The Geopolitics of Civil War Intervention

by

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Abstract

JACOB D. KATHMAN: The Geopolitics of Civil War Intervention.  
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The regional interests of third party interveners are critical determinants of intervention in civil war. Foreign policymakers often tout the importance of regional stability when justifying their intervention decisions, as civil wars have shown a distinct tendency to be geographically contagious. Third parties observe these regional diffusion properties and consider a war’s likelihood of infecting its regional context when deciding whether or not to become involved. As a third party becomes increasingly able to contain a civil war’s hostilities from spreading into a region of foreign policy value to the potential intervener, intervention to contain the conflict becomes increasingly likely. I draw on theories of war diffusion and intervention to construct a model of intervention decision making, focusing on third party interests in the containment of conflict hostilities. Hypotheses derived from this model are then tested on the population of potential interveners for all civil wars in the post–World War II period. The empirical results support the theoretical arguments put forth in the intervention model, as third parties are shown to intervene in conflicts that threaten the third party’s regional stability interests. In addition, the relative effectiveness of intervention as a tool for containing civil war hostilities is empirically tested. The findings indicate that interventions increase the likelihood of regional contagion in the short–term, but decrease its likelihood in the long–term. The theoretical and empirical advances of this dissertation represent the first study to directly address how the contagious properties of civil conflicts affect intervention phenomena.
To my wife, Mona, whose love and support have led me to believe that anything is possible.
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Chapter 1

Introduction

In his 2007 State of the Union address to Congress, President George W. Bush responded to growing popular sentiment to reduce the American military commitment in the Iraqi civil war by stating,

“If American forces step back before Baghdad is secure, the Iraqi government would be overrun by extremists on all sides. We could expect an epic battle between Shia extremists backed by Iran, and Sunni extremists aided by al Qaeda and supporters of the old regime. A contagion of violence could spill out across the country – and in time the entire region could be drawn into the conflict. For America, this is a nightmare scenario (Bush, 2007).”

Many have made the case that the presence of approximately 140,000 American soldiers in Iraq is all that is preventing the Iraqi conflict from erupting in extreme hostilities that would spill across its borders, infecting the surrounding region with its violence. As such, the Bush Administration has argued that a reinforced effort in Iraq,

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1Many have debated whether the conflict in Iraq is in fact a civil war. Much of this debate, however, is motivated by the political consequences for American policymakers for using the phrase “civil war.” Yet, by all objective accounts, the conflict in Iraq easily meets the minimum requirements for being termed a civil war in quantitative international relations research.

2See Byman and Pollack (2007) for a comprehensive review of the threat of contagion posed to the Middle East by the civil war in Iraq and the containment role played by the United States military.
including an increase of over 20,000 troops, is necessary to improve the future prospects for stability in the Middle East. Stability in the region is a primary American foreign policy concern. An unchecked Iraqi civil war that infects its surrounding countries with its hostilities would have far-reaching consequences for a number of American political interests. Such a contagious process would threaten American interests in regional security, economic relationships, natural resource availability, and its continued ability to fight the ongoing war on international terrorism in the region. The regional consequences of civil war are commonly used by state leaders as justification for third party intervention in an attempt to contain the violence from infecting the civil war state’s surrounding region. President Bush made this very argument in his State of the Union address in an effort to gain support for his policy of sending additional troops to Iraq.

The above example introduces a phenomenon for which there exists relatively little scientific research, raising a number of questions. Why do states intervene in foreign civil wars? Are civil wars geographically contagious? If so, what role do the regional destabilization consequences of civil wars play in determining whether third party states choose to intervene? How effective is intervention as a policy for containing civil war hostilities? While we know a great deal from previous research about the motivations of states in becoming involved in foreign civil wars, we know relatively little about how the regional stability interests of third parties affect their decisions to intervene. I address these questions in this dissertation.

The Iraq illustration may not be a perfect example of third party intervention in an ongoing civil war. However, the logic of the Bush argument for a greater troop commitment to the conflict is instructive: third party states justify involvement in foreign civil wars in an effort to contain the violence from infecting the conflict state’s surrounding region. Such justifications for intervention are not new. President Harry
Truman feared that instability in Europe and elsewhere would threaten the tenuous peace that was won with the end of World War II. Truman believed that the Greek civil war could cause a domino effect on fragile governments in the region. In his address to Congress on March 12, 1947, which would become known as the Truman Doctrine, President Truman outlined his belief that an unchecked civil war in Greece would threaten American interests throughout the surrounding region.

“It is necessary only to glance at a map to realize that the survival and integrity of the Greek nation are of grave importance in a much wider situation. If Greece should fall under the control of an armed minority, the effect upon its neighbor, Turkey, would be immediate and serious. Confusion and disorder might well spread throughout the entire Middle East (Truman, 1947).”

Truman would go on to describe the threat posed to nations along Greece’s northern boundary, as fighting had begun to spill across the borders of Bulgaria, Albania, and Yugoslavia. The result of such geographic conflict diffusion posed a serious risk to American foreign policy interests in the region.

The spatial diffusion tendency of civil war is one of the more consistent findings in the scientific literature on civil war processes. Third parties recognize this aspect of civil conflict. They make their intervention decisions based on the threat of regional contagion and their ability to affect the propensity of civil wars to spread. This is an especially pertinent topic for foreign policymakers and scholars alike given that civil war has become the primary form of conflict in the international system since the end of World War II.

During this time period, the number of ongoing civil wars in the international system has trended steeply upwards, as is evidenced in Figure 1.1, with only a recent decrease since 1994 (Harbom, Hogbladh and Wallensteen, 2006). Yet, it is not simply
the number of civil wars that so solemnly describes the prominence of these conflicts in the last half century. Civil wars have been particularly destructive, as Figure 1.2 makes abundantly clear. Using battle–related fatalities as a proxy indicator of the level of instability being produced by civil wars, Figure 1.2 shows that the number of deaths produced by civil conflicts in the post–WWII period approached twelve million, far outstripping the level of violence produced by interstate conflicts.\(^3\) This is certainly not to say that interstate wars have become an unimportant phenomenon relative to civil conflicts. Rather, these statistics simply reflect the fact that civil wars have quickly become an increasingly prominent international relations phenomenon, one for which third party states have sought means by which to manage these conflict hostilities.

\(^3\)The number of fatalities reported for civil wars in Figure 1.2 is actually a very conservative value, as it is often difficult to accurately count the number of battle deaths incurred by rebel groups. Rebels do not commonly wear uniforms. As a result, civilian and rebel deaths are often difficult to distinguish, producing missing values for observations of battle–related fatalities for rebel organizations. As such, Figure 1.2 reports only battle death figures for which information was available, resulting in a value that is likely far lower than the actual deadly consequences of civil wars in the post–WWII period.
The growing prominence of civil wars over the past several decades is particularly troubling given the propensity of civil war hostilities to spread. Civil war does not occur randomly in the international system. Rather, civil conflicts are international events, with causes and consequences that cross state boundaries. The presence of domestic unrest in one state affects the likelihood of violence in other proximate states.

Figure 1.3 plots the geographic midpoints of each civil war that occurred from 1989 to 2001 according to the conflict data provided by Armed Conflict Data Project (Gleditsch et al., 2002; Strand, Wilhelmsen and Gleditsch, 2004). The conflicts noticeably cluster geographically during this time period, particularly in Central America, the Balkans, the Caucasus, Sub-Saharan Africa, and Southeast Asia. Of course, this clustering effect of civil conflicts may simply be the result of spatially defined domestic attributes of states that are associated with civil unrest. For example, the political systems and

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4In Figure 1.3, each dark square represents an individual civil war and each light square represents an internationalized civil war. This figure was taken directly from Salehyan and Gleditsch (2006). It was originally created using the ViewConflicts software provided by Rød (2003).
economic conditions that are correlated with domestic violence may simply be more prominent in those parts of the world where we observe the clustering effect of civil war occurrence. However, Figure 1.3 may also indicate that the presence of domestic unrest in one state spreads like a contagious virus to other proximate states.

A cursory look at the civil wars that took place in the late 1980s and the early 1990s in the Great Lakes region of Africa provides an example of the geographically diffusive nature of civil conflict. The states in this region faced a series of civil wars that are commonly associated with one another. During this period, Uganda was embroiled in a war against rebel groups in the northern and western provinces of the country. As the Ugandan government was preoccupied with its own conflict, large Tutsi refugee camps had been set up in southern Uganda. Ethnic Hutus had rebelled against the previous Tutsi-controlled regime in Rwanda. The Hutu seizure of the state and the subsequent mistreatment of Tutsis led to an exodus of Rwandan Tutsis to refugee camps in southern Uganda. Extremism often flourishes in refugee camps, creating ideal conditions for the organization of peoples around rebel ideologies. It is in this environment that the Rwandan Patriotic Front (RPF) was born.

In an attempt to regain control of the Rwandan state, the RPF launched attacks from southern Uganda and used its refugee camps as rear bases for their operations. The fighting between the RPF and the Hutu government was particularly intense, including the genocide led by extremist Hutus against ethnic Tutsis and moderate Hutus, claiming the lives of approximately 800,000 Rwandans. Eventually the RPF gained the upper hand, and Hutus, fearing reprisals for the pogroms previously committed against the Tutsis, fled in the millions to Zaire, now the Democratic Republic of Congo.

Unopposed in Rwanda, the new Tutsi government enjoyed approximately two years of relative peace. However, hidden within the flood of Hutu refugees to Zaire were Hutu
rebels, former government members, and the Interhamwe militia, which was largely responsible for carrying out the genocide in 1994. These forces were able to regroup in Zaire’s eastern territories and make plans for retaking control of the Rwandan government.

The flood of refugees exacerbated the growing ethnic tensions in Zaire, as Hutu rebels fleeing Rwanda teamed with Zairian government forces in clashes against Tutsis, also known as the Banyamulenge, in Zaire’s northeastern territories. These clashes were followed by a significant escalation of fighting in Zaire. Therefore, the conflict in Rwanda had significant spillover effects for its neighbor, resulting in the onset of Zaire’s civil war.

The instability in Zaire eventually gave Hutu militants the ability to conduct cross-border strikes from the refugee camps in Zaire against Tutsi government forces in
Rwanda, essentially reigniting the civil war in Rwanda. The instability in Zaire also helped lead to the war in Burundi, as Burundian rebel groups partaking in Zaire’s conflict redirected their violence across the border by striking the Burundian government. It was only after Joseph Kabila came to power in the Zaire, which by this time had changed the name of the state to the Democratic Republic of Congo (DRC), that stability began to be restored to the country, making it increasingly difficult for rebel groups to use DRC territory as bases from which to carry out attacks in Rwanda and Burundi.

Third party states are able to observe this process, and, through experience with their observations of previous cases of civil war diffusion, third parties are capable of estimating the likelihood that particular civil wars will be contagious for the civil war state’s surrounding region. A potential intervener is not solely concerned about the effect of a civil war on its relationship with the conflict state. Given the distinct regional consequences of civil wars, third parties also make decisions about intervention based upon the expected impact of regional contagion on their interests in the conflict’s surrounding region. The United States National Security Strategy document of 2006 makes this very point. “Regional conflicts do not stay isolated for long and often spread… This means that even if the United States does not have a direct stake in a particular conflict, our interests are likely to be affected over time (Bush, 2006, 14).” Although this quotation refers to “regional conflicts” more generally, several civil wars are highlighted prominently in the text, including conflicts in Sudan, Liberia, and Northern Ireland. This is similar to the press release from the US National Security Council in 1999 concerning the imminent involvement of US and NATO military forces in Kosovo which stated that the goal of intervention in Kosovo was to “promote regional stability and protect our investment in Bosnia (Gellman, 1999, A31).” The implication of such decision making is that third parties consider the broader regional consequences
of civil wars when making their intervention decisions. Where civil wars increasingly threaten to infect regional states with whom third parties have valued relationships, intervention becomes an increasingly attractive policy option in an effort to maintain regional stability.

However, regional stability predictors of intervention have gone unaddressed in the conflict processes literature. This dissertation is the first study that directly addresses how the contagious properties of civil conflicts are related to third party intervention decision making. Civil wars are international events. Civil war processes and phenomena associated with civil conflict should be studied in their international contexts. Doing so will provide a fuller understanding of why third parties choose to intervene in civil wars and how successful third parties are in achieving their intervention goals.

The following chapters address questions of civil war diffusion and intervention decision making. In doing so, it is important to provide an overview of existing research on third party intervention and civil war contagion. Chapter 2 reviews the literature on these topics, paying special attention to the dyadic nature of research on intervention onset. However, the existing research on intervention has paid little mind to the regional spillover consequences of civil conflicts. The civil war diffusion literature is thus also briefly reviewed, noting that the intervention and civil war diffusion literatures have evolved relatively independent of one another. Chapter 3 combines our knowledge of these two distinct literatures by introducing my theoretical arguments on the relationship between civil war contagion, the regional interests of third parties, and intervention decision making. Since I am primarily concerned with the decision of third parties to intervene in an ongoing civil war, a decision theoretic approach is employed to clarify the decision process as it refers to the regional destabilization tendencies of civil conflicts. Given the centrality of the decision theoretic model’s components introduced in Chapter 3, Chapter 4 is dedicated to operationalizing them. This chapter
introduces proxy indicators of each third party’s ability to contain a conflict, the value to each third party of the region in which the civil war is taking place, and the intervention costs associated with becoming involved in a foreign civil war. In doing so, Chapter 4 introduces an innovative means of statistically capturing the likelihood of a civil war infecting each of its neighboring states by calculating the increased likelihood of conflict spillover while controlling for a number of common domestic explanations of civil war. Chapter 5 empirically tests two hypotheses derived from the theoretical arguments made in Chapter 3. The statistical analyses address the effect of a potential intervener’s regional stability interests on its likelihood of intervention. The findings support the theoretical propositions of Chapter 3, noting that third parties that are not members of the the civil war state’s region are increasingly likely to intervene as a conflict poses a rising risk of spreading into a region of foreign policy value to the third party. Additionally, those third parties that are themselves members of the civil war state’s region are driven to intervene by their own likelihood of being infected rather than by their broader regional stability concerns. Chapter 6 then provides an empirical analysis of intervention effectiveness. Where effectiveness is defined as an intervention’s ability to decrease the likelihood of civil war contagion, three hypotheses are drawn from the extant literatures on civil war and intervention. Chapter 6 reports results indicating that interventions are effective at containing civil wars over the long-term time horizon, measured as a five year effect of intervention on the likelihood of contagion. However, in the short-term, measured as a single year effect, intervention is found to exacerbate the risk of regional contagion. Finally, Chapter 7 reviews the theoretical and empirical advances of the previous chapters, providing implications for the policymaking community and contributions to the conflict processes literature.
Chapter 2

The Intervention and Civil War Diffusion Literatures

2.1 Introduction

In this chapter, I briefly outline the extant literatures on third party intervention and civil war diffusion, noting that the two have evolved largely independent of one another. Previous research has produced a foundation of knowledge upon which this dissertation builds. Much has been learned from these previous studies about the motivations for third party intervention. However, as I will describe in the following pages, much of the work on civil war intervention relies on strict dyadic explanations. These explanations of intervention, what I refer to as dyadic connection theories, have focused on the links between third party states and the states experiencing civil wars. Such approaches argue that intervener decision making, intervention dynamics, and intervention outcomes can be explained by emphasizing the characteristics of the third party, traits of the civil war state, or the existence of affective relationships between them.

Geopolitical explanations of intervention also draw connections. However, the links
emphasized are those that note the importance of regional and systemic factors associated with the civil war that affect third party decision making. Geopolitical theories have not been highlighted prominently in the civil war intervention literature. This dissertation introduces an explanation of intervention that is motivated by the geopolitical interests of third parties in the civil war state’s region. Chapter 1 noted the importance of the regional destabilization consequences of civil wars as predictors of third party involvement. Indeed, one of the more consistent findings in the civil war literature is that war hostilities tend to be geographically contagious. Yet, such regional destabilization consequences of civil conflicts have gone largely unaddressed as explanations of third party decision making. I advocate for an increased emphasis of research on such explanations of intervention and related phenomena. In the following section, the intervention literature is briefly outlined. I go on to describe existing research on civil war contagion. Finally, I conclude with arguments about the regional considerations of third parties in the intervention decision making process.

2.2 Dyadic Connections and Intervention

I define dyadic connection theories as those that hypothesize a connection or relationship between the intervener and the civil war state. This connection may result from existing characteristics of the civil war state, features of the intervener, or aspects of the conflict itself. Admittedly, this definition is rather broad, encompassing a number of existing explanations of intervention. Mitchel (1970) was the first to note the importance of such connections, and while Mitchell also noted that the characteristics of the international system are important to our understanding of intervention, a prelude to my emphasis on a geopolitical explanation of intervention, dyadic connection theories of intervention have been the most prominent in the literature.
Such theories have emphasized the importance of looking for ethno–linguistic (Car-
ment and James, 1995; Carment, Rowlands and James, 1997; Davis, Jaggers and Moore,
1997) and ideological (Regan, 1996) ties between the potential intervener and the groups
participating in the civil war. Also, characteristics of the civil war state, including the
value of its natural resources to the potential third party intervener (Olsson and Fors,
2004), have been highlighted as a determinant of intervention onset and dynamics.
Furthermore, the nature of the civil war being waged, whether it be ethno-religious,
irridentist, ideological, a coup/revolution, secessionist, or driven by the availability
of lootable goods (Balch-Lindsay and Enterline, 2000; Fearon, 2004; Licklider, 1995;
Regan, 1996, 2002), the civil war’s intensity (Regan, 1998, 2002), the presence of hu-
manitarian crises (Dowty and Loescher, 1996; Regan, 1998), and other characteristics
of the conflict have been shown to affect intervention.

The general argument that is made by this class of theories is that when a powerful
connection exists between a third party state and the civil war, the third party becomes
increasingly likely to be pulled into the conflict. Additionally, the type of intervention
chosen and the war outcomes related to a third party’s involvement in the conflict are
likely to be affected by such connection variables. Where little or no such powerful
connection exists, it is less likely that intervention is to occur in the first place. In this
sense, dyadic connections are drawn between the third party and the civil war state
without regard to the international environment in which the war is taking place. Less
attention is paid to the potential regional consequences of civil wars and the subsequent
regional interests of third parties in these conflicts. Such regional concerns may affect
the potential intervener’s decision calculus on whether or not to become involved.

One reason for the focus on dyadic connections as an explanation for intervention
may simply be the result of the dyad or dyad–year research designs that are commonly
used in the quantitative conflict processes literature. It is often difficult to account for
dynamic temporal and spatial processes in a more static dyad or dyad–year research design. In addition, when thinking theoretically about explanations for phenomena that occur between two countries, it is natural to consider the relationships of the two countries as principal explanations of these interaction phenomena. Third party intervention is no different in the sense that intervention is a phenomenon that occurs between two countries: the third party and the civil war state. Consequently, identifying how the relationship between the two affects the phenomena that occur between them pays dividends in helping to understand why the third party chose to intervene.

However, a focus solely on dyadic relationships leaves several questions that are more difficult to answer within this framework. Does a potential intervener have interests in a civil war state’s regional context? Does the region in which the civil war state is situated have characteristics that would attract intervention? Does a potential intervener have a vested interest in the war’s regional outcomes? These are questions that are not easily answered by simply considering the dyadic links between a third party and the civil war state. While much has been learned through a focus on common affinities between the civil war state and the potential intervener, an array of factors external to the dyadic intervener–civil war state relationship are likely to have a substantial impact on the calculations made by third parties regarding intervention.

2.3 Interventions, Civil Wars, and Regional Environments

Not all research on intervention decision making focuses narrowly on dyadic relationships between the third party and the civil war state. Geopolitical explanations are present in the literature. However, they have been under–utilized relative to their
dyadic connection counterparts. In fact, most geopolitical measures have been con-
strained to common control variables that supplement other explanations. These have
included measures of the international system’s power distribution (Regan, 1998; Lemke
and Regan, 2004),1 the proximity of the potential intervener and the civil war state
to one another and the frequency of neighboring states (Regan, 1998; Balch-Lindsay
and Enterline, 2000; Lemke and Regan, 2004), and the power status of the intervener
(Regan, 1996; Lemke and Regan, 2004). While several of these variables are power-
ful predictors of intervention, they are relatively silent in terms of the policy options
available to decision makers. For example, potential interveners can do nothing about
whether they share a border with a state experiencing a civil war. While prior studies
of intervention are correct to include such factors given that they are significantly re-
lated to intervention, geopolitical explanations of intervention need not be constrained
to these control variables.

Only recently has research begun to look at the relationships between potential
interveners and the affective links between potential interveners and the geopolitical
environments in which civil wars take place (Findley and Teo, 2006; Gent, 2005a,b).
Civil wars do not occur in a vacuum. They take place in regional environments that
should be accounted for in explanations of intervention. Including an emphasis on the
role of a civil war’s regional context in explaining intervention admittedly adds a level
of complexity to our understanding of third party decision making. However, doing so
should also provide a more complete understanding of when we should expect to observe
intervention and the different consequences that result from third party involvement.
Models that incorporate such a geopolitical focus will more accurately represent the
regional motivations of a third party’s decision to intervene.

1One such measure which is commonly found to be a significant predictor in empirical models of
intervention is whether or not the civil war occurred during the Cold War.
Previous research on third party intervention has made a number of assumptions with regard to the primary motivation of third parties. The interests of third parties have been assumed to include preferences for ceasing the conflict’s hostilities (Regan, 1996, 1998, 2000), manipulating civil war duration (Balch-Lindsay and Enterline, 2000; Regan, 2002), affecting the outcome of the conflict defined as government or rebel victory or an accepted negotiated settlement (Gent, 2006; Mason and Fett, 1996; Mason, Weingarten and Fett, 1999; Walter, 1997, 2002), or affecting the decisions of and costs incurred by other third parties (Findley and Teo, 2006; Gent, 2005b).

However, studies of third party intervention can generally be regarded as viewing intervention as a foreign policy tool used by states to influence civil war dynamics (Lemke and Regan, 2004). In fact, the commonly used definition of third party intervention in the literature, and that which is also employed in this dissertation, is a definition of intervention as influence: “Intervention is defined as convention-breaking military and/or economic activities in the internal affairs of a foreign country targeted at the authority structures of the government with the aim of affecting the balance of power between the government and opposition forces (Regan, 1998, 756).”

Following this definition of intervention as influence, I argue that civil wars are international events. This may seem somewhat counterintuitive given the single-state nature of civil wars. While it is true that by their very definition civil wars are conflicts that take place between the ruling regime of a nation-state and one or more rebel groups within that same country, civil wars do not occur wholly independent of their surrounding regional context. Rather, civil conflicts take place in a complex web of interstate interactions and relationships, where the effects of civil wars are likely felt by a number of relevant parties. If it is the case that the instability generated by a civil war is unconstrained by the borders of the civil war state, potential third party interveners may have interests in manipulating the likelihood that other regional states
will become infected by that instability.

In the following chapter, I formally make the case that potential interveners observe whether the civil war’s instability is likely to threaten their interests in the civil war state’s regional environment. These considerations affect third party decisions about whether to intervene. The choice of a third party state over intervention depends upon its orientation toward the regional environment in which a civil war takes place. Third parties with valued investments in a civil war’s surrounding region have incentives to contain the conflict’s hostilities to the civil war state and thus may use intervention as a means of inhibiting the spread of the conflict’s instability to other states. By containing the hostilities, a third party is able to mitigate the effects of the civil war for those parties that would otherwise be detrimentally affected. Such interveners hope that an effort made in intervention will result in the realization of their regional stability objectives, including a decrease in the likelihood of cross-border conflict spillovers.

In this sense, intervention decision making is not conducted based simply upon the relationship between the third party and the civil war state. The expected regional destabilization of civil wars, and the investments that are potentially disrupted as a result of those destabilization consequences, also affect the choice to intervene. The argument that foreign policy decisions made by one state toward another are dependent upon its interests in other states in the international system is not new. My contention that third party decisions on intervention are related to a civil war’s expected regional consequences is similar to those currently being made in the literature on interstate conflict where the dyadic level of analysis has traditionally dominated. Scholars are

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2In this dissertation, the civil war state’s region refers to those states that are the most geographically proximate to the civil war state. Operationally, the civil war state’s region consists of those states that fall within the five-point ordinal Correlates of War Direct Contiguity scale that codes land and sea borders between states (Stinnett et al., 2002).

3See Bremer (1992) for a seminal example of how the study of interstate conflict has relied upon the dyadic level of analysis.
increasingly attempting to incorporate information on the temporal and spatial contexts in which states interact (Bueno de Mesquita, 1981; Signorino and Ritter, 1999; Crescenzi and Enterline, 2001; Ward and Gleditsch, 2002; Crescenzi, 2007). In doing so, scholars are accounting for the international context and the interdependence of observations that are absent in studies focusing solely on the dyad.

Indeed recent work has noted the spatially and temporally interconnected nature of states in the international system. A growing body of research has indicated how closely civil unrest in one state affects and is affected by socio-political events in other states (Rosh, 1988; Forman, 1972; Enterline, 1998; Maoz, 1996; Gleditsch, 2007; Murdoch and Sandler, 2002, 2004; Balch-Lindsay and Enterline, 2000; Salehyan and Gleditsch, 2006). Civil wars exhibit a distinct interstate dimension, and it is the countries in a civil war states’s region that are most vulnerably exposed to the instability produced the conflict.

In an early work, Forman (1972) argues that civil wars can be a source of international conflict between states, as civil wars create the opportunity for foreign interveners to influence the status quo power distribution of the international state system. This being the case, potential third party interveners must weigh the costs and benefits of intervention with regard to the utility of revising or maintaining the status quo of the system. In other words, the cost–benefit calculus of any one potential intervener is influenced by the intervener’s assessment of the civil war’s environment.

Whereas Forman’s focus is on the potential for international violence, Rosh (1988) draws on previous work by Buzan (1983) to note the importance of links between states and their regional environments in explaining the level of militarization in the third world. He finds that the military allocations made by third world states are most heavily dependent upon the level of militarization in their surrounding regions, what he terms their “security webs.” Thus the strategic, military, and foreign policy
decisions made by states are determined by their relationships with the environments within which they reside. This is particularly important as these security webs are destabilized by the presence of conflict in any one state. As Maoz (1996) shows, domestic unrest in one state leads to increased levels of conflict in the state’s politically relevant international environment (PRIE). In particular, states undergoing revolutionary change, as is common in cases of civil war, tend to become involved in an increased number of interstate conflicts. Also, members of the PRIE experience an increased likelihood of being drawn into militarized disputes with other states in their PRIE. In other words, domestic conflict is closely associated with increased instability and conflict among those states with the most vested interests in the state experiencing domestic unrest.

This research has led to more recent work that finds that the ramifications of civil conflicts are rarely confined to the civil war state alone. Civil conflicts threaten the stability and economic wellbeing of states in the civil war’s region. Whether the civil war causes economic recessions in its surrounding regional neighborhood (Murdoch and Sandler, 2002, 2004), increases the level of interstate conflict involvement of neighboring states (Maoz, 1996), or directly yields a spillover of violence to proximate states (Balch-Lindsay and Enterline, 2000; Gleditsch, 2007; Buhaug and Gleditsch, N.d.), the effects of civil wars are rarely if ever constrained solely to the civil war state.

