated settlements preserve them. Based on this assumption, tests of the foregoing hypotheses have employed the means by which civil wars are ended as proxies for the different fates of factions. I argue that this is problematic for two reasons. First, in the absence of data on the fate of factions we do not know whether it is reasonable to assume that military victories destroy rival factions' organizational structures and that negotiated settlements preserve them. Second, the fates of factions should be considered components of civil war-ending agreements, the bargains that "specify who gets what and when" (Werner and Yuen, 2005: 262). Questions regarding whether or not these bargains are the product of civil war outcomes and/or whether they exercise an influence on the duration of the peace independent of the way in which wars are ended should be the subject of empirical investigation. Answers to these questions could help guide peacemakers in the design of suitable conflict resolution strategies.

In this article I review the literature on civil war settlements and make existing theories testable through the use of new data on the fate of armed opponents' organizational structures and agreements among rivals to share power. These two dimensions of the fate of factions tap into central terms of civil war-ending agreements – i.e. who "survives" and who gets to exercise power and how – allowing me to examine the effects the terms of settlements have on the peace. The results of this analysis raise questions about some of the untested assumptions that underpin the theoretical debates regarding the best means by which to end civil wars. The proxies I use for the fate of factions indicate that although destroying opposing groups' organizations has little effect on the duration of the peace, an agreement among rivals to share power can help to prolong the peace. This result, coupled with the finding that both military victories and negotiated ends to civil wars are associated with a stable peace, suggests that the long-held belief that military victories prolong the peace by destroying the organizational structures of all but the victorious faction is empirically questionable. The manner in which civil wars end does matter where the duration of the peace is concerned, although not for the reasons that have commonly been identified in the literature on this topic.

This article is organized as follows. I begin with a discussion of scholarship on the relationship among civil war settlements, the fate of factions, and the duration of the peace. Next I specify testable hypotheses regarding the effects different settlement provisions and civil war outcomes have on the stability of the peace. I then describe the data collected for this study and the research design. Following that I employ hazard analysis to test the hypotheses. I conclude by discussing the implications the results have for the question of how civil wars might best be ended in order to stabilize the peace.

## **Civil War Settlements, the Fate of Factions, and the Duration of the Peace**

Broadly speaking, two different positions regarding the impact the fate of factions has on the duration of the peace have been staked out in theories of civil war termination. One holds that the peace is most likely to be long-lived when the organizational structures of all but one of the factions that compete in a war are destroyed or dismantled at the war's end. The other position maintains that the peace can best be preserved when rival groups agree to share state power at the war's end. Each of these "fates of factions" is assumed to be the product of a different type of civil war settlement, one the outcome of military victories and the other following from the negotiated end of civil wars.

Both theories regarding the role the fates of factions play in securing a stable peace build on the rationalist approach to the study of civil wars. This approach suggests that war, once begun, will only end once the parties arrive at a bargain they prefer to ongoing war, and peace will last only as long as the groups remain committed to the new bargain (Fearon, 1995, 1998; Reiter, 2003). Adversaries will stick to their bargains, and the peace will be stable, as long as the groups in question have convergent expectations regarding the outcome of a future hypothetical war. As several scholars have pointed out, however, agreements are not likely to be kept, and war will become more likely, if these expectations change (Wagner, 1993; Werner, 1999; Werner and Yuen, 2005). Based on this explanation of the recurrence of civil war, the challenge facing those who wish to foster an enduring peace is how best to reduce uncertainty and stabilize expectations among the parties to the settlement. As I discuss below, despite the fact that they start from this common position, each of the theories under consideration has a different perspective on what the fate of factions should be if the peace is to be stabilized.

### ***Military Victory and the Destruction of Rival Factions' Organizational Structures.***

The dominant school of thought regarding the relationship between civil war settlements, the fate of factions, and post-conflict peace duration can be summarized by the following hypothesis: Civil wars that end via military victory will experience the longest-lived peace (Wagner, 1993; Licklider, 1995; Walter, 1997; Quinn et al., 2007). The logic on which this hypothesis is based is that military victories result in the destruction of the organizational identities or structures of all factions with the exception of the one that emerges victorious from the conflict. Taking advantage of their superior strength, the victors of civil wars are thought to destroy or dismantle the organizations of armed adversaries in order to check future armed challenges to their power. Groups that can no longer carry out a vital set of organizational functions – i.e. leadership, communication and coordination, and/or recruitment or replacement of members – are believed to be unlikely to resume armed conflict, in effect stabilizing the terms of any settlement agreed to at the war's end.

According to this school of thought, rival factions' expectations regarding any future deal they may be able to obtain for themselves are believed to be least likely to change in those instances in which the winning faction in a civil war demonstrates

its dominance. By destroying the organizational structures of opposing factions, the winning group leaves its opponents with little doubt regarding the outcome of future military encounters. Dissuaded from believing that they can gain a better bargain for themselves by resorting to the use of force again, adversaries who have been militarily defeated are thus thought to be more likely to stick to the war-ending bargain to which they agreed at the conflict's end.

