ABSTRACT

This paper examines the effect of external interventions on the duration of civil conflicts. Researchers have presented puzzling findings showing that interventions lead to civil wars with longer durations. I reconsider this finding by examining the relationship between pre-war signals and intra-war interventions, arguing that combatants develop expectations for interventions before the war begins based on pre-war signals from external actors. Interventions during a war are best considered in light of these signals. Expected interventions reveal little information, and should therefore have little effect on the duration of a civil war. Unexpected interventions—and the failure of a state to intervene when expected to—should have a strong effect in decreasing the duration of fighting because they reveal a plethora of information and make a quick victory more likely. This theory is tested by capturing the (un)expectedness of interventions on the duration of 157 civil conflicts from 1951 to 2001.
The role that external actors play in ongoing civil conflicts is one of the foremost topics studied by civil war scholars. Researchers have shown quite consistently that military interventions in civil wars are associated with wars of longer duration (Pearson, 1974; Mason, Weingarten and Fett, 1999; Balch-Lindsay & Enterline, 2000; Elbadawi and Sambanis, 2000; and Regan, 2002). The most common explanation for this finding is that third parties exacerbate the tensions in an ongoing civil war, making it drag out longer than it would have otherwise. This explanation implies that policy makers have little option to lessen the harmful consequences of civil war other than to let the belligerents fight it out. Policy-makers have taken a different approach. Leaders seem quick to advise foreign engagement as the best means to bring an end to civil conflicts. The Iraq Study Group Report, for example, advises US policy-makers to reach out to as many states as possible to help bring an end to the civil war in Iraq:

“The United States should embark on a robust diplomatic effort to establish an international support structure intended to stabilize Iraq and ease tensions in other countries in the region. This support structure should include every country that has an interest in averting a chaotic Iraq, including all of Iraq’s neighbors—Iran and Syria among them” (Baker et al. 2006: 32).

This contrast presents an interesting puzzle for researchers. To bring a quick end to civil wars, scholars discourage intervention, while policy-makers are apt to promote foreign engagement. Given the devastating nature of civil conflicts, it is crucial that researchers reconsider their current conclusions to ensure that policy makers are in the best possible position to deal with these conflicts.

In the following pages, I argue that interventions have been found to be associated with civil wars of longer duration due to a problematic theoretical assumption made by past scholars.
Current work assumes that the decision to intervene in an ongoing civil war is exogenous to the opposition group’s initial decision to challenge the government, which means that interveners should have some sort of immediate and unexpected impact on the duration of the conflict. This may be a problematic assumption, especially when we consider arguments suggesting that signals from external actors play a key role in the opposition’s decision to rebel in the first place (e.g., Cetinyan 2002; Thyne 2006). If the combatants in a civil conflict indeed develop expectations for external support or hostility, then the moves made by external actors during the civil war are best understood in the context of these expectations. In other words, the effects of interventions (and failures to intervene) during a war are endogenous to the combatant’s pre-war expectations, and they must be studied in this context.

THEORETICAL FRAMEWORK

The study of conflict has occupied scholars of international relations for decades. A large body of research examines this question in a bargaining context. According to the bargaining model, the source of conflict is a disagreement among two or more parties over resource allocation and/or policy choice. If the competing parties have sufficient information about the strength, resolve, and demands of the other side, they should be able to peacefully settle problems without resorting to war, which the bargaining approach assumes to be costly for both sides. This framework is presented in the intrastate context in Figure 1. In this figure, the solid line represents some issue that the government and opposition have in dispute. The preferred bargaining positions of the two sides lie on the ends of the line, with the government’s ideal position at the extreme right and the opposition’s at the extreme left. Each side prefers to move the status quo environment towards its side. Each side also has expectations regarding the future position were a war to break out ($G_{exp}$ and $O_{exp}$), which may be preferable to the status quo.
Because war is costly, each side will accept a settlement less than its ideal point, and less than that which it may expect to achieve through violent means ($G_{acc}$ and $O_{acc}$). This creates an overlapping “settlement zone” that both actors will accept. Because war is costly, neither side has an incentive to change in its position, which results in a stable and peaceful equilibrium.

[Figure 1 here]

Despite the peaceful predictions of the basic bargaining framework, civil wars exist, and they have devastating consequences for both the combatants and civilians. Scholars have pointed to two key explanations for the onset of conflict in the bargaining context. First, actors have an incentive to misrepresent private information about their capabilities and resolve. This should increase the likelihood of conflict because it is likely that one side will overestimate their likelihood of winning a conflict if information is withheld. Next, even if the competing actors have identical levels of information, their inability to credibly commit to follow through with an agreement increases the likelihood of bargaining failure (Fearon 1995; Powell 2006). Though both sources of conflict are important, my theory focuses on the role external actors play in revealing information during a conflict. This corresponds with the major advancements in the bargaining literature, which also focus on the revelation of information during the war and, thus, provides a strong vein of scholarship to draw upon in developing the argument.

One of the most useful developments in the interstate bargaining literature is its recent extension into ongoing wars. Rather than assuming that a crisis ends with the onset of conflict, recent models allow bargaining to continue during a war. For instance, Filson and Werner (2002), Smith and Stam (2002) and Slantchev (2003) present models of ongoing interstate conflicts in which the actors update their pre-war positions based on information revealed through fighting. Once expectations about future military victory converge sufficiently, we
should expect a termination of war through a negotiated settlement. This expectation is known in the bargaining literature as the “Principle of Convergence” (Slantchev 2003: 815). By allowing actors to update their positions as they learn new information, this approach unifies the two stages of a conflict, crisis and combat, which provides a useful framework for understanding how external actors might affect an ongoing civil war in the context of pre-war signals.

This approach is immediately accessible by assuming that expectations of interventions are synonymous with expectations of military capabilities—interventions are important because they increase the fighting capabilities of the side receiving external help. Just as information about each side’s ability to wage war is revealed through fighting, so too is information revealed about external actors’ decisions to aid either side of the conflict. As we will see, the same information revealed prior to the onset of civil war is useful during the war as actors update their policy stances based on third party actions. This type of learning allows us to follow past bargaining research in making predictions about the duration of the war (e.g., Slantchev 2004).