Previous research has found a number of causal factors for the diffusion of civil conflicts to the civil war state’s neighbors. The proximity of the violence may be the most obvious predictor of regional infection. The closer regional states are to the violence, the greater the risk of being infected by that violence (Buhaug and Gates, 2002; Hegre, 2006; Raleigh and Hegre, 2005). Civil unrest tends to follow the flow

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4Maoz’s definition of a country’s PRIE includes all those states that are contiguous to the country of interest, the relevant regional powers, and the great powers.
of refugees (Salehyan and Gleditsch, 2006). Refugees put a great strain on their host countries. They are an economic detriment. The often carry with them diseases that may spread into the native population thus decreasing the living standards and public health capacities of neighboring states (Ghobarah, Huth and Russett, 2003). Radical ideologies commonly thrive in refugee camps, posing a threat to the order and stability of the host nation. Furthermore, cross-border ethnic ties create opportunities for wars to spread (Moore and Davis, 1998; Gleditsch, 2007) especially if an ethnic group in a neighbor state shares a kinship with one of the warring parties. Ethnic grievances may span borders, and transnational kin groups may show solidarity by igniting domestic unrest in their own country. The war in the conflict state also creates demonstration effects for potential rebel groups in proximate countries (Kuran, 1998). Ethnic kin in neighboring states may learn lessons from these signals, and use these lessons to more effectively challenge their own government. In addition, civil wars are associated with regional economic recessions (Murdoch and Sandler, 2002, 2004). Declining regional economies make rebel ideologies in states throughout the region more attractive to rebel recruits (Collier and Hoeffler, 2004; Fearon and Laitin, 2003; Walter, 2004).

Research on the spillover effects of civil wars follows a well-established literature on interstate war contagion that uncovers the propensity of interstate war to spread beyond its initial participants. War is not randomly distributed in time and space (Houweling and Siccama, 1985; Davis, Duncan and Siverson, 1978; Kadera, 1998). Rather, conflict has a tendency to infect those states with links to the original conflict participants. These links include but are not limited to geographical proximity or a shared border (Most and Starr, 1980; Houweling and Siccama, 1985; Siverson and Starr, 1991), a military alliance (Levy, 1982; Siverson and Starr, 1991), or an adversarial relationship (Houweling and Siccama, 1985).

Taken together, both the intrastate and interstate war contagion literatures note
that violent hostilities have a distinct tendency to be spatially contagious, threatening the stability of those countries located in the civil war state’s surrounding region. These regional threats come in a number of forms, including an increased risk of war infection, economic recession, regime instability, and others. Within this catalogue of detrimental geopolitical ramifications, the most destructive is the threat of civil war diffusion, as the ongoing presence of hostilities in the civil war state threatens the regime stability of other countries in the same neighborhood.

However, the expected likelihood of war infection for regional neighbor states is not likely to be consistent from one war to the next. The prospect of contagion for one civil war state’s environment may be substantially different from the environment of another civil war state. The potential for contagion is likely to be greater for a civil war state that is defined by intense hostilities, produces transborder refugee flows, has a number of contiguous neighbors, and multiple cross-border ethnic affinities with other states in its region than should be the case for a civil war state that lacks these characteristics.

Furthermore, certain countries in a particular civil war state’s regional environment will face differential likelihoods of becoming infected by civil conflict than do other states in that same region, given each state’s domestic predictors of civil war. Several traits of neighbor states may predispose them to domestic unrest making a contagion of hostilities from the civil war state more likely. Several domestic factors that may make a neighbor state more vulnerable to domestic unrest may include its economic wellbeing (Sorli, Gleditsch and Strand, 2005; Elbadawi and Sambanis, 2002; Collier and Hoeffler, 2002), form of governance (Gurr, 2000; Reynal-Querrol, 2002; Hegre et al., 2001; Regan and Norton, 2005), ethnic constitution (Lake and Rothchild, 1996, 1998; Fearon and Laitin, 2003), population size (Elbadawi and Sambanis, 2002; Collier and Hoeffler, 2002; Sorli, Gleditsch and Strand, 2005), and history of previous domestic hostilities.

Potential interveners consider the variable regional distribution of a war’s contagious
instability as they formulate their foreign policy responses. Civil conflict increases the level of uncertainty about the future status quo not only for the civil war state but also of the civil war state’s regional environment. The risk of contagion increases the threat level faced by the countries in the civil war state’s neighborhood. Those potential interveners who have significant relationships with countries in the civil war state’s regional environment should have vested interests in the extent to which the diffusion effect of the war disrupts the stability of the conflict’s neighboring states.

These potential third party interveners are likely to choose intervention as a means of affecting the probability of contagion to the civil war state’s neighborhood. The instability inherent in the intrastate hostilities makes the civil war state intrinsically vulnerable to the involvement of foreign powers. Potential interveners may have incentives to manipulate the civil war in an attempt to preserve the regional status quo, what Forman terms “conservative” policies, and intervention offers the most dramatic means available to third party states for affecting the contagious consequences of the conflict.

2.4 Conclusion

Intervention decisions by potential interveners are not made in a vacuum. To more fully understand third party interventions into foreign civil wars, one must understand the geopolitical context in which civil wars take place. Civil wars are international events that produce power voids in the international system, creating opportunities and vulnerabilities for third party states. From the civil war contagion literature we find that civil conflict increases the level of uncertainty about the future status quo not only of the civil war state but also of the civil war state’s surrounding region. The civil war state is at once more vulnerable and more threatening to its environment. The civil war state becomes increasingly vulnerable to the involvement of third parties
with interests in the war’s outcome, what Forman refers to as a “dramatic reduction in the sovereign impenetrability (p. 1134)” of the civil war state. At the same time, the contagious hostilities produced by a civil war also make it more threatening to its immediate region and to the interests of other states in the international system. As a result, a potential intervener’s decision over intervention in a civil war is colored by its interests in the war’s geopolitical environment, because each civil war carries the potential to infect that environment with its conflict hostilities.

As the works above show, a state’s orientation to its dyadic partner is not independent of its interests in others in the international system. If war brings with it the potential for contagion, then the decisions of potential interveners may be affected by its interests in those states that are threatened by the conflict. In this sense, a third party’s foreign policy orientation is more broadly defined than a simple focus on the civil war state, as dyadic approaches to civil war intervention implicitly assume. Third parties may have a number of regional interests tied to the consequences of the civil war including the political stability of the environment or the maintenance of its economic, military, and natural resource relationships with states in the civil war’s region. A third party’s interests in the civil war increases as the value of the potential intervener’s investments in the conflict’s region increases. Interveners with valued relationships in the civil war state’s region have an interest in containing the instability of the civil war from infecting its regional context.

This review of the literature on intervention and civil war contagion describes the geographically contagious characteristics of civil wars. Since these conflicts have distinct regional consequences, it is unlikely that third parties make their intervention decisions based solely upon their direct relationship with the civil war state. The following chapter captures the intervention decision making process with regard to a third party’s regional stability concerns.
Chapter 3

Civil War Contagion and Third Party Intervention

3.1 Introduction

As evidenced in the previous chapter, the literature on third party intervention offers insights into multiple factors that influence a state’s decision calculus to intervene in foreign civil wars. Also, the literature on the international consequences of civil conflicts offers an interesting, if sobering, understanding of the epidemiological processes by which civil wars may infect the regional environments in which they take place.

However, these two literatures have evolved largely independently of one another. The literature on third party intervention would benefit from a consideration of the regional effects of civil war. Taken together, these literatures offer a basis of knowledge from which new and interesting insights into the determinants of third party intervention can be reevaluated and the geopolitical effects of intervention can be judged. Only recently have scholars begun to look beyond the dyadic connections between potential interveners and the characteristics of the civil war state that attract third party involvement (Findley and Teo, 2006; Gent, 2005b). Still, to date no research has attempted to
explain civil war intervention by linking the decision calculus of potential interveners to the regional diffusion effects of civil war. Nor have the diffusion effects associated with intervention been systematically addressed. This is interesting since the basis of the dyadic connection approach to intervention research relies upon the premise that the civil war’s violence threatens the interests of the third party in the civil war state. As such, a third party may choose intervention as a means of influencing the course of the conflict or its outcome in line with its interests in the civil war state. However, it is abundantly clear from the civil war diffusion literature that civil war hostilities do not simply threaten the status quo of the civil war state. Rather, the region in which the civil war is situated is also threatened by the prospect of geographic contagion processes that are so commonly associated with civil war hostilities. Therefore, what a simple dyadic approach to intervention research misses is the interests of third parties in the regional consequences of a conflict. The implicit assumption in dyadic connection theories of intervention is that the decision of each third party is driven by a focus on the civil war state. However, as the previous two chapters indicate, this assumption is overly narrow, as third parties have regional stability interests, and the presence of a contagious civil war threatens to detrimentally affect those interests. As a result, the hostilities produced by a civil war do not simply affect a third party’s interests in the civil war state, but they also pose a threat to a third party’s regional concerns.

In this chapter I discuss the interests of third parties in intervention with regard to the expected regional consequences of civil war. I approach intervention from the decision making perspective of the potential intervener. I therefore construct an expected utility model to demonstrate the logic and reasoning of third parties in the intervention decision process (Bueno de Mesquita, 1980, 1981, 2003). Deductions from the model are then used to generate testable hypotheses that represent my core theoretical arguments on the connection between the perceived risk of regional contagion, the utilities
associated with the transnational spread of civil war, and the interests of potential interveners in the geopolitical consequences of intervention. Prior to introducing the model, I first discuss the regional stability preferences of third parties in containing the contagious effects of civil conflicts.

3.2 An Expected Utility Approach

In the pages below I construct an expected utility model of civil war intervention. Using an expected utility model allows me to isolate the third party’s utility for successful or unsuccessful outcomes and the variable probability of those outcomes that result from third party decisions over intervention. In this model I delineate a third party’s regional interests with regard to an ongoing civil war, its utility for war containment, and its subjective estimate of the likelihood that the war will spread with and without an intervention effort.¹

3.2.1 Regional Stability Preferences and Intervention as a Tool for Containment

Potential third party interveners often publicly tout the importance of intervention in order to contain a civil conflict from enveloping its surrounding regional environment. For example, given the explosive potential for the conflict in Kosovo to have infectious effects on the greater Balkan region, the Clinton administration sought foremost to

¹It is not my contention in this dissertation that the decisions of a third party over intervention are based wholly on the third party’s interest in the regional consequences of a civil conflict. In fact, third party states may have a number of incentives for involving themselves in a foreign civil war. These may include, but are not limited to, interests in ending the war’s hostilities, pillaging resources, gaining control over territory, or improving the likelihood that the side supported prevails. My argument is simply that potential interveners very often have interests that go beyond a narrow focus on the civil war state to a broader set of geopolitical consequences. I therefore separate the role of the contagious properties of civil wars from other explanations of intervention in order to clarify the role of such factors in the intervention decision making process.
contain the conflict within the Federal Republic of Yugoslavia, evidenced by the US
National Security Council’s defined goals in the crisis to “promote regional stability
and protect our investment in Bosnia; prevent...[a] renewed humanitarian crisis; [and]
preserve US and NATO credibility (Gellman, 1999, A31).” Also, given the types of
states that most often choose to intervene, third party interests in the containment
of war hostilities is a generalizable phenomenon. The vast majority of intervening
states are either neighbors of the civil war state or global powers with force projection
capabilities beyond their geographic region. It is not often the case that global powers
wish to intensify the spread of civil war instability throughout the regions in which the
wars take place. Major powers, by definition, define their security and foreign policy
interests globally. Attempting to manipulate a civil war in ways that make it regionally
intractable is not likely to be a common intervention goal of major powers. Nor, for
that matter, is it likely that major power interveners would have the ability to spread a
civil war to particular states in the civil war state’s region and not others. Intervention
to exacerbate a conflict’s hostilities is likely to raise the costs of the conflict for the
entire regional context not simply for particular members of the region with whom
an intervener may have an adversarial relationship. Third parties that neighbor the
civil war state are also likely to prefer regional stability over infectious outcomes. As
Rosh (1988) and Maoz (1996) make clear, a state’s security is closely tied to its regional
environment. Intervention to exacerbate regional instability could only serve to increase
the threat faced by the intervening neighbor state. Therefore, it is reasonable to believe
that third parties use intervention in foreign civil wars as a means of containing these
conflicts from infecting their regional environments.

In addition, I do not contend that intervention is the only foreign policy tool avail-
able to third parties. Instead, it is one of several. For example, in the initial stages of
the conflict in Kosovo, the UN feared conflict spillover into neighboring areas, especially
for Albania and Macedonia given their large ethnic Albanian populations. Therefore, preventive forces were deployed along the borders in order to contain the spread of the conflict. This is an alternative to intervention. However, the preventive effort was quickly discarded given the extraordinary costs of patrolling what was a largely underdeveloped area given the considerable number of troops needed to effectively control the border. One can imagine that any effort to patrol the borders of substantially larger civil war states, like the conflicts in the Democratic Republic of the Congo for example, would be practically impossible for any state that is not solely interested in containing the conflict from crossing its own contiguous border. Additionally, since civil wars take place almost exclusively in less developed nations, the ability to effectively patrol a border as a means of containing a civil war is diminished given the lack of transportation corridors and the prevalence of isolated and underdeveloped border regions. This very phenomenon is currently playing out in the conflict in Sudan’s Darfur region. Chad shares a very long border with Sudan. Chad’s inability to contain the war from spilling across its border has made containment through preventive measures practically impossible. Although it has not yet been verified, there is speculation that Chad has chosen to support the rebels fighting in Darfur given its own inability to seal its border from the spillover effects of the war through preventive measures. Chadian Army General Mahamat Itno makes many of these points when commenting on the threat of conflict spillover from Darfur into Chad when he states that “Sudan wants to export the war in Darfur to us here. They want to use the Janjaweed they armed to terrorize Darfur, to terrorize our population.” However, General Itno acknowledged the difficulty in containing the conflict by patrolling the border region when he stated, “It is a long border. We cannot be everywhere at once (Polgreen, 2006, A1).” Therefore, my contention is that intervention as a foreign policy tool of third parties offers the most dramatic form of affecting a civil war congruent with a third party’s containment
interests whereas the use of preventive measures are often difficult to effectively implement. Below I introduce an expected utility model that sheds light on the decision processes of potential interveners with regard to their interests in the containment of civil war diffusion.

3.2.2 The Model

Given that intervention is a costly venture for third party states, potential interveners must calculate the expected utility of intervening versus not intervening. Where the expected utility of intervening to contain the conflict’s hostilities exceeds the expected utility of not intervening, we should observe third party involvement. Regan (1998, 2000) makes a similar point in his decision–theoretic model. However, Regan’s initial assumptions for why states choose to intervene differ from my own. Regan argues that third parties intervene with the goal of ceasing civil war hostilities. He points out that “not all interventions have the explicit goal of stopping the hostilities, but other desired outcomes can often be achieved by stopping the fighting or requiring this as a necessary first step (1998, 760).”

This initial assumption is not fully compatible with the regional war contagion arguments that I am making here. First, Regan’s arguments are specifically directed to a third party state’s interest in affecting a conflict relative to the civil war state itself. My approach is more concerned with the effect of intervention on the likelihood of war diffusion to actors that are external to the civil war state. A third party’s interest in the cessation of the war’s hostilities is not necessarily congruent with a third party’s interest in the effect of intervention on containing the war. A third party’s interest in a shorter conflict should be closely associated with its goal of containing the the war from infecting its regional environment. In fact, an intervention that is successful in abruptly ending a civil war may be the most dramatic way to contain
its hostilities from detrimentally affecting the civil war state’s environment. When the conflict’s hostilities cease, instability is no longer being exported by the civil war state. Similarly, the prolongation of a civil war may be correlated with the spread of a war’s hostilities to the civil war state’s regional neighborhood.²

Although these phenomena may be correlated, basing the interests of interveners on the duration of hostilities would require a redefinition of the success or failure of intervention from a war diffusion perspective. For instance, an intervening state may have a strong interest in containing a civil war from infecting a state that is contiguous to the conflict if, for example, the intervener receives a substantial proportion of its oil imports from the contiguous state. Such an intervention may be judged a success as long as the conflict is contained, thus allowing the neighboring state to remain stable and capable of continuing its oil exports, even if the war was somehow prolonged by the intervention.

To clarify this point, consider the war in Bosnia–Herzegovina and its associated interventions. While the international community was initially unwilling to intervene decisively to hasten an end to the conflict, the United Nations Protection Force (UNPROFOR) sought to isolate the Federal Republic of Yugoslavia (Serbia) in order to contain the conflict from infecting the Balkan subregion while simultaneously leading a humanitarian relief effort. In fact, this containment effort may have been partially responsible for an extension of the conflict’s duration. By establishing “safe areas” within Bosnia, displaced persons were able find refuge from the violence, thus redirecting refugee flows to conflict–free zones within Bosnia rather than facing the consequences of a refugee exodus to neighboring countries, which would otherwise have increased the likelihood of civil war contagion for the neighboring asylum states (Salehyan and

²For research noting a range of third party interests in the extension of civil conflict, thus contesting Regan’s assumption of an intervener’s essential intention to cease civil war hostilities, see Olsson and Fors (2004); Gent (2006); Sambanis (2002)
However, Muslim forces were able to use these zones as safe havens from advancing Serb forces. From these safe havens they were then able to launch raids against territories held by the Serbs. Whereas the advances by the Serbs in Bosnia had been relatively swift given the military superiority of Serbian–controlled Yugoslav National Army (JNA), Serbian progress was slowed in part by the ability of Muslim forces to regroup within the no–conflict zones (Nation, 2003). It could be argued then that the intervention was in part responsible for the ability of Muslim forces to avoid battle defeat, thus extending the duration of the war’s hostilities. In this sense, the successful containment of the civil war was essentially equivalent to an extension of the hostilities.\footnote{This type of phenomenon may be partially responsible for the finding that third party interventions generally appear to extend the duration of civil wars (Regan, 2002). For others, see Sambanis (2002).} Thus the interests of an intervener in the cessation or extension of war duration cannot be considered perfectly congruent with alternate interests in the containment or spread of civil war contagion, respectively.\footnote{In reality, every individual intervention is likely to have multiple goals associated with its interests in the civil war and its outcome. For the purposes of the research conducted here, assumptions about the interests of third parties in the regional diffusion outcomes of the conflict are necessary to construct a generalized theory of third party interests in the regional effects of civil war and intervention.}

Therefore, I argue that third parties intervene to affect the regional consequences of the civil conflict. Given that civil war has a tendency to be infectious for its regional environment, third parties with interests in that environment are likely to have concerns for how the war’s contagious hostilities will affect their existing investments in those states located in the region. Two outcomes exist relative to the contagious effects of a civil war: the hostilities associated with the conflict may be contained within the civil war state or they may spread to other states in the civil war’s regional environment. When a third party considers intervention, the outcome that it prefers and the actions that it takes depend on the third party’s relationship with the states in the civil war’s
region. I focus on third party interests in containing conflict. An effort to contain does not necessarily imply that the regional environment would be unaffected by the war’s contagious hostilities. Rather, containment simply implies an interest in reducing the risk that the regional environment, or particular states in that environment, will be infected by the conflict’s hostilities. Third party’s have interests in the containment of civil wars when it has positive relationships with those states in the civil war’s region, especially when those relationships are threatened by the spread of the war’s violence.

By modifying Regan’s model, my argument for when we should expect third party states to intervene in a civil war can be represented in the following expected utility models. The model below defines the expected utility of not intervening in a foreign civil war:

\[
EU_{\sim i} = p_{s|\sim i}(U_s) + (1 - p_{s|\sim i})(U_{\sim s}) - \Sigma C_{\sim i}
\]

where \(EU_{\sim i}\) is the expected utility of not intervening in the civil war. This expected utility is a function of the likelihood of the different regional outcomes, the utility to the potential intervener of those outcomes, and the costs associated with avoiding intervention. The subjective probability that the civil war will spread given no intervention is represented by \(p_{s|\sim i}\), and \(U_s\) is the utility that the third party receives from the civil war spreading. The subjective probability that the war will not spread to other states in the civil war’s geopolitical region given that no intervention occurs is represented by \(1 - p_{s|\sim i}\), and \(U_{\sim s}\) is the utility received by the third party from the civil war not spreading. \(\Sigma C_{\sim i}\) is the sum of the costs for the third party that are associated with not intervening. Assuming that there are no military or economic costs included in not intervening, the costs of nonintervention are primarily considered to be audience
Policymakers may be faced with a multitude of domestic and international audience costs associated with nonintervention. For example, domestic pressures created a costly situation for American decision makers as the humanitarian crises in Rwanda and the former Yugoslavia became publicly known. Sensational images of ethnic cleansing, refugee camps, and brutal fighting increased the pressure on the American leadership from domestic constituents to take the necessary steps to restore stability. Furthermore, international audience costs included pressure from the international community for American leadership in maintaining and restoring regional stability in Europe. For example, in the Yugoslav crises of the early 1990s, although the Bush administration had initially hoped to avoid the costs of intervention in the anticipation that Europe would be capable of maintaining its own regional stability, it quickly became clear that American leadership would be necessary to restore order. International pressure for an American presence was applied from fellow NATO members and the European Community/European Union.

Similar to the above, the following model represents a third party's expected utility of intervening in a foreign civil war.

\[ EU_i = p_{si}(U_s) + (1 - p_{si})(U_{\sim s}) - \Sigma C_i \]  

(3.2)

where \( EU_i \) is the expected utility of intervention. The subjective probability that the civil war will spread given an intervention is represented by \( p_{si} \), and \( U_s \) is the utility that the third party state receives from the civil war spreading. The subjective probability that the war will not spread given an intervention undertaken by the third party state is represented by \( 1 - p_{si} \), and \( U_{\sim s} \) is the utility that the intervener receives from the civil war being contained as a result of its involvement. \( \Sigma C_i \) is the sum of costs.

\(^5\)See Fearon (1994) for a discussion on the role of audience costs in foreign policymaking.
associated with intervention. These include, but are not limited to, military, economic, and audience costs.

### 3.3 Deductions from the Model

From the models above conclusions can be drawn about the likelihood that a third party will choose to intervene in an effort at containment. My primary focus in this chapter and in the following empirical chapters will be on the effect of a third party’s subjective probability that different outcomes will obtain and the utility that the third party places on those outcomes. Drawing on the above models, the factors affecting the likelihood of intervention can be addressed individually.

To determine the effect of each component of the models, the expected utilities of intervention and nonintervention may be considered simultaneously. Intervention is expected to occur when $EU_i > EU_{\sim i}$. Stated differently, when $EU_i - EU_{\sim i} > 0$ the models predict intervention on the part of the third party. Substituting for $EU_i$ and $EU_{\sim i}$, we obtain:

\[
[p_{s|i}(U_s) + (1 - p_{s|i})(U_{\sim s}) - \Sigma C_i] - [p_{s|\sim i}(U_{\sim s}) + (1 - p_{s|\sim i})(U_{\sim s}) - \Sigma C_{\sim i}] > 0 \quad (3.3)
\]

By rearranging terms and simplifying, we obtain the following inequality:

\[
(p_{s|\sim i} - p_{s|i})(U_{\sim s} - U_s) - \Sigma C_i + \Sigma C_{\sim i} > 0 \quad (3.4)
\]

In this reduced form, we can address the effect of each component of the model on the expected intervention outcomes. Very simply, any change in the values of those terms on the left side of the inequality that produces a positive effect on the aggregate
calculation will increase the likelihood of intervention. Therefore, as the $p_{s|\sim i} - p_{s|i}$ calculation, the $U_{\sim s} - U_s$ calculation, and $\Sigma C_{\sim i}$ increase, and as $\Sigma C_i$ decreases, the likelihood of intervention should increase. More specifically, as $p_{s|i}$ decreases relative to $p_{s|\sim i}$, intervention will become increasingly likely. I conceptualize this as the third party’s ability to contain the conflict’s hostilities. Left to its own devices, a civil war poses a given likelihood of contagion ($p_{s|\sim i}$). When compared to the likelihood of contagion given an intervention effort to contain the spread of hostilities ($p_{s|i}$), the difference between the two is the third party’s ability to lower the risk of regional diffusion. As the ability of a third party to reduce the likelihood of contagion increases (e.g. $p_{s|\sim i} - p_{s|i}$ increases), third parties will be increasingly attracted to the intervention option. Furthermore, as the difference between $U_{\sim s}$ and $U_s$ increases, the likelihood of intervention will also increase. Since the containment of civil war hostilities is preferred to their spread, I assume that the utility of containment ($U_{\sim s}$) is preferred to the utility of a civil war spreading into its regional context ($U_s$). The likelihood of third party intervention is thus determined by the ability of the third party to contain the civil war, the utility associated with containing a civil war’s hostilities, and the costs associated undertaking or avoiding intervention. Below, I elaborate on the effect of each individual component of the expected utility models on the decision processes of third parties in containing the violence of civil wars.

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6I assume that third party states expect that their efforts in intervention to contain a conflict will depress the likelihood that a civil war will infect its surrounding region. In other words, third parties expect that $p_{s|i} < p_{s|\sim i}$. This will be discussed in greater detail in the following section.

7The value of each utility varies from one potential intervener to the next, as different interveners are likely to have varying interests in each region. The expected likelihood that a civil war will spread, on the other hand, is dependent upon the contagious characteristics of a conflict and the vulnerability of a conflict’s neighbor states. Therefore, the subjective estimate of the diffusion of a war’s hostilities should be the same for each potential intervener. Each third party’s valuation of the civil war’s regional environment will be discussed in the operationalization of the model’s components.
3.3.1 Containment Ability, Utility, and the EU to Contain

For a containment–oriented third party to choose intervention, at least one or some combination of the following must be true: (1) the third party must have some minimal opportunity and ability to contain the civil war, (2) the utility for containment must be high, and/or (3) the costs associated with intervention must be lower than the relative benefit of the expected containment outcomes. These three factors are represented by the subjective probability that a civil war will spread into its regional environment with and without an intervention, the utility of that environment to the third party, and the sum of intervention costs, respectively. Each is individually discussed below.

Civil War Contagion Risk and The Ability to Contain

With reference to the model, where $p_{s|\sim i}$ is low (and therefore $1 - p_{s|\sim i}$ is high), the likelihood is high that the third party’s most preferred outcome will obtain: the civil war’s hostilities are likely to remain contained to the civil war state without necessitating an intervention by the third party. However, as $p_{s|\sim i}$ increases, the expected utility of nonintervention decreases. I conceptualize $p_{s|\sim i}$ as the ex ante risk that a civil war will infect its regional environment. Civil wars and their environments may exhibit characteristics that can be associated with the likelihood of contagion. For instance, shared borders, intense war hostilities, mounting humanitarian crises, cross–border ethnic affinities, and political instability in the region are all likely to be associated with an increased risk that a civil war’s hostilities will be transmitted to countries in the war’s regional environment.

Third parties are able to observe and approximate the risk of hostility transmission to the countries of the civil war state’s region, and these observations affect their willingness to involve themselves in the conflict. For example, consider American deliberations over its potential involvement in the war in Kosovo between the Serbs and
the Kosovo Liberation Army (KLA) in 1998. The risk of war diffusion into the regional environment was especially high. First, the KLA’s military and political agenda was particularly destabilizing, as they proposed “independence for Kosovo grown from the barrel of a gun as the first step toward the creation of a greater Albania including all or part of Albania proper, Serbia, Montenegro, the Republic of Macedonia, and Greece (Nation, 2003, 229–230).” The KLA had hoped to unite ethnic Albanians under a single banner, and given the substantial Albanian minority populations in many of the surrounding republics, the war in Kosovo threatened to ignite violence throughout the region. The collapse of the government in Albania did not help matters. Lacking a stable and responsible government to the south, KLA rebels were able to receive support and refuge across the Albanian border where former government light weaponry caches were looted and distributed to KLA militants.