### ***Negotiated Settlements and Power Sharing among Civil War Rivals***

The fate of factions following civil wars is not limited to the question of whether or not groups retain their organizational identity. Civil war settlements can also be designed to address the issue of the role, if any, that former armed rivals are to play with respect to the structures of state power. Power-sharing measures, provisions that call for the distribution of political, territorial, and/or military power among contending groups, have been designed to provide for the security of rivals in the post-war environment by giving groups a means of checking the actions of others (Hartzell, 1999).

Scholars who hypothesize that the adoption of power-sharing measures by rival factions can help to extend the peace argue that these provisions can be used to stabilize expectations and reduce uncertainty. Agreements among adversaries to share power can prolong the peace by providing rivals with a stake in the future in the form of access to state power. Power-sharing measures may also alter actors' preferences. The rationalist approach to war recognizes that actors' preferences are not immutable; if actors' expectations change, a war-ending settlement can become obsolete and subject to challenge, including through the force of arms. Although accurate, this observation does not take into account the possibility that the very bargain that is agreed to can itself alter rivals' preferences in a manner that makes for a stable peace. By providing adversaries with a stake in the peace, power-sharing measures can help to increase the set of agreements that actors prefer to war. Finally, because power-sharing provisions such as those that call for the integration of rivals' troops into the state's armed forces make it difficult for rival forces to return to armed conflict, adversaries may be more likely to abide by terms of the war-ending bargain to which they agreed (Hartzell and Hoddie, 2007).

### **Distinguishing between Civil War Outcomes and the Terms of Settlements**

To date, efforts to test empirically the theories discussed above have proved problematic. Studies that have used war outcomes as a proxy for civil war settlements have found support for the hypothesis that the peace persists longer following military victories than it does when wars end via negotiations (Licklider, 1995; Fortna, 2004). This result has been claimed as evidence for the argument that military victories stabilize the peace by ensuring the destruction of the organizational identities of all but the winning faction in a civil war. Such a conclusion may not be warranted, however. First, in the absence of data on the fate of factions, we cannot be sure that military victories lead to the destruction of the organizational structures of competing groups or that negotiated settlements preserve rivals' organizations. Second, it might be the case that military victories serve to stabilize the peace for

reasons other than their effects on the organizational structures of armed adversaries. Lacking a proxy for the status of rival groups' organizational structures at the end of civil wars, it has been difficult to determine what association, if any, this factor has with the different war outcomes and/or whether it exercises any independent effect on the duration of the peace.

Problems of empirical testing extend to the role that power sharing purportedly plays in stabilizing the peace. Studies have demonstrated empirically that agreements that include an array of power-sharing mechanisms prove more durable than settlements that call for no or few such measures (Hartzell and Hoddie, 2003, 2007). However, those analyses have been limited to civil wars ended via negotiation. Because it is conceivable that the military victors in a civil war could offer to share power with the rivals they have defeated, all war-ending agreements – those following both military victories and negotiations to end civil wars – should be examined in order to determine what effect, if any, this particular fate of factions has on the duration of the peace.

What all of this suggests is that there may be a need to distinguish more carefully between the means by which wars are ended and the terms of the settlements actors agree to at a civil war's end. It is possible to imagine a scenario, for example, in which the victor of a civil war adopts a strategy of "prudence in victory" that sees the winner allowing losing factions to maintain their organizational structures and perhaps even to share state power.<sup>2</sup> In this instance, the terms of the settlement – "who gets what" – will differ considerably from those scholars generally associate with military victory. Is this scenario plausible? Data on the fate of factions can be used to determine the extent to which civil war outcomes and the terms of settlements converge or not. If these data indicate that there is a significant divergence between the means by which wars end and the fate of factions, an investigation of the influence that each of these factors has on the duration of the peace seems warranted.

Based on this logic, I specify three hypotheses that distinguish between the effects that civil war outcomes and the fates of factions have on the stability of the peace.

*Civil war outcomes.* The dominant school of thought regarding the impact that civil war outcomes have on the duration of the peace is that military victories produce a more durable peace than do the negotiated ends of civil wars. It is this hypothesis that I test in this paper.

*H<sub>1</sub>: Civil wars ended via a military victory will be followed by a longer-lived peace than will intrastate conflicts terminated through negotiation.*

*The destruction of rival factions' organizational structures.* The core assumption underlying the hypothesis that military victories can best serve to stabilize the peace is that wars that end in this manner see the victors destroy or dismantle the organizational structures of the factions they defeat. This demonstration of dominance on the part of the victor is believed to strengthen groups' commitment to the peace by convincing defeated actors that they have little likelihood of prevailing in a future conflict. I adopt the logic of this argument in specifying a

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<sup>2</sup> The concept of "prudence in victory" has been discussed by Maoz (1984) in relation to interstate conflicts.

testable hypothesis regarding the effect the fate of factions' organizations has on the duration of the peace.

*H<sub>2</sub>: The peace will prove more stable when rival factions' organizational structures are destroyed at the end of civil wars.*

*Power sharing among civil war rivals.* Negotiated civil war settlements that include a range of power-sharing provisions have been found to stabilize the peace. Measures that provide adversaries access to the structures of state power are thought to strengthen rival groups' commitment to the peace by giving them a stake in the peace, altering their preferences in a manner that is supportive of the peace, and hampering their ability to use force in an attempt to alter agreements. I follow the logic of this theory in identifying a testable hypothesis.

