# WHAT CAN THE COLLECTIVE ACTION PROBLEM TELL US ABOUT THE RECURRENCE OF CIVIL WAR AND THE LONG-TERM STABILITY OF A COUNTRY?

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This study attempts to explain why some countries experience multiple civil wars while others who have experienced a civil war build long-term stability from the rubble of conflict. The explanation of why civil war recurs focuses on the collective action problem, centering on the rebel leaders' ability to solve the Rebel's Dilemma. I further argue that once the Rebel's Dilemma has been solved once it is much easier for rebel leaders to solve it again and again. The empirical finds suggest that the political situation resulting from the first war plays a strong role in the solutions to the collective action problem and thus the long-term stability following a civil war. Namely, the level of democracy, partition and third party enforcement of the peace all affect the ability of the rebel leaders to solve the collective action problem and the likelihood of another civil war.

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#### INTRODUCTION

War truly has become a scourge, as was disease throughout most of human history. The scourge of disease has, almost within living memory, been largely defeated and though it is true that disease had no friends as war has had friends, war now demands a friendship which can only be paid in false coin. A world political economy which makes no room for war demands, it must be recognized, a new culture of human relations. As most cultures of which we have knowledge were transfused by the warrior spirit, such a cultural transformation now confronts the world.

Keegan, 1993

Since the end of the Cold War the world has experienced no international wars of the magnitude and loss of life equal to that of World War I or World War II. According to the Doyle and Sambanis (2000) data set, civil wars from 1944 to (terminated before) 1997 account for approximately 8.6 million battle deaths; 23.8 million combined civilian and battle deaths, and have displaced more than 70.7 million people (both externally and internally due to war). The Doyle and Sambanis (2000) data set record a total of 124 events of civil war. Comparing these figures to those of interstate wars, according to the Correlates of War data set (Sarkees 2000), interstate wars begun in 1944 and terminated before 1997, account for 3.3 million battle deaths. Thus, we can clearly see that civil war is now the dominant form of conflict in the international system as well the leading cause of death.

Fortunately, the international system has experienced few wars of the magnitude and loss of life as those of WWI and WWII. Indeed the United Nations was, at least in part, created following WWII to prevent or limit these types of conflicts. However, there seems to be no shortage of civil wars in the international system, and all recognize that civil wars have been

<sup>&</sup>lt;sup>1</sup> The Doyle and Sambanis (2000) "International Peacebuilding: A theoretical and Quantitative Analysis" paper, tables and data set are available at <a href="http://www.worldbank.org/research/conflict/papers/peacebuilding/">http://www.worldbank.org/research/conflict/papers/peacebuilding/</a> and the article is also available in APSR 94(4): 779-801.

incredibly bloody and have caused millions of deaths. As a result of these stark figures, intrastate conflicts have received greater attention in the international relations literature.

The scholarly research on civil wars has focused on several areas in the wider context of civil wars. As a result, several "subfields" have emerged within the study of civil wars. In this context several researchers have focused on how civil wars end. They include: Walter (1997 and 2002); Regan (1998); Mason and Fett (1996); and Mason, Weingarten, and Fett. (1999). Scholars have also focused on interventions and their effects on the duration of intrastate conflicts: DeRouen and Sobek (2004); Balch-Lindsay and Enterline (2000); Hegre (2004); Fearon (2004); and Collier, Hoeffler, and Soderbom (2004). Other scholars such as Diehl, Reifchneider, and Hensel (1996); Carment and Rowlands (1998); Dixon (1996); Regan (1998a, 1998b, 2000 and 2002); and Walter (1997, 1999 and 2002) have focused their attentions on interventions in civil wars, and what is required for successful interventions. Luttwack (1999) argues that peace resulting from intervention may be premature and that the international community should allow the combatants in the intrastate conflict to fight it out. He claims that the most stable peace is one that includes a clear winner. Yet other scholars have focused on negotiated settlements: Licklider (1995); Pillar (1983); Hartzell and Hoddie (2003a and 2003b); Hartzell, Hoddie, and Rothchild (1999); and Hartzell (1999).

Scholars have begun to research what makes negotiated settlements in intrastate conflicts endure. Walter (1997 and 2001) argues that it requires third party guarantor making credible commitments to ensure that the former combatants will lay down their arms and coexist together in the state. Fortna (2003) and Doyle and Sambanis (2000a) test the effects of peacekeeping operations that include a third party guarantors and both studies find that they do increase the duration of the peace. Thus, third party guarantors have been found to enhance the durability of

peace following a negotiated settlement. Hartzell and Hoddie (2003a) examine the context of the settlement and its design on the effects of the duration of peace. In particular, Hartzell and Hoddie (2003a) focus their attention on the power sharing mechanisms in the negotiated settlement, which are intended to distribute power among the competing groups in the post-civil war environment.