Furthermore, the fighting increased in intensity as the Serb forces, whose military capabilities were far superior to that of the KLA, attempted to break the resistance in Kosovo. The heavy-handedness of Serbian actions galvanized resentment for the Serbs and support for the KLA in the province, leading to a flood of new recruits to the KLA cause and a continuation of sustained intense conflict. American and NATO officials feared that the increasing intensity of the conflict risked the stability of the entire Balkan region and increased the threat that a humanitarian crisis was imminent. The aggressive tactics and ethnic cleansing crimes of the militants risked a humanitarian catastrophe that threatened to envelop the region in chaos. American and NATO attraction to intervention was thus due in part to the effect of the substantial risk posed by the conflict for the international transmission of hostilities.

In terms of the expected utility models, $p_{s|\sim i}$ in the Kosovo conflict was rather high, thus decreasing the overall expected value of not intervening. Given a low value of $EU_{\sim i}$, interested potential interveners, like American and NATO decision makers, considered
the effect of an intervention to contain on the subjective probability that the conflict
would spread to the civil war state’s regional environment. Theoretically, interventions
to contain the spread of civil wars should depress the likelihood of contagion given an
intervention (e.g. \( p_{s|i} < p_{s|\sim i} \)). The values of \( p_{s|i} \) and \( p_{s|\sim i} \) are closely linked to one
another in that both reflect the risk that a civil war’s hostilities will spread into the
surrounding region. However, a containment–oriented third party expects the value
of \( p_{s|i} \) to be lower than \( p_{s|\sim i} \) given the third party’s efforts to constrain the war’s
costs from infecting its environment. I assume that containment–oriented third party’s
intervene with the expectation that an effort made to contain a war’s violence will have
a positive, nontrivial effect on the war’s regional outcomes. Without this belief among
third parties, there would be little incentive to intervene in an attempt to contain a civil
war in the first place. Therefore, the expectation in intervention is that \( p_{s|i} < p_{s|\sim i} \).

Since containment–oriented third parties expect the value of \( p_{s|i} \) to be lower than
\( p_{s|\sim i} \), the impact of \( p_{s|i}(U_s) \) on the expected utility of intervention should be smaller than
the effect of \( p_{s|\sim i}(U_s) \) on the expected utility of nonintervention. Similarly, as the value
of \( p_{s|i} \) falls, the probability that the civil war will not spread given intervention (e.g.
\( 1 - p_{s|\sim i} \)) increases. This increased value combined with the preferred positive outcome
of containment (e.g. \( U_{\sim s} \)), leads to an increasing expected utility of intervention (\( EU_i \)).
Such was the decision process of the US and other NATO members who feared that the
absence of an intervention to contain the hostilities in Kosovo would inevitably lead to
a substantially destabilized regional environment.

The above discussion leads to the following hypothesis regarding the likelihood of
intervention to contain the spread of civil war:

- **The Ability to Contain**: Holding values of \( U_s \) and \( U_{\sim s} \) constant, as the ability of a
third party to contain a civil war’s hostilities increases (e.g. \( p_{s|\sim i} - p_{s|i} \) increases),
the likelihood that a third party will intervene to contain the conflict will increase.
The Utility of Civil War Containment

The second critical piece of a third party’s attraction to intervention deals with the utility it places on the spread and containment outcomes of the civil war, $U_s$ and $U_{\sim s}$ respectively. As was stated above, we can assume that the value of $U_{\sim s}$ is greater than the value of $U_s$ for a containment–oriented third party. Yet an accurate calculus of $EU_{\sim i}$ and $EU_i$ requires an assessment of the difference between these values (e.g. $U_{\sim s} - U_s$). Containment–oriented third parties believe that there is something of value in the civil war’s regional environment. This valuable commodity is threatened by the instability being exported by the conflict in the civil war state. Thus, the third party’s concern for containing the spread of the conflict increases as its vested interests in the regional environment increase.

A third party may have several interests that are threatened by the conflict–induced regional instability. For instance, the third party may have economic, ideological, natural resource, or military interests on multiple states in the war’s environment. The risk of conflict spillover, massive refugee flows, and regional economic depression caused by the civil war will detrimentally affect the third party’s ability to continue its positive relationship with the states in the war’s environment. A third party’s military security may be diminished if its ally becomes infected by the civil war’s hostilities. Its economic vitality may be diminished if a valued trading partner experiences an economic downturn as a result of a neighboring civil war. Therefore, the difference between $U_{\sim s}$ and $U_s$ increases as its interests in the war’s regional environment increase.

This has a substantial impact on the third party’s expected utility calculations. As the third party’s foreign policy interests in the regional environment increase, the likelihood of intervention is also expected to increase. Since intervention to contain the conflict is theoretically expected to depress the likelihood that the civil war will spread to its environment, the greater the value of the third party’s investments in the region,
the more likely the third party will intervene in an attempt to reduce the likelihood that its interests will be detrimentally affected by the conflict. Importantly, even where there is a low risk that the war will spread, intervention to contain the conflict may be reasonable in order to ensure that the large and positive value of $U_{\sim s}$ is the far more likely outcome than the substantially lower value of $U_{s}$, thus resulting in a large expected utility for intervention. This logic leads to the following hypothesis regarding to the utility of containment and the decision of a containment–oriented third party to intervene:

- **The Utility of Containment**: Holding values of $p$ constant, as a third party’s foreign policy interests in the civil war’s regional environment increase (e.g. as $U_{\sim s} - U_{s}$ increases), the likelihood that a third party will intervene to contain the conflict will increase.

**The Interactive Effect of Ability and Utility**

Theoretically, however, the ability to contain and utility of containment are two dimensions that interact with one another to predict intervention. Therefore, empirically the two above hypotheses will not be tested independently. From the expected utility models, we note the interactive effect of the third party’s ability to contain and the foreign policy value of those states that face the risk of infection. Therefore, the results from the analyses in the following chapters will not distinguish between the distinct effects of the ability to contain or the utility of the civil war region. Rather, the combination of these factors provides the results of the expected utility of intervention. It is the interactive effect of a third party’s ability to contain a civil war and the potential losses incurred by infection that informs a third party’s interest in intervention.

Figure 3.1 demonstrates this interactive effect by graphing the relationship between the ability to contain civil war hostilities, the utility of containment, and a third party’s
Figure 3.1: Containment Ability–Utility Indifference Curve

decision to intervene. The curve represents a potential intervener’s indifference to intervention, where civil war observations above the curve will warrant intervention for the purposes of containing the regional effects of the conflict while observations that fall on or below the line will either not merit or necessitate the third party’s involvement. In other words, as the third party’s ability to reduce the risk of diffusion increases and the foreign policy value of the civil war’s region increases to the potential intervener, the likelihood of intervention will increase as the expected utility associated with intervention correspondingly increases.

However, if either the ability to contain or the utility of containment was minimally small, large increases in the other should not substantially increase the likelihood of intervention. For instance, suppose a third party observes a civil war occurring in a region that includes only one other state.\(^8\) Suppose also that the civil war is highly

\(^8\)Recall that my definition of a state’s region does not coincide with the more general continental understanding of the world’s regions. Rather, my definition of a state’s region includes only those states that fall within the Correlates of War II Project’s five-point ordinal coding of state contiguity.
unlikely to infect its neighboring regional state. In other words, the risk of infection would be observed as being very low. This low estimate of risk may result from a number of factors. The geography of the border separating the civil war state and its regional neighbor may inhibit contagion. For example, a civil war may be less likely to spread across a sea border or mountainous land boundary relative to a more easily traversable land border. Other reasons to believe a civil war will not be infectious from the civil war state to its regional neighbor could include the lack of an ethnic affinity between the two states (Gleditsch, 2007), the absence of refugee flows from the conflict state to its neighbor (Salehyan and Gleditsch, 2006), or the presence of low-level hostility rather than extremely intense fighting. With such a low ex ante likelihood of regional contagion ($p_{s|\sim i}$ is low), the ability of a third party to significantly reduce this likelihood ever further is also relatively low ($p_{s|\sim i} - p_{s|i}$ is low).

This description of a hypothetical civil war’s contagious properties is somewhat similar to Cuba’s conflict in the late 1950s. Fidel Castro’s play for control of the Cuban government reflects a relatively well incubated civil war that lacked some of the characteristics more commonly associated with geographic contagion. Cuba has several regional neighbors. However, as an island nation in the Caribbean it is separated from all of its closest neighbors by sea boundaries, leaving a minimum of one hundred kilometers of water between it and the next nearest state, Haiti (Gleditsch and Ward, 2001). According to the United Nations High Command for Refugees, no refugees were recorded as having fled Cuba seeking asylum in any of its neighboring countries (UNHCR, N.d.). In the decades following Castro’s seizure of power, thousands of political refugees have sought asylum in countries throughout the Caribbean region. However, these refugee movements did not begin in earnest until the late 1960s, well

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9The above description of conflict transmission processes is relatively short. Chapter 4 directly addresses my operationalization of conflict contagion risk and thus provides a more substantial explanation of the means by which civil wars spread from the conflict state to its regional neighborhood.
after the conflict had ended and Castro and his socialist political system were firmly entrenched. The scale of the fighting was low relative to some of the more intense civil wars of the postwar period, as approximately three thousand deaths resulted from the conflict (Regan, 2002). The Correlates of War (COW) project lists the fatalities associated with the Cuban civil war as being approximately five thousand. However, this number is still relatively low given that the average number of fatalities of all civil wars recorded by the COW project is approximately sixty four thousand (Sarkees, 2000; Singer and Small, 1972; Small and Singer, 1982; Singer and Small, 1994). Finally, although Cuba shares ethnic affinities with other states in the Caribbean region, the conflict itself was not based in ethnic tensions (Regan, 2002) and thus was not likely to resonate with any existing ethnic tensions in other countries of the region.10

The conditions of the civil war in Cuba thus pointed to a relatively low likelihood of conflict contagion, providing little opportunity for the third party to substantially affect the already low likelihood of diffusion. Therefore, even if a potential third party intervener considered Cuba’s surrounding region to be particularly valuable to its foreign policy interests, as is depicted in Figure 3.2, the likelihood of intervention for the purposes of containing the conflict’s violence to the Cuban island should be rather low. In Figure 3.2, a hypothetical third party observes the ex ante likelihood that the Cuban civil war will spread and the value of the threatened states that face the risk of conflict

10The ideological nature of the conflict and the success of the rebel faction may be associated with demonstration effects for similar potential rebel movements in nearby states. In other words, the success of a rebel faction in an ideological civil conflict may send a signal to other ideologically-based groups in nearby states to also engage in a rebellion against their own governments in an attempt to achieve political reform. In fact, the Cuban case may be indicative of this very phenomenon, as Che Guevara and his fellow revolutionaries traveled to the Congo and Bolivia in an attempt to replicate the success of the socialist revolt in Cuba. The generalizability of this phenomenon depends on the empirical evidence, and this should be addressed in future research. However, the demonstration effects of ideological conflicts are particularly challenging to quantify in any meaningful way, as it is difficult to identify potential ideologically-based rebel organizations within nearby states that could be influenced by the demonstration effects produced by the conflict in the civil war state. The role of ethnic affinities and the effect that ethnically-based civil wars have on the mobilization of ethnic groups in neighboring states are more tangible and more likely to be associated with civil war contagion.
Figure 3.2: Containment Ability–Utility Indifference Curve, Cuban Civil War

contagion. In this example, the third party determines that should the Cuban conflict be contagious, this diffusion effect would be highly detrimental to its foreign policy interests in the region. A high likelihood of contagion would provide the opportunity for an intervention to have a substantial effect on lowering the likelihood of contagion. Yet, the case is made above that the civil war in Cuba exhibited characteristics that were consistent with a relatively low likelihood that the conflict would spread. The conflict’s hostilities were unlikely to detrimentally affect the surrounding region and the third party’s interests there. Therefore, intervention in an attempt to contain the conflict would not be a logical policy alternative to pursue as the interactive effect of the third party’s ability to contain and the utility of the region produce low values for the third party’s expected utility for intervention.

For another example of the interactive effect of this phenomenon, consider the American decision not to intervene in Rwanda’s civil war in the early 1990s. Quite the opposite of Cuba’s conflict, Rwanda’s civil war exhibited a number of characteristics
commonly associated with an increased likelihood that the war’s hostilities would spread to other neighboring countries. The intensity of the fighting was extreme, producing upwards of five hundred thousand fatalities (Regan, 2002).\textsuperscript{11} Hundreds of thousands of refugees from Rwanda flooded into nearby nations as fear of genocidal violence being perpetrated by Hutu extremists permeated the nation (UNHCR, N.d.).

This created a great amount of strain on neighboring states, particularly Zaire, which by 1994 was hosting over one million Rwandan refugees. Not only were these enormous refugee flows a growing strain on a failing economy, but hiding in the masses of refugees flooding across the border were members of the Interhamwe, the militant arm of the Hutu extremists which was largely responsible for the genocidal violence conducted in mid–1994. The conflict had thus followed the flow of refugees as the Interhamwe were able to commit further atrocities in the Zairian refugee camps.

At least in part as a result of Mobutu’s unwillingness to stifle these attacks, Tutsis in both Rwanda and Uganda teamed with fellow Zairian Tutsis in rebellion against the Mobutu government. The conflict had thus spread to Zaire. Cross border ethnic affinities between Rwanda and its neighbors and the ethnic nature of the conflict increased the risk that neighboring states would be infected by the violence. Cross–border ethnic affinities, ethnic tensions, refugees flows, and the severe intensity of the fighting help to explain the movement of conflict from Rwanda to Zaire.

However, many nations like the United States avoided intervention. Although the Rwandan conflict exhibited a number of characteristics consistent with a high likelihood

\textsuperscript{11} The number of fatalities resulting from the conflict varies somewhat depending upon the source. The five hundred thousand fatalities listed here is likely a conservative value that depends upon the estimates of the number of civilians killed in the genocide. As with the Regan (2002) value, the Correlates of War project also lists the number of casualties as being approximately five hundred thousand. However, Feil (1998) reports that the number of deaths ranged somewhere between five hundred thousand and eight hundred thousand and the Uppsala–Peace Research Institute, Oslo data on conflict fatalities reports that this figure ranged between five hundred thousand and one million deaths.
of regional contagion, the region put at risk by the conflict’s hostilities was not especially valuable to American foreign policy interests. Unlike former colonial metropoles, the US had no former colonies in the region, only a small fraction of its trade relied upon the Rwandan region, and its security interests there decreased substantially with the end of the Cold War.\textsuperscript{12} Outside of the realm of humanitarian concerns, the US had relatively few vital interests in the region. Therefore, even as the characteristics of the conflict indicated a high likelihood of contagion, the low foreign policy salience of the region, as is depicted in Figure 3.3, would suggest that the US would avoid involvement.

\textbf{Figure 3.3: Containment Ability–Utility Indifference Curve, Rwandan Civil War}

Importantly, US decision making at the time was colored by the failure of its previous intervention experience in a similar geographic region. Like the Rwandan case,\textsuperscript{12} one could generally make the point that most countries on the African continent became substantially less valuable to developed nations as the ideological competition between the US and Soviet Union ended with the demise of the Cold War. With the threat of communism diminished, interest in the wellbeing and political stability of African nations decreased. However, my definition of a civil war’s regional context is narrower than the more common continental characterization of region. Therefore, broader references to the continental interests of potential interveners are not necessary.
American foreign policy interests in Somalia and its surrounding regional context was relatively limited. As Joseph Lepgold remarks, “In speaking about Somalia...the US ambassador to that country noted that it was ‘not a critical piece of real estate for anybody in the post–Cold War world’” (Lepgold (1998, 87), originally cited by Jentleson (1997, 52)). The public backlash that followed the American special forces battle in Mogadishu and the ghastly images that were portrayed to the public led policymakers away from intervention in areas of the world that were not considered vitally important to American national security interests. The Rwandan conflict fell into this category. Although Rwanda’s civil war exhibited characteristics that were consistent with regional contagion effects, the geopolitical environment in which the conflict took place was not of sufficient value to the US to justify the involvement necessary to contain the conflict.

A counterpoint may note that it is possible that as the civil war in Rwanda began to envelop its region, decision makers may have believed that the ferocity of the war made it increasingly intractable to any simple, low–risk solution for potential interveners. However, two important issues contradict this notion. First, many of the characteristics associated with an increased likelihood of regional war contagion are observable ex ante, and those that are not can be observed throughout the course of the conflict. In other words, in the early stages of a civil war, third party observers are able to estimate the likelihood that a conflict will infect its surrounding region. Third party observers have the ability to estimate the contagious potential of a civil war before it’s violence becomes extremely fierce and make their intervention decisions accordingly. Second, even during the most intense stages of the Rwandan conflict, some estimate that only a minor force of approximately “5,000 troops, drawn primarly from one country and sent to Rwanda...could have significantly altered the outcome of the
The intensity of the conflict did not make it impervious to a successful intervention attempt. In fact, the presence of five thousand troops seems to be a relatively low-risk alternative when compared to the shear number of deaths and atrocities committed during the hostilities. Therefore, the ability of a third party, like the United States, to contain the conflict was relatively high, as is illustrated in Figure 3.3. A high likelihood of contagion provided the opportunity to have a substantial effect on decreasing the threat of contagion, and a moderate intervention attempt on the part of the US would likely have had an important impact on containing the conflict.

The lack of substantial interests in Rwanda and its region, even in the face of a significant ability to contain the conflict, helps to explain American avoidance of intervention in Rwanda. The US did not have much of value in those states that were put at risk of infection. As the Cuban and Rwandan nonintervention examples make clear, it is the interactive effect of the ability to contain a conflict and the utility of containing its violence from infecting its regional context that drives the regional considerations of potential third party interveners. Where potential interveners observe a civil war to fall on or below the Ability–Utility indifference curve, intervention will not be undertaken for the purposes of containment. However, when the ability to contain and the utility of containment for a third party are sufficiently high, observed at a point above the indifference curve, the third party will choose to intervene in an effort to contain the conflict. This discussion leads to the following hypothesis that combines the ability to contain dimension with the regional utility dimension:

- **Ability to Contain and Utility of Containment**: A potential third party intervener will be increasingly likely to intervene as the ability to contain dimension and the

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13 This estimate was not based upon Scott Feil’s own opinion of the conflict. Instead, the estimate was based upon a project undertaken by the Carnegie Commission on Preventing Deadly Conflict, the Institute for the Study of Diplomacy at Georgetown University, and the United States Army to consider whether an intervention force in Rwanda could have substantially affected the historical path of the conflict.
regional utility of containment dimension increase in tandem.

(Non)Intervention Costs and the Likelihood of Intervention

The costs associated with intervening and not intervening are also expected to affect the likelihood of intervention. For third parties considering intervention to contain a civil war’s hostilities, any increase in the value of $\Sigma C_i$ will decrease the likelihood of intervention while any increase in the value of $\Sigma C_{\sim i}$ will decrease the likelihood of nonintervention. The costs for nonintervention are generally assumed to be audience costs. Since there are no military and presumably no economic costs associated with nonintervention, the primary costs depend on the presence of a politically powerful constituency that is vocal in its preference for intervention. If such a group exists, the third party state’s avoidance of intervention is expected to be politically costly, thus increasing the negative effect of $\Sigma C_{\sim i}$ on the expected utility of not intervening.

However, I will assume that third parties generally believe the expected costs of intervention to be greater than the expected costs of nonintervention, e.g. $\Sigma C_i > \Sigma C_{\sim i}$. While the audience costs associated with nonintervention can be substantial at times, governments also experience audience costs as a result of choosing to intervene. The domestic audience’s reaction to American involvement in the Somali conflict is one example. The audience costs associated with intervention are just as likely to be equal to, if not exceed, those of nonintervention audience costs. Furthermore, the economic and military costs associated with intervention are not considered in the cost calculus of nonintervention. Depending on the commitment level of the intervention, these economic and military costs may be sizeable. The addition of the economic and military costs to the audience costs of intervention essentially ensures that the overall sum of costs for intervention will be larger than the sum of costs for choosing not to intervene.
Since I assume that $\Sigma C_i > \Sigma C_{\sim i}$, any increase in the expected costs of nonintervention will be outweighed by relatively larger expected costs associated with intervention. As a result, any increase in the costs associated with (non)intervention should decrease the expected utility of intervening, $(EU_i)$.

- **Intervention Costs**: As the expected costs of intervention increase to a potential third party intervener, the likelihood that the third party will intervene will decrease.

### 3.4 Conclusion

As was outlined in Chapter 2, the reasons third party states choose to intervene in foreign civil wars are many. Among these explanations of third party involvement, several can be classified more broadly as relying upon a classic dyadic connections approach: observing the characteristics of the third party, the civil war state, and the affective connections between them yields powerful explanations for why third parties intervene. We have learned a great deal from this class of studies. My contention, however, is that third party decision making on intervention is not so narrowly construed. Third parties observe the regional and geopolitical effects of civil wars. They determine the nature of a civil war’s contagious properties, their ability to contain these hostilities, and the value of those regional states believed to be at risk of infection. Where their interests are threatened by the risk of regional contagion, third parties have incentives to intervene in civil conflicts in an attempt to contain their hostilities from disrupting their vital foreign policy interests.

In the following chapters, I attempt to operationalize the decision theoretic model presented in this chapter and test its validity with data on all civil wars and their associated interventions in the post–WWII period. In the following chapter, each facet
of the decision theoretic model is discussed and operationalized. Most importantly, this chapter presents the method by which the risk of civil war contagion and the ability to contain a conflict is determined, as this concept is central to the contribution of this dissertation. Chapter 5 uses the measures operationalized in Chapter 4 to explain which potential interveners choose to become involved in particular civil wars. The final empirical chapter builds on the findings of Chapter 5 by addressing the relative success or failure of third parties in attempting to contain civil war hostilities. The successful or unsuccessful outcomes of their containment attempts is an important facet of the empirical puzzle worth tackling, and Chapter 6 attempts to do so. The first step in addressing these issues is to operationalize each component of the decision theoretic models. This exercise is conducted in the following chapter.
Chapter 4

Measuring Contagion Risk, Containment Utility, and Intervention Costs

4.1 Introduction

In this chapter, I attempt to operationalize the concepts in the decision theoretic models presented in the previous chapter. Operationalizing the utility of the regional context to the potential intervener and the costs of intervention will be a rather straightforward process. Representing the utility of different regional contexts will rely upon a number of proxy measures that are commonly associated with foreign policy value. The costs associated with intervention will be represented by measures that mirror those used in previous research (Regan, 1998, 2000). However, operationalizing the ability to contain a civil war’s hostilities is more difficult. Therefore, the majority of this chapter will be dedicated to a discussion of representing this component of the decision theoretic model. Once these factors are properly represented, their effect on the likelihood of intervention can be addressed in Chapter 5.
4.2 Measuring the Ability to Contain as the Risk of Contagion

Measuring the ability to contain a civil war’s contagious hostilities is not a straightforward process. Ideally, doing so would require that I represent both the likelihood of civil war contagion to each neighboring state given no intervention by the third party \( p_{s|\sim i} \), modified by the likelihood of contagion given an intervention to contain the conflict \( p_{s|i} \), the calculation of which would provide the ability of a third party to contain the conflict \( p_{s|\sim i} - p_{s|i} \). In the empirical analyses that follow in Chapter 5, I assume that all states in the international system are potential interveners. In this sense, every country in the world has some capacity to intervene either militarily or economically in any ongoing civil war. In other words, every country is assumed to have some ability to contain the hostilities of each conflict. However, not every conflict will pose a serious contagious threat to its surrounding region. This is important because when the value of \( p_{s|\sim i} \) is minimal, there is little room for an intervention to have a substantial impact on decreasing the likelihood of contagion irrespective of a third party’s intervention capacities (i.e. when \( p_{s|\sim i} \) is small, there is little room for \( p_{s|i} \) to be substantially smaller). This is to say that small values on \( p_{s|\sim i} \) leave little opportunity for third parties to have a substantial containment effect. However, as the value of \( p_{s|\sim i} \) rises, the opportunity for third parties to have a substantial effect on reducing the likelihood of contagion through intervention should also increase.

It is possible to measure \( p_{s|\sim i} \), and I do so through an empirical analysis later in this chapter. It is more difficult to assign a value to \( p_{s|i} \), as capturing the capacity of different third parties to have a differential impact on civil war contagion is more complex. For example, all other things being equal, a third party that is a major power may be expected to be more capable of reducing the likelihood of contagion to a greater
extent than a third party that is a minor power. However, determining how much of a differential impact the distinct power capabilities produce is not clearly evident. In addition, there are a multitude of factors that could also contribute to the differential impact of third parties other than power status, including proximity to the civil war state, the variety of policy options available to interveners, and their variable resolve in achieving their policy goals.

To simplify this process, I create a measure to reflect $p_{s|\sim i}$ as a proxy for $p_{s|\sim i} - p_{s|i}$, making the argument that as the ex ante likelihood of a civil war spreading increases, the opportunity for third parties to have a substantial impact on the likelihood of contagion should also increase. In other words, as $p_{s|\sim i}$ increases, so too should $p_{s|\sim i} - p_{s|i}$.

To represent $p_{s|\sim i}$ in the expected utility models, I must measure the risk that a civil war will infect its surrounding region. However, depending on their characteristics, separate civil wars will have a differential effect on the likelihood of spreading their hostilities to their regional neighborhoods. For example, a civil war that produces large refugee flows may be more likely to create spillover effects into neighboring states than a civil war that does not incite an exodus of refugees. Yet, the diffusion effect is not likely to be the only predictor of civil war onsets in states that neighbor the civil war state. The domestic characteristics of the countries surrounding the civil war state affect which countries are the most vulnerable to experiencing unrest. For instance, a regional state that is destitute is more likely to experience its own civil war than a regional state that is very wealthy. Therefore, in representing the effect of the diffusion process, care must be taken to avoid confusing the effect of domestic predictors of civil wars with the diffusion effect of a contagious civil war.

To measure this risk empirically, each neighbor state should be assigned a value that reflects its risk of infection, given its observed characteristics.\(^1\) Each value could

\(^1\) For scholarly precedent for this type of exercise, see Belkin and Schofer (2003) and Stone (2004).
be determined empirically through an analysis of domestic and contagion factors that are commonly associated with civil war onsets. Below, I conduct an analysis to achieve this end. I first introduce a number of factors that control for common domestic explanations of civil unrest. I then discuss a number of factors associated with the contagious effect of neighboring civil wars. By calculating the marginal effect of my contagion variable from logistic models of civil war prevalence, I am able to create a useful measure of the risk that a civil war will spread from one country to the next.

4.2.1 Domestic Sources of Civil War

In the expanding literature on civil war phenomena, domestic explanations of intrastate conflict are many and varied. It is not my goal in this section to review this literature in its entirety. Rather, I hope to draw attention to a number of domestic factors that are commonly associated with unrest. By controlling for domestic predictors of communal violence, I hope to avoid the undesirable outcome of improperly assigning value to a civil war diffusion effect that may otherwise be the result of an omitted domestic variable. Below I discuss a number of domestic predictors of civil war that will be employed in the analysis that follows.

**Economic Wellbeing**

The economic wellbeing of a state’s people is one of the most common and robustly significant predictors of civil war. When a state’s populace is relatively wealthy, the opportunity costs of rebellion are high. As people become increasingly affluent, they also become increasingly unwilling to risk their livelihoods by participating in or contributing to a revolution against the government. Even if a successful revolt promised

Both studies attempt to represent the risk of coup onset.
rewards of more political liberties and even greater wealth, the risk involved in using violent means of pursuing these ends is often too great to justify such a gamble. As one’s wealth increases, the shadow of the future becomes longer and future earning potential is often substantial enough to make rebellion an unattractive option. Therefore, an organization with a radical ideology and designs on challenging the state’s government with violence is likely to have a great deal of difficulty in recruiting rebel soldiers to its cause (Collier and Hoeffler, 2004; Fearon and Laitin, 2003; Walter, 2004).