*H<sub>3</sub>: The peace will endure longer when rival factions agree to construct an array of power-sharing measures at a civil war's end.*

## **Data and Research Design**

This article employs a new dataset that identifies the factions that participated in civil wars and tracks the fate of their organizational structures for a period of three years after the war's end.<sup>3</sup> In addition, because data on power-sharing measures existed only for wars ending via negotiated settlements, I collected new data on power-sharing provisions for civil wars ending in military victories and negotiated truces.<sup>4</sup>

*Measurement.* I begin by operationalizing the variable *organizational structure scores*. This variable ranks the fate of factions' organizational structures on a scale from 1 (destroyed) to 4 (preserved) three years after the end of the relevant civil war. A faction was classified as a participant in a civil war if it had an identifiable leader, represented the government or expressed some form of opposition to the regime in place, and carried arms and fought at some point during the civil war.<sup>5</sup> Based on this, 358 factions, including both government and rebel groups, were identified as participants in the 108 civil wars fought and ended at some point between 1945 and 1999. The number of factions active in each conflict ranged from

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<sup>3</sup> I employ a three-year period because it is possible that some groups' organizational structures that initially are spared because of the glare of media attention or the temporary presence of peacekeeping forces may be systematically dismantled after the passage of time. This seems less likely to happen after a period of three years, particularly if groups have been able to strengthen their organizational structures during a period of post-war peace.

<sup>4</sup> The three principal means by which civil wars have been ended in the post-World War II era are military victories, negotiated settlements, and negotiated truces (Hartzell and Hoddie, 2007). See Quinn et al. (2007) for a discussion of civil war outcomes which differentiates among military victories on the basis of the party—government or rebel group—that wins the war.

<sup>5</sup> A variety of sources were used to identify the factions, including the Europa World Year Book, the Facts on File Database, INCORE Conflict Data Service, Conciliation Resources, the Library of Congress's Country Studies series, the Uppsala Conflict Database, the Minority at Risk datasets, and various country monographs. The same sources were also used to code the organizational identity of factions.



a low of two, the government and one rebel group, to a high of eleven (Lebanon in the 1975–1989 civil war).

Although the organizational structure or identity of factions is central to arguments regarding the relationship between civil war outcomes and the duration of the peace, surprisingly little effort has been made to define the concept. Wagner's assertion that the organizational identity of factions can remain intact even in the face of the destruction of their military forces suggests that the continued survival and ability to bargain of these groups does not rely solely on their ability to fight armed battles (1993: 259). Guided by Wagner, the concept of organizational structure that I employ is based not on the fate of adversaries' fighting forces following the end of the war but on their ability to carry out a vital set of organizational functions.<sup>6</sup> The factors I consider central to assessing the fate of a faction's organizational structure are whether or not the leadership of a faction remains in place and is able to exercise control over or induce compliance by its members; whether or not there exist routine and reliable means of communication and coordination within the group; and whether or not the faction is able to recruit and/or replace members.

I assigned each faction a score reflecting the extent of destruction of its organizational structure at the end of the assessment period.<sup>7</sup> A faction's organizational structure was considered to have been destroyed if it experienced the death and/or exile of key members of the leadership and no new effective leaders emerged; if communication between leaders and followers was effectively destroyed; and if the organization was unable to recruit new followers. Factions need only have met one of these criteria in order for their organizational structures to be considered destroyed. One example of the destruction of a group's organizational identity occurred with the exiling to the Netherlands of the members of the secessionist Republic of South Molucca at the conclusion of Indonesia's civil war in 1950. Factions whose organizational identities were destroyed were scored 1.

On rare occasions, factions that were once active in a conflict opted to dismantle their own organizational structures following the end of the war. I sought to distinguish these cases of voluntary organizational termination from those achieved as a result of the actions of the government following the war's end. The voluntary dismantling of a faction occurred in the case of the Movement for National and Social Liberation (EKKA), for example, at the end of the Greek civil war (Eudes, 1972). The eleven instances in which this occurred in the dataset were coded with a 2.

Groups that survived but whose ability to function was limited or altered in some fashion were coded 3. Groups in this category found themselves confronting challenges such as leadership struggles, interruptions in their networks of communication, and/or a loss of followers. A case in point followed the Iraqi civil war of 1950 when the government initiated a campaign to destroy its most formidable opponent,

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<sup>6</sup> The availability of arms and growing group contacts with diasporas suggest that even if factions' fighting forces are disbanded, rearming may prove a relatively simple prospect as long as groups retain an organizational structure of some sort.

<sup>7</sup> In some cases, factions' organizational structures were destroyed at the end of a civil war, before the end of the three-year assessment period. In no case did a faction whose organizational structure was destroyed reconstitute itself before the end of the assessment period.