**SIGNALS, (NON)INTERVENTIONS, AND CIVIL WAR DURATION**

Previous scholars have argued that signals from external actors can increase the likelihood of civil war onset by introducing uncertainty into the negotiations between the government and the opposition. For example, Thyne (2006) argues that cheap signals—low cost day-to-day communications between states—are likely to increase the likelihood that a civil war begins if they cause either the government or the opposition to overestimate their chances of winning a future conflict. This would happen if (1) one side had superior information about the signal’s true intent; (2) one side updated its bargaining position more quickly than the other based on the new information provided by the signal; or (3) the opposition leader(s) used the signal to “trump up” support for their cause. Each of these mechanisms suggests that signals
transmitted from external actors play an important role in the opposition’s decision to challenge the government. Thyne’s empirical analyses provide strong support for this argument, which provides a useful starting point to understand how external actors affect wars that have already begun. In order to understand how third party actions during a civil war affect the war’s duration, it is helpful to begin by placing them into two categories based on the signals they sent prior to the onset of civil war, including those that signaled either (1) support for the government or (2) support for the opposition. Once a civil war begins, the third party who sent a signal prior to the onset of a rebellion is faced with two choices when deciding what action to take once a civil war begins. As shown in Figure 2, they can remain consistent with the pre-war signal (paths 1, 4), or show inconsistency by either remaining neutral (paths 2, 5) or aiding the other side (paths 3, 6).

[Figure 2 here]

Given this set-up, how do third party actions during a civil war affect the positions of the combatants? Because the root of the conflict is informational uncertainty, a plausible argument might suggest that third party interactions will always reveal information, which should lead to a convergence in the policy positions of the government and the opposition. Consider the following sequence of events:

(1) an outside actor sent a hostile signal towards another government;

(2) interpreting this signal as a potential source for outside help during a future rebellion, the opposition group in the receiving country challenges the government;

(3) the government disagrees, interpreting the external signal differently than the opposition, and rejects the opposition’s demands;

(4) the opposition rebels;
(5) the external actor from the first step aids the opposition in their rebellion.

In this scenario, we would expect the third party’s intervention on behalf of the opposition during the civil war in step 5 to reveal information to the combatants. For the opposition, they would learn that their pre-war expectations developed in step 2 were correct, leading to little or no change in their position. For the government, they would learn that they underestimated the likelihood that the third party would intervene on behalf of the opposition in step 3. This would ultimately cause the government to update their policy positions by moving towards the opposition’s side. This example is represented in Figure 3.

[Figure 3 here]

As we can see, the revelation of information causes a convergence in both the government’s and opposition’s bargaining positions, which results in a mutually-agreeable settlement to avoid the ongoing costs of fighting. If the third party had chosen to help the government or remain neutral in step five, this would have had the opposite effect to that shown in Figure 3: the settlement zone would move towards the government’s optimal position. Regardless, the logical conclusion is that any move made by the third party during an ongoing civil war will reveal information, which increases the likelihood that the combatants will settle the conflict. If this is true, why would we expect variation in the duration of civil war based on the decisions made by third parties?

We must return to the first step in the sequence to develop predictions for civil war duration. We recall that external actors have two options once a civil war begins. They can remain consistent with pre-war signals, or switch positions by either helping the other side or remaining neutral. Analyzing the reaction of the combatants to the (in)consistency of the third party’s moves provides a way to predict variations in the duration of a civil war.
We can begin by defining the baseline environment as one in which a third party’s intervention during a war is consistent with its pre-war signal (paths 1, 4). In this context, one actor was correct in expecting intervention on its behalf, while the other actor is somewhat surprised by the intervention. Given that information from the pre-war signal was available to both parties, the surprise should be minimal. If an Iranian opposition group were to spark a civil war by making objectionable demands to the Iranian government tomorrow, for example, the Iranian government would not be shocked if the United States were to support the opposition’s efforts to overthrow the government because of the numerous hostile signals sent from the US in recent years. The logic of this argument follows Fearon (1994), who suggest that observable capabilities should have little impact on the duration of an interstate conflict because they should have already been incorporated into the combatant’s initial decision to fight. A link can also be made to several arguments that draw on rational expectations as a framework for understanding interstate interactions. These include studies of interstate trade (Morrow 1999; Li and Sacko 2002), diversionary theory (Fordham 2005), and both interstate and intrastate disputes (Blainey 1988; Moore 1995; Walter 1997; Lake and Rothchild 1998; Gartzke 1999; Wagner 2000; Moore and Lanoue 2003). Ultimately, while we might expect the moderately-surprised actor to lower their demands, there will be no need to make an immediate adjustment in order to avoid being defeated because the intervention was likely not altogether unexpected.

Beyond the expected minimal reaction, we need to consider two types of uncertainty that can potentially be revealed by an external actor once a war begins. These include (1) uncertainty in regards to which side the external party will support, and (2) the extent and duration of the support. These two types of uncertainty are also presented in Figure 2.
Support can come in a variety of ways, including military or economic support, providing safe havens for exiles and refugees, or the sharing of intelligence (Harff and Gurr 2004; Regan 2002). Aid during a war that is consistent with pre-war signals will likely include one of these, which will reveal the side that the external actor intends to support. However, uncertainty will still remain in regards to how much aid will be supplied, and to the duration that a third party is willing to continue support (paths 1, 4). Third party aid during a civil war is often short-lived as leaders avoid becoming entangled in a Vietnam-like quagmire. Clinton’s quick decision to withdraw US support in Somalia for the hunt for Aideed in 1994 after eighteen Army Rangers were killed in a firefight is a telling example of how quickly external support in an ongoing civil war can disappear (Clarke and Herbst 1996). Therefore, while third party support that is consistent with pre-war signals indeed reveals information, this information will likely have a minimal effect on the duration of the civil war because the combatants will still have uncertainty about the extent to which an external actor will provide the support.