In destitute societies, individuals value the status quo economic situation less, producing a shorter shadow of the future in which future earnings are likely to be considered insubstantial. As a result, the share of a state’s population willing to use extralegal means of achieving a remedy to their economic plight will be larger than is the case in wealthier societies. Violence against the government becomes an increasingly viable alternative in an attempt to redistribute the economic resources over which the government is likely to maintain a monopoly of control.

In addition to affecting a population’s willingness to partake in violent revolution, the economic wealth of societies also affects institutional factors associated with domestic stability. In increasingly wealthy societies, law enforcement capabilities tend to be more sophisticated, corruption is usually less distinct, the military is often more disciplined, public services are more abundant, and social and political institutions tend to have a greater ability to resolve domestic disputes peacefully before they have the opportunity to turn violent.

Poor societies are substantially different. As wealth decreases, governments are often unwilling or unable to accommodate those that are dissatisfied with the economic status quo. Distributing resources to the disadvantaged becomes terribly difficult as these resources become increasingly scarce. As wealth decreases so too does a government’s ability to provide needed public goods and services to its people, thus decreasing the
level of public satisfaction with the government and increasing the likelihood of revolt. Furthermore, poor societies often have inferior institutional capacities for maintaining or restoring order once domestic unrest arises. Police and military forces are often underpaid and lacking in discipline. Political and social institutions tend to be corrupt and deficient in the services that they provide. The lack of open, honest, and reliable means of resolving disputes peacefully frequently lead to illegal activities that may coalesce into rebel groups that believe violence to be the only realistic alternative for changing the status quo.

Given these characteristics of rich and poor societies, it is unsurprising that previous studies have found that as a state’s wealth increases, its likelihood of experiencing a civil war decreases (Collier and Hoeffler, 2002; Fearon and Laitin, 2003; Walter, 2004; Sorli, Gleditsch and Strand, 2005; Buhaug and Gleditsch, N.d.; Elbadawi and Sambanis, 2002).\footnote{This finding appears to hold within regions as well as across them (Collier and Hoeffler, 2002; Sorli, Gleditsch and Strand, 2005).} Therefore, in the analysis that follows, I expect a measure of increasing wealth to have a negative effect on the likelihood of civil war onset.

**Regime Type**

The second domestic predictor that I evaluate considers the domestic political system characteristics associated with an increased or decreased likelihood of experiencing a civil war. Similar to the discussion of wealth provided above, a state’s type of governance is likely to be significantly related to its propensity to experience civil wars, as domestic political systems are important to understanding the freedoms afforded to people, the opportunities for advancement available to them, satisfaction with their livelihoods, and their ability to peacefully redress grievances within the boundaries of the state’s legal system. Grievances with the domestic political system should then be
associated with the likelihood of domestic conflict (Gurr, 2000).

Following research on the peace–inducing effect of democracy on interactions between nations, research on civil war phenomena has argued for the possibility of a democratic civil peace in which established democracies are expected to be less likely to experience domestic unrest than other forms of governance. Recent studies have found some support indicating that democratic forms of government have a dampening effect on the likelihood of civil war. Democracies, it is argued, have domestic institutions that possess the capacity for resolving grievances in a peaceful manner. Public protest and open discourse are often common features of established democracies as nonviolent forms of dissent against the government and state leaders are acceptable freedoms of expression. These and other nonviolent institutional forms of redressing grievances allow democracies to diffuse potential domestic conflicts before they become hostile. This line of reasoning helps to explain the findings that democracies experience fewer civil wars when compared to all other regime types (Walter, 2004; Elbadawi and Sambanis, 2002, 2000b).³

However, other studies have argued for a nonmonotonic effect of regime type upon civil war in which anocracies, or mixed regimes, are the most likely form of government to produce domestic unrest while both democracies and autocracies are believed to be relatively more stable. As noted above, democracies are less likely to experience civil conflict given their institutional arrangements and their tolerance of nonviolent forms of dissent. Authoritarian regimes may also be somewhat more stable for quite different reasons. Autocracies are capable of suppressing protest and rebellion. In order to maintain a firm grip on power, authoritarian decision makers have the ability to use the

³Reynal-Querrol (2002) looks at the role of different types of democracies and their effects on civil war phenomena whereas most other studies simply employ ordinal autocracy–democracy scales to represent regime type. While this research is promising, I will use a measure that relies upon Polity IV data in an attempt to replicate findings that are common in the literature.
state’s resources and its monopoly of coercive force to resist the demands of domestic factions whose interests diverge from those of the government. Since power is focused in the hands of the few, the state’s resources can be used to effectively repress threats to the sitting authoritarian. Anocracies, on the other hand, exhibit characteristics of both democratic and autocratic forms of government. Yet anocracies are not sufficiently democratic to allow open and nonviolent forms of government protest, nor are they adequately authoritarian to effectively repress powerful groups seeking to revise the political status quo. This logic helps to explain previous findings noting that anocracies are the government type most prone to experiencing civil conflict (Walter, 2004; Muller and Weede, 1990; Ellingsen and Gleditsch, 1997; Hegre et al., 2001; Buhaug and Gleditsch, N.d.). These findings lead to two distinct, though not completely independent expectations concerning the regime type of states and the likelihood of civil war: increasingly democratic regimes are expected to decrease the likelihood of civil wars, and anocracies are expected to be more vulnerable to civil unrest than democracies and autocracies.

Ethnic Constitution

Given the ethnic character of many contemporary civil wars, it is generally expected that the ethnic constitution of states may play an explanatory role in understanding the onset and prevalence of civil war. In regions like Africa and much of Asia, where many state borders continue to reflect the relatively arbitrary boundaries drawn along colonial lines and that exist in large part irrespective of ethnic configurations, ethnic differences within states may play a distinct role in explaining civil war phenomena. However,

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4In a more nuanced piece Regan and Norton (2005) find that higher levels of authoritarianism and democracy each decrease the likelihood of rebellion onset, but neither significantly affects the the likelihood of protests or full-scale civil war. To this end, more research should focus on the differing forms of domestic unrest and the predictors that help to explain varying levels of instability.
there is generally little consensus on which types of societal ethnic compositions should be more likely to lead to civil unrest. In fact, several different configurations of a state’s ethnic composition have been found to be significantly associated with civil war, including the ethnic dominance of one group over others (Collier and Hoeffler, 2004; Bates, 1999), the polarization of societies between two principal groups (Elbadawi, 1999), and increasingly heterogeneous societies.

Although there is relatively little agreement as to the role of ethnicity and civil war, multiple studies and data projects have noted the importance of understanding a state’s ethnic makeup and classifying conflicts that are driven by ethnicity in attempting to understand civil war phenomena (Lake and Rothchild, 1996, 1998; Reynal-Querrol, 2002; Sambanis, 2001; Vanhanen, 1999; Fearon and Laitin, 2003; Fearon, 2003; Esty et al., 1998; Goldstone et al., 2000; Gurr et al., 1993; Minorities at Risk Project, 2005). One possible explanation of inconsistent findings in the literature may have to do with the difficulty in coding ethnic, religious, cultural, and linguistic characteristics within states. This is especially the case in underdeveloped states where reliable census data is hard to come by. The lack of reliable census data for underdeveloped states is particularly unfortunate, as it is in these states, like the former colonies in Africa and Asia, that one might expect ethnic differences to play an important role in explaining intrastate conflicts. Future research focusing more closely on the ethnic compositions of states may provide us with an improved understanding of ethnicity’s role in predicting civil war phenomena (Fearon, 2003). In the analysis below, I include a common estimation of ethno-linguistic fractionalization to account for explanations of civil war that consider the ethnic composition of states. However, I have no a priori expectations as to the statistical effect of ethnicity on civil war prevalence.
**Population Size**

The size of a state’s population is somewhat of an atheoretical predictor of civil war. Nonetheless, increasing population size has routinely been found to be a positive and significant predictor of intrastate conflict (Sorli, Gleditsch and Strand, 2005; Regan and Norton, 2005; Buhaug and Gleditsch, N.d.; Elbadawi and Sambanis, 2002; Fearon and Laitin, 2003; Collier and Hoeffler, 2004, 2002). An argument that has been put forward in the literature is that if we can assume a fixed likelihood that any individual citizen will decide to partake in violent anti–government activities, as a state’s population increases so too does the size of the pool from which radical groups may draw their rebel soldiers. As population size increases, the number of people dissatisfied with government policies, displeased with their socioeconomic status, or unhappy with with the status quo political system will also increase. As the pool of dissatisfied citizens grows, rebel organizations have greater opportunities to attract recruits to their cause, providing them with the ability to challenge the government’s forces. In the analysis that follows, I thus expect that states with higher population levels will be more likely to experience civil wars than states with lower population levels.

**Time Dependence**

Finally, to account for the potential time dependence of my dependent variable, I include measures of peace years and three cubic splines. As I will note below, the data are formatted to the state–year. Controlling for time dependence allows me to account for the likelihood that a state experiences a civil war given the number of years that have passed since a previous war occurrence. One would expect that the residual instability remaining in a state after a recent civil war may be associated with an increased likelihood that the state experiences another conflict shortly after the initial war’s end. Alternatively, the longer a country is at peace, the less likely it is
to experience a civil war in each next time period. In other words, as the amount of time since the last conflictual events in a particular state increases, the likelihood of another civil war occurring is expected to decrease. To correct for autocorrelation between observations, I follow the Beck, Katz and Tucker (1998) method of including cubic smoothing splines.

4.2.2 Hostility Diffusion as a Source of Civil War

While there are a number of domestic predictors of civil war, recent research has also hypothesized various ways in which the instability of domestic conflict in one state may be contagious for other states in the system. Previous research has uncovered a number of mechanisms that create the opportunity for contagion and/or facilitate the transmission of conflict hostilities across state boundaries. Below, I summarize several of these mechanisms that scholars have begun to investigate. Although I address them separately, several of the following mechanisms are closely related to one another.

Geographic Proximity

As in research on interstate war diffusion, a state’s proximity to another country’s civil war is an important predictor of transborder civil war contagion. For instance, the presence of a shared land border between states provides the opportunity for conflict spillover (Buhaug and Gleditsch, N.d.; Gleditsch, 2007). The fewer the geographic inhibitors of interaction, the greater will be the likelihood of violence spilling across otherwise exposed borders. As the distance between the conflict state and another state in the system increases, the likelihood that the civil war’s hostilities will have any substantial contagious effect should decrease.

Most research addressing the contagious effects of civil wars simply include dummy variables for the presence of at least one neighboring civil war to determine the effect
of neighborhood instability on the likelihood of conflict onset or prevalence. However, other geographic factors may play a role in the contagion process. The location of the actual fighting relative to proximate states, the border terrain between states, population densities across borders, and other factors may play a role in explaining the likelihood of conflict diffusion. Until recently, precise data for these types of measures have been nonexistent. However, recent studies and data projects have begun to collect these data aided by geographic information systems (GIS) technology (Buhaug and Gleditsch, N.d.; Buhaug and Gates, 2002; Hegre, 2006; Raleigh and Hegre, 2005; Hegre and Raleigh, 2005). As these data become increasingly available, their value in terms of estimating the likelihood of civil war contagion will become more apparent. To this point, however, more common conceptions of proximity and border contiguity remain the standard forms of geographic distance used in the international relations literature.

**Transborder Ethnic Connections**

When the issues or actors party to a dispute within a state cross national borders, the opportunity for civil conflict to be internationally contagious increases. Transborder ethnic connections provide an example of this phenomenon. Many modern state boundaries, particularly in Africa and Asia, are drawn along colonial lines, largely irrespective of native ethnic boundaries. As a result, many states share ties between ethnic kin groups that straddle interstate borders. When civil conflict arises in one state the presence of transborder ethnic groups may facilitate the spread of hostilities to neighboring states. This is especially the case when the original conflict is defined along ethnic lines and directly involves a domestic ethnic population with transborder ties. For example, a large Kurdish population stretches from Southeast Turkey, across Northern Iraq, and into Western Iran. When Kurdish and Sunni/Baathist tensions arise in Iraq, for instance, this is likely to create an increased level of insecurity for the
governments of Turkey and Iran due to the threat of ethnic kin connections spreading the crisis across the whole of Kurdistan. Initial evidence has been found for a link between the presence of transborder ethnic affinities and civil unrest in connected countries (Gleditsch, 2007; Moore and Davis, 1998; Salehyan and Gleditsch, 2006). However, comprehensive data coverage over a sufficient spatial and temporal domains is often lacking. Still, examining the role of ethnic connections and the spread of civil war is a positive direction for future research.

Refugee Flows

Refugee flows from the civil war states to asylum states have also been shown to increase the likelihood of conflict diffusion (Salehyan and Gleditsch, 2006). The movement of refugees from one state to another increases the risk of domestic unrest in the asylum state. As Salehyan and Gleditsch argue, this effect may arise in a number of ways that are associated with the burden of providing asylum to refugees fleeing hostilities in their homeland.

First, an influx of refugees may have an indirect, though important, effect on the risk of civil war by placing great pressure on the domestic economy of the asylum state. Making an effort to sustain large refugee camps can increase the strain on an asylum state’s resources. Asylum states often reluctantly receive large flows of refugees, as available resources are scarce. This is especially the case in third world countries that are so commonly the destination of refugee movements that are fleeing unrest elsewhere in their geographic region. Additionally, refugees may inadvertently carry with them infectious diseases, further lowering the standard of living in asylum states. As was noted in the previous section, a low standard of living breeds unrest. As refugees increase the strain on the resources of asylum states, they in turn increase the likelihood of civil unrest there.
Second, an influx of refugees may also have a more direct effect on an asylum state’s increased likelihood of civil war. As the example of the Interhamwe’s infiltration of refugee camps in the Democratic Republic of Congo shows, large flows of refugees may include militants that were previously engaged in the hostilities of the civil war state. In this case Hutu extremists embedded themselves within the streams of Hutu and Tutsi refugees fleeing to the west from Rwanda to the DRC. They were then able to continue their attacks on Tutsis and moderate Hutus who were defenseless in Congolese refugee camps in addition to attacking native Tutsi tribes residing in the Congo. As refugees migrate, so too may caches of small arms and revolutionary ideologies which can have a destabilizing effect on those states that provide asylum. In this sense, as refugees flee a war–torn country in search of security, conflict hostilities unfortunately often follow close behind.

**Negative Regional Externalities**

Research has also recently shown that civil wars produce several negative externalities that may endure well after the hostilities cease and that are unconstrained by the the borders of the civil war state. For example, civil wars may induce a regional decline in health standards as public health service capacities become depressed and infectious diseases spread without regard for political boundaries (Ghobarah, Huth and Russett, 2003). Also the regional economic effects of civil war can be substantial. Murdoch and Sandler (2002, 2004) find a significant effect of civil wars on increasing the likelihood of economic recession in the countries surrounding the civil war state. These effects are distinct in both the short– and long–run. As a civil war detrimentally affects the standard of living of its surrounding nations, one would expect the likelihood of civil unrest in those regional countries to rise. Repeating points made in previous pages, by lowering a regional state’s standard of living, domestic levels of dissatisfaction in
these regional countries should rise, thus increasing the propensity of further domestic conflicts in the region.

**Demonstration Effects**

The success of a rebel group in one country may create demonstration effects for groups in other proximate nations (Kuran, 1998). Disaffected groups in regional countries surrounding the civil war state are able to observe the relative success or failure of rebel groups fighting their ruling regime. They learn from the strategies employed by rebel and government factions and the outcomes produced by those strategies. As a result, would-be rebel groups estimate the similarity of their situation to that which has taken place in the civil war state. Learning from the successes and mistakes of other rebel groups may embolden would-be rebels in the region to challenge their government, thus initiating their own civil war.

**Conflict Intensity**

Lastly, the intensity of a civil war’s hostilities is also likely to be associated with conflict diffusion. Although the effect of a civil war’s intensity has not been empirically studied in the civil war contagion literature, one might reasonably expect that the greater the intensity of a conflict’s hostilities, the greater the likelihood that the conflict could have a detrimental effect on the civil war state’s regional neighbors.

The intensity of a conflict, proxied by the number of battle deaths produced by the war during distinct time intervals, is a suitable representation of the level of instability caused by the hostilities. Highly intense fighting is likely to be more regionally destabilizing than relatively low levels of violence. Low-intensity domestic conflicts may endure for long periods of time without causing widespread destruction or high levels of instability that breed insecurity throughout geographic regions. Low-intensity
civil conflicts are more likely to be isolated within states, causing a smaller amount of disruption to the lives and livelihoods of others not involved in the hostilities.

Highly intense conflicts, on the other hand, are likely to disturb not only the security of the civil war state but are also more likely to create a higher level of insecurity for neighboring states. Highly intense intrastate conflicts are more likely to disrupt trade relationships, test alliance ties, and strain diplomatic associations with countries that maintain relationships with the civil war state. In addition, as the intensity of a civil war’s hostilities rise, it is increasingly likely that the conflict will trigger several of the other contagion mechanisms discussed above. Relative to low-intensity conflicts, civil wars that are defined by severe hostilities are more likely to induce an exodus of refugees from the civil war state to other neighboring states. Highly intense conflicts are more likely to have acutely detrimental effects on the economic vitality of the civil war state and its region. Furthermore, as the hostility level of civil war becomes increasingly severe, the direct spillover effects of the conflict into neighboring regional states are likely to increase.

In this sense, it is not simply the presence of a neighboring conflict that determines the risk of civil war contagion. The conflict’s severity is important to an understanding of which civil wars will be contagious for their surrounding regions. Yet many studies of the infectious properties of civil wars rely upon simple dichotomous indicators of the presence or absence of a neighboring civil war. Therefore, the amount of destruction caused by proximate civil wars is obscured by an overly simple accounting of the existence of conflict rather than its magnitude. Although dichotomous measures of neighboring civil conflict have routinely had a positive and significant effect in empirical models explaining civil war onset, it is not simply the presence of neighboring civil

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5For examples, see Buhaug and Gleditsch (N.d.); Gleditsch (2007); Salehyan and Gleditsch (2006). For a contradictory finding, see Hegre et al. (2001).
wars that sufficiently account for the likelihood of contagion. Certainly the presence of a neighboring civil war indicates a higher level of regional instability than the absence of a civil war in the region. However, the objective level of instability is lost in such dichotomous measures. This is especially the case when using low battle death threshold definitions of what is considered an intrastate war. Studies that generate their dichotomous representations of neighboring civil wars by using data from the Armed Conflicts Dataset (ACD) (Gleditsch et al., 2002) code conflicts that produce as few as 25 battle deaths identically to those that generate far more. For example, consider Cuba’s minor conflict in 1953 or Ghana’s conflict in 1966, neither of which generated more than thirty battle deaths, according to the University of Uppsala and Peace Research Institute, Oslo (PRIO) estimates for the ACD project. Using dichotomous measures essentially equates these low-intensity conflicts with other far more severe conflicts like Greece’s civil war in the late 1940s which produced approximately 40,000 battle deaths annually⁶ and Pakistan’s conflict with Mukti Bahini in 1971 that resulted in approximately 50,000 fatalities. Clearly the examples of Cuba and Ghana are substantially different from Greece and Pakistan in terms of their severity, destructive capacity, and overall threat to regional security. Including the intensity of civil wars in empirical models of conflict contagion is thus an improvement over simpler dichotomous measures that are unable to capture the relative severity of each conflict. This will be the contagion measure that I employ in the analysis below to produce an estimation of each civil war’s contagious effect on its contiguous neighbors.⁷

¹⁶The annual battle deaths figure given here is not wholly accurate since battle deaths are reported as totals for the entire duration of each conflict. Instead, the total number of fatalities for the Greek conflict (154,000 according to the Uppsala/PRIO record) was divided by the number of years of the conflict’s duration.

⁷Below, I describe the method I employ to represent the risk that a civil war will spread to each of its individual neighbors. I do this by calculating the marginal effect of a civil war’s intensity on the likelihood that the war will infect each neighbor state. One criticism of this approach may be that I am not explicitly accounting for the other contagion mechanisms described in the previous pages.
4.2.3 Data

The analysis that follows requires data formatted to the state year in which the presence and intensity of civil wars neighboring the primary state are coded in each year of observation. One benefit of employing this data format and the domestic predictors of civil war onset discussed above is that they allow me to replicate data used in previous research and to compare my findings to those of others after including my civil war intensity variable. The dataset used by Salehyan and Gleditsch (2006) is one such dataset that contains my variables of interest in the necessary format and covers the years 1950 to 2001.8

The dependent variable measuring conflict prevalence in each primary state year relies upon data from the Armed Conflict Dataset (Gleditsch et al., 2002). This variable measures a 0 for every year in which the primary state does not experience its own civil war. However, it is difficult to use multiple predictors of contagion in this analysis for three important reasons. First, since many of the contagious effects of civil wars (hostility spillover, refugee flows, negative externalities) occur during ongoing wartime hostilities, many of the contagion measures will be highly correlated with one another. In other words, many of the contagion predictors will only take on nonzero values during war years, and this may obscure from their true effect on the dependent variable. Second, I am attempting to determine the risk of civil war infection from each civil war state to individual neighboring countries. However, this direct effect is difficult to attribute to war contagion with many of the other contagion variables. For example, refugees fleeing a war in one state may increase the likelihood of conflict onset in the asylum state. However, in some cases, refugees may not be fleeing a civil war. It may be that an interstate war or a famine is triggering an exodus of refugees from one state to another. Unfortunately the data are not available at this level of specificity. Accounting for civil war–induced demonstration effects and negative regional externalities are also very difficult to estimate accurately. Still, my measure of civil war intensity is the principal measure among all of the contagion predictors. The intensity of the war is likely to drive the values observed on the other contagion measures, as an increasing level of civil war hostilities is likely to produce larger refugee flows, greater negative externalities, and more intense spillover effects more generally. Finally, in those instances in which a state is bordered by more than one neighboring civil war state, determining the marginal effect of contagion from each civil war state becomes analytically impossible with multiple contagion variables. By using a single measure of contagion, I can determine the marginal effect of each neighboring civil war by using the proportion of battle deaths accounted for by each conflict. Proportions for measures like the number of refugees could be similarly employed. The difficulty, however, is in determining how to weight the differences between measures rather than between particular neighboring wars.

8The list of states constituting the dataset conform to Gleditsch and Ward (1999) list of independent states.
Table 4.1: Summary of *Neighbor Civil War Intensity*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Neighbor Civil War Intensity</em></td>
<td>7,827</td>
<td>1,568</td>
<td>4,239</td>
<td>0</td>
<td>57,409</td>
</tr>
</tbody>
</table>

Data on existing conflict in the primary state’s region were taken from Regan (2000). Years in which a civil war occurs is coded as a 1. In this analysis, the region is defined as only those states that fall within the Correlates of War dataset’s five-point ordinal coding of contiguity with the primary state. Rather than coding a dichotomous measure for the presence or absence of a neighboring civil war, I employ a measure of conflict intensity that is constructed from Regan’s (2000) count of each civil war’s number of fatalities. The *Neighbor Civil War Intensity* variable codes the number of yearly deaths produced by the neighboring conflict. I then take the natural log of this value. Table 4.1 summarizes this variable.

Separate civil war datasets were used to code for conflict in the primary state (the dependent variable) and existing civil war intensities in the surrounding region (the independent variable) for three reasons. First, I used the Regan data for cases of civil war intensity in the primary state’s region because it offered a suitable middle ground between datasets that define civil conflict with varying casualty thresholds. For example, the Armed Conflict Dataset codes those conflicts that reach a minimum of 25 battle-related deaths whereas the Correlates of War dataset requires a minimum of 1,000 battle fatalities for inclusion. High casualty thresholds tend to miss lower level conflicts that may have acute domestic and regional consequences. However, low fatality thresholds may record conflicts that are rather localized and unlikely to be destabilizing for the civil war state’s region. Regan’s requirement of 200 fatalities offers a suitable compromise. Second, I use the Regan data to test my hypotheses on intervention in the following chapter. Therefore, it made sense to use his sample of civil wars in my basic
framework. Third, using data on the presence of conflict in the primary state from the Armed Conflicts Dataset allowed me to capture the effect of civil war diffusion at a more fine-grained level that other datasets would otherwise overlook.

Each of the domestic control variables for the primary state were taken from the data provided by Salehyan and Gleditsch (2006) who assembled the data from various sources. To represent societal wealth for each state year, GDP per capita data is taken from Gleditsch (2002), and the values are transformed by taking the natural log of each observation to produce the variable \( \text{GPD/Capita} \). Both regime type variables are taken from the Polity IV dataset scale that records values from -10 to 10 across the spectrum of regime types from fully autocratic states (-10) to fully democratic states (10) (Marshall and Jaggers, 2000).\(^9\) The \textit{Regime Type} variable reflects each states annual Polity IV score and \textit{Regime Type}\(^2\) tests for an inverted U–shape effect of regime type by squaring the Polity score for each state year. The \textit{Ethnic Heterogeneity} variable used by Salehyan and Gleditsch relies on the data provided by Vanhanen (1999). Salehyan and Gleditsch identify the largest racial, religious, or linguistic grouping by its share of the population. The measure is then created by subtracting this percentage from 100%. The value of this calculation rises to reflect an increasing level of ethnic heterogeneity in a state. The measure of state population size (\textit{Population}) is taken from disaggregated Composite Index of National Capability (CINC) scores for each state recorded in the National Material Capabilities Dataset (Singer, Bremer and Stuckey, 1972). To account for time dependence, a simple count measure (\textit{Peace Years}) is included to record the number years each state remains at peace. Finally, three cubic splines are included to control for autocorrelation (Beck, Katz and Tucker, 1998).

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\(^9\)The Polity IV data was revised to conform to the Gleditsch and Ward (1999) list of independent states.
4.2.4 Methods and Analysis

To generate a numerical representation of a regional state’s risk of civil war, I must determine the effect of a neighboring civil war’s intensity on the likelihood of civil war contagion. To accomplish this, I include my contagion variable (\textit{Neighbor Civil War Intensity}) in a statistical model of civil war prevalence. Given the dichotomous nature of this dependent variable – either a civil war occurs in a particular state year (1) or it does not (0) – logistic regression is a suitable model to use in determining the effect of a neighboring civil war on the likelihood of conflict prevalence.\textsuperscript{10}

I report two models of civil war prevalence for the period 1950 to 2001. The results of these models are presented in Table 4.2. As an initial test, of the effect of my independent variable of interest, I include it in a simple logistic model where \textit{Neighbor Civil War Intensity} is the only variable analyzed. The positive and highly significant effect of \textit{Neighbor Civil War Intensity} in Model 1 indicates that when a state’s neighbor experiences an increasingly intense civil war, its likelihood of experiencing its own civil conflict increases. In other words, increasingly intense hostilities in a neighboring state increases the likelihood of cross–border infection.