Table 1. Frequency Distribution of the Organizational Structure Scores for Warring Factions at Wars' End

Organizational Structure Score	Frequency	Percent	Cumulative
1	103	29.26	29.26
2	11	3.13	32.39
3	106	30.11	62.50
4	132	37.50	100.00
Total	352	100.00	

the Iraqi Communist Party (ICP). By arresting several of the organization's top leaders, closing down its mass organizations, refusing to recognize the ICP as a legal entity, and subjecting its members to intimidation and violent attacks, the regime succeeded in destabilizing the faction's means of operation. With its organizational structure weakened, the ICP was forced to operate clandestinely in order to continue to exercise influence within Iraq (Sluglett and Sluglett, 2001).

Groups whose leadership remained in place or which experienced an unforced change of leadership and continued to work to secure some set of goals, even if the goals changed over time, are considered to have preserved their organizational structure. These factions were coded with a 4. One example of such a faction is the National Resistance Movement of Mozambique (Renamo). Renamo, which to this day is still headed by its former military leader, Afonso Dhlakama, has competed politically as the main opposition party in Mozambique since the country's 1992 peace accord ended its decade-long civil war.

Table 1 provides a snapshot of the fate of factions' organizational structures following the end of civil wars. As indicated by the frequency distribution of the coding for the 358 factions, roughly two-thirds of the factions retain an organizational structure of some sort (i.e. scores of 3 or 4 for the level of destruction of their organizational structures) following the end of the various conflicts.

Because I am interested in the impact that the fate of factions' organizational structures has on the duration of the post-conflict peace, I recode the organizational structure variable so that it can be used in studies which have civil wars as the unit of analysis. Creating such a variable presented something of a challenge as different numbers of factions, many of which have different organizational structure scores, fought in each of the civil wars. The solution I devise is to replace the ordinal organizational structure scores variable with a dichotomous variable, *destruction of rival factions' organizational structures*. I code this variable 0 in those instances in which more than one of the factions that participated in the war preserves some form of its organizational structure (i.e. the faction's organizational structure score was a 3 or a 4). I code the *destruction of rival factions' organizational structures* 1 when only one faction—the winning faction—saw its organizational structure preserved.

The variable *power-sharing measures* identifies the number of different types of provisions for the sharing of state power that factions agree to at a war's end. I rely on Hartzell and Hoddie's (2003) criteria in order to code this variable. An agreement is coded 1 for political power sharing if it calls for one of the following:



electoral proportional representation; administrative proportional representation; and executive proportional representation. An agreement that calls for power to be divided either on the basis of federalism, confederalism, or regional autonomy is scored 1 for territorial power sharing. An agreement is coded 1 for military power sharing if it calls for any of the following: the integration of adversaries' armed forces on the basis of a formula representative of the size of the armed groups; integration of armed forces on the basis of equal numbers of troops drawn from the antagonists' armed forces; appointment to key leadership positions within the military of the members of armed factions that do not dominate the state or are weaker; permission for adversaries to remain armed; and permission for antagonists to retain their own armed forces.

Having coded each civil war outcome for the three different types of power-sharing provisions, I then sum the number of different types of measures each includes. Totals range between a low of 0 (none of the three types of power-sharing provisions are included) and a high of 3 (all three types of provisions are included).

The variables *military victory* and *negotiated settlement* are used to distinguish between these two types of civil war outcomes.<sup>8</sup> *Military victory* is a dichotomous indicator coded 1 for civil wars that end in a battlefield victory for one side in the conflict. *Negotiated settlement* is a dichotomous variable coded 1 for civil wars that end in negotiations among some set of rivals to the conflict, none of whom admits defeat. The negotiations must address the question of how power is to be distributed and managed in the post-war state. Both measures are from Hartzell and Hoddie (2007).

I include several control variables identified by scholars as having an impact on post-civil war peace duration.<sup>9</sup> Three of these measures tap into the nature of the conflict. Conflict *intensity* is expected to increase the risk of renewed civil war by producing feelings of insecurity in former opponents. Wars of long *duration* are thought to strengthen parties' commitment to the peace by serving to convince groups of the difficulty of prevailing militarily on the battlefield (Hartzell and Hoddie, 2003). Finally, conflicts in which the central issue at *stake* is one of identity (i.e. wars involving ethnic, religious, racial, and linguistic interests) are thought to be destabilizing because the security concerns associated with those issues are deemed more intense than those stemming from politico-economic issues (Licklider, 1993; Kaufmann, 1996–1997).

Scholars have suggested that the introduction of *peacekeeping forces* at a war's end should make for a more enduring peace (Walter, 2002; Doyle and Sambanis, 2000; Fortna, 2004). Third-party promises to provide for the safety of combatants should serve to reassure former adversaries, thereby increasing their commitment to the peace. Wars with a *post-Cold War settlement* are thought likely to prove more stable as rival factions would be less likely to receive renewed access to the types of arms and funding available from the superpowers during the Cold War period.

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<sup>8</sup> The third principal means by which civil wars have been ended in the post-World War II era, *negotiated truces*, constitutes the reference category in models that employ *military victory* and *negotiated settlements* as independent variables. See the Appendix for details regarding the coding of this variable.

<sup>9</sup> See the Appendix for details regarding the coding of these variables and the sources used.