In comparison to the baseline environment, consider a situation in which the external actor switched policies (paths 2-3, 5-6). It may have sent a hostile cheap signal in the pre-war phase, and then chosen to remain neutral or to intervene on behalf of the government once the war began. This inconsistency is likely because the effects of signals on civil wars are often a residual or unintended effect of some other policy goal. This view is consistent with Thyne’s causal mechanisms explained earlier, which focus on the consequences of indirect or ambiguous signals. This is also supported by the vast majority of signaling work done by previous research. The authors in the deterrence literature, for example, have examined how international actors use signals to bluff or show resolve in interstate interactions, giving little (if any) explanation for how these same signals might affect the receiving state’s internal stability.
Given that signals are rarely meant to affect the onset of civil conflict in another state, we should expect a great deal of variation in whether or not the signaler remains consistent with its pre-war signal once a civil war begins. When it is inconsistent, we should expect the change in policy to provide a dramatic shock to the party that expected external support on its behalf. Instead of receiving external help, the expectant party finds itself far weaker than it had expected when it chose to fight. If the external party aids the other side rather than simply remaining neutral, this shock becomes even more dramatic because expectant party finds itself even weaker than it was prior to the onset of the civil war because their adversary now has increased military capabilities from the unexpected external support. This inconsistency should lead to a quick termination of conflict in one of three ways.

First, because one party is at an extreme and unexpected disadvantage in military capabilities, it is likely that it will be defeated with a quick and decisive victory by its opponent. The disastrous Shiite rebellion following the first Gulf War provides an example. In this case, the opposition perceived strong foreign interests in support for the overthrow of Hussein. Interpreting these signals as an indication of imminent support for a rebellion, the Shiites staged a rebellion against the Iraqi government the following month. This rebellion was crushed rapidly when coalition forces failed to support the Shiite fighters (Farouk-Sluglett and Sluglett 2001; Abdullah 2003). Mobutu’s miscalculations in Zaire provide an example of the same process in favor of the rebels. When the opposition staged a rebellion in 1996, President Mobutu expected foreign intervention on behalf of the government based on his consistently supportive relationship with the West. The failure of the international community to act was a dramatic
shock, which heavily weakened the government’s forces and led to a quick and decisive overthrow of Mobutu’s regime (McNulty 1999).

The second way that third party inconsistency will lead to a brief civil war is more directly tied to informational uncertainties. As shown in Figure 3 (paths 1, 4), when a third party is consistent with its pre-war signal once a civil war begins, only the first type of uncertainty disappears (the beneficiary of the support). The second type of uncertainty (extent of support) remains, which may make the weaker side willing to continue fighting in hopes that the third party will tire of supporting its opponent. In contrast, when a third party is inconsistent, meaning that its support during the war differs from its pre-war signal, both types of uncertainty disappear (paths 2-3, 5-6). Had the United States had been consistent in supporting the Shiites in 1991, for example, it is possible that war would have continued if the Iraqi government expected support for the Shiites to be short-lived. When the United States revealed that it would not support the Shiites, this inconsistent policy dramatically reduced uncertainty because it told the Shiites that they would not receive support, which made any question about the extent of support irrelevant.5

The possibility of a quick settlement leads to a third mechanism by which inconsistent policies from external actors may cause a quick end to hostilities. As Filson and Werner (2002), Smith and Stam (2002) and Slantchev (2004) explain, the disadvantaged side in a conflict seeks to stop fighting before it loses decisively, so it will want to offer a negotiated deal acceptable to the winning side as quickly as possible. While these authors are referring to the interstate environment, there is little reason to expect a different process in the intrastate environment. When one side of a conflict finds itself dramatically weaker than it expected prior to the onset of the conflict, it should attempt to settle the conflict quickly to avoid being defeated.
Finally, a slight modification in these expectations may be necessary to improve our prediction of civil war duration. It may be unreasonable to assume that switches in policy from external actors during a civil war have the same effect, regardless of when the switch happened. We might expect a switch in policies during the first year of a rebellion to have a much larger impact than a switch in policies during the sixteenth year of fighting, for example. Regan (2002: 61) previews this expectation, arguing that early interventions should matter the most because rebel groups are “rather fragile and more susceptible to military defeat or early accommodation” in the early stages of conflict. The expectation may still hold without Regan’s assumption of rebel strength. As time progresses during a war, both the government and opposition become more effective in attacking the other and more entrenched in their opposition to the other. As each group becomes more effective in fighting with its own resources, the impact of a switch in support from external actors should decline. Take the Shiite rebellion as a counterfactual example. It is reasonable to assume that, had the Shiites received support from the United States for their cause early on (consistent with the pre-war signal), they would have been able to develop an infrastructure to support their rebellion, become better organized, and developed effective fighting strategies. If a drop in support from the United States had happened several years into the conflict, it is possible that the rebellion would be able to continue, at least for some period of time. As it were, the switch happened early and the rebellion was quickly crushed. The two expectations developed in this section—inconsistent actions and timing—lead to a single hypothesis: The duration of a civil war should decrease as the deviation between the pre-war signal and the intra-war intervention increases. The impact of this deviation should decrease over time.
Ultimately, the theory developed here should contribute greatly to our understanding of how external actors affect the duration of civil conflicts. This is one of the few efforts to unify the onset and duration stages of civil conflict, which is likely the key to solving the puzzles presented in past findings. We now proceed to an empirical investigation of the hypothesis.

**TESTING THE THEORY**

*Cases, Dependent Variable and Methods*

The dependent variable is the duration in months of each civil war recorded by the Uppsala University Conflict Data Project from 1948 to 1993. A civil war is defined as a “contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths” (Gleditsch et al. 2002). The dependent variable for each observation is coded 0 until the civil war ends, or until the dataset ends (1 otherwise). Using the conflict-month with time-varying covariates as the unit of analysis is preferable to simply using each conflict as an observation because I expect the effect of my primary independent variables on the duration of the conflict to decrease over time. The duration of each conflict is examined by observing whether or not the conflict ended in each month using a Weibull model.