Model 2 reports findings from a more fully specified model of civil war prevalence. In this model, I include additional variables to reflect the domestic predictors of civil war prevalence discussed above. \textit{Neighbor Civil War Intensity} is also positive and significant in this model, reinforcing the idea that increasingly intense intrastate conflicts in a neighboring state have a positive effect on the likelihood of conflict contagion. The remaining variables in the model appear to support many of the more common findings

\textsuperscript{10}As noted in the previous section, the dependent variable is based upon the Armed Conflict Dataset coding of civil war which relies upon a 25 battle deaths threshold for inclusion as an intrastate conflict. In the appendix to this chapter I include additional analyses. One of these analyses employs a dependent variable for civil war onset from the Armed Conflict Dataset that defines civil war using the more conventional 1,000 battle deaths threshold used by the Correlates of War data project. See the appendix for the results.
Table 4.2: Logit Analysis of Civil War Prevalence

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighbor Civil War Intensity</td>
<td>.140***</td>
<td>.073***</td>
</tr>
<tr>
<td></td>
<td>(.016)</td>
<td>(.020)</td>
</tr>
<tr>
<td>GDP/Capita</td>
<td>-.227**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.089)</td>
<td></td>
</tr>
<tr>
<td>Ethnic Heterogeneity</td>
<td>.017***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.004)</td>
<td></td>
</tr>
<tr>
<td>Regime Type</td>
<td>.005</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.012)</td>
<td></td>
</tr>
<tr>
<td>Regime Type$^2$</td>
<td>-.015***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.002)</td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>.260***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.044)</td>
<td></td>
</tr>
<tr>
<td>Peace Years</td>
<td>-.511***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.060)</td>
<td></td>
</tr>
<tr>
<td>Spline1</td>
<td>-.007***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.001)</td>
<td></td>
</tr>
<tr>
<td>Spline2</td>
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<td></td>
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<td>Spline3</td>
<td>-.000</td>
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<tr>
<td></td>
<td>(.000)</td>
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</tr>
<tr>
<td>Constant</td>
<td>-3.510***</td>
<td>-2.138**</td>
</tr>
<tr>
<td></td>
<td>(.096)</td>
<td>(.858)</td>
</tr>
<tr>
<td>Observations</td>
<td>6318</td>
<td>5567</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-1190.263</td>
<td>-823.048</td>
</tr>
<tr>
<td>$\chi^2$</td>
<td>75.24***</td>
<td>418.47***</td>
</tr>
</tbody>
</table>

*** = significant at the .01 level, ** = .05, * = .1

Standard errors in parentheses
in the civil war literature. First, the significant negative coefficient on the GDP/Capita variable implies that as a state’s people become increasingly wealthy, they also become less likely to rebel presumably due to the opportunity costs of rebellion and the superior administrative and policing capacities of wealthy states over poor ones. The positive and significant coefficient for the coefficient for the Ethnic Heterogeneity variable indicates that as states become more heterogenous, the likelihood of conflict increases possibly due to a correlation between ethnic tensions and societal heterogeneity. The regime type variables test two separate conjectures about the effect of regime type and civil war prevalence. Regime Type investigates the possibility of an effect of different governance types from full autocracies to full democracies. However, this variable is insignificant, and thus nothing of substance can be inferred from the coefficient. Regime Type$^2$ tests for a curvillinear effect of a state’s government type which argues that civil wars are most likely in anocracies, as more democratic states provide peaceful means of civil dissent and nonviolent protest, and more autocratic states are sufficiently capable of repressing dissident activity. The negative and significant value on this coefficient supports this hypothesis. The coefficient for the Population variable indicates that as population increases, the likelihood of civil war also rises as the pool of potential rebel recruits increases in size. Lastly, the significantly negative effect of Peace Years notes the time dependent effect of peace. The longer a state remains at peace, the less likely it is to experience a civil war in each subsequent year.$^{11}$

While the sign and significance of the coefficients provide an indication of the relationship between the independent variables and likelihood of civil war, the substantive effect of a neighboring war’s intensity on the likelihood of conflict contagion requires an additional calculation. To represent the risk of contagion, I need to be able to represent

---

$^{11}$A rare events logit was also used to model the prevalence of civil war, and the results were very similar to those presented here in terms of the signs on the coefficients and their significance levels.
the likelihood that a civil war will infect its neighbor. In other words, I am interested in determining the increased probability of conflict that neighboring civil wars pose.

To accomplish this, I carry out a transformation to determine the marginal effect of Neighbor Civil War Intensity on the likelihood of contagion. Whereas most studies hold each of the control variables at their mean or modal values and vary the values of the independent variable of interest to determine its marginal effect on the dependent variable, I calculate the marginal effect of Neighbor Civil War Intensity for every state year observation in the dataset. For each observation, I conduct the marginal effect transformation by varying the value of a neighboring civil war’s intensity from 0 (i.e. no neighboring civil war) up to the observed yearly casualty value for each ongoing year of a neighboring conflict while holding all of the domestic predictors of civil war at their observed values. This produces a percentage increase effect of the neighboring civil war on the likelihood of infection.

This increased likelihood of civil war is used to represent a potential intervenor’s belief about the likelihood that the civil war will infect its neighboring state. Each neighboring country receives a different probability of infection relative to other neighboring states as a result of the varying values recorded on the base domestic predictors and the contagion variable. Potential interveners are able to estimate the varying level of contagion risk for each neighboring country, and these estimates can be updated over time as the probability of infection changes. In the data, the probability of infection generated by the marginal effects transformation is updated each year.

For clarification, Table 4.3 notes three examples of this process. Three individual state years are extracted from the dataset and displayed in this table: Zambia 1964, Panama 1951, and Mexico 1967. The rows report observations on each of the variables included in the logit model presented above.\textsuperscript{12} The Baseline Effect notes the expected

\textsuperscript{12}The Peace Years value for the Panama case is somewhat deceiving. This value does not accurately
Table 4.3: Marginal Effect of Neighbor War Intensity

<table>
<thead>
<tr>
<th>Variable</th>
<th>Zambia, 1964</th>
<th>Panama, 1951</th>
<th>Mexico, 1967</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP/Capita ($millions)</td>
<td>$1,824</td>
<td>$1,897</td>
<td>$5,059</td>
</tr>
<tr>
<td>Ethnic Het.</td>
<td>5</td>
<td>21</td>
<td>30</td>
</tr>
<tr>
<td>Regime Type</td>
<td>2 (Anoc)</td>
<td>-1 (Anoc)</td>
<td>-6 (Autoc/Anoc)</td>
</tr>
<tr>
<td>Regime Type(^2)</td>
<td>4 (Anoc)</td>
<td>1 (Anoc)</td>
<td>36 (Autoc/Anoc)</td>
</tr>
<tr>
<td>Population (thousands)</td>
<td>3,596</td>
<td>817</td>
<td>44,161</td>
</tr>
<tr>
<td>Peace Years</td>
<td>0</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td><strong>Baseline Effect</strong></td>
<td>15.72%</td>
<td>9.24%</td>
<td>4.26%</td>
</tr>
<tr>
<td><strong>Neighbor CW Intensity</strong></td>
<td>9,425</td>
<td>2,088</td>
<td>473</td>
</tr>
<tr>
<td>Civil War Country</td>
<td>DRC</td>
<td>Columbia</td>
<td>Guatemala</td>
</tr>
<tr>
<td><strong>Baseline + Contagion</strong></td>
<td>26.68%</td>
<td>15.12%</td>
<td>6.52%</td>
</tr>
<tr>
<td><strong>Marginal Effect</strong></td>
<td><strong>10.95%</strong></td>
<td><strong>5.87%</strong></td>
<td><strong>2.26%</strong></td>
</tr>
</tbody>
</table>

The likelihood that a civil war will be observed in each neighbor state during the specified year given the reported values on each of the domestic predictors of civil war prevalence while holding the Neighbor Civil War Intensity value at zero. Baseline + Contagion then reports the increased probability of civil war onset in each neighbor state after varying the value of Neighbor Civil War Intensity from zero to the specified casualty level. The difference between these two percentages represents the risk that the neighboring conflict posed to each of the states in the column heading. For instance, the severity of the war in Guatemala increased the likelihood of a civil war in Mexico by 2.26 percentage points in 1967. The substantially more severe conflict in the Democratic Republic of Congo increased the likelihood of a civil war in Zambia by 10.95 percentage points in 1964. This table displays the idea that as the intensity of a conflict in a neighboring country increases, the likelihood of conflict infection increases.\(^\text{13}\)

---

\(^{13}\)It should be noted, however, that the marginal effect of Neighbor Civil War Intensity is dependent

---

reflect the number of years that Panama had been at peace. Rather, since 1950 was the first year of the dataset and since Peace Years is a simple count variable, all states existing in 1950 were assigned a value of 0 for Peace Years, and the count of years at peace continued from this point forward.
I use these marginal effect percentages to represent a third party’s estimated likelihood that particular civil wars will have a contagious effect upon each of its individual neighbors. Potential interveners observing the civil war in Columbia are expected to estimate the likelihood of this conflict infecting Panama to be approximately 5.87%. This is the risk that Columbia’s civil war poses to Panama. The risk value represents the probability that a civil war will spread given no intervention. Third party interveners observe this risk of contagion when calculating the expected utility of intervening in Columbia’s civil war in an attempt to contain its hostilities from infecting Panama.

Operationalizing the risk of civil war contagion required a rather involved description of the predictors of civil war prevalence, mechanisms of contagion, data, and methods of analysis. Representing the remaining components of the expected utility model—regional utility and the costs associated intervention—is far more straightforward. It is to this discussion that I now turn.

4.3 Measuring the Regional (Dis)Utility of Civil War Contagion

Estimating the risk of civil war contagion is part of the story told in the expected utility models. However, this risk is important with regard to its interactive effect with the potential intervener’s valuation of those regional states that are put at risk by the contagious properties of the civil war. In other words, a third party will only intervene for regional stability purposes when the risk of civil war diffusion threatens something that it values in the civil war state’s region. It is this interactive effect that attracts or repels intervention for regional stability purposes. For example, a third party state upon both the value of Neighbor Civil War Intensity and upon the values observed on the domestic predictors. Therefore, identical values for Neighbor Civil War Intensity may produce different findings as a result of different domestic variable observations across time and space.
with very few or no foreign policy interests in a civil war state’s region should not be attracted to intervention no matter whether the risk of contagion is low or high. With very few foreign policy interests in the region, the model notes that the third party would receive little or no benefit from a successful attempt to contain. Similarly, even when a third party has a number of foreign policy interests in the civil war state’s region, if the risk of contagion is practically zero, the third party will not intervene in an attempt to contain the civil war’s hostilities. The fact that the civil war poses little threat to the third party’s interests translates to disinterest in intervention.

As the value of the region at risk increases to the potential intervener in conjunction with some nontrivial risk of contagion, the likelihood of intervention to contain should increase. Therefore, we must have a means of measuring the utility that each third party assigns to each regional state. As was mentioned in the previous chapter, the ways in which third parties value a civil war state’s region are varied depending each potential intervener’s relevant foreign policy interests. These may include security interests, economic ties, natural resource dependencies, and others. For the purposes of this dissertation, I consider three measures of the civil war state’s regional foreign policy value to potential interveners: military alliances, trade dependence, and geographic proximity.

First, alliances offer a suitable proxy for a state’s security interests. All other things being equal, a third party that maintains a number of alliances with countries in the civil war state’s region will perceive the civil war to be a greater threat to its security. Second, as a third party’s economic wellbeing becomes increasingly predicated on its trade with the civil war state’s region, the greater the likelihood that the civil war will adversely affect the economic vitality of the third party. Murdoch and Sandler (2002; 2004) have noted the detrimental regional economic consequences of civil wars. As the contagious effect of a civil war increases to a region upon which a third party is
trade dependent, the third party is likely to have a stronger incentive to intervene in an attempt to contain the conflict’s detrimental effects. Lastly, the geographic proximity of the civil war state and its surrounding region to a potential intervener is a suitable proxy for many third party foreign policy interests. Relationships between states are tied to geographic proximity in that a potential intervener is likely to have its most important relationships with states that are nearby. Security interests, trade relationships, and other forms of interaction are likely to be closely connected to geographic proximity. As a result, one might expect potential interveners to consider civil wars that occur in their own continental region to be more salient to their interests than conflicts that take place in more distant lands. For example, South American states are likely to consider the war in Columbia to be substantially more salient to their foreign policy interests than is a similar conflict in Burundi.

4.4 The Regional Costs of Contagion: Combining Regional Risk and Value

To represent the interactive effect of the risk of contagion for a civil war state’s region and each potential intervener’s foreign policy interests in that region, I calculate the product of the risk of diffusion and measures of each of the three foreign policy issues mentioned above. This measure captures the contagion risk posed to a third party’s valued foreign policy interests in the civil war state’s region. The components of this measure can be represented by the following model in which potential intervener state \( j \) is calculating whether or not to intervene in a foreign civil war for regional stability purposes:

\[
R_j = \sum_{i \neq j}^N \alpha_i \chi_{ij}
\]  (4.1)
where $\alpha_i$ represents the risk of the conflict spreading from the civil war state to its neighbor state $i$, and $\chi_{ij}$ represents the value of intervener $j$’s foreign policy interests, if any, in state $i$. The calculation of $\alpha_i \chi_{ij}$ is then summed across all countries ($N$) that neighbor the conflict state to produce $R_j$, the risk of infection posed to $j$’s foreign policy interests in the civil war state’s region.

The marginal effect of contagion calculated from the logistic regression model of civil war prevalence will represent each state’s relative likelihood of being infected by the hostilities in the civil war state, thus representing $\alpha_i$. In the data, the marginal effects of contagion are generated for each observed neighboring state year. The contagious effect percentages are then multiplied by measures of each potential intervener’s alliance, trade, and geographic proximity scores with individual neighboring states, representing $\chi_{ij}$. For instance, the presence of an alliance is measured dichotomously, representing the presence or absence of an alliance between a potential intervener and each country neighboring the civil war state. To translate each intervener–neighbor state observation into a regional value, I sum the risk*alliance calculation into a single regional score.

For example, consider a civil war state that has three neighbors, states A, B, and C. Suppose that a potential intervener (J) maintains an alliance with states A and B but not with C, where 1 denotes the presence of an alliance in the potential intervener–neighbor state dyad and 0 represents no alliance relationship. Suppose also that the marginal effects of infection for each state are calculated as follows: A 9%, B 3%, and C 15%. To determine the regional value of J’s alliance interests in the civil war state’s region ($R_j$), the following is calculated: $(1*.09)+(1*.03)+(0*.15) = .12$. This calculation thus provides a value that represents the combination of the risk posed to the civil war state’s region and the utility of that region to the potential intervener. The value varies by year with the changing characteristics of the conflict. It also varies across potential interveners depending upon their different alliance relationships.
with each neighboring state. The regional risk*trade and risk*proximity measures are calculated in the same fashion.\textsuperscript{14}

This exercise results in three variables used in my analysis of third party intervention in civil wars: \textit{Regional Ally Risk}, \textit{Regional Trade Risk}, and \textit{Regional Proximity Risk}. The variables take into consideration the likely direction in which third parties expect civil wars to spread and the issues at stake that are threatened by the hostilities. The expectation is that as the values on each of these three variables increase, the likelihood of intervention should also increase, as third parties are likely to be increasingly interested in containment.

### 4.5 Measuring Intervention Costs

The costs associated with intervening or avoiding intervention are also expected to affect the likelihood that a third party will choose to become involved in a foreign civil war. Recall, however, that I assume that the costs of intervention will generally be higher than the costs associated with not intervening, e.g. \( \Sigma C_i > \Sigma C_{\sim i} \). This is not to say that the costs associated with nonintervention are always insubstantial. To the contrary, the audience costs associated with nonintervention may be politically costly for policymakers that choose to avoid an intervention policy that would otherwise be supported by a powerful domestic constituency. However, audience costs are not uniquely associated with nonintervention decisions. Policy decisions in favor of intervention may also result in substantial audience costs, as domestic groups opposed to intervention voice their political preferences. For example, the public outcry that followed the American catastrophe in Somalia was a pivotal predictor of American withdrawal. Also, we can

\textsuperscript{14}Trade dependence is measured as the potential intervener’s total trade (imports + exports) with each neighbor state as a percentage of the potential intervener’s GDP. The alliance data is taken from Leeds et al. (2002), the trade dependence data is taken from Gleditsch (2002), and the proximity data is taken from the Correlates of War project (Singer and Small, 1994).
generally assume that there are little or no economic and military costs paid by states that choose not to intervene, whereas the economic and military costs of intervention may be considerable. In this sense, the total costs associated with intervention (including audience, economic, and military costs) are highly likely to be greater than the total cost of nonintervention (audience costs alone). Given the assumption that $\Sigma C_i > \Sigma C_{-i}$, I focus solely on the representing the costs of intervention in the statistical models of third party intervention that are presented in the following chapter.

To operationalize the costs associated with intervention, I follow the conventions of previous research. Regan (1998, 2000) measures intervention costs with a proxy for the number of casualties per year produced by the conflict. Support for this idea notes that the more violent the conflict, the more difficult it will be to bring an end to the fighting and the greater effort that will be required on the part of the intervener to achieve its intervention goals. Third parties are able to approximate the level of violence taking place in the civil war, and their observations color their willingness to become involved. The empirical results reported by Regan support this conjecture. As the number of deaths produced by the conflict increases, third parties are less likely to intervene. Further evidence supports this finding, if indirectly, as Regan (1996) finds that interventions in increasingly violent civil wars are less likely to be successful in attaining their goals, and Regan (2002) notes that increasing levels of violence in civil wars tend to extend their duration.

I therefore include a measure of intervention costs that relies upon the predictor used in Regan’s previous research. Intensity, is a measure of the yearly casualties produced by the conflict. This variable represents a suitable proxy for the costs that interveners are likely to pay for their involvement in foreign civil conflicts.
4.6 Conclusion

This chapter has operationalized the principal components of the expected utility model introduced in Chapter 3. The majority of this chapter was dedicated to operationalizing the risk that a civil war will spread to each of the surrounding countries that constitute a civil war state’s regional context. This required a more complicated approach than was necessary for the other components of the expected utility model, as the utility and costs of intervention and nonintervention could be represented with proxy measures.

The discussion of the contagion risk measure’s derivation was necessary because this is a central element the empirical work in this dissertation, as Chapter 5 uses the measure to address the onset of third party interventions in civil wars. Operationalizing the components of the expected utility model allows me to empirically address issues of third party intervention with regard to the containment of civil war hostilities. These are the issues that I now address in Chapters 5 and 6.
4.7 Appendix

Given the centrality of the civil war contagion risk measure to the empirical chapter that follows, I include two additional analyses of civil war prevalence similar to those presented in Table 4.2. The models shown here are meant to judge the robustness of the results provided in Table 4.2. In each of the following models, the results for the *Neighbor Civil War Intensity* variable are consistently positive and highly significant, lending credence to the argument that increasingly intense civil wars in a neighboring country increases the likelihood of a civil war in the primary state.

Table 4.4 presents a comparison of results between my analysis and the findings reported by Salehyan and Gleditsch (2006). Since I use the dependent variable and many of the independent variables provided by Salehyan and Gleditsch, it makes sense to compare my results with their own. Also, I use a different definition of civil war which is provided by Regan (2000) to generate *Neighbor Civil War Intensity* that relies upon a higher death threshold than the Armed Conflict Dataset data employed by Salehyan and Gleditsch. Salehyan and Gleditsch use a simple dummy variable for the presence or absence of a neighboring conflict. I therefore include this variable (*Neighbor Civil War*) and my variable in separate models. In addition to the other independent variables presented in Table 4.2, I also include Salehyan and Gleditsch’s measure of refugee flows in the analysis presented in Table 4.4.15 The coefficient for the *Refugees* variable is consistent in its direction and significance to the findings reported by Salehyan and Gleditsch. *Neighbor Civil War Intensity* remains positive and significant in this analysis, and the other independent variables appear to behave as one would expect given the findings provided by Table 4.2.

---

15Data for this variable were supplied by the United Nations High Commissioner for Refugees (UNHCR) Population Data Unit. See footnote 7 for an explanation of why I do not include a measure of refugee flows in the models reported in Table 4.2.
Table 4.4: Replicating Salehyan/Gleditsch Primary Findings with Regan’s Neighboring Civil Wars

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighbor Civil War Intensity</td>
<td>.058***</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>(.021)</td>
<td>–</td>
</tr>
<tr>
<td>Neighboring Civil War</td>
<td>–</td>
<td>.337***</td>
</tr>
<tr>
<td></td>
<td>–</td>
<td>(.152)</td>
</tr>
<tr>
<td>Refugees</td>
<td>.037***</td>
<td>.042***</td>
</tr>
<tr>
<td></td>
<td>(.014)</td>
<td>(.013)</td>
</tr>
<tr>
<td>GDP/Capita</td>
<td>-.198**</td>
<td>-.214**</td>
</tr>
<tr>
<td></td>
<td>(.090)</td>
<td>(.089)</td>
</tr>
<tr>
<td>Ethnic Heterogeneity</td>
<td>.016***</td>
<td>.016***</td>
</tr>
<tr>
<td></td>
<td>(.004)</td>
<td>(.004)</td>
</tr>
<tr>
<td>Regime Type</td>
<td>.006</td>
<td>.006</td>
</tr>
<tr>
<td></td>
<td>(.012)</td>
<td>(.012)</td>
</tr>
<tr>
<td>Regime Type²</td>
<td>-.014***</td>
<td>-.015***</td>
</tr>
<tr>
<td></td>
<td>(.002)</td>
<td>(.003)</td>
</tr>
<tr>
<td>Population</td>
<td>.249***</td>
<td>.264***</td>
</tr>
<tr>
<td></td>
<td>(.044)</td>
<td>(.040)</td>
</tr>
<tr>
<td>Peace Years</td>
<td>-.500***</td>
<td>-.492***</td>
</tr>
<tr>
<td></td>
<td>(.060)</td>
<td>(.063)</td>
</tr>
<tr>
<td>Spline1</td>
<td>-.007***</td>
<td>-.007***</td>
</tr>
<tr>
<td></td>
<td>(.001)</td>
<td>(.001)</td>
</tr>
<tr>
<td>Spline2</td>
<td>.004***</td>
<td>.003***</td>
</tr>
<tr>
<td></td>
<td>(.001)</td>
<td>(.001)</td>
</tr>
<tr>
<td>Spline3</td>
<td>-.000*</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>(.000)</td>
<td>(.000)</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.340***</td>
<td>-2.298***</td>
</tr>
<tr>
<td></td>
<td>(.860)</td>
<td>(.823)</td>
</tr>
</tbody>
</table>

Observations: 5567 5567  
Log likelihood: -819.673 -821.040  
χ²: 425.22*** 354.06***

*** = significant at the .01 level, ** = .05, * = .1
Standard errors in parentheses
Table 4.5 addresses the potential concern that the results presented in Table 4.2 are product of the dependent variable’s specification. The dependent variable for Table 4.2 relies upon the Armed Conflict Dataset coding of civil war prevalence which only requires a 25 battle deaths threshold for inclusion. Models 1 and 2 in Table 4.5 provide a replication of 4.2 with a dependent variable that reflects the more common 1,000 battle deaths threshold. The findings reported here for Neighbor Civil War Intensity are nearly identical to those presented in Table 4.2. Most of the other independent variables are also consistent with the findings between tables. However, GDP/Capita becomes insignificant at conventional levels. Also, the sign of the coefficient for Regime Type changes directions. However, Regime Type remains insignificant, so the variable still cannot be meaningfully interpreted.
Table 4.5: Logit Analysis of Severe Civil War Prevalence

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighbor Civil War Intensity</td>
<td>.139***</td>
<td>.069**</td>
</tr>
<tr>
<td></td>
<td>(.021)</td>
<td>(.028)</td>
</tr>
<tr>
<td>GDP/Capita</td>
<td>-.141</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.21)</td>
<td></td>
</tr>
<tr>
<td>Ethnic Heterogeneity</td>
<td>.020***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.006)</td>
<td></td>
</tr>
<tr>
<td>Regime Type</td>
<td>-.014</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.018)</td>
<td></td>
</tr>
<tr>
<td>Regime Type^2</td>
<td>-.018***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.003)</td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>.308***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.061)</td>
<td></td>
</tr>
<tr>
<td>Peace Years</td>
<td>-.606***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.073)</td>
<td></td>
</tr>
<tr>
<td>Spline1</td>
<td>-.006***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.073)</td>
<td></td>
</tr>
<tr>
<td>Spline2</td>
<td>.003***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.001)</td>
<td></td>
</tr>
<tr>
<td>Spline3</td>
<td>.001**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.000)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-4.067***</td>
<td>-3.412***</td>
</tr>
<tr>
<td></td>
<td>(.126)</td>
<td>(1.163)</td>
</tr>
<tr>
<td>Observations</td>
<td>6186</td>
<td>5448</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-774.778</td>
<td>-470.700</td>
</tr>
<tr>
<td>( \chi^2 )</td>
<td>43.29***</td>
<td>323.61***</td>
</tr>
</tbody>
</table>

*** = significant at the .01 level, ** = .05, * = .1
Standard errors in parentheses
The results presented in this appendix indicate that my contagion variable is consistently significant and positively signed. This provides a greater degree of assurance that an increasingly intense civil war in one state does in fact increase the likelihood of civil war contagion to other neighboring states.
Chapter 5

Intervention Onset

5.1 Introduction

This chapter tests two hypotheses derived from the theoretical arguments proposed in Chapter 3 using a quantitative test of intervention onset. The sections that follow will introduce the research design, data, and predictors of intervention used in the analysis of intervention onset. I will only briefly comment on the primary independent variables of interest, as they are described more fully in the previous chapter. In addition, my consideration of the effect of the expected costs of intervention on the likelihood that a third party will intervene will be necessarily brief, as the theoretical and empirical work in this dissertation on this topic are essentially a replication of previous research (Regan, 1998, 2000; Lemke and Regan, 2004). I will then present statistical results that test my arguments with regard to the regional contagion predictors of civil war intervention. Finally, I will conclude with a discussion of these results and their implications for research on civil war and intervention. The appendix that follows this chapter provides further support the findings presented in the Empirical Results and Discussion section of the chapter text.
5.2 Research Design

5.2.1 Primary Independent Variables

In the analysis that follows I am interested in testing the effect of the regional stability measures introduced in Chapter 4 on the likelihood that each potential intervener chooses to intervene in an ongoing civil war. Operationally, the regional environment surrounding the civil war state is defined by the Correlates of War Direct Contiguity dataset (Stinnett et al., 2002), where any country that is coded in the five-point contiguity scale is considered a member of the civil war state’s region.\(^1\)

At any given point in time, potential interveners have the ability to observe the risk faced by those countries that surround the civil war state. In other words, potential interveners are able to estimate the ex ante likelihood that a country in the civil war state’s region will become infected by the conflict’s hostilities. Third parties have the ability to distinguish between those regional states that face a high risk of infection and those that are relatively incubated from being infected.

Recall from Chapter 4 that a potential intervener’s regional stability interests in a civil war can be represented as follows:

\[
R_j = \sum_{i \neq j}^{N} \alpha_i \chi_{ij}
\]

where \(\alpha_i\) represents the risk of the conflict spreading from the civil war state to its neighbor state \(i\), and \(\chi_{ij}\) represents the value of \(j\)’s foreign policy interests in state \(i\). Calculating \(\alpha_i \chi_{ij}\) provides a measure of the risk*utility component of the decision theoretic model introduced in Chapter 3. The \(\alpha_i \chi_{ij}\) calculation is then summed across all countries (\(N\)) that neighbor the conflict state to produce \(R_j\), the risk of infection.

\(^1\)The values in this five-point scale range from a shared land border (1) to a 420 mile separation by sea (5).
posed to \( j \)'s foreign policy interests in the civil war state's region.