The remaining variables I control for are proxies for various characteristics of the economy, society, and state thought to have an impact on the stability of the peace. Higher levels of *economic development* are hypothesized to be associated with a lowered risk of return to civil war (Kumar, 1997; Collier et al., 2003). Large *populations* are believed to undermine the stability of the peace by providing rebels with a large pool from which to recruit forces (Fearon and Laitin, 2003; Sambanis, 2004). Finally, states with a significant *conflict history* are also deemed less likely to stick to the peace.

### **Research Design**

The dataset employed in this analysis covers civil wars fought and ended during the years 1945–1999. I classify intrastate conflicts as civil wars if they meet the criteria employed by Small and Singer (1982) in the Correlates of War project: the conflict produces at least 1,000 battle deaths per year; the central government is a party to the conflict; there was effective resistance on the part of both the national government and its opponents during the course of the conflict; and the conflict occurred within a defined political unit.

Because I am interested in accounting for the duration of the peace following the end of civil war, I code any cessation in the fighting as the end of an intrastate conflict. If fighting re-emerges in a state, I code that as another civil war episode. My coding of these conflicts yields a total of 122 civil war episodes for the years 1945 to 1999.

The data set is “censored,” or ends, on 31 December 1999. Of the 122 civil war episodes that began during the period on which I focus this study, 14 were ongoing at the end of 1999. These cases are omitted from the dataset. This leaves a total of 108 civil wars for analysis.

I employ event history analysis to test the effects of the independent variables on the dependent variable, duration of the peace, following the end of civil wars. Event history models are specifically designed to consider factors that might increase or decrease the length of time before a particular event occurs. In this test the event in question is the failure of the peace as indicated by the renewed outbreak of war among the factions that were party to the previous war. If intrastate conflict erupts in a country that had previously experienced a civil war but the new war involves a different set of actors, the peace following the previous war is still considered to be in force.<sup>10</sup> The model considers the duration of a peace episode until war breaks out again or until censoring of the episode takes place.

I use the Cox proportional hazards model to analyze the data. The hazard ratio statistic produced by this test provides an easily interpretable measure of the influence of a variable on the event of interest. The hazard ratio is defined as the exponent of the coefficient. Its deviation from the value of one indicates the percentage increase or decrease in the likelihood of the incident occurring (Bueno de Mesquita and Siverson, 1995). Variables with hazard ratios below the baseline value of one and with

<sup>10</sup> Distinguishing between new wars and renewed civil wars on the basis of whether or not factions were previously involved in fighting a civil war in the country in question is necessary in order to test the theory that the fate of factions has an impact on the duration of the peace. Coding all civil wars in a country, including those that involve different factions, as indicating the failure of the peace might be appropriate if one were interested in determining whether the fate of previous factions has any effect in deterring the onset of civil war.

Table 2. Civil War Outcomes and the Fate of Factions' Organizational Structures Following Civil War

<i>Civil war settlement type</i>	<i>More than one faction preserves org. identity</i>	<i>Only one faction preserves org. identity</i>	<i>Row total</i>
Military victory	23 (41.82%)	32 (58.18%)	55 (100%)
Negotiated settlement	30 (78.95%)	8 (21.05%)	38 (100%)
Negotiated truce	14 (93.33%)	1 (6.67%)	15 (100%)
Column total	67 (62.05%)	41 (37.96%)	108 (100%)

Pearson's chi-square = 20.40; ( $p = 0.000$ ).

negative coefficients decrease the potential of the event (in this case the renewed outbreak of civil war) occurring; variables with hazard ratios higher than one and with positive coefficients increase the risk of the event taking place.

## Results

Does the fate of the factions that participate in civil wars have an effect on the duration of the peace? I take a first cut at this question by conducting a cross-tab analysis. Table 2 provides an overview of the relationship between civil war outcomes and the fate of factions' organizational structures. As the table makes clear, nearly 80% of the cases in which only one faction maintained its organizational structure saw the war end via military victory. Somewhat surprisingly, however, given the oft-hypothesized relationship between military victory and the destruction of losing groups' organizational structures, nearly 42% of all wars that ended via military victory see the preservation of the organizational structures of factions other than that of the victor. Finally, fully one-fifth of the wars that end via negotiated settlement see the destruction of the organizational structures of all but the winning faction.

Table 3 displays the results of two tests of post-civil war peace duration. Model 1 constitutes a test of the hypothesis that the peace will prove more stable if wars end in military victory rather than in a negotiated settlement. The results of this model provide support for the general argument that the manner in which civil wars end has an effect on the duration of the peace. In this instance we find that both military victories and negotiated settlements are more likely to prolong the duration of the peace than are negotiated truces, the reference category.<sup>11</sup> The effect of each of these variables is quite significant. The hazard ratio statistic indicates that ending a civil war via a military victory reduces the risk of a return to war by 86%, while use of a negotiated settlement decreases the likelihood of the peace failing by 84%.

<sup>11</sup> This result is not without precedent. Quinn et al. (2007) find that civil wars that ended in rebel victories and those that ended in negotiated settlements supported by peacekeeping operations were less likely to experience the renewal of civil war than were wars that ended in government victory.