*Independent Variables*

Two sets of analyses are used to test how the (in)consistency of interventions during a civil war vis-à-vis the pre-war signal affect the war’s duration. Each begins by defining the pre-war expectation, which is operationalized using two events datasets. Events data code newsworthy intrastate and interstate interactions into categories in order to capture their level of conflict or cooperation. The first event dataset used is the Conflict and Peace Data Bank (COPDAB), which codes daily interactions between states on an intensity scale ranging from –
92 (most conflictual) to +102 (most supportive) from 1948 to 1978 (Azar 1980). These data include over 20,000 dyadic events for 135 states. The second dataset is the World Events Interaction Survey (WEIS), which codes over 100,000 dyadic events into 63 nominal categories from 1966 to 1992 (McClelland 1978). These nominal categories are recoded following Goldstein (1992), who places the WEIS codes on a conflict/cooperation continuum ranging from –10 (most conflictual) to +8.3 (most supportive). Because the scale for COPDAB uses larger values than WEIS, I follow Reuveny and Kang (1996: 299) by splicing the two datasets in the overlapping periods (1966—1978) with the following formula:

$$\text{WEIS}_t = C_0 + C_1 \times \text{COPDAB}_t + e_t$$

After splicing the dyadic measure, I then aggregate the data monthly. This results in the mean monthly level of conflict/cooperation between all dyads. At this point, the unit of analysis is directed-dyad month. Because civil war happens within a single state and covariates (explained later) are at the state level, I follow previous scholars such as Davis and Ward (1990), Leeds and Davis (1997), and Moore and Lanoue (2003) in collapsing all interstate interactions from dyads by target-month. Given that the vast majority of dyads have few (if any) interactions in a given month, I limit the data to interactions between politically relevant dyads (PRDs), which consist of all contiguous states and major powers (Small and Singer 1982). This aggregation allows me to delete obscure dyads, such as Nigeria/Nicaragua, from the dataset while including relevant dyads, such as United States/Nicaragua, which have many interactions due to the expansive foreign policy of the United States. After collapsing the data by mean/target/month and lagging it one month, the result is a single monthly value ranging from –10 (most conflictual) to +8.3 (most supportive) for the mean event received by each state from PRDs from 1949 through 1993. The signal sent in the month prior to the onset of civil conflict
defines the pre-war expectation—support for the government (if positive), or support for the opposition (if negative).

Using this measure, the first independent variable, signal deviation, captures the deviation between the external actors’ pre-war signals and their signals sent during the conflict. The assumption here is that interveners do not necessarily need to intervene directly to affect the duration of conflict. Rather, they can affect the intra-war bargaining positions between the government and opposition by merely signaling what they will do if the war were to continue. A large deviation between the pre-war signal and the signal sent during each period of fighting should reveal a great amount of information, which should increase the likelihood that the civil war ends. This concept is operationalized by subtracting the pre-war signal in each time period from the signal sent in the month before the war began. Because switches in favor of both the government and the opposition have the same prediction (shorter duration), I take the absolute value of this measure. The result is a single measure where large values indicate a dramatic difference between the pre-war and intra-war signals, while small (or zero) values indicate consistent signals of support for either the government or the opposition. As a final step, this measure is allowed to decay over time by dividing it by the month of the conflict.

To clarify how this measure is operationalized, hypothetical values are shown in Table 1. In the second column, we see a negative pre-war signal (-4), which suggests that the opposition should have developed an expectation for external support prior to the onset of rebellion. In the remaining rows, we see that the signal sent after the war began was very supportive of the government (+1 to +5). The column marked “Change” picks up the absolute value of the deviation between the pre-war and intra-war signals, while the column marked “Signal deviation” captures the same deviation after allowing the values to decay over time. We should
expect the coefficient for *Signal deviation* in the final empirical analyses to be negative and significant, which would indicate that large deviations between the pre-war and intra-war signals decrease the duration of the conflict.

[Table 1 here]

The second set of independent variables provides more nuanced indicators of the decision by external actors to intervene (or not to intervene) in ongoing civil conflicts. I use the same measure for pre-war expectations, and add the variables for (1) government or (2) rebel interventions as coded by the Uppsala University Conflict Data Project to code interveners in a conflict. The Uppsala database codes interventions for states actively supporting either side of the conflict with troops (Gleditsch et al., 2002). While this measure excludes other types of interventions, such as economic aid or diplomacy, it provides a reasonable standard for evaluating the effects of interventions that are likely to have an impact on the tenure of fighting. More minor levels of support should be captured with the *signal deviation* variable.

While the Uppsala data collection effort is impressive, it fails to account for the signal sent by the intervener prior to the onset of conflict. I therefore recode these variables by examining how the intervention during the war deviates from (or remains consistent with) the pre-war signal. We recall that external actors have two choices once a civil war begins. They can either remain consistent with the pre-war signal or switch sides by helping the other or by remaining neutral. Each of these decisions is captured with the four variables displayed in italics in the bottom row of Figure 2. The first pair captures consistent policies. *Expected intervention-governments* is coded 1 if the pre-war signal was positive and the third party remained consistent by aiding the government during the war (path 4). Similarly, *expected intervention-opposition* is coded 1 if the pre-war signal was negative and the third party remained consistent by aiding the
opposition (path 1). These variables are also combined in a single measure, *expected intervention-all states*, to capture all expected third party behavior.

The second pair of variables captures switches in policies. These are coded 1 if the third party signaled support for either the government or the opposition, and then chose to support neither side once fighting began (paths 2, 5). Likewise, they are coded 1 if the third party signaled support, and then chose to aid the opposite side (paths 3, 6).$^9$ *Government unexpectedly weak* is coded 1 when the government expected support based on a positive pre-war signal, and then either received none, or was forced to fight the opposition with unexpected third party support after the war began. Similarly, *opposition unexpectedly weak* is coded 1 when the opposition expected support based on a negative pre-war signal, and then either received no support, or was forced to fight the government with unexpected third party support. These variables are also combined in a single measure, *Surprise intervention-all states*, to capture all unexpected third party behavior. As a final step, each of these variables is allowed to decay over time by dividing each dummy variable by the month of the conflict.$^{10}$