Chapter 4 delineates three regional measures to be tested in the following analysis. Each of these measures include \( \alpha_i \) scores for each neighboring state derived from the logistic analysis of civil war prevalence that was carried out in the previous chapter. The \( \alpha_i \) scores were then determined by calculating the marginal effect of neighboring civil war hostility diffusion. The \( \alpha_i \) scores are then combined with three representations of \( \chi_{ij} \) that reflect the security, economic, and geographic interests of third parties. To represent the regional security interests of potential interveners, I use a measure of existing alliances between the third party and the civil war state’s neighbors. The data on existing alliance relationships is taken from the Alliance Treaty Obligations and Provisions project (Leeds et al., 2002). The regional economic interests of third parties is represented by the level of trade dependence of the potential intervener on the civil war’s regional states. Trade dependence is measured as the potential intervener’s total trade (imports + exports) with each neighbor state as a percentage of the potential intervener’s gross domestic product. Trade dependence data is taken from Gleditsch (2002). The geographic proximity predictor is a more general category of foreign policy interest for third parties which represents the idea that third parties should value conflict regions that are more proximate to the third party than those that are located a great distance from it. Proximity data is taken from the Correlates of War project on shared continental region (Singer and Small, 1994).

This exercise of combining \( \alpha_i \) with the three representations of \( \chi_{ij} \) results in three variables used in my analysis of third party intervention onset: Regional Ally Risk, Regional Trade Risk, and Regional Geography Risk. The variables take into consideration the direction in which third parties expect civil wars to spread and the issues at stake that are threatened by the hostilities. These variables are used to address my first testable hypothesis:
• H1: As the value of a civil war state’s regional risk*utility score increases to a third party, the likelihood that the third party will choose to intervene will increase.

Following the definition used by Lemke and Regan (2004), every state in the international system is considered a potential intervener in each civil war. As a result, my regional explanations of intervention must distinguish between those potential interveners that reside within the civil war state’s region, and those that do not. Like noncontiguous third parties, states that neighbor the civil war state are able to observe the risk posed to the civil war state’s other regional neighbors and the utility of containing the civil war from infecting those neighbors. However, a third party state that is contiguous to the conflict defines its regional utility for containment in a another qualitatively different fashion that is distinct from noncontiguous states. Given their geographic distance from the conflict, third parties residing outside of the civil war state’s region face no direct threat of cross-border contagion. Third parties that neighbor the civil war state, on the other hand, are directly threatened by this diffusion process. The variables listed above do not sufficiently represent the regional interests of potential third parties that border the civil war state. While a contiguous third party may indeed have valuable relationships with other states in the war’s region, it is a contiguous third party’s own expectation of being infected by the war that will be the predominant “regional” explanation of intervention. War diffusion to a contiguous third party threatens domestic violence that may challenge the ruling regime’s stability or even the continued existence of the state. For a contiguous third party state, the utility of containing the hostilities from spilling across its own border is extremely high. A contiguous third party’s own risk of infection is thus likely to be substantially more salient than the risk posed to its interests in other states that reside in the civil war state’s region. For these reasons, I test a second hypothesis that only addresses the
intervention decision making of contiguous third parties:

- **H2**: Third party states that are contiguous to the civil war state will be increasingly likely to intervene as their own probability of being infected by the conflict increases.

### 5.2.2 Data

To judge the effect of my variables of interest on the likelihood of intervention, the data on civil war must be formatted at the level of the intervention opportunity. In order to analyze the impact of the independent variables on a state’s decision to intervene, observations must be made at the level of the potential intervener. Lemke and Regan (2004) provide such a dataset format in their reconsideration of Regan’s previous findings on intervention (Regan, 2000) for all civil wars occurring between 1944 and 1994. In the Lemke and Regan data, each civil war is treated as an intervention opportunity for every state in the international system, allowing the results to reflect the decisions of those states that may have considered involvement but chose not to intervene.

My variables of interest are year-specific. However, the Lemke and Regan dataset is not specific to the civil war year. Their data provides observations per each potential intervener that existed in the international system at some point during the course of each war. This format may not be accurate in the sense that membership in the international system changes over time. This is especially the case for long civil wars for which system membership may change substantially. To support the inclusion of my variables of interest and to provide a finer level of specificity, I modify the Lemke and Regan dataset to provide observations of potential intervention for each member of the international system that existed in each civil war year.\(^2\) The resulting dataset

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\(^2\)This dataset format was constructed using EUGene3.03 (Bennett and Stam, 2000).
spans the 1950 to 1999 time period.

5.2.3 Dependent Variable

Civil wars are defined as conflict between groups within a state that result in a minimum of 200 battle fatalities. As I noted in Chapter 3, the coding of the dependent variable (intervention onset) follows the definition used by (Regan, 2000, 10): “Intervention is defined as convention-breaking military and/or economic activities in the internal affairs of a foreign country targeted at the authority structures of the government with the aim of affecting the balance of power between the government and opposition forces.” The expansion of Lemke and Regan’s data required the dependent variable to be coded to the precise year in which an intervention occurred. More fine-grained information about the timing of interventions was obtained from Regan (2002).³

5.2.4 Control Variables

Replicating the control variables used in the analysis performed by Lemke and Regan offers the advantage of controlling for a number of explanations of intervention that are found in the literature. Importantly, as I have previously argued, existing explanations of intervention have primarily taken a dyadic approach in which the third party’s decision to intervene is determined by (a) the qualities of the intervener, (b) the characteristics of the conflict, or (c) the affective connections between the third party and the civil war state. The Lemke and Regan analysis sufficiently addresses each.

First, three variables reflect important characteristics of the potential intervener that are hypothesized to affect intervention decision making. The power status of the

³The results presented below address a dependent variable for all interventions. An identical analysis was conducted using a dependent variable that relied only upon military interventions. These results are reported in the appendix of this chapter. The findings on the coefficients for these additional analyses were very similar in their sign and significance to those reported in the following pages.
potential intervener is expected to affect the ability of third parties to intervene. Given that major powers have the military and economic strength to extend their influence globally, a dichotomous indicator of the third party’s power status (Major Power Intervener) should have a positive effect on the likelihood of intervention.\(^4\) Also, the likelihood that certain states will become involved in a foreign civil war is theorized to be influenced by the third party’s regime type. Following on findings provided by Hermann and Kegley (1996), Lemke and Regan expect democratic forms of governance, represented by the Democratic Intervener variable, to be positively related to intervention.\(^5\) Lemke and Regan also include a variable that reflects whether the potential intervener is an African state. This is meant to reflect research conducted by Lemke (2002) that finds African states to be disproportionately peaceful toward one another. Their expectation is that a dichotomous African Intervener variable should be negatively related to intervention.

Second, several predictors represent the characteristics of the conflict. These include the total number of casualties produced by the conflict (Casualties) and the conflict’s yearly casualty rate (Intensity). The Intensity variable is used in this analysis to represent the expected aggregate costs of intervention \((\Sigma C_i)\), as more hostile conflicts are likely to be more difficult to manage. Intensity has been employed in previous research to represent the concept of intervention costs (Regan, 1998, 2000; Lemke and Regan, 2004). The hypothesis on intervention costs generated in Chapter 3 from the decision theoretic model is a replication of these previous works.\(^6\) Whether the

\(^4\)Power status data is provided by the Correlates of War Project: State System Membership List, v2004.1 (2005).

\(^5\)Regime type is measured dichotomously using Polity IV data (Marshall and Jaggers, 2000). A Polity score of six or greater is considered a democracy and is coded as 1. All other scores are coded as 0.

\(^6\)In this sense, the intervention costs hypothesis and the measures used to represent it are not a novel contribution of this dissertation. As such, this chapter will emphasize the regional predictors of intervention that are theorized in Chapter 3 and operationalized in Chapter 4.
conflict took place during the Cold War is reflected by the Cold War variable, with the expectation that interventions should be more likely during the Cold War given the global competition between the eastern and western ideological blocs. Additionally, the nature of the conflict is represented by the Ethnic, Ideological, and Religious predictors to determine how the type of hostilities affect the likelihood of intervention.\(^7\)

Lastly, the variables included in the analysis below account for the affective connections between the potential intervener and the civil war state. The Dyadic Allies variable represents the third party’s security interests in the civil war state.\(^8\) The expectation is that third parties will be more likely to intervene when they have direct military interests in the civil war state. The Dyadic Trade measure is not a predictor used in analysis presented by Lemke and Regan. However, this variable reflects Lemke and Regan’s interest in representing significant levels of interaction between the civil war state and the third party as a predictor of intervention. This variable is calculated by measuring the total amount of trade within the dyad as a percentage of the potential intervener’s GDP.\(^9\) A rising value on this variable reflects an increasingly important trading partner with respect to the third party’s economic wellbeing.\(^10\)

\(^7\)Religious is treated as the baseline category in the analysis and is thus dropped due to collinearity.

\(^8\)Correlates of War data on the presence of an alliance within the dyad (Gibler and Sarkees, 2004) are used to replicate this variable from the Lemke and Regan analysis.

\(^9\)These data are provided by Gleditsch (2002).

\(^10\)Prior to including my variables of interest, I re–estimated the first stage of Lemke and Regan’s original model using my modified version of their dataset. The results are largely the same in the direction and significance of the coefficients. The only substantial difference between the two is that the African variable changes signs and increases in significance, Intensity becomes positive and significant, and Democratic Government becomes insignificant. I assume that the discrepancy between Lemke and Regan’s findings and my own are a result of modifying their original dataset to the civil war year format. Since they were insignificant in my replication, I do not include the Democratic Government and Joint Democracy variables in my own analysis. Also, I drop the Refugees variable due to its prevalence of missing values.
5.3 Empirical Results and Discussion

The analysis of intervention onset requires a statistical model that can accommodate a dichotomous dependent variable. A logistic model is suitable for this analysis.\textsuperscript{11} Table 5.1 presents results that address the first hypothesis. My three independent variables of interest provide evidence for the arguments made in the expected utility models. In each model, the three variables are significant at the .01 level or better, and each is positively signed. This implies that as civil wars pose an increasingly contagious threat to regions that are valuable to a third party’s interests, intervention becomes increasingly likely as a means containing the instability of the civil war.

In models 1 and 2, the positive coefficients on \textit{Regional Ally Risk} indicates that as a potential intervener’s security interests in the civil war state’s region are increasingly threatened by the risk of diffusion, the third party is more likely to become involved in the conflict. The more alliances that a third party maintains in a particular region, the more important the region will be in determining the overall security of the third party. Impending instability threatened by civil war in such a region make intervention an appealing policy choice as a means of containing the conflict’s hostilities. These results are notable in part because I have controlled for several existing explanations of intervention. In particular, in both models 1 and 2 I have directly controlled for the dyadic counterpart of my regional variable. An existing alliance tie between the third party and the civil war state increases the likelihood of intervention. However, this dyadic connection cannot account for the independent effect that a contagious civil war poses to the third party’s regional security interests.

The positive coefficients on \textit{Regional Trade Risk} in models 3 and 4 yield the same interpretation as \textit{Regional Ally Risk}. Third parties that are dependent upon the civil

\textsuperscript{11}This analysis was also performed using a rare events logit, and the results were practically identical in the direction of the coefficients and their significance.
Table 5.1: Logit Analysis of Intervention in Civil War (Noncontiguous States)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
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<td>1.88**</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>(.52)</td>
<td>(.71)</td>
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<td></td>
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<tr>
<td>Dyadic Allies</td>
<td>1.80***</td>
<td>1.31***</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>(.13)</td>
<td>(.14)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reg. Trade Risk</td>
<td></td>
<td></td>
<td>39.03***</td>
<td>37.67***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(12.89)</td>
<td>(15.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dyadic Trade</td>
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<td>-56.61</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(33.48)</td>
<td>(14.15)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reg. Geo Risk</td>
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<td></td>
<td></td>
<td></td>
<td>2.94***</td>
<td>3.24***</td>
</tr>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td>(.34)</td>
<td>(.46)</td>
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<td>Intensity</td>
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<td>6.2e-5***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(7.0e-06)</td>
<td>(7.4e-06)</td>
<td>(7.6e-06)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Casualties</td>
<td>1.3e-06***</td>
<td>1.1e-06***</td>
<td>9.2e-07**</td>
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<td>(2.9e-07)</td>
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<td>Afr. Interv.</td>
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<td>.89***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>(.24)</td>
<td>(.24)</td>
<td>(.25)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cold War</td>
<td>.95***</td>
<td>.95***</td>
<td>1.08***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.13)</td>
<td>(.13)</td>
<td>(.13)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Power</td>
<td>4.14***</td>
<td>4.26***</td>
<td>4.29***</td>
<td></td>
<td></td>
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<td></td>
<td>(.11)</td>
<td>(.10)</td>
<td>(.10)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dem. Interv.</td>
<td>.02***</td>
<td>.03***</td>
<td>.04***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.01)</td>
<td>(.01)</td>
<td>(.01)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ideological War</td>
<td>1.90***</td>
<td>1.84***</td>
<td>1.75***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.31)</td>
<td>(.31)</td>
<td>(.29)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic War</td>
<td>1.12***</td>
<td>.92***</td>
<td>.91**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.32)</td>
<td>(.31)</td>
<td>(.30)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-6.06***</td>
<td>-9.47***</td>
<td>-5.76***</td>
<td>-9.19***</td>
<td>-5.94***</td>
<td>-9.35***</td>
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<tr>
<td></td>
<td>(.05)</td>
<td>(.33)</td>
<td>(.05)</td>
<td>(.33)</td>
<td>(.05)</td>
<td>(.31)</td>
</tr>
<tr>
<td>Observations</td>
<td>176,374</td>
<td>121,653</td>
<td>174,308</td>
<td>121,212</td>
<td>176,374</td>
<td>121,653</td>
</tr>
<tr>
<td>Log Likelihood</td>
<td>-3472.7</td>
<td>-2134.3</td>
<td>-3593.2</td>
<td>-2187.5</td>
<td>-3595.3</td>
<td>-2181.5</td>
</tr>
<tr>
<td>(\chi^2)</td>
<td>556.5***</td>
<td>2301.0***</td>
<td>9.0*</td>
<td>2280.8***</td>
<td>76.9***</td>
<td>2155.7***</td>
</tr>
</tbody>
</table>

*** = significant at the .001 level, ** = .01, * = .05
Robust standard errors in parentheses
war state’s region for its economic wellbeing are increasingly likely to intervene as the risk of diffusion rises. Civil wars have detrimental effects on the economic vitality of their regions (Murdoch and Sandler, 2002, 2004). Where a third party is heavily invested in a civil war state’s region, a civil war that threatens the stability of its regional context will increase the likelihood that the third party chooses intervention in an attempt to defend its economic interests. Interestingly, the level of dyadic trade between the third party and the civil war state does not appear to have a significant effect on the choice to intervene. One would expect that as the level of trade increases between the potential intervener and the conflict country, intervention should become an increasingly attractive policy option. However, this result lends further credence to an emphasis on regional explanations of intervention.

Lastly, the interpretation of the *Regional Geography Risk* variable reported in models 5 and 6 is similar to the previous two regional measures. The more proximate the potential intervener is to the region that is threatened by the civil war’s contagious hostilities, the more likely the third party is to become involved in the conflict. *Regional Geography Risk* is a more generic predictor than the others. This measure may be a proxy for a number of more nuanced relationships, as the proximity of states is likely to be related to the existence of alliance relations, trade ties, and other relationships that may be valuable to the potential intervener’s foreign policy interests.\(^{12}\)

These results provide support for hypothesis 1. Third parties do in fact consider the regional effects of civil wars when making their intervention decisions. We see support for this phenomenon in the American interventions in Greece and American and NATO interventions in Bosnia and Kosovo. Where third parties observe that a civil war poses a distinct threat to their regional foreign policy interests, the likelihood of intervention

\(^{12}\)There is no dyadic measure of geographic proximity that is comparable to the regional measure employed here. Therefore, the regional measure is included without a dyadic counterpart.
in an attempt to contain violent spillovers increases.

The control variables behave consistently across each model, and most yield results consistent with their hypothesized expectations. However, *Intensity African Intervener*, and *Democratic Intervener* produce results that do not match those reported by Lemke and Regan. First, whereas *Intensity* is insignificant in Lemke and Regan’s analysis, my results report a positive and significant coefficient. This finding contradicts a previous finding reported by Regan (1998). My results indicate that the more intense conflicts appear to attract more interventions. However, the positive coefficient appears to be consistent with my arguments about the level of hostility produced by civil wars, their contagious effects, and the regionally–based motives for interventions. Still, the hypothesis from Chapter 3 which holds that high expected intervention costs should decrease the likelihood of intervention. This may indicate that better proxy indicators of expected intervention costs should be employed in future analyses of intervention onset.

The coefficient for *African Intervener* changes sign to become positive, indicating that African third parties are more likely to intervene in civil wars. Lemke and Regan’s coefficient for this predictor is only significant at the .1 level with a one–tailed test. They interpret their negative coefficient to support Lemke’s (2000) research which argues that African states are surprisingly peaceful in their interactions with one another. However, interventions need not signal hostility between states. In fact, Lemke and Regan assume that intervention is a form of conflict management, and it is not clear from the analysis whether the rebels or government are supported in each intervention effort. It may be just as reasonable to believe that the positive coefficient I report indicates that African states are relatively more peaceful in their interactions if African governments commonly support one another in their conflicts against their domestic rebel organizations. More accurately specified variables are likely necessary
to determine how intervention represents the tenor of relationships between African states. Lastly, whereas Lemke and Regan produce results indicating that there is no relationship between a third party’s democratic regime type and its propensity to intervene. My result is similar the initial findings produced by Hermann and Kegley (1996) supporting previous findings in the democratic intervention literature.

Hypothesis 2 is addressed in Table 5.2. The expectation is that a country neighboring the civil war state will be increasingly attracted to intervention as its own likelihood of being infected by the hostilities rises. Across each of the five models, consistent support for this hypothesis is provided by the Individual Risk variable. Model 1 presents a simple bivariate analysis. Model 2 is more fully specified, as I include each of the controls from the previous analysis presented in Table 5.1. Models 3 through 5 add the additional variables employed in the previous analysis for noncontiguous potential interveners. A consistent finding in each model is that as the neighboring state’s probability of being infected by the conflict increases, the likelihood of intervention increases as third parties attempt to contain the war from spilling across its own border.

These results reflect the dynamics of several examples including interventions by Israel into Lebanon’s civil war in the 1970s, interventions by several states in the Great Lakes region of Africa in the late 1980s and early 1990s, and the suspected Chadian interventions into Sudan’s current conflict. The power vacuum produced by the war in Lebanon created an opportunity for the Palestinian Liberation Organization to carry out attacks on Israel from Southern Lebanon. Israel responded to the instability on its border by intervening in Lebanon and creating a buffer zone in which conflict spillover would be effectively contained. Civil wars in Uganda, Rwanda, Zaire, and Burundi were closely related to one another, as rebel groups often spanned the boundaries of more than one country and partook in more than one civil war. This created an environment in which the governments of the Great Lakes region were routinely intervening in one
### Table 5.2: Logit Analysis of Intervention in Civil War (Contiguous States)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indiv. Risk</strong></td>
<td>7.38***</td>
<td>7.76***</td>
<td>7.96***</td>
<td>7.73***</td>
<td>8.12***</td>
</tr>
<tr>
<td></td>
<td>(.93)</td>
<td>(1.35)</td>
<td>(1.38)</td>
<td>(1.41)</td>
<td>(1.38)</td>
</tr>
<tr>
<td><strong>Reg. Ally Risk</strong></td>
<td>-2.35*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.14)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dyadic Allies</strong></td>
<td>-.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.17)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reg. Trade Risk</strong></td>
<td>-15.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(21.30)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dyadic Trade</strong></td>
<td>-103.12*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(41.24)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reg. Geo Risk</strong></td>
<td></td>
<td>-1.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.57)</td>
<td></td>
<td></td>
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<tr>
<td><strong>Intensity</strong></td>
<td>6.1e-05***</td>
<td>6.4e-05***</td>
<td>6.1e-05***</td>
<td>6.3e-05***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.4e-05)</td>
<td>(1.5e-05)</td>
<td>(1.4e-05)</td>
<td>(1.4e-05)</td>
<td></td>
</tr>
<tr>
<td><strong>Casualties</strong></td>
<td>-1.7e-06</td>
<td>-1.5e-06</td>
<td>-1.9e-06*</td>
<td>-1.3e-06</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(9.6e-07)</td>
<td>(9.1e-07)</td>
<td>(9.5e-07)</td>
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*** = significant at the .001 level, ** = .01, * = .05

Robust standard errors in parentheses
another’s civil conflicts in an attempt to stifle the diffusion effect across their own borders. Lastly, Chad has been suspected of intervening in the conflict in Darfur in an attempt to stem the flow of refugees and combatants that have spilled across their border. There is speculation that Chad has chosen to support the rebels fighting in Darfur, as it has been unable to seal its border by using border patrolling measures.

Interestingly, several of the variables from the previous analysis of noncontiguous states do not produce parallel results for contiguous states. Contiguous potential interveners do not appear to consistently consider the wellbeing of other regional states that are also posed with the risk of being infected by the war. It is their own risk of infection that drives their decision over intervention. I interpret this to mean that when neighboring states face a substantial probability of conflict spillover, their attention is diverted from the wellbeing of others in the region as they focus on containing the conflict from affecting their own domestic stability. Violent spillovers may threaten the ability of the neighboring regime to maintain power or, at the extreme, contagion may threaten the very survival of the third party state. It is understandable, then, that third parties contiguous to the civil war state focus on their own vulnerability to infection before considering the welfare of other susceptible states.

5.4 Conclusion

As was outlined previously, the reasons third party states choose to intervene in foreign civil wars are many and varied. Among these explanations of third party involvement, several can be classified more broadly as relying upon a classic dyadic connections approach: observing the characteristics of the third party, the civil war state, and the affective connections between them yields powerful explanations for why third parties intervene. We have learned a great deal from this class of studies. My contention, however, is that third party decision making on intervention is not so narrowly construed.
Third parties observe the geopolitical effects of civil wars. They determine the nature of a civil war’s contagious properties and the salience of those regional states believed to be at risk of infection. Where their interests are threatened by the risk of regional contagion, third parties have incentives to intervene in civil conflicts in an attempt to contain their hostilities from disrupting their vital foreign policy interests. The results presented above offer support for the validity of these arguments. I find that third parties consider the expected effect of the war’s hostilities on the broader regional context. The threat of civil war contagion plays a significant role in the intervention decision calculus.

More specifically, I find that noncontiguous states (e.g. those states that are not members of the civil war state’s region) make their intervention decisions based upon the expected regional consequences of the conflict whereas states contiguous to the civil war (e.g. those states that constitute the civil war state’s region) make their intervention decisions based upon their own likelihood of being infected by the hostilities. In a sense, noncontiguous states have the luxury of making their decisions based on their regional diffusion expectations. Being sufficiently distant from the conflict’s hostilities, noncontiguous third parties are able to evaluate the broader security environment and make intervention decisions based upon their interests in the entire surrounding region without fearing for their own infection. Contiguous states do not have this luxury. Their own risk of infection focuses their attention on maintaining domestic stability before considering the broader regional consequences of the conflict.

The following chapter addresses the issue of whether third parties are effective at achieving their regional stability goals through intervention. Chapter 7 then concludes with a review of the previous chapters and a discussion of this dissertation’s contributions to the policymaking community and the conflict processes literature.
5.5 Appendix

The following two tables replicate the analyses in the previous pages for intervention onset. However, the dependent variable in the following two analyses consider only military interventions by third parties. It may be argued that military means are the most likely intervention type to be employed in a third party’s effort at containing a civil war. To be certain that the findings reported in this chapter are not being driven by a potentially spurious connection to economic intervention, I report results below that only analyze the use of military forms of intervention for both noncontiguous and contiguous third parties. The results are nearly identical in their sign and significance to those reported previously in this chapter.
Table 5.3: Logit Analysis of Military Intervention in Civil War (Noncontiguous States)

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<th>Variable</th>
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\( \chi^2 \) 430.7*** 2069.5*** 10.2** 1984.3*** 59.3*** 1897.6***

***=significant at the .001 level, ** = .01, * = .05
Robust standard errors in parentheses
Table 5.4: Logit Analysis of Military Intervention in Civil War (Contiguous States)

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*** = significant at the .001 level, ** = .01, * = .05

Standard errors in parentheses
Chapter 6

Intervention Effectiveness

6.1 Introduction

Having established that third parties choose intervention in an attempt to contain civil wars from infecting regional neighborhoods that are valuable to their foreign policy interests, a secondary question considers whether third party interveners are in fact effective in achieving their containment goals. This chapter is dedicated to answering this question.

Indeed states believe that their interventions have at least a reasonable chance of being successful. Otherwise there would be little sense in embarking on a costly intervention strategy in the first place. However, a reasonable ex ante calculation of success by potential interveners does not guarantee that a third party’s most preferred outcome will obtain in all cases. In fact, previous studies of intervention success or failure have produced somewhat ambiguous results with regard to the effectiveness of third parties in achieving their goals.

It is therefore valuable to explore the question of intervention success or failure in containing the spread of civil wars, as little may be known in the scientific and policy-making communities about the systematic effects of intervention on regional diffusion.
outcomes. In the following pages, I analyze the effect of third party intervention on the diffusion of civil wars. I begin with a discussion to identify a definition of intervention effectiveness as it relates to containing conflict hostilities.

6.2 Research Design and Analysis

6.2.1 Dependent Variable: Defining Intervention Effectiveness

For regional stability purposes, an effective intervention would successfully contain a civil war’s hostilities that may otherwise infect neighboring states in which the third party has significant foreign policy interests. Ideally, the analyses that follow would rely on data that specifically coded for those civil wars that remained contained to the civil war state and those conflicts that spread into their surrounding regional neighborhoods, noting which particular states in each region were infected by the violence. However, as is apparent in the discussion and analysis in Chapter 4, civil wars may occur for a number of reasons, cross-border contagion being one in addition to a number of domestic explanations. As a result, it is difficult to simply code which states experienced their own domestic conflict as a primary consequence of a violent spatial diffusion process from its neighbor. Complicating this matter further, there are instances in the data where a country shares a border with multiple civil war states. Determining whether a new civil war onset was the result of one neighboring civil war over another or a combination of more than one conflict would have required a level of subjective coding license that would have been tenuous at best. Therefore, it would be difficult to know with a minimal level of certainty that new conflict onsets in the region were in fact a result of contagion from one particular civil war and not as a consequence of other domestic political processes native to those countries sharing a border with the civil war state.
Lacking this information, there are two available approaches to determine the effectiveness of intervention within the confines of this project. First, the dependent variable could consider the change in the likelihood that each civil war will spread to its neighboring states. This approach would rely upon the measure constructed in Chapter 4 of the contagion risk posed to a third party’s valued foreign policy interests in the civil war state’s region. Recall that the components of this measure can be represented by the following model in which state \( j \) is a third party considering intervention in a foreign civil war for regional stability purposes:

\[
R_j = \sum_{i \neq j} \alpha_i \chi_{ij} \tag{6.1}
\]

In this model, \( \alpha_i \) represents the risk of the conflict spreading from the civil war state to its neighbor state \( i \), and \( \chi_{ij} \) represents the value of \( j \)’s foreign policy interests, if any, in state \( i \). The calculation of \( \alpha_i \chi_{ij} \) is then summed across all countries \( N \) that neighbor the conflict state to produce \( R_j \), the risk of infection posed to \( j \)’s foreign policy interests in the civil war state’s region.