Table 3. Event History Analysis of Determinants of Post-Civil War Peace Duration

Variable	Model 1		Model 2	
	Coefficient	Hazard ratio	Coefficient	Hazard ratio
Military victory	-1.96*** (0.634)	0.14	-1.94*** (0.577)	0.14
Negotiated settlement	-1.84*** (0.421)	0.16	-1.19* (0.65)	0.31
Destruction of factions' org. structure			-0.415 (0.537)	0.66
Power-sharing measures			-0.603* (0.322)	0.55
Conflict intensity (logged)	0.201** (0.098)	1.22	0.202** (0.096)	1.22
Conflict duration (logged)	0.26** (0.112)	1.3	0.254** (0.108)	1.29
Stake	0.796** (0.404)	2.22	0.806* (0.459)	2.24
Peacekeeping forces	-0.138 (0.459)	0.87	0.222 (0.533)	1.25
Post-Cold War settlement	0.248 (0.457)	1.28	0.554 (0.449)	1.74
Economic development	-0.089*** (0.024)	0.92	-0.10*** (0.029)	0.91
Population (logged)	-0.597*** (0.15)	0.55	-0.557*** (0.15)	0.573
Conflict history	0.025 (0.097)	1.03	0.061 (0.095)	1.06
N	105		105	
Months at risk	20152		20152	
Log-likelihood	-124.755		-122.041	

Robust standard errors in parentheses, adjusted for clustering over country.

\*\*\* $p \leq .01$ , \*\* $p \leq .05$ , \* $p \leq .10$ . All significance tests are two-tailed.

Global test of proportional hazards assumption indicates no violation of the assumption that the hazard ratio is proportionate over time.

Model 2 in Table 3 adds the variables *destruction of rival factions' organizational structures* and *power-sharing measures* to the variables in Model 1 as a means of discerning whether the fate of factions has an impact on the duration of the peace apart from the war's outcome.<sup>12</sup> The addition of these variables produces some interesting results. Most notably, although the variable *destruction of rival factions' organizational structures* has a negatively signed coefficient, it is not

<sup>12</sup> I conduct two diagnostic tests of multicollinearity. In the first, a correlation matrix indicates that there is a positive correlation of 0.65 between the variables *negotiated settlement* and *power-sharing measures*. I follow this up with an examination of the Variance Inflation Factor (VIF) values and tolerances (1/VIF), both of which indicate that multicollinearity is not a problem.

statistically significant. The variable *power-sharing measures*, however, does prove to be statistically significant. The negative coefficient associated with this variable suggests that power-sharing measures have a peace-stabilizing potential in more than just those instances in which wars end via a negotiated settlement.<sup>13</sup>

Finally, the military victory and negotiated settlement variables remain statistically significant in Model 2 with each outcome lowering the likelihood of peace failure (although  $p = 0.07$  for the negotiated settlement variable).

Both Models 1 and 2 indicate that several of the control variables have an influence on the duration of the peace. Wars of high intensity and those that are long in duration increase the risk that the peace will fail. The result with respect to the conflict duration variable is unexpected as I had hypothesized that longer wars would produce a more durable peace by serving to convince combatants that they had little chance of prevailing in any future military encounter. Rather than affecting expectations in that manner, however, long wars may have the effect of hardening rivals' attitudes and fostering mistrust. The issue at stake in a conflict also has an impact on the duration of the peace, with identity-based wars less likely to be followed by an enduring peace than those in which the issue at stake is politico-economic in nature.

Higher levels of economic development and larger populations decrease the risk of renewed war. Although the result with respect to population is contrary to that hypothesized by some scholars, other analysts have found that population is negatively related to the recurrence of civil war (Quinn et al., 2007). It may well be that the overall size of a population matters less for factions' ability to recruit followers than does the manner in which the population is distributed over the territory in question.

In Models 3 and 4 in Table 4, I examine the effects that the destruction of rival factions' organizational structures and power-sharing measures have when wars are ended via military victory (Model 3) and by negotiated settlement (Model 4). The organizational structure variable, which has a positively signed coefficient in Model 3 and a negatively signed coefficient in Model 4, does not prove statistically significant in either instance. The negatively signed coefficient for the power-sharing variable suggests that measures to share power can help to stabilize the peace following the end of both military victories and negotiated settlements, although the variable is statistically significant only in the case of negotiated settlements. This latter result is consistent with other work that has found that an array of power-sharing measures helps to stabilize the peace following the negotiated settlement of civil wars (Hartzell and Hoddie, 2003, 2007).

In Table 5, I present the substantive effects of the variables that prove statistically significant in Model 2. Column 3 of the table reports the ratio between the hazard ratio with one variable increased or decreased from its mean or modal value and the "base" hazard ratio in which all the continuous variables in the model are held at their mean and all the dichotomous variables at their modal value. I shift

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<sup>13</sup> Because Model 2 simply adds two additional variables to Model 1, I use a log likelihood ratio test of nested models to see which model fits better. The results suggest that the variable I use as a proxy for the destruction of rival factions' organizational structures can be dropped from Model 2.