To clarify how these measures are operationalized, hypothetical values for interventions following a hostile pre-war signal are shown alongside the previous measure in Table 1. We see that the variables for *Expected government interventions* and *Government unexpectedly weak* are coded zero for the duration of the war because the government should not expect an intervention on its behalf following a hostile pre-war signal. In contrast, we see that the opposition receives an expected intervention in the fifth and sixth periods of the war, which results in positive values for *Expected intervention-opposition*. The effect of this intervention has decayed, however, because the intervention came later than expected. The values in the final column indicate that the opposition found itself weaker than expected in the early stages of the war because it was
forced to fight without the support it expected. Again, this effect decays over time as the 
opposition was able to adjust to the unexpected lack of support to maintain itself as a viable 
fighting force. According to my theory, this hypothetical civil war was most likely to end during 
the first months of fighting when the opposition found itself weaker than expected. The expected 
intervention that came during the fifth and sixth periods of fighting should have a minimal 
impact on the duration of the conflict because it should have already been incorporated into the 
opposition’s pre-war decision to rebel. More generally, as noted by the horizontal arrows at the 
bottom of Figure 2, we should expect the duration of the civil war to decrease as the deviation 
between the pre-war signal and the intra-war intervention increases.

While separating these four variables into six categories based on the decisions shown in 
Figure 2 would be preferable, there are few cases in which third parties signaled support for one 
side, and then drastically altered their support by helping the other. In most cases, the third party 
failed to support the side that expected aid. The insurgencies in Iraq and Zaire mentioned above 
provide telling examples. A similar process happened with the communist insurgency in British-
controlled Malaya when the Chinese and Soviets failed to provide the rebels with meaningful 
support (Harff and Gurr 2004). A drop in external support should also matter for more 
established revolutions. Doyle and Sambanis (2000) explain that the drop in support for the 
warring factions in Cambodia (1970-75) by China, the Soviet Union, Vietnam and other Western 
powers made peace a more attractive option, which led to a cessation of hostilities. These 
examples suggest that an external actor does not necessarily need to switch sides in order to 
affect the duration of the war. Rather, failure to aid a party expecting support may be just as 
important for the duration of the conflict.
Control Variables

Several control variables are included in the model to help isolate the effects of the primary independent variables. The first is a variable indicating whether or not the fighting was for control of the central government, *fight for the government*, as defined by Gleditsch et al. (2002). Kaufmann (1996) argues that other types of conflict, particularly those that are ethnically-based, are more difficult to resolve than wars where one party simply seeks to overthrow the government. Several scholars have found the type of civil war to be an important determinant of its duration in empirical models. For instance, Elbadawi and Sambanis (2000), Regan (2002), and Fearon (2004) find that ethnically-driven wars or wars of succession are generally longer than those seeking overthrow of the central government. As Licklider (1993) argues, this is likely because secession is perceived as a non-divisible good, which makes a negotiated settlement an unlikely option for cessation of hostilities. Thus, we should expect to see shorter wars when the opposition’s purpose is to overthrow the government.

The second control variable, *battle deaths*, captures the severity of the civil war by capturing the yearly battle deaths. As casualties mount, we might expect the combatants to be more apt to settle the war. On the other hand, battle deaths may proxy resolve, presuming that only highly resolved groups will continue to fight in spite of high numbers of casualties. This would suggest a positive relationship between battle deaths and civil war duration. Battle death data come from Lacina and Gleditsch (2005).

The final two control variables include *GDP/capita* and *Population* from Gleditsch (2002). Past research has shown that wars in states with high populations and low incomes tend to last longer than other civil wars (Collier, Hoeffler and Soderbom 2004). This is likely due to the lowered costs of rebel recruitment when rebel leaders have a large and/or impoverished
population from which to recruit. Thus, we should expect larger populations to lead to longer civil wars, while high levels of state wealth should have the opposite effect. Both variables are logged to correct for skewness in the data. Having defined the full model, we now turn to an analysis of the data.

DATA ANALYSIS

The results presented in Table 2 are for an accelerated time failure metric, which identifies the effect of each independent variable on the expected duration of the civil war when controlling for all other variables in the model. Positive values indicate that the variable increases the duration of the war, while negative values indicate a shortened duration. The marginal effect of each variable can be calculated by exponentiating each coefficient, which tells us the percentage longer (or shorter) than we can expect the conflict to continue. For example, the presence of any intervention (Old intervention) in Model 1 will increase the duration of the conflict by $1-e^{1.368}$ or about three times.

[Table 2 here]

We begin with the variable for Old intervention in Model 1. This variable captures the standard operationalization of interventions used in past research, which assumes that interventions during the war are exogenous to signals sent by external actors prior to the war’s onset. I include it here to show that the model is consistent with past research. As expected, this variable is positive and significant, which indicates that interventions increase the duration of civil wars—at least when we neglect the expectations developed by the combatants prior to the onset of fighting. Of course, this is the main puzzle I seek to solve in this paper.

We now move to the first measure used to capture deviations between the pre-war signals and intra-war interventions, signal deviation, which relies exclusively on the measure for cheap
signals developed to define both the pre-war and intra-war signals. This variable has the expected negative sign in Model 2, which indicates that civil wars are shorter when external actors send signals during the war that differ from their pre-war signals. However, the variable is only marginally significant (p<.055), which provides tenuous support for the theory. This is not altogether unexpected because once combatants have committed to fighting, the actual balance in capabilities—rather than expectations for future capabilities—is likely to define the duration of the fighting (Licklider 1993, 1995; Bennett and Stam 1996). The measures used to capture more direct intra-war decisions by external governments provide more convincing tests of the theory.

Moving to the measures for consistent interventions, in Models 3-4 we see insignificant findings for expected interventions on behalf of the government (expected intervention-government) and in the combined measure (expected intervention-all states). These findings are consistent with my theory because both sides likely developed expectations for these interventions prior to the onset of fighting. Milosevic’s support for the Serbian secession in Bosnia (1992-1995), for example, could only have been expected by the competing sides in the conflict. Because his support offered little new information, we should expect its ultimate effect on the duration of the conflict to be minimal or nonexistent.