Measuring the change in \( R_j \) over time is a potential means of measuring the change in the risk posed to those regional states with which the third party maintains a valuable relationship. The change in \( j \)’s assessment of the diffusion risk posed to its interests is demonstrated in the model below:

\[
\Delta R_j = \sum_{i \neq j} [\alpha_{i,t} \chi_{ij,t} - (\alpha_{i,t-1} \chi_{ij,t-1})] \tag{6.2}
\]

It is not simply the change in in the risk of contagion \( (\alpha_i) \) that concerns a third party with regard to the effectiveness of an intervention to contain a civil war, as a change in \( \alpha \) for regional state \( i \) is theoretically expected to be of little consequence to \( j \) if \( j \) has few vested interests in \( i \). Of interest here is the change in contagion risk to \( j \)’s
regional interests over a given period of time ($\Delta R_j$). In the above model, $\alpha_i$ and $\chi_{ij}$ are measured at some time ($t$) and compared with measurements of these components at some previous time point ($t-1$). If intervention was then found to have a systematically negative effect on the $\alpha_i\chi_{ij}$ calculation from time $t-1$ to time $t$, then intervention may be said to be generally successful at containing civil war hostilities.

However, there are two important limitations to this approach. First, in the calculation of $\Delta R_j$ it is uncertain whether the change in the values on my measures were indeed the result of changes in the probability of civil war contagion ($\alpha_i$) rather than a change in the affective relationship between the intervener and the states constituting the civil war region ($\chi_{ij}$). For example, consider the measure assessing the risk posed to $j$’s regional alliance relationships where $\chi_{ij}$ reflects the presence or absence of alliances between $j$ and all states $i$ in the civil war state’s region. In the calculation of a change in $\alpha_i\chi_{ij}$ over time, it is not simply the change in the probability of contagion that would affect the value of $R_j$. Should state $j$ choose to discontinue its alliance relationship with one or more states $i$ in the region while the probability of contagion remained constant over time, $\Delta R_j$ would decrease during this time period. As a result, any systematic analysis of intervention on the value of $\Delta R_j$ may be spurious, as changes in the affective relationship between $j$ and $i$ may play a role in determining the results rather than accurately measuring the effect of intervention on fluctuations in the likelihood of contagion.¹

Second, calculating $\Delta R_j$ may require a manipulation of the data beyond its limitations. If there were errors in the original coding of the data, a lack of objective

¹This issue would be a particular problem for a dependent variable that relied up the measure of $j$’s regional trade relationships, as trade between the potential intervener and members of the civil war state’s surrounding region is likely to fluctuate over time. The measures addressing alliance and geographic proximity relationships would likely suffer less from this issue, as alliance relationships and political geography tend to change less quickly than can trade relationships. However, none of the $R_j$ variables would be immune to the problem of constructing a $\Delta R_j$ dependent variable to analyze intervention effectiveness.
information on particular cases, or limitations as to the original data’s accuracy in reflecting the real world, these inaccuracies would have been compounded by yet another transformation of the data.

Given these limitations, a more practical approach to measuring the changing likelihood of regional contagion is necessary. Recall the theoretical and empirical analysis of civil war contagion from Chapter 4 which posited that as a civil war’s violence level increases, so too does its likelihood of infecting its neighboring states with its hostilities. Therefore, casualty rates may be a suitable proxy for the propensity of civil wars to infect their neighbors. Higher levels of hostility lead to an increasingly destabilized regional environment, increasing the threat of cross-border contagion faced by those countries constituting the civil war state’s region.

The level of violence produced by a conflict is certainly not the only predictor of contagion. As Chapter 4 notes, several other explanations of civil war diffusion have been theorized and tested in the literature. However, I argue that the intensity of war hostilities is the principal predictor of conflict contagion. Other explanations in the literature on civil war diffusion focus on the effect of violent spillovers, refugee flows, negative regional externalities, and demonstration effects among others. The intensity of the war’s violence is the primary theoretical driver of each of these more nuanced explanations. For example, violent spillover explanations consider the contagious effects of civil wars as the combatants tangle with one another during the hostilities. Where there are few geographic barriers between states, conflicts may more easily spill across borders as the violence is transmitted across space. However, the more intense the conflict, the more reckless the warring sides may become and the more likely that other proximate populations will be affected by or drawn into the fighting as the factions become less constrained by formal state boundaries.

Also, while refugee flows have been shown to decrease the level of domestic stability
in neighboring host states (Salehyan and Gleditsch, 2006), the onset and magnitude of a humanitarian crises are closely related to the presence of intense civil war hostilities. The more intense the hostilities, the greater the threat posed to the civil war state’s defenseless population. Civilians observe the level of hostility that characterizes a civil war and calculate their own likelihood of being harmed by the fighting. Increasingly intense conflicts cause larger numbers of people to flee the conflict state, seeking refuge in safe havens provided by neighboring countries. As refugee camps swell, the domestic stability of these host states decreases.

Similarly, the hostility level of a civil war is closely related to the severity of detrimental regional externalities. For example, knowing that the economic wellbeing of a population is closely associated with the ability of rebel organizations to attract followers (Collier and Hoeffler, 2002; Fearon and Laitin, 2003; Walter, 2004; Sorli, Gleditsch and Strand, 2005; Buhaug and Gleditsch, N.d.; Elbadawi and Sambanis, 2002), the extent to which civil wars produce negative economic externalities for neighboring states will affect the likelihood that new civil wars will ignite in the surrounding region. One would expect that increasingly intense hostilities in the civil war state would produce increasingly severe externalities as higher hostility levels are more likely to threaten economic stability, including threats to the availability of open trade routes and the supply of foreign direct investment to the region.

Lastly, civil wars produce demonstration effects for potential rebel groups in other proximate states. More intense conflicts are likely to send louder, more visible signals to marginalized groups in these nearby countries. The greater the visibility, the greater

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2In fact, a simple bivariate regression analyzing the magnitude of refugees hosted by countries neighboring a civil war state is positively related to the number of casualties produced by the conflict and is significant at the .001 level.

3See Murdoch and Sandler (2002, 2004) for an analysis of the negative regional economic effects of civil war.
the ability of potential rebel groups to learn from the strategies that were and were not successfully employed by the rebel group in the civil war state. This learning process should increase a potential rebel group’s calculated likelihood of a successful rebellion attempt, as the rebels increase their ability to determine what strategies are most likely to bring success against a sitting regime.

In sum, while the level of hostility produced by a civil war is not the sole predictor of war diffusion, it is the primary driver of the contagion process. More nuanced explanations of diffusion, including those noted above, are closely related to, if not dependent upon, the conflict’s intensity. Therefore, the temporal change in conflict intensity is a suitable proxy indicator of a conflict’s changing likelihood of regional diffusion over time. Although measuring a conflict’s hostility level is an imperfect means of representing a war’s propensity to spread, civil war intensity is the chief stimulant of diffusion. As a result, an analysis of the change in a conflict’s intensity over time should provide the opportunity to determine the effect of intervention on the changing likelihood of civil war contagion.

Yet, it is unclear what is the most reasonable period of time over which a change in conflict hostilities should be judged. I therefore measure changes in battle deaths over short- and long-term time periods. The short-term change in casualties produced by the conflict simply measures whether the amount of casualties produced in one year increases or decreases in the following year. This one-year change in casualty levels reports fluctuations in conflict intensity from one year to the next, allowing an analysis of whether intervention has an immediate impact on a conflict’s likelihood of spreading. The long-term change in casualties produced by a war measures the aggregate change in the number of battle fatalities from the year of observation to each of the following five consecutive years of conflict. This long-term change in conflict intensity...
intensity allows an analysis to determine whether intervention has a lasting effect on conflict hostilities. Third party interveners may have interests in the long–term stability of particular regions rather than simply focusing on short–run stability outcomes. As a result, the findings on the containment effect of intervention may differ depending on the timeframe being analyzed.

6.2.2 Data

To evaluate the effect of intervention on the propensity of civil wars to spread, data on casualty levels must be coded at the level of the conflict year. This requires fine–grained data on the number of casualties produced by each civil war within the temporal domain evaluated by the analysis. Battle deaths data in the Armed Conflicts Dataset (ACD) provided by the Uppsala University Conflict Data Program in conjunction with the Peace Research Institute, Oslo, provides such a data format, which includes yearly information on all civil wars in the post World War II period from 1946 to 2005 (Lacina and Gleditsch, 2005; Harbom, Hogbladh and Wallensteen, 2006). For inclusion in the data as a recognized civil war, hostilities must take place between the government of a state and one or more domestic opposition groups for which a minimum casualty threshold of 25 battle–related deaths must be met in each year of conflict.

6.2.3 Primary Independent Variable

Using the ACD information on yearly conflict battle deaths requires that I also employ its coding of third party intervention. Ideally, preference would be given to using long–term change in casualties is carried out as follows: \((t_1 - t_0) + (t_2 - t_0) + (t_3 - t_0) + (t_4 - t_0) + (t_5 - t_0)\). As a robustness check, I also conducted the analyses presented below with a similar long–term dependent variable to calculate the aggregate per–year change. This variable was calculated as follows: \((t_1 - t_0) + (t_2 - t_1) + (t_3 - t_2) + (t_4 - t_3) + (t_5 - t_4)\). The results were very similar in their sign and significance on the intervention variable.
Regan’s (2000; 2002) data on intervention. These data include a broader range of intervention information on timing, intervention strategy, and the side supported. The Regan data are also more specific, as they indicate the particular type of intervention tools employed by the third party. However, Regan’s data do not include yearly battle death measurements. Also, the Regan data are not a perfect subset of the data provided by the ACD, making it difficult to merge Regan’s intervention data with the ACD’s battle death data.

However, for the purposes of this chapter, I am interested in investigating a more general effect of intervention on the changing likelihood of civil war diffusion. The Armed Conflicts Dataset provides information on third party intervention that allows me to conduct such an analysis. The ACD definition of intervention is somewhat different than Regan’s. The ACD codes four conflict types: extrasystemic, interstate, intrastate, and internationalized intrastate. Only the intrastate and internationalized intrastate categories are considered in the analyses that follow. The Armed Conflicts Dataset defines an internationalized intrastate conflict to be an intrastate conflict in which an intervening state becomes involved militarily as an active secondary participant in the conflict. In other words, for each instance in which an intrastate war becomes an internationalized intrastate war, an intervention into the conflict has taken place on either the side of the government or opposition forces. These data are sufficient for the purposes of testing whether intervention has a more general effect on civil war diffusion.

\footnote{As such, the ACD information on intervention is essentially a subset of the data provided by Regan, as Regan presents data on several military and economic forms of intervention, and the ACD only provides information on those interveners that become active participants in the conflict’s hostilities.}
6.2.4 Expectations

In the previous chapters it has been established that third parties choose to intervene in civil wars for regional stability purposes. The success or failure of third parties in containing civil wars from infecting their surrounding regions can be tested empirically. However, the theoretical expectations of intervention effectiveness are somewhat less straightforward. Drawing on the findings in the previous chapter, the existing literature on intervention and civil war dynamics, and case examples, I elaborate on three separate and empirically testable expectations of intervention’s effectiveness in containing the spread of civil war hostilities.

The first expectation of intervention’s effect on contagion is an intuitive one. Having found theoretical and empirical support for the idea that third parties choose to intervene when the prospect of civil war contagion threatens their regional stability interests, it is likely that third parties only intervene when they expect that their involvement will have some positive effect on the containment of the conflict. Third parties have ex ante beliefs about whether their intervention will positively affect the outcome of the war relative to their stability interests. As such, only those third parties that have some reasonably high expectation of success will choose to intervene. Assuming all else to be equal, those third parties that choose intervention have approximated their likelihood of success prior to intervening and have determined that intervention is a gamble worth taking. Without some minimal expectation of success, a third party is unlikely to choose intervention in the first place. Those interventions that are actually undertaken are those that are expected to be the most successful from the pool of potential interventions given each third party’s pre-intervention approximation of success. This intuition leads to the following hypothesis:

- H1a: In both the short-term and the long-term analysis periods, third party intervention will decrease the number of casualties produced by civil war.
However, pre-intervention forecasts of successful containment do not guarantee that the actual interventions employed by third parties will be effective more generally. Third parties may miscalculate by overestimating their capabilities, underestimating the intractability of the conflict, employing suboptimal strategies to match the conflict’s characteristics, or failing to anticipate changes in the conflict that occur after intervention.

In fact, previous studies have found that intervention has been somewhat ineffective in achieving its theorized aims. Regan has argued that the aim of intervention is to end conflict hostilities (Regan, 2000). Although the political motivation for intervention may not simply be an interest in stopping the violence, Regan argues that whatever the payoff for intervening, little can be gained unless the violence ceases for a period of time in which the third party’s political reward for intervention can be realized. However, empirical research has found that while third party states may indeed seek to halt civil war hostilities, they are not particularly effective in achieving this end, as most studies have found that external interventions tend to extend civil war duration (Regan, 2002; Elbadawi, 1999; Elbadawi and Sambanis, 2000a; Balch-Lindsay and Enterline, 2000).⁶

One possible explanation for the relative ineffectiveness of intervention, at least in terms of intervention’s effect on war duration, may be associated with the relationship between a conflict’s number of actively participating factions and the opportunities for resolution. Recent research has found that as the number of factions partaking in a conflict increases, so too does the war’s intractability (Cunningham, 2006; Doyle and Sambanis, 2000; Enterline and Kang, 2003). Increasing the number of war participants also increases the number of divergent preferences that must be met to bring a war

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⁶More recent work on diplomatic forms of intervention by Regan and Aydin (2006) finds that third party interveners that employ mediation strategies in their intervention attempts are significantly more effective at shortening the duration of civil war hostilities. However, diplomatic forms of intervention are not addressed in this project.
to resolution. As a result, empirical findings indicating that intervention extends the
duration of civil wars may obtain because yet another set of preferences need to be
satisfied before the conflict can abate.

As I noted in Chapter 3, the conflict duration and conflict containment interests of
third parties are not interchangeable. However, if a conflict’s intractability is related to
its duration, by the same logic we might also intuit that higher levels of intractability
also increase the propensity of civil wars to be regionally contagious. Intervention
may simply add another violent actor to the conflict, thus increasing the overall level
of hostility produced by the war and in turn increasing the conflict’s likelihood of
spreading.\(^7\) This logic yields the following hypothesis:

- **H1b**: In both the short–term and the long–term analysis periods, third party
  intervention will increase the number of casualties produced by civil war.

There is also support in the literature for a variable effect of intervention on civil war
outcomes depending on the time horizon being considered. Barbara Walter (1997; 1999;
2002) argues that third party security guarantees are critical to the successful settlement
of civil wars, as third parties provide the only means of resolving the security dilemma
that exists between government and rebel forces as the two sides attempt to demobilize

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\(^7\)While I argue that a conflict’s duration and propensity to spread are not perfectly associated
with one another, I recognize that wars of longer duration provide more opportunities for regional
contagion, all other things being equal. For example, suppose that each time point of a civil war
carries with it some probability \(p\) that the war will spread to a neighboring state. For a civil war
that lasts for a specified amount of time \(t\), the expected effect of diffusion to the neighbor state
may be represented by \(p(t)\). As the duration of the war is extended due to third party intervention
to \(t+n\), each time point past time \(t\) increases the overall likelihood that the neighbor state will be
infected by the violence. In other words, \(p(t + n) > p(t)\). However, my focus in this dissertation is on
the effect of intervention on the probability of contagion \(p\). If the effect of intervention on regional
contagion were to be parallel to the effect of intervention on war duration, then my interest would
consider the relationship between the likelihood of contagion with \(p_i(t)\) and without \(p\) intervention at
a given point in time. If this relationship was properly reflected in the inequality \(p_i(t) > p(t)\), then the
effect of intervention on regional contagion and war duration would be congruent with one another.
However, any other relationship between \(p_i(t)\) and \(p(t)\) would disassociate the contagion and duration
phenomena.
and commit themselves to lasting peace. While Walter’s research indicates that third parties are generally effective in achieving their aims when involving themselves in foreign civil wars, she does not provide an analysis of the time it takes for third parties to influence the outcome of these conflicts. It is conceivable that the effectiveness of intervention may differ in the short- and long-term. In the short-term, the addition of another violent party to the hostilities could increase the level of violence produced by the conflict, and thus also increase the probability of contagion. The combatants and civilians may perceive the intervention of a third party as an immediate escalation of the crisis. Fearing that the presence of an intervener may impede one or both of the combatant forces from achieving their aims in the war, the conflict participants may escalate their hostilities in the near-term, causing an increase in the conflict’s likelihood of infecting its regional neighbors.

This process played out in Rwanda’s civil war shortly after France announced Operation Turquoise, the French military intervention into the conflict. French involvement coincided with an immediate escalation of the war’s intensity. Although Operation Turquoise was initiated with the goal of restoring stability around the sitting Hutu regime, Hutu extremists within the regime escalated the genocide of Tutsi civilians while attempting to keep the atrocities from becoming public before their genocidal mission was complete. The French intervention posed a threat to the Hutu regime. Although the goal of Operation Turquoise was to restore stability around the Hutu-dominated status quo, concrete information of the genocide being carried out by the Hutus would surely sway French interests in stabilizing the Hutu regime. Also, if the

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8It should be noted that Walter’s research focuses on third party mediation and security guarantees, which is not equivalent to common definitions of third party intervention used in the civil war intervention research. Still, the logic of the arguments made by Walter are relevant to those made here.
French intervention was successful in enforcing stability, the genocide may go unfinished and would thus have been a failure from the perspective of extremist Hutus. As a result, Hutu forces escalated the rate at which Tutsis were targeted in an attempt to complete the genocide before Operation Turquoise could be effectively implemented.

This escalation by the Hutu government was responded to by the Rwandan Patriotic Front (RPF), the Tutsi rebel group that had been fighting the Hutu government in Rwanda’s northern territories. Similar to Hutu forces, the RPF also reacted with urgency upon French involvement in the conflict. The Tutsi offensive moved in a sweeping motion through the Rwandan countryside from the north, through the east, and toward the southwestern territories that were held most securely by Hutu forces. The RPF moved swiftly, engaging Hutu forces in an attempt to stop the genocide and overthrow the government in Kigali. Knowing the French government had traditionally supported Juvenal Habyarimana’s Hutu government, and believing the intervention would attempt to restore order around the sitting Hutu regime, the RPF attempted to achieve its war aims quickly by immediately escalating the conflict. In this sense, the French intervention coincided with a short-term escalation of the conflict as both government and rebel forces attempted to achieve their goals before Operation Turquoise could take effect (Kuperman, 2001). This escalation not only increased the intensity of the hostilities produced by the war, it also led to an increasing number of refugees fleeing the country and putting greater strain on Rwanda’s neighboring host states. More generally, the short-term result of the French intervention was an increased likelihood of civil war contagion.

The escalation of Rwanda’s hostilities and refugee crisis upon the initiation of Operation Turquoise is similar to the example of NATO’s intervention into Kosovo. Large numbers of refugees did not begin to leave Kosovo until the NATO bombing campaign had begun. The NATO intervention followed the passage of United Nations Security
Council Resolution 1199 that described the conflict in Kosovo as a “threat to peace and security in the region” which demanded “immediate action (Nation, 2003, 236).” Yet, NATO did not find either the government–controlled Yugoslav National Army (JNA) nor the Kosovar Albanian–controlled rebel organization, the Kosovo Liberation Army (KLA), to be particularly attractive sides with which to partner in the conflict. However, in response to Serbian human rights abuses, the disproportionate repression of civilians in Kosovo, and the regional spillover effects that these actions threatened to produce, Operation Allied Force was launched in an effort to compel Belgrade to cease the JNA’s heavy–handed activities in Kosovo. The operation sought to use superior NATO air power to suppress Serbian defenses and destroy the JNA’s capacity to continue its combat operations in Kosovo, thus addressing the proximate cause of instability in the Kosovo region.

However, the response by Milošević was to expand the ethnic cleansing being carried out by the JNA in Kosovo. Viewing the NATO intervention as an immediate escalation of the conflict, masses of refugees sought sanctuary from the fighting and the ethnic violence by fleeing the Kosovo conflict zone. Approximately 840,000 refugees fled Kosovo (UNHCR, 2004). The short–term result of the NATO intervention could thus be seen as increasing the likelihood of contagion because the conflict was escalated in the near–term. Criticism of Operation Allied Force argued that the NATO intervention escalated the conflict into a humanitarian disaster, an outcome that NATO had hoped to prevent. In other words, the short–term result of the NATO intervention was to increase the threat of diffusion to the surrounding region.

However, the operation was given time to have its intended effect. NATO air strikes, led predominately by the United States, severely weakened the JNA’s capabilities. Partnered with the threat of NATO ground forces, Belgrade eventually relented on its designs for Kosovo. The region became substantially more stable as the fighting ended,
and displaced peoples began to leave their host countries to return to their homes in Kosovo. As Nation states,

“NATO won the war in Kosovo... Milošević’s forces were compelled to withdraw from the province which was immediately occupied by KFOR (NATO’s ‘Kosovo Force’). Hundreds of thousands of Kosovar Albanian refugees were permitted to return to their homes, and the humanitarian disaster so feared at the outset was headed off with thousands, or tens of thousands, of lives spared as a consequence. The conflict itself was contained, and... its impact upon the surrounding region was not allowed to escalate out of control (Nation, 2003, 262).”

From these examples, we might expect that while an intervention may increase the threat of regional diffusion in the near–term, given sufficient opportunity for the intervention to fully take effect, we might alternatively expect third parties to be successful in their attempts to contain the war’s hostilities in the long–run. These arguments are captured by the following hypothesis:

- H1c: In the short–term analysis period, third party intervention will have a positive effect on the number of casualties produced by civil war. However, in the long–term analysis period, third party intervention will have a negative effect on the number of casualties produced by civil war.

### 6.2.5 Control Variables

In an analysis similar to those conducted below, Bethany Lacina (2006) models the hostility level of civil wars in the post–WWII period. However, Lacina’s goal is to determine what explains the variation in the overall severity of these conflicts by measuring the number of battle deaths produced by each conflict using a new dataset on
battle–related fatalities (Lacina and Gleditsch, 2005). In contrast, my intention is to measure the change in a civil war’s intensity over time, thus providing an understanding of each conflict’s changing threat of spreading into its surrounding region. Still, Lacina’s research provides a valuable starting point for my analysis, as several of the factors associated with a war’s overall severity may also be associated with its changing intensity over time. With this in mind, I introduce the control variables pulled from Lacina’s previous research.

Lacina’s regression analysis uncovers four significant predictors of civil war severity that I reproduce in my analysis. First, Lacina finds an unsurprising result that the duration of civil war is closely related to the number of casualties produced, as longer civil wars produce more fatalities. A variable for war duration is included in the following analysis. However, the expectation on this variable is quite different from Lacina’s. Since I am addressing the change in battle deaths over time, one might not expect a conflict to accelerate its violence levels as it drags on over multiple years. In fact, intuitively one should expect that as conflicts become increasingly long, the ability of the combatants to endure increasingly high numbers of casualties should degrade as the government and rebel forces are depleted. As such, I expect that as the duration of a civil war increases, the change in civil war casualties over time should decrease, yielding a negative coefficient for the Duration variable.9

Lacina finds a positive and significant effect of the Cold War, confirming her expectation that the greater availability of foreign assistance to both rebel and government factions during this time period should lead to more costly civil wars. One might also extrapolate from this finding that the ideological climate of the Cold War, all other things being equal, should lead to civil conflicts that escalated more quickly relative

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9This variable is coded as the number of conflict years that have passed prior to the conflict year observation. As in Lacina’s work, I transform this variable by taking the natural log of duration years.
to the less ideologically competitive climate of the post–Cold War period. I therefore expect a similar result to that reported by Lacina, as the Cold War variable should be positively related to the change in civil war violence over time.\(^\text{10}\)

Drawing on the theoretical foundations of the democratic peace, Lacina expects a state's regime type to affect the overall severity of domestic conflicts.\(^\text{11}\) Specifically, she hypothesizes that democracies should experience less severe civil wars for three reasons. First, as in interstate conflicts, democracies tend to pick fights that they believe can be won at minimal cost (Bueno de Mesquita, Siverson and Woller, 1992; Bueno de Mesquita and Siverson, 1995; Bueno de Mesquita and Lalman, 1992; Siverson, 1995). If domestic conflicts are similar to international conflicts in this sense, then one might expect to observe less violent and easily checked civil wars in democracies. Second, democratic governments are commonly invested in norms of peaceful conflict resolution rather than using violent measures to repress disaffected domestic groups. Third, Lacina argues that democracies are more easily capable of coopting dissatisfied groups into the existing political framework through peaceful negotiation. Authoritarian groups are less capable of incorporating violent resistance organizations into the existing power structure. For these reasons, we might also expect democracies to be capable of muffling civil wars before they escalate to high levels of intensity. As a result, democratic forms of governance should be negatively related to a change in civil war hostility level over time, producing a negative coefficient for the Regime Type variable.\(^\text{12}\)

The last significant predictor of civil war severity in Lacina’s analysis is a civil war

\(^{10}\)The Cold War variable is coded 1 from 1946 through 1989 and 0 thereafter.

\(^{11}\)Lacina admits to a potential selection effect in her analysis as some regime types may be less likely to experience civil wars in the first place. Her results are therefore interpreted as the effect of regime type among those countries that actually experience civil wars.

\(^{12}\)Data on regime type are provided by the Polity IV dataset (Marshall and Jaggers, 2000). The Regime Type variable is dichotomous, where a Polity score of six or greater is coded 1 for democracy and a score of less than six is coded 0.
state’s level of ethnic polarization. Drawing on work by Horowitz (1985), Huntington (1997), and Thies (2004), Lacina hypothesizes that the more ethnically polarized the civil war state, the more intractable the issues of the conflict are likely to be as ethnic differences make the warring factions inflexible to conflict resolution.\footnote{Lacina actually finds a negative relationship between ethnic polarization and conflict severity. In readdressing this supposedly counterintuitive result, she speculates that “in ethnically homogeneous societies virtually the entire population can be implicated in the conflict, and it is more difficult to determine who is on what side, leading to more indiscriminate use of force (Lacina, 2006, 287).”} An analysis of a conflict’s change in hostility level over time might incorporate a similar logic by arguing that ethnic differences lead to rapid escalations of a civil war’s violence, especially in those cases when dormant yet supposedly primordial ethnic hatreds erupt into violence. Therefore, the Ethnic Polarization variable should be significantly related to a positive change in conflict hostility level.\footnote{The dichotomous coding of Ethnic Polarization is taken from Fearon and Laitin (2003). A polarized population is characterized by a minority ethnic group accounting for a minimum of eight percent of the total population.}

I also transform one of Lacina’s insignificant variables and include it in my analysis. While a state’s population size is commonly found to be positively related to the onset of civil war (Sorli, Gleditsch and Strand, 2005; Regan and Norton, 2005; Buhaug and Gleditsch, N.d.; Elbadawi and Sambanis, 2002; Fearon and Laitin, 2003; Collier and Hoeffler, 2004, 2002), Lacina finds that it has no significant effect on conflict severity. Total population size may not be directly related to a change in hostility level. However, the change in population size over time may indeed be related to an increased or decreased number of fatalities produced by the conflict. This is a supply–side variable in the sense that if a state’s population decreases, as a result of the conflict or other phenomena including famine or disease, so too should the supply of combatants available to join and die in the conflict, thereby reducing the number of recruits that could be counted among the conflict’s fatalities. In other words, the change in population...
over time, represented by the Population Change variable, should be positively related to the change in hostility level.\textsuperscript{15}

To the variables taken from Lacina’s analysis, I also add three relevant independent variables. First, Current Fatalities measures the number of battle deaths in the year being observed. This predictor is included to ground the analysis of a change in battle fatalities in the context of the current violence level. The expectation is that as the number of deaths recorded at time $t$ rises, it will become more difficult for the conflict to escalate even higher, thus yielding a lower number of casualties produced at time $t + 1$ relative to those produced at time $t$. Including Current Fatalities in the analysis is practical. Wars reaching their peak levels of intensity in any one time period leave little room for further intensification in future periods, as highly intense conflicts are more likely to burn themselves out. This may result from a shallower pool from which the factions can draw combatants and resources, or the high level of casualties in one period may induce battle fatigue in a subsequent period. Both effects should reduce the number of casualties experienced in the following conflict time period.