Table 4. Event History Analysis of Determinants of Post-Civil War Peace Duration

Variable	Model 3 Military victories		Model 4 Negotiated settlements	
	Coefficient	Hazard ratio	Coefficient	Hazard ratio
Destruction of factions' org. structure	0.64 (1.05)	1.896	-2.29 (1.66)	0.102
Power-sharing measures	-1.19 (1.17)	0.304	-1.49* (0.86)	0.226
Conflict intensity (logged)	0.263** (0.115)	1.3	-0.012 (0.364)	0.988
Conflict duration (logged)	0.474*** (0.178)	1.61	.371 (0.501)	1.45
Stake	0.719 (0.858)	2.05	4.64** (2.01)	103.69
Peacekeeping forces	-0.587 (1.28)	0.556	1.15 (1.66)	3.15
Post-Cold War settlement	1.24 (1.21)	3.44	0.457 (1.18)	1.58
Economic development	-0.024 (0.027)	0.976	-0.446*** (0.171)	0.640
Population (logged)	-1.25** (0.543)	0.287	-1.73** (0.686)	0.177
Conflict history	0.208 (0.144)	1.23	0.610 (0.669)	1.84
N	53		38	
Months at risk	14,612		4,545	
Log-likelihood	-45.727		-17.643	

Robust standard errors in parentheses, adjusted for clustering over country.

\*\*\* $p \leq .01$ , \*\* $p \leq .05$ , \* $p \leq .10$ . All significance tests are two-tailed.

Global test of proportional hazards assumption indicates no violation of the assumption that the hazard ratio is proportionate over time.

the continuous variables up and down one standard deviation from their mean values and the dichotomous variables from their modal value. If the revised hazard ratio and base hazard ratio are the same, their ratio will equal 1.0, meaning the variable has no substantive effect. The deviation of the ratio from 1.0 indicates the substantive effect of the variable (Werner, 1999).

Altering the value of the military victory variable from its modal value of 1 to 0 has a sizeable effect on the failure of the peace, with the hazard of another war breaking out increasing by nearly 600%. A change in the modal value of the variable negotiated settlement from 0 to 1 lowers the hazard of a renewed war by nearly one-third. Shifting the value of the power-sharing measure variable from its mean value by raising it one standard deviation lowers the risk of renewed civil war by nearly 50%. The results also suggest that efforts to lower the intensity and/or duration of civil war would have a positive payoff, lowering the hazard of another war breaking out by anywhere from 67 to 60%. Other more difficult-to-achieve changes, such as



Table 5. Substantive Effects of Significant Variables in Model 2 on Duration of Peace

Variable	Change	Revised hazard rate/ Base hazard rate
Military victory	1 to 0	6.95
Negotiated settlement	0 to 1	0.31
Power-sharing measures	– 1 standard deviation	1.91
	+ 1 standard deviation	0.54
Conflict intensity	– 1 standard deviation	0.67
	+ 1 standard deviation	1.48
Conflict duration	– 1 standard deviation	0.60
	+ 1 standard deviation	1.65
Stake	1 to 0	0.45
Economic development	– 1 standard deviation	3.05
	+ 1 standard deviation	0.33
Population	– 1 standard deviation	2.35
	+ 1 standard deviation	0.44

Continuous variables are held at their mean values and dichotomous variables are held at their modal values. The deviation from 1.0 of the revised hazard rate/base hazard rate indicates each variable's substantive effect.

securing higher levels of economic development in countries emerging from civil war, could also help significantly to lower the risk that peace will end.

## Discussion and Conclusion

Three surprising results emerge from this study of the impact the fate of civil war factions has on the duration of the peace. First, I find that contrary to what has commonly been assumed, in at least some instances the fate of factions and civil war outcomes do diverge. Most strikingly, slightly more than 40% of the conflicts that ended via military victory saw more than one faction preserve its organizational identity. Second, I discover that insofar as the duration of the peace is concerned, the fate of factions matters in some ways—through provisions for sharing power—but not others—the fate of rival groups' organizational structures. Finally, I find that both military victories and negotiated settlements serve to reduce the risk of a return to civil war. I discuss each of these results, and the implications that follow from them, below.

Theories regarding the stabilizing effects of different civil war outcomes on the peace have been built on critical yet untested assumptions regarding the impact these outcomes have on the fate of factions. Using data collected on the fate of factions, I find that military victories do not consistently give rise to the destruction of rival organizations' structures, that provisions for power-sharing sometimes follow military victories, that negotiated settlements do not always include an array of power-sharing measures, and that rival groups' organizational structures are sometimes dismantled following negotiated settlements. Any number of possible explanations exists for these outcomes. Third party intervention in civil wars might serve to preserve the organizational structures of some rival groups. Third parties

could also pressure victors to share power with defeated groups. Victors themselves might believe that a strategy of “prudence in victory” can best serve to stabilize the peace. Aid from diasporas or other sympathetic third parties could disrupt the balance of power arrived at through a negotiated settlement, empowering and encouraging some faction to dismantle the organizational structures of its rivals. Whatever the case, further data collection on the fate of factions could serve to give scholars a better understanding of the reasons there is often a disconnect between civil war outcomes and the fate of factions.