We see a slight aberration to the supportive findings with the positive and significant coefficient for expected intervention-opposition in Model 4, which suggests that civil wars are longer when rebels receive support for their cause—even if the support should have been expected based on pre-war signals. One potential explanation for this finding is that governments systematically underestimate the likelihood that opposition groups in their country will receive support once a civil war breaks out, perhaps due to sovereignty issues. Rather than quickly defeating an insurgency, therefore, governments are apt to encounter a rebel group with
unexpected external support, despite the hostile pre-war signal. Another explanation is the rarity in which we see expected interventions on behalf of opposition. While hostile pre-war signals are common (23.23%), less than five percent of the hostile signals are supported with troops once the war begins. Thus, the significant findings may be more of an artifact of the data than a systematically robust finding.

We now move to the measures used to capture unexpected interventions in Models 5-6. Here we see results strongly supporting the duration hypothesis. The sign for each coefficient is negative and significant, which indicates that parties either hastily seek to settle the war, or are quickly defeated when they fail to receive expected aid. Whether it benefits the opposition or the government (surprise intervention-all states), inconsistency between the third party’s pre-war signal and its intra-war support should decrease the duration of the conflict. The effect remains strong when considering interventions in which the government finds itself weaker than expected (government unexpectedly weak), with the duration of the war decreasing by 95.2 percent. The effect is somewhat smaller when the opposition finds itself weaker than expected (Opposition unexpectedly weak), with a 94.3 percent decrease in the duration of the war. Taken together, these results provide strong support for the hypothesis.

Looking beyond the primary independent variables, we see several interesting results for the control variables. The variable capturing opposition groups seeking to overthrow the government, fight for the government, is negative and significant in each model. These findings provide strong support for the argument that direct challenges to the central state apparatus are likely to end quickly, while fights for secession or ethnically-based wars are apt to be drawn out processes because they are more difficult to resolve (Licklider 1995; Kaufmann 1996; Sambanis 2001). Substantively, we should expect fights for the government to last between 70.1% to
44.3% shorter than other types of civil conflicts (Model 2 and 5, respectively). Moving to the intensity variable, we see a consistently positive and significant coefficient for battle deaths, which suggests that civil wars are likely to last longer as the intensity of the war increases. Regan (2002) presents similar findings for this variable. As noted earlier, this likely suggests that intensity is working as a measure of resolve. The variable for population has the expected positive sign in each model, though the variable is significant in Models 1, 3 and 4 only. This provides moderate support for the argument that civil wars are more difficult to control when there is a large population available for rebel recruitment. Collier, Hoeffler and Soderbom (2004) present similar findings. Finally, the variable for wealth (GDP/capita) is found to be an insignificant indicator of civil war duration, though we see the expected negative sign in each model. There may be a selection problem here, resulting in ambiguous results. If we consider wealth to be a proxy for state strength, as suggested by Fearon and Laitin (2003), then it is likely that only highly resolved opposition groups will rebel against a powerful government. This resolve should make the opposition less likely to quit fighting, leading to civil wars with longer durations. At the same time, governments should be better equipped to quell rebellions in a wealthy state because money is easily transferred to military capabilities in times of crisis.

CONCLUSION AND IMPLICATIONS

This paper has produced a handful of interesting conclusions and implications for both the research and policy communities. For the former group, the theory and evidence presented here goes a long way in solving one of the most interesting puzzles from the civil war literature. Interventions have been found to increase the duration of civil wars in past research not because they exacerbate the tensions of the conflict, but because they have been studied in isolation of the conditions that precipitated rebellion. Each phase of the civil war process—the pre-war
conditions, the onset of rebellion, and the duration of fighting hostilities—must be studied in light of what happened in past phases. Researchers would be wise to consider this same set-up when analyzing other variables, such as the level of economic strength. Rather than using a variable for the current level of state wealth during a civil war, for example, researchers should examine how the current level of wealth differs from the pre-war conditions. Similar calculations could be made for other continuous variables, such as measures for population and the size of the government forces. A more sophisticated approach would be to use the pre-war values to forecast expectations for these variables, and then examine how these forecasts differ from the actual conditions during the conflict. Ultimately, the failure to consider how pre-war expectations compare to the conditions during the conflict is likely one of the foremost reasons that scholars have failed to develop a set of variables that performs consistently across various studies of civil war duration.

This study also has important implications for scholars studying the outcomes of civil conflicts. Like duration, predictions for the outcomes of civil wars should be rooted in signals sent from external actors prior to the onset of civil war. Current work assumes, however, that the factors affecting the outcome of a civil war are exogenous to the original decision to rebel. For instance, DeRouen and Sobek (2004) examine factors such as the size of the government’s army, bureaucratic effectiveness, and ethnicity to predict the outcome of a civil war. This assumption leads to several puzzling findings. The authors find that the size of the government’s army, for instance, provides no leverage in understanding which side will win, or whether the war will end in a negotiated settlement. This puzzle is easily solved using the theoretical approach presented in this paper, which would expect precisely this finding. Because the size of the government’s army is known prior to the opposition’s decision to challenge the government, it is a critical part
of that decision. Once a war begins, the size of the government’s army will only matter for the outcome of a conflict if there was a miscalculation by either the opposition or the government in regards to its size or fighting effectiveness. Because the size of a government’s army is easily calculated by both the opposition and the government, it should have no effect on the outcome or duration of the war. Only factors that are difficult to predict, such as interventions from external actors, should affect the outcome of a civil war.

For the policy community, this study casts serious doubt on past policy advice coming from the academic literature. Intervention in civil wars does not necessarily exacerbate the consequences of these conflicts. Rather, the effect of interventions is conditioned on the pre-war signal. When interventions are consistent with past signals, they have little effect on the duration of fighting. When actions (either interventions or failures to intervene) are inconsistent, they can dramatically reduce the duration of fighting. This finding reveals three important implications for policy-makers. First, one should not conclude that interventions in civil wars will either do no good or make things worse. Widespread adoption of this point of view would absolve actors of any moral dilemma in sitting back and watching the widespread destruction and mass killings that accompany civil wars. It would also provide a foundation for those who think problems “over there” should be of no concern.