Lastly, I include variables that code for the type of conflict being waged. The ACD data code for civil wars that are fought primarily over control of the government or disputed territory. I therefore include two variables in the analysis to distinguish the conflict type: Government Conflict and Territorial Conflict.\textsuperscript{16} Conflicts over the government may escalate more quickly as the combatants may view control over the government as a zero–sum game. Should the regime lose control of the state apparatus,

\textsuperscript{15}Population Change measures the change in the civil war state’s population from one year to the next. These data are taken from the disaggregated Correlates of War Project National Material Capabilities dataset (Singer, Bremer and Stuckey, 1972).

\textsuperscript{16}These variables are mutually exclusive. Therefore, Government Conflict is dropped from the analysis due to collinearity.
all governing power would be lost, and government officials may face the threat of post–
war executions. As a result, the sitting regime may respond ferociously to a violent
rebel organization, resulting in a quickly escalating conflict. On the other hand, rebel
groups seeking control over territory may be assuaged more easily through guarantees
of varying levels of autonomy over the land they seek to control, thus preventing a
rapidly escalating conflict spiral.

Alternatively, the value of territory is often very high due to cultural, ethno–
nationalist, or religious attachments, in addition to the more tangible value of territory
that includes natural resources, commodities, or commercial opportunities. As a result,
civil wars fought over territorial disputes may raise the level of hostility more quickly
than wars fought for control of the state, as the combatants may be more willing endure
increasingly high levels of violence if their cultural, ethnic, or religious identities and
economic wellbeing are tied to the disputed territory.

6.2.6 Statistical Model

The statistical model used to address the effect of third party intervention on the change
in civil war fatalities must be capable of analyzing a continuous dependent variable.
A standard regression model is appropriate for this purpose. However, to account for
the potential dependence of observations, I also clustered the results by the conflict
identification and the civil war country. In addition, I ran a generalized least squares
regression model with random effects to account for the cross-sectional times series
nature of the data. Lastly, a treatment effects regression model was used to test for
a potential selection effect of my primary independent variable. In this model, Intervention
was “treated” by several relevant independent variables including, Cold War,
Current Fatalities, Regime Type, and Duration. Each of these models checked for the
robustness of the results reported below, and in each the findings were similar in their
sign and significance to the results on the primary independent variable, Intervention, reported in Tables 6.1 and 6.2. I therefore report the standard linear regression models in the following section.

6.2.7 Results

Table 6.1 reports the effect of third party intervention on the short–term change in the number of casualties produced by civil war. Intervention yields a result that is inconsistent with Hypothesis 1a, but consistent with both Hypotheses 1b and 1c. Judging from the positive and significant coefficient, intervention tends to increase the level of conflict hostility in the short–term. From Hypotheses 1b and 1c, we may interpret this result to mean that the presence of an intervention may simply increase the short–term level of hostility in a civil war due to the fact that yet another violent participant has been added to the conflict making it increasingly intractable and less amenable to the goals of any one combatant party (Hypothesis 1b). Alternatively, it is possible that the government and rebel forces tend to ramp up the level of the violence in the short–term following intervention in an effort to achieve their war aims before the intervener can successfully implement its stability interests (Hypothesis 1c).

The interpretation of the result for Intervention in Table 6.2 is quite different than that produced in Table 6.1. Table 6.2 reports findings for the long–term effect of third party intervention on a civil war’s change in casualties. It appears from the negative and statistically significant coefficient that intervention in fact decreases the five–year aggregate change in casualties produced by the conflict. Taken alone, this result supports Hypotheses 1a and 1c but rejects Hypothesis 1b. The long–term negative effect of intervention on the change in a civil war’s casualties may thus obtain as a result of the fact that those potential interveners that choose to intervene do so after calculating of their own accurate ex ante estimations of a successful outcome to their intervention.
Table 6.1: Regression Analysis of 1-Year Change in Civil War Violence

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>1451.55**</td>
</tr>
<tr>
<td></td>
<td>(539.01)</td>
</tr>
<tr>
<td>Duration</td>
<td>-77.57</td>
</tr>
<tr>
<td></td>
<td>(245.61)</td>
</tr>
<tr>
<td>Cold War</td>
<td>-299.93</td>
</tr>
<tr>
<td></td>
<td>(195.59)</td>
</tr>
<tr>
<td>Regime Type</td>
<td>-2.91</td>
</tr>
<tr>
<td></td>
<td>(143.96)</td>
</tr>
<tr>
<td>Ethnic Polarization</td>
<td>189.99</td>
</tr>
<tr>
<td></td>
<td>(414.59)</td>
</tr>
<tr>
<td>Population Change</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>(0.01)</td>
</tr>
<tr>
<td>Current Fatalities</td>
<td>-0.17**</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
</tr>
<tr>
<td>Territorial Conflict</td>
<td>-217.16</td>
</tr>
<tr>
<td></td>
<td>(210.80)</td>
</tr>
<tr>
<td>Constant</td>
<td>679.75</td>
</tr>
<tr>
<td></td>
<td>(957.11)</td>
</tr>
</tbody>
</table>

Observations: 1208

$R^2$: .25

**=significant at the .01 level, * = .05

Standard errors in parentheses
attempt (Hypothesis 1a). Also, it is conceivable that interveners need a reasonable period of time during which their intervention strategies can be implemented and their regional stability aims met (Hypothesis 1c).

Considering these analyses simultaneously, Hypothesis 1c is confirmed the most convincingly. Intervention appears to have differing short- and long-term effects on the number of casualties produced by civil war. Intervention increases the level of violence produced by civil conflict in the short-term, as the number of casualties that result from the fighting increases in the single-year time change. However, given the opportunity to have a lasting effect on conflict dynamics, intervention decreases the overall number of casualties incurred by civil war in the five-year aggregate time change.

The results for several of the control variables report somewhat mixed findings. In the short-term analysis, only Intervention and Current Fatalities are significant and consistent with their theorized expectations. The remaining control variables in Table 1 appear to have no significant relationship with the short-run change in casualties. Across both the short- and long-term analyses, Current Fatalities reports a negative and significant effect on the change in war casualties. This is an unsurprising result. As the number of fatalities produced in the current time period increases, the ability of the combatants to commit even greater soldiers and resources to the conflict should decrease. In other words, the government and rebel factions cannot continue to accelerate the level of violence in each successive time period, as battle fatigue and a limited pool of resources make it impossible to sustain a monotonically increasing level of violence.

War duration is expected to have a negative effect on the change in conflict casualties similar to the effect of Current Fatalities. However, the effect of Duration is mixed. While Duration’s effect is as theorized in the the long-term analysis, it is insignificant in the short-term, albeit with the proper sign on the coefficient. It may be that the duration of a conflict has a more notable effect on the long-term projections of the
Table 6.2: Regression Analysis of 5-Year Aggregate Change in Civil War Violence

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>-8193.84**</td>
</tr>
<tr>
<td></td>
<td>(4095.50)</td>
</tr>
<tr>
<td>Duration</td>
<td>-2453.37**</td>
</tr>
<tr>
<td></td>
<td>(1200.51)</td>
</tr>
<tr>
<td>Cold War</td>
<td>4583.66***</td>
</tr>
<tr>
<td></td>
<td>(1063.04)</td>
</tr>
<tr>
<td>Regime Type</td>
<td>-1795.62*</td>
</tr>
<tr>
<td></td>
<td>(1031.50)</td>
</tr>
<tr>
<td>Ethnic Polarization</td>
<td>-4036.28</td>
</tr>
<tr>
<td></td>
<td>(4439.74)</td>
</tr>
<tr>
<td>Population Change</td>
<td>-0.04*</td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
</tr>
<tr>
<td>Current Fatalities</td>
<td>-0.55**</td>
</tr>
<tr>
<td></td>
<td>(0.22)</td>
</tr>
<tr>
<td>Territorial Conflict</td>
<td>-1495.84</td>
</tr>
<tr>
<td></td>
<td>(1803.86)</td>
</tr>
<tr>
<td>Constant</td>
<td>11184.02*</td>
</tr>
<tr>
<td></td>
<td>(6810.55)</td>
</tr>
<tr>
<td>Observations</td>
<td>1208</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.14</td>
</tr>
</tbody>
</table>

***=significant at the .01 level, ** = .05, * = .1
Standard errors in parentheses
warring parties. The longer a conflict endures, the government and rebel factions are more likely to limit their long–term willingness to continue accepting an increasing casualty toll. However, the effect of these projections may be less critical to their short–term designs on the battlefield.

Neither Cold War nor Regime Type are significant in the short–term analysis. However, both behave as expected with regard to the long–term change in conflict casualties. The long–term results are as hypothesized. The positive coefficient on the Cold War variable in Table 6.2 supports the idea that civil wars had a tendency to escalate quickly given the ideologically–charged Cold War climate relative to less geo–strategically tense post–Cold War time period. The negative coefficient for Regime Type in Table 6.2 supports the expectations derived from the democratic peace arguments made above. Although the sign of the coefficient in Table 6.1 is in the expected direction, the variable is insignificant, and thus nothing can be credibly deduced from this result.

Ethnic Polarization, Population Change, and Territorial Conflict are each insignificant in their effect on the short–term change in battle fatalities. In the long–term, only Population Change is significant yet only at a marginal .1 level. Therefore, very little can be said about the effect of these variables with regard to the change in civil war casualties over time more generally.

6.3 Discussion

From the results reported above, Hypothesis 1c is the most conclusively supported. Interventions appear to increase the number of casualties in the short–term, while substantially reducing them in the long–term. Knowing that the number of casualties produced by a civil war is positively and significantly related to conflict diffusion, the results reported in this chapter indicate that third party intervention tends to increase the short–term likelihood that a civil conflict will infect its surrounding neighborhood. By
adding another violent participant to an ongoing civil war, the result in the near–term is to increase the likelihood of regional contagion. However, given the opportunity to establish their regional stability strategies, interveners appear to be relatively successful in containing civil wars from spilling across state boundaries into their surrounding regional neighborhoods.

These findings appear to fit existing historical examples. As noted above, the war in Kosovo experienced a substantially increased likelihood of regional diffusion immediately after the NATO bombing campaign began against Serbian forces. The conflict’s intensity level increased as the JNA and KLA clashed fiercely and the JNA carried out atrocities against the Kosovar Albanian population. In addition, the initiation of the NATO operation was followed almost immediately by a refugee exodus from the conflict zone into surrounding territories. The result was increased strain on the domestic capacities of neighboring states, thus increasing the likelihood that these neighbor states would fall victim to their own domestic violence as Kosovo’s contagious instability was transmitted across its borders. However, the NATO intervention was eventually able to punish Serbian forces to the extent that Milošević found it too costly to continue attempting to impose Serbian designs on Kosovo. The ultimate result of the NATO intervention was a cessation of conflict hostilities, which is the most dramatic form of containment, as the instability being exported by the conflict ceases when the violence ends.

Intervention brings with it an initial level of uncertainty. As evidenced in the Rwandan and Kosovar cases, the intervention of a third party initially sparked an increased level of violence in the conflicts, as rebel and government forces attempted to achieve their war aims quickly before the intervention could impose itself on the combatants. In this sense, intervention is somewhat of an unknown quantity, as the goals of the intervener may not be totally clear from the perspective of the combatants.
Without knowing how the presence of an intervention will affect the long–term outcome of the conflict, it is not particularly surprising that the factions escalate their hostilities in the immediate aftermath of a third party intervention. First, the violence between the original rebel and government combatants increases as the two warring factions escalate their efforts to achieve one of two things. At best, the factions may hope to realize their war aims fully through the defeat of its enemy in the immediate short–term prior to the effective infusion of intervention forces. A more modest goal could be to gain the upper hand over the other faction on the battlefield in the hope that this advantage will either persist after the intervention or, at the least, be difficult to reverse upon the intervention of the third party.

In addition to the immediate escalation of the violence by the original government and rebel combatants, a second reason for the initial increase in a conflict’s likelihood of regional contagion is that the addition of another violent party to the conflict has an escalatory effect on the short–term level of contagious hostilities being produced by the war. The presence of additional actors appears to yield additional violence, at least in the short–term. However, given the time to contain these hostilities to the civil war state in an attempt to prevent the diffusion of violence to the surrounding region, intervention can have a lasting effect on conflict containment.

It is important to note that the Intervention variable is one of only two variables that are significant across both short– and long–term analyses. This is an interesting finding, as it indicates that intervention is an important factor in explaining the changing likelihood of civil war diffusion. Future research on this topic should delve more deeply into intervention dynamics and their effect on contagion processes. Future analyses may address the impact of intervention on contagion contingent upon the side supported in the conflict by the third party, the intervention strategy employed, or the timing of the third party’s involvement. Further research may find that different
conflict types pose different challenges to interveners and thus produce different results on the likelihood of diffusion. There are a number of interesting avenues for subsequent work on this topic that address more nuanced questions on the relationship between intervention and regional contagion processes. The goal of this initial analysis, however, was to uncover the more general effect of third party intervention on the diffusion outcomes of civil wars. The promising findings reported above justify deeper investigation into this relationship.

The following chapter concludes with an overview of the lessons learned from the theoretical and empirical insights of this dissertation. In addition, policy prescriptions derived from the results reported in this and previous chapters are presented with the aim of improving our understanding of the policy options available for confronting the regional destabilization consequences of civil wars.
Chapter 7

Conclusions

7.1 Review

Since the end of World War II, civil wars have become the primary form of conflict in the international system, far outnumbering conflicts between countries during that time. Third party intervention is a rather common phenomenon in these conflicts. While we have learned a great deal about the motivations of third parties and the effectiveness of their intervention attempts, the common approach of research on intervention has been somewhat narrowly focused on the affective connections between potential third party interveners and the civil war state.

I argue that civil wars are international events, having consequences that affect their surrounding regions. Previous research on the international aspects of civil wars and the analysis conducted in Chapter 4 make clear that civil wars have geographically contagious properties. An innovation of this dissertation finds that it is not simply the presence of proximate conflicts that lead to the transborder spillover of civil war hostilities. Instead, the intensity of these conflict hostilities help to explain whether civil wars will infect their neighbors. For example, a civil war that produces tens of thousands of casualties is more destabilizing for its surrounding region than a conflict
that produces several hundred casualties. While there are multiple explanations of the diffusion process, including the spillover effects, refugee flows, negative regional externalities, and demonstration effects produced by civil conflicts, the primary driver of these more nuanced determinants is the conflict’s level of violence. It is thus unsurprising that the intensity of conflict hostilities are found to be closely associated with civil war contagion in the analyses conducted in Chapter 4.

The spatial diffusion of civil wars is one of the more conclusive findings in the civil war literature. Having found further evidence of this phenomenon, I go on to argue that third parties consider the regional diffusion consequences of civil wars when making their intervention decisions. States intervene in foreign civil wars for a multitude of reasons. One reason that is commonly purported by decision makers but has gone untested in the scientific literature on civil war are third party concerns regarding the regional destabilization consequences of conflict hostilities. While intervention certainly is not the only containment strategy available to third parties, I argue that it is the most direct and dramatic means available to them for affecting a conflict’s diffusion dynamics. Interveners often tout their regional stability interests when justifying the need for intervention. However, it is not simply the level of instability being exported by the civil war state that determines whether or not a third party will choose to intervene. Rather, the value of the region put at risk by the contagious hostilities is also critically important. It is the combination of a third party’s perceived likelihood of regional diffusion and the value of its regional investments that are put at risk by the threat of diffusion that determine whether a third party will choose to intervene. Only when the potential intervener observes sufficiently high values on these two dimensions will it choose to become involved in an attempt to contain the conflict’s hostilities from spilling into the civil war state’s neighboring countries. The results reported in Chapter 5 support these claims with an analysis of all potential interveners in all civil
wars from 1950 to 1999. The findings indicate that as the threat of diffusion posed to a third party’s security, economic, and geographic interests increase, so too does the third party’s likelihood of intervention.

Finally, having found theoretical and empirical support for the regional stability considerations of third parties in the intervention decision making process, Chapter 6 empirically tests for the overall effectiveness of intervention in achieving the containment goals of third parties. The goal of this chapter was to test the more general effect of intervention on the contagious properties of civil wars. Using a measure that reflects a civil war state’s changing hostility level as the primary driver of the diffusion process, the effect of intervention on the short– and long–term changes in the likelihood of contagion was tested on the population of civil wars in the post–WWII period. The results indicated that intervention has varying effects on the short– and long–term time frames. It is hypothesized that intervention adds a level of uncertainty in the short–term, where one or both rebel and government factions have incentives to escalate the civil war in the short–run. Fearing that the presence of the intervener may detrimentally affect a faction’s ability to achieve its war aims, an immediate escalation of the conflict is expected as one or both factions attempts to either obtain its goals in the short–term or, at the least, achieve a position of strength and improved bargaining leverage over its opponent. Furthermore, the addition of another violent member to the conflict increases the level of hostilities soon after intervention. However, with time to establish their intervention strategies, third parties are effectively able to decrease the contagious likelihood of civil conflicts.

This research makes contributions to both the policymaking community and to the scientific study of civil war and conflict more generally. I will conclude with considerations for both.
7.2 Lessons for the Policymaking Community

Research that considers the regional destabilization consequences of civil wars and the role of external powers is timely given the current status of the conflict in Iraq. From an American intervention perspective, this particular conflict does not perfectly reflect the story told in this dissertation in the sense that the civil war in Iraq was not a preexisting conflict that subsequently attracted American intervention. Rather, the American invasion in 2003 and subsequent occupation of Iraq preceded the current civil war. In this sense, no distinct intervention decision was made by the United States to involve itself in an ongoing conflict. Still, the research conducted in the previous chapters speaks to the ongoing considerations of third parties for the Iraqi civil war.

First, the conflict in Iraq exhibits several characteristics that are commonly associated with regional contagion. The conflict has produced intense sectarian violence and yielded scores of refugees seeking sanctuary in neighboring states. Many of these refugees have not been from the more destitute classes of Iraqi civilians. As a result, the flow of refugees out of Iraq has not posed a terrible economic burden to the surrounding region. However, some observers expect that the presence of American troops is all that stands in the way of masses of underprivileged people flooding across the borders of Saudi Arabia, Syria, Kuwait, and Iran (Byman and Pollack, 2006, 2007). Furthermore, transborder ethnic connections between Iraq and its neighbor states increase the likelihood that heightened violence could lead to spillover effects for ethnic kin groups in the surrounding region.

Should the American presence in Iraq fail to contain the violence, the most likely interveners would be those states that directly face the detrimental effects of spillover: Saudi Arabia, Syria, Turkey, and Iran in particular. Saudi Arabia and Syria may expect a wave of refugees flooding across their borders should the American military begin to withdraw, as many of the current refugees have sought safe haven across these borders.
In addition, Syria has previously been accused of failing to seal its border from the al Qaeda militants, insurgents, and Saddam Hussein loyalists that have conducted cross-border raids into Iraq. With an existing level of militant activity in Syria, the potential for increased domestic violence in Syria grows as the combatant factions in Iraq may spill across their porous shared border.

Both Turkey and Iran have substantial Kurdish populations. The Kurds are the largest stateless ethnic group in the world. A successful Kurdish play for increased autonomy, if not full statehood, in northern Iraq could create demonstration effects for the Kurds in southern Turkey and northwestern Iran. As a result, the ethnic Kurdish populations in these states may call for their own territorial autonomy or unity with their kin in Iraq, threatening the territorial integrity of both Turkey and Iran. Turkey and Iran also share long borders with Iraq that are difficult to patrol effectively, making intervention in Iraq an attractive policy alternative in an effort to contain the potential spillover effects of the conflict. Turkey, it has been claimed, has already begun the process of massing troops along its southern border with Iraq with the alleged aim of weakening the Kurdish military capacity in an effort to contain the conflict in Iraq from sending a positive signal to its own Kurdish minority (Dickey and Barry, 2007). Iran has also been accused of providing support to Muqtada al Sadr’s Mahdi Army in an effort to improve the potential for a future Shiite–dominated Iraq that would in turn be friendly to Iranian regional hegemonic interests.

The worst case scenario for the contiguous neighbor countries and for the international community more generally would be for the civil war in Iraq to infect the surrounding region. Such an outcome would have far-reaching consequences for such a strategically important region of the world, not the least of which would be its potential effect on the global supply of oil.

However, regional conflict diffusion is not a foregone conclusion for the Iraqi conflict.
Indeed, while the results from the previous chapter point to an increased likelihood of contagion as a consequence of intervention in the short–run, this diffusion effect is offset by the containment outcome that is achieved in the long–run. In fact, the coefficient reporting the effect of intervention on the long–run is larger in the negative direction than the positive effect of intervention in the short–run, indicating that the overall effect of intervention is to reduce the number of casualties produced by the conflict, thus reducing the likelihood of regional contagion.

From the perspective of American foreign policy decision makers, the lesson to be learned from this result may be that maintaining a presence in Iraq will pay dividends in the long–term even though observable progress may be limited in the short–term. The results from chapter six note that interveners hoping to maintain regional stability need to be wary of the short–term effect of intervention as the decision to intervene may not seem to produce the desired outcomes in the immediate aftermath of intervention. However, the results also indicate that third parties are more likely to experience positive results in the long–term time frame. In this sense, third parties should choose intervention when they have sufficient capability to weather the initial storm of increased hostility levels. Bearing these initial costs gives way to improved regional stability in the long–run.

For example, implementing this advice may have been beneficial to the containment of the Rwandan conflict at the outset of the genocide in 1994. After an initial escalation of the violence in which eight Belgian troops, in Rwanda under UN auspices, were killed in the fighting, Belgian forces were withdrawn soon thereafter. However, speculation since the war in Rwanda has commonly held that the presence of relatively few well–armed troops could have substantially reduced the level of violence and the regional catastrophe that resulted from it had they been committed to the conflict in its early
stages. The estimation made by the Carnegie Commission for Preventing Deadly Conflict, a group that included representation from the US Army, noted that the presence of approximately 5,000 troops could have significantly decreased the loss of life in the Rwandan conflict and effectively prevented the genocide (Feil, 1998). Even estimates, like that put forth by Alan Kuperman (2001), refuting the ability of foreign powers to stop the violence do so on the grounds that an intervention force may not have been able to reach the conflict at an early stage. Still, Kuperman’s conservative estimates claim that the presence of an intervention force likely could have reached the conflict at a point during which these forces could have saved the lives of approximately 75,000 to 125,000 people, a substantial reduction of the violence. More generally, the lesson for foreign policymakers to draw from this research is that the decision to intervene for conflict containment should be made when a third party has distinct regional interests and the capacity to weather the initial escalation of the conflict in the short–term. By doing so, improved containment outcomes are more readily achievable in the long–term.

7.3 Contributions to the Scientific Study of Conflict

In addition to lessons drawn for the foreign policymaking community, this research makes contributions to the conflict processes literature. First, this dissertation adds to work by scholars that are increasingly attempting to incorporate information on the temporal and spatial contexts in which states interact.¹ In doing so, scholars are accounting for the international context and the interdependence of observations that are absent in studies focusing solely on the dyadic level of analysis. The research conducted in Chapters 4 and 5 provide an interesting way in which to capture information

¹For examples, see Bueno de Mesquita (1981); Signorino and Ritter (1999); Crescenzi and Enterline (2001); Ward and Gleditsch (2002); Crescenzi (2007); Crescenzi, Kathman and Long (2007); Beck, Katz and Tucker (1998).
that exists outside of the dyad and incorporate it into a dyadic research design. Using predicted probabilities of civil war onset in neighboring states, I am effectively able to represent a civil war’s likelihood of spreading from one state to the next as a predictor of intervention behavior. Regional context is a particularly important aspect of many events that occur in the international system. As Maoz (1996) states, “The political, strategic, and economic behavior of states depends to a large extent on the kind of environment surrounding them. When the characteristics of this environment change dramatically, states must adjust to meet the threats or respond to the opportunities created by these changes (p. 142).” However, our theorizing about, and our ability to empirically represent, these regional aspects of international phenomena have been limited. Using the tools discussed in previous chapters, I am effectively able to capture a significant regional aspect of conflict phenomena and incorporate it into the traditional dyad–year research design. By doing so, I am able to account for an explanation of intervention that is commonly purported by state leaders but for which we had not previously represented in our models of intervention.

This is an important step in conflict processes research. Much of the research that is conducted on interstate conflict phenomena relies upon the dyad or the dyad–year unit of analysis. As a result, our explanations of events occurring in the international system are often relegated to characteristics of individual states, dyadic connections between states, or broader international system characteristics. Yet, explanations of international events may be substantially more complex than existing dyadic models let on. An explanation of the way in which two states interact with one another may rely heavily upon the relationship between them. However, their interactions also may be a function of their relationships with other states over time or their location relative to other states in the system. These are aspects of international phenomena that are impossible to capture by simply looking at dyadic relationships, and difficult to account
for when using the dyadic level of analysis.

Conflict phenomena, whether interstate or intrastate, are a partial result of their international contexts. For civil wars, a growing literature has found that the onset of civil war, duration of hostilities, and the outcomes associated with the conflict are determined at least in part by factors external to the civil war state. In addition, what is clear from the civil war diffusion literature is that the consequences of civil conflicts are rarely, if ever, constrained by the confines of the civil war state’s national borders. Even if a civil war does not spread its violence to a neighboring state, detrimental regional externalities are common characteristics of civil conflicts. Domestic violence often produces refugee flows out of the conflict state, regional economic recessions, and dangerous demonstration affects for proximate states with their own domestic groups that may be unhappy with the existing status quo. Each of these regional consequences increase the risk of civil war onset in neighboring states.

Many studies of civil war diffusion rely on simple dichotomous measures of civil conflict in a neighboring state. The analysis conducted in Chapter 4 is an improvement on such studies, as I directly account for the level of instability produced by civil conflicts. By accounting for the number of casualties produced by a conflict, I am effectively able to measure the likelihood that a civil war will spread to each of its neighboring states, as the level of violence is directly related to a war’s propensity to spread. Dichotomous measures of neighboring conflict fail to reflect the level of instability being exported by a proximate civil war. The implicit assumption is that a civil war that produces several hundred casualties is essentially equivalent to a conflict that produces tens of thousands of casualties. This is an oversimplification. Highly intense conflicts are substantially more destabilizing for their surrounding regions than those conflicts that are considerably less violent. I add important nuance to our understanding of civil war diffusion processes by directly accounting for the level of instability produced by each
conflict in the post-WWII period.

Third parties observe these regional consequences of civil wars and make their intervention decisions based on whether a conflict is expected to spread, those neighboring countries that are likely to be infected, and the relationship that the third party maintains with those regional states. Third party states commonly justify their intervention decisions on regional stability grounds. However, this is the first systematic study in the conflict processes literature that effectively accounts for these aspects of third party decision making.

As civil wars continue to be the primary form of violence in the international system, more research will be necessary to gain a fuller understanding of civil war and intervention processes. Civil wars pose a threat to the stability of the international system, and their consequences can be disastrous, especially for the civil war state and its surrounding region. Improving our knowledge of civil war and intervention processes will enhance our ability to properly represent these phenomena in our models, provide more complete explanations for civil war and intervention events, and augment the policy prescriptions made to foreign policy decision makers for managing these conflicts successfully. The explanation of intervention decision making that is put forward in this dissertation is an important step forward in the civil war and intervention research fields, as I account for a central aspect of the geopolitics of civil war intervention.
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