Perhaps the most surprising finding of this study is that one dimension of what I have referred to as the fate of factions—the fate of adversaries’ organizational structures—has no discernible impact on the duration of the peace. This result proves consistent across tests focusing solely on wars ending in military victories, those terminating in negotiated settlements, and both types of civil war outcomes. Why the destruction of rival groups’ organizational structures fails to have the stabilizing effect it has been hypothesized to have on the peace is not clear. It may be that a victor’s dismantling of the organizational structures of rival factions does not generate as clear a signal to defeated groups that they will be unable to win a future war as has long been thought. Victors of civil wars may be strong enough to dismantle the organizational apparatus of defeated groups yet also appear inherently weak to the losers of those conflicts. Governments that can exert control over only a portion of the national territory, are unable to provide basic public goods to their populations, and cannot effectively police national boundaries may be perceived as ripe for defeat at some point in the future.<sup>14</sup> Just what the nature of the signal is that civil war rivals do associate with the destruction of their organizational structures is a question that merits further investigation.

The finding that military victories and negotiated settlements reduce the hazard of renewed war independently of the proxies I use for the fate of factions suggests that other, as yet undiscovered, features of the settlements associated with each of these outcomes have a stabilizing influence on the peace. Discovering what these features are requires that we give further thought to just how it is that settlements stabilize the peace following civil wars. Drawing on rationalist explanations for conflict, scholarship has been focused on the importance of putting in place settlements that reduce uncertainty and stabilize actors’ expectations as a means of extending the peace. An alternative explanation for the stabilizing effects of some settlements is that these provide parties that do revise their expectations with some mechanism for peacefully renegotiating the terms of the war-ending bargains to which they initially agreed. Examining military victories and negotiated settlements to see whether they have anything in common, rather than thinking solely in terms of factors that distinguish these settlement types, could help scholars to identify new means of stabilizing the peace.

This analysis has two immediate policy implications with respect to the question of how best to end civil wars in order to stabilize the peace. First, since both military victories and negotiated settlements reduce the risk of a return to war, policymakers

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<sup>14</sup> These characteristics, among others, describe many of the “weak states” that have been the sites of contemporary civil wars. See Esty et al. (1995) and Hironaka (2005).

need not act on the advice that the best way to stabilize the peace is to “give war a chance” (Luttwak, 1999). In fact, in light of the finding that wars of long duration increase the risk of a return to war, those interested in stabilizing the peace should seek to encourage civil war adversaries to negotiate an end to their conflicts rather than standing by to watch them play out. Second, the finding that the use of power-sharing provisions has a stabilizing effect on the peace, independent of the way wars end, suggests that civil war adversaries should be encouraged to include such measures in war-ending agreements.

More generally, the results of this study suggest the need empirically to test long-held assumptions regarding the nature of civil war settlements and the effects they have on the peace. The two dimensions of the fate of factions that I examine in this paper constitute one effort to begin to tackle these questions. Further scholarly efforts to deconstruct civil war settlements could go a long way toward identifying those features of war-ending agreements that help to stabilize the peace.

## **Appendix: Coding of Variables**

*Military victory*: A dichotomous indicator coded as 1 for civil wars that ended in a battlefield victory for one side in the conflict. This measure is from Hartzell and Hoddie (2007).

*Negotiated settlement*: A dichotomous variable coded as 1 for civil wars that ended in negotiations among some set of rivals to the conflict, none of whom admits defeat. The negotiations must directly address the question of how power is to be distributed and managed in the post-war state. This measure is from Hartzell and Hoddie (2007).

*Negotiated truce*: A dichotomous variable coded as 1 for civil wars that ended in negotiations among some set of rivals to the conflict, none of whom admits defeat. Negotiated truces focus on the process and modalities of ending violence in the short term rather than addressing questions of how power is to be exercised in the post-war state and by whom. This measure is from Hartzell and Hoddie (2007). Negotiated truce constitutes the reference category in Model 1.

*War intensity (lnintensity)*: The log of the number of battle-related deaths that occurred in the course of the conflict. Data are from Hartzell and Hoddie (2003).

*War duration (lnwardur)*: The log of the number of months civil war endures. Data are from Hartzell and Hoddie (2003).

*Stake*: Dichotomous variable coded as 1 if the interests at stake in a civil war were ethnic, religious, linguistic, or racial, and 0 otherwise. Data are from Hartzell and Hoddie (2003).

*Peacekeeping forces*: A dichotomous indicator coded 1 for years in which peacekeepers are present within the post-civil war state. This measure is from Fortna (2004).

*Post-cold war settlement*: A dichotomous variable coded 1 for those conflicts ending in 1991 or later. Measure coded by author.

*Level of economic development:* Operationalized by using years of life expectancy at birth. I draw on Doyle and Sambanis's (2000) dataset for this variable and use the World Bank's *World Development Indicators* to fill in the values for cases not included in their dataset.

*Population:* Data for population, which are from the first full year following the civil war's end, are from the U.S. Census Bureau's *International Data Base (IDB)*. I employ the natural log of the population figures.

*Conflict history:* The number of previous civil wars a country has experienced dating back to 1816. Coding based on the Correlates of War Project's civil war dataset and secondary sources.

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