Second, policy-makers cannot allow external interveners with a past history in the conflict to be the only ones attempting to settle the dispute. This recommendation coincides well with those already made in the Baker/Hamilton Report, which suggests that the US should reach out to Iran and Syria to help bring peace to Iraq. Similar policies should be considered elsewhere. In Africa, for instance, neighboring states and former colonizers are too often the only Western actors to get involved in civil wars, resulting in little change in the duration of the
conflicts. For internal disputes to be resolved, interventions need to come from third parties that have traditionally been isolated from the dispute. The end of the Cold War provides an excellent opportunity for both states and international organizations to help quell ongoing civil conflicts. During the Cold War, states within either the US or Soviet sphere of influence were likely to receive interventions because either of these parties viewed the warring state’s internal security as strategically important to the world power’s overall security regime (Yoon 1997: 597). The decline of this rivalry should allow these states to look beyond their traditional spheres of influence to affect global stability.

Another promising source of unexpected interveners comes from international organizations, such as the United Nations (UN) and the North Atlantic Treaty Organization (NATO). The end of the Cold War led to a more supportive approach in US and Soviet policies towards multilateral peacemaking efforts. This has allowed the UN to intervene in situations where either the United States or the Soviet Union would have exercised their veto power in the Security Council in earlier years (Weiss, Forsythe and Coate 1994: 53-65; Vertzberger 1998; Betts 2001: 285). The decline in the Cold War rivalry has also allowed NATO to reinvent itself (Wallander 2000). The original purpose of this organization was to deter a Soviet military attack in Western Europe and to defend Europe if deterrence failed. In 1990, the London Declaration claimed that the Soviet Union was no longer an adversary, which allowed NATO to focus on more diverse threats to regional stability. Support of the UN Protection Forces (UNPROFOR) in the former Yugoslavia in 1994-95 marked the organization’s first direct military involvement in a civil conflict. This mission helped bring a quick end to the fighting, and led to the Dayton Agreement in November 1995. Based on its past goals and military action, NATO’s involvement in this conflict would have been nearly impossible to predict in the pre-war phase.
According to my theory, it is precisely these types of interventions that are likely to reveal new information to lead to a resolution of the conflict.

Finally, these results show that the failure to get involved in a dispute may be just as important as an intervention. When an international actor signals support for the overthrow of the government, it should realize that its failure to act once the war begins will have devastating consequences for the opposition. For example, in 1991 the United States called on the Iraqi people to overthrow Saddam Hussein. By doing this, the United States became largely responsible for the onset of rebellion. Its failure to support the opposition movements led to the murder of thousands. This blunder should cause the current administration to reconsider its recent rhetoric in support for a rebellion in Iran. If these signals are being sent haphazardly, with no real intent to support the opposition if a rebellion were to begin, they are apt to result in the same disastrous consequences for the Iranian opposition, and the further crumbing of US legitimacy in the Middle East.
Figure 1. The Basic Intrastate Bargaining Framework

- Opposition’s expectation of war outcome ($O_{exp}$)
- Government’s expectation of war outcome ($G_{exp}$)
- Set of agreements the opposition prefers to going to war ($O_{acc}$)
- Government’s ideal outcome
- Opposition’s ideal outcome
- Set of agreements the government prefers to going to war ($G_{acc}$)
- Settlement zone — set of mutually acceptable agreements
Figure 2. Theoretical Framework and Expectations for Civil War Duration

Pre-war phase - “cheap signals”

Future aid for the opposition (hostile pre-war signal)

Future aid for the government (supportive pre-war signal)

1. Remain hostile (support opposition)
2. Do nothing
3. Become supportive (support government)

4. Remain supportive (support government)
5. Do nothing
6. Become hostile (support opposition)

Intra-war choice

Beneficiary of intervener’s support
Beneficiary of intervener’s support Extent/duration of support
Beneficiary of intervener’s support Extent/duration of support
Beneficiary of intervener’s support Extent/duration of support
Beneficiary of intervener’s support Extent/duration of support
Beneficiary of intervener’s support Extent/duration of support

Information revealed

Extensive/none
Extensive/none
Extensive/none
Extensive/none
Extensive/none
Extensive/none

Remaining uncertainty

Expected intervention-opposition
Opposition unexpectedly weak
Opposition unexpectedly weak
Expected intervention-government
Government unexpectedly weak
Government unexpectedly weak

Variables and predictions

Prediction: decreased duration
Prediction: decreased duration
Figure 3. Interstate Bargaining Positions Following an Intervention for the Opposition

- **new settlement zone**
- **$O_{acc}$**
- **old zone of divergence** (prior to intervention)
- **$G_{acc}$ (revised)**
Table 1. Coding of Primary Independent Variables (hypothetical values)

<table>
<thead>
<tr>
<th>Phase</th>
<th>Signal</th>
<th>Intervention for...</th>
<th>Change</th>
<th>Signal deviation</th>
<th>Expected interv-gov</th>
<th>Expected interv-opp</th>
<th>Gov unexp. Weak</th>
<th>Opp unexp. Weak</th>
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<tr>
<td>Pre-war</td>
<td>-4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Onset</td>
<td>+2</td>
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<td>6</td>
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<td>0</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Intra-war+1</td>
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<td>Gov</td>
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<td>4</td>
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<td>+3</td>
<td>Gov</td>
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<td>0</td>
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<td>Intra-war+3</td>
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<td>Gov</td>
<td>6</td>
<td>1.5</td>
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<td>0</td>
<td>0.25</td>
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<tr>
<td>Intra-war+4</td>
<td>+5</td>
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<td>1.8</td>
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<td>0</td>
<td>0.2</td>
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<tr>
<td>Intra-war+5</td>
<td>+1</td>
<td>Opp</td>
<td>5</td>
<td>0.8</td>
<td>0</td>
<td>0.2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Intra-war+6</td>
<td>+3</td>
<td>Opp</td>
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<td>0.16</td>
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<td>0</td>
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<td>0</td>
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Table 2. Duration of Civil Wars and External Interventions

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
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<tr>
<td>Old intervention</td>
<td>1.368*</td>
<td>(0.714)</td>
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<td>Signal deviation</td>
<td>-0.617</td>
<td>(0.386)</td>
<td></td>
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<tr>
<td>Expected intervention</td>
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</tr>
<tr>
<td>-all states</td>
<td>0.913</td>
<td>(2.407)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Expected intervention</td>
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</tr>
<tr>
<td>-opposition</td>
<td>309.023***</td>
<td>(42.150)</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Expected intervention</td>
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<tr>
<td>-government</td>
<td>0.899</td>
<td>(2.388)</td>
<td></td>
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<td>Unexpected. intervention</td>
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<tr>
<td>-all states</td>
<td>-3.018***</td>
<td>(0.346)</td>
<td></td>
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<tr>
<td>Opposition unexpected</td>
<td></td>
<td></td>
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<tr>
<td>weak</td>
<td>-2.869***</td>
<td>(0.516)</td>
<td></td>
<td></td>
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<tr>
<td>Government unexpected</td>
<td></td>
<td></td>
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<tr>
<td>weak</td>
<td>-3.047***</td>
<td>(0.343)</td>
<td></td>
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<tr>
<td>Fight for gov</td>
<td>-1.091**</td>
<td>(0.377)</td>
<td>-1.026**</td>
<td>(0.376)</td>
<td>-1.021**</td>
<td>(0.375)</td>
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<tr>
<td>Battle deaths</td>
<td>0.697***</td>
<td>(0.235)</td>
<td>0.802***</td>
<td>(0.233)</td>
<td>0.798***</td>
<td>(0.234)</td>
</tr>
<tr>
<td>Population</td>
<td>0.522*</td>
<td>(0.254)</td>
<td>0.415*</td>
<td>(0.257)</td>
<td>0.417*</td>
<td>(0.250)</td>
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<tr>
<td>GDP/capita</td>
<td>-0.007</td>
<td>(0.333)</td>
<td>-0.134</td>
<td>(0.356)</td>
<td>-0.076</td>
<td>(0.329)</td>
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<tr>
<td>Observations</td>
<td>10567</td>
<td>8468</td>
<td>10567</td>
<td>10567</td>
<td>10567</td>
<td>10567</td>
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<tr>
<td>ρ</td>
<td>0.578</td>
<td>(0.037)</td>
<td>0.575</td>
<td>(0.037)</td>
<td>0.568</td>
<td>(0.036)</td>
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<tr>
<td>se(ρ)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Wars</td>
<td>157</td>
<td>152</td>
<td>157</td>
<td>157</td>
<td>157</td>
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<tr>
<td>Wars ended</td>
<td>133</td>
<td>117</td>
<td>133</td>
<td>133</td>
<td>133</td>
<td>133</td>
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<tr>
<td>Wald χ²</td>
<td>32.26***</td>
<td>26.21***</td>
<td>27.73***</td>
<td>116.88***</td>
<td>170.25***</td>
<td>174.16***</td>
</tr>
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</table>

Robust standard errors in parentheses. *significant at .05; **significant at .01; *** significant at .001 (one tailed).
REFERENCES


1 Some variation exists when considering more nuanced factors, such as the type and timing of interventions (Regan 2002; Regan and Aydin 2006) or biased interventions (Balch-Lindsay and Enterline 2000).

2 See Reiter (2003) and Powell (2004) for excellent reviews of bargaining theory. Several scholars have used the same logic to explore civil conflicts (e.g., Pillar 1983; Wagner 1993; Cetinyan 2002; Walter 2002; Regan and Aydin 2006; Werner and Yuen 2005; Thyne 2006).

3 According to McGinnis and Williams (2001: 53), “Rational expectations refers to the aggregate result of private economic actors utilizing relevant information in forming unbiased expectations of the future behavior of the economy as a whole.” Like these authors I extend the rational expectations framework beyond economics by using it to understand intrastate bargaining.

4 These signals came in a number of ways. For example, in the middle of a rousing speech on February 15, 1991 (less than two weeks before the rebellions broke out) President Bush claimed, “There’s another way for the bloodshed to stop, and this is for the Iraqi military and the Iraqi people to take matters into their own hands and force Saddam Hussein, the dictator, to step aside” (Sinai 1991). Other signals included the coalition’s dropping of leaflets encouraging rebellion (Pollack 2002), and encouragement of rebellion from the CIA-supported Voice of Free Iraq (Krauss 1991).

5 During this period, the administration claimed that the revolts were an “internal matter,” and took a somewhat confused and contradictory policy towards the rebellions (Bierman and Mackenzie 1991). State Department spokesman Richard Boucher stated, “It’s neither our intent nor our purpose to try to choose the future leadership of Iraq” (Kranish 1991). The result of the US inaction was clear. Morteza Sarmadi, the Iranian Foreign Ministry spokesman, condemned the change in US policies, highlighting Hussein’s brutality: “In the beginning [of the rebellions],
the suppression was more careful.” After the US made it clear that it would not aid the rebels, Hussein began using “the most violent methods, including illegal weapons such as napalm and incendiary bombs, to massacre the people and intimidate the rebellion” (Miller 1991).

6 The results are substantively identical when using the Correlates of War data with conflict/year as the unit of analysis (Small and Singer 1982: 210; Sarkees 2000).

7 Past research has found that civil wars are more likely to end after they have lasted for many years, providing ground for choosing the Weibull model (e.g., Regan 2002, Fearon 2004).

8 Missing values can be dealt with by either (1) assuming that the most recent signal holds until replaced by a newer signal (i.e., filling down), or (2) assuming that the missing value is a neutral signal (coded 0). Results presented in this manuscript use the first method, though the results are substantively identical when the second method is used.

9 Though it is rare, it is possible for a single conflict-year to be coded 1 for more than one independent variable (i.e., the independent variables are not mutually exclusive). For example, from 1983 to 1988 the government in Chad received an expected intervention on their behalf, while the opposition received unexpected support. In this case, both “Expected intervention-government” and “Government unexpectedly weak” are coded 1 during this time period.

10 Regan and Aydin (2006) include a similar decay function in their model, though their decay begins after the intervention, whereas mine begins at the beginning of the war. I am concerned with the deviation between interventions and the pre-war signal, while they do not consider expectations based on pre-war signals. I ran the variables without the decay function, which resulted in substantively identical results to those presented here. Though neither of the variables (with or without the decay function) violates the assumption of proportional hazards, I employ the variables with the decay function because these measures provide the most direct test of my theory.