Civil wars end in one of three ways: government victory, rebel victory, or a negotiated settlement (Mason, Weingarten and Fett 1999). The bulk of the research on negotiated settlements focuses on their short-term effects on the durability of peace. Little of the current research addresses the long-term stability of the country following the conclusion of a civil war and the recurrence of another civil war. Several scholars have developed some interesting variables which have been found to lengthen the duration of a civil war; however, one must ask: how well do these variables perform in the larger context of all wars and what effect do they have on the recurrence of a civil war? I argue that studying the long-term stability of peace is at least as important as studying the short-term effects on durability of peace. This should be interesting to scholars of both interstate and intrastate conflicts because all or almost all actors in the system prefer to operate in a stable system. This research question also provides insight into the larger set of civil wars with peace being the goal all forms of intrastate conflict should be examined. I believe that this study will shed some light on the differing goals and outcomes of long-term stability versus the goals of short-term stability. This research may suggest that the means used to attain long-stability versus short-term stability are closely related but somewhat different.

# RESEARCH QUESTION

Negotiated settlements have recently received a great deal of scholarly attention, and according to Pillar (1983), there should be no shortage of such settlements in the future. While a negotiated settlement may be more preferable than allowing the conflict to rage on it does exclude the other two outcomes of civil wars. Furthermore, most of the research into negotiated settlements in civil war focuses on the short-term effects of the durability of peace. This ignores the long-term stability of peace following the conclusion of a civil war regardless of the outcome. I believe the real question in this area should be: What causes civil wars to recur so frequently interrupting the stability of the post civil war environment of a country? In an effort to address this question I propose to examine the recurrence of civil war.

The recurrence of civil war should be viewed as a collective action problem. Once the collective problem has been solved once it is much easier to solve it again. Civil war leaders and individual participants in the original war conclude the previous war with the knowledge of the necessary infrastructure of a rebel organization, how to fight a civil war, and how to persuade free rides to contribute to the cause. I contend that once the rebel leaders have solved the collective action problem once by mobilizing, fielding an army and fighting in a civil war, it is much easier for them to solve the collective action problem again. In addition to the knowledge gained by participating in a civil war, the environment in which rebel leaders operate also plays an equally important role in the solutions to the collective action problem. I assert that the environment in which the civil wars take place, the state, can influence rebel leader's ability to solve collective action problem. The participants in the conflict as well as interested outside parties can manipulate the environment making it more or less difficult to solve the collective action problem again.

I propose to examine all the cases of civil war that reflect the full range of possible variation in the dependent variable. Failure to include all cases reflecting the full range of the dependent civil war variable limits scholars to the assessment of only the necessary relationship and thereby precludes the use of standard statistical procedures (Most and Starr 1989).

In this study, peace is defined as the absence of war. This definition of peace is adapted and applied to the definition of long-term stability. Thus, long-term stability is the lack of an observable recurrence of another civil war in a state. Recurrence is conceived as the renewal of combat after a government victory, a rebel victory, or a negotiated settlement (Mason and Fett 1996 and Mason, Fett and Weingarten 1999). I do not attempt to distinguish the relations between the parties competing for power within the state following the conclusion of a civil war. It is conceivable that the former combatants develop friendly relations or still harbor a great deal of animosity towards each other. It is important to note that the ending of some civil wars and thus the resulting stability may not be desirable in terms of social justice, human rights and democracy. For example, I argue that the ending the Iraq-Kurds civil wars did not result in social justice for the Kurds, reduce the number of human rights violations, nor bring Iraq as closer to democracy. Bringing this civil war to a conclusion is better than the alternative, and it did end the large-scale casualties that were the outcome of combat and at least reduce the number of civil casualties. However, the Saddam Hussein regime did continue to imprison, torture and kill indiscriminately. Most civil wars cause destruction of property, increase the spread of disease, and dislocation, and all result in the large-scale loss of human life (Fortna 2003). "Repeated conflicts only exacerbate these tragedies" (Fortna 2003: 339).

This research proposes to measure the recurrence (the dependent variable) of civil war after the end of the previous civil war as a dummy variable measuring whether the war occurred

again. The method employed in this study will be logit. The data set that will be utilized in this study is the Doyle and Sambanis (2000) International Peace building data set. I intend to examine many of the hypotheses applied to the study of negotiated settlements, but in the context of the larger set of all civil wars, and also, including hypotheses concerning variables that have previously been overlooked. For example, the Hartzell and Hoddie (2003a) article includes a hypothesis concerning the Cold War, which is essentially a resource theory, but they fail to examine lootable goods, which also fuels the flames of civil wars. Hartzell and Hoddie (2003a) hypothesize that the end of the Cold War enhances the prospects for stable settlements because intrastate rivals no longer have access to the arms and resources supplied from the two superpowers, fighting over the periphery, which often allowed civil wars to endure or emerge. They argue that without the resources of the superpowers antagonist would not have the capabilities necessary to fight a civil war. This hypothesis does not account for local resources, which could have a similar effect of causing civil wars to endure or emerge with out attaching competing ideologies of the superpowers fighting over the periphery.

This study expects to find that the recurrence of a civil war is not only the result of the ability of the rebel to solve the collective action problem again, but also solutions to the collective action problem influenced by the environment within each state. I additionally suggest that actors outside of the state can alter the solutions to the collective action problem. I also intend to address one of the contradictory findings in the literature pertaining to the effect of partition in negotiated settlements and the recurrence of civil wars. In the third chapter, I examine the literature of civil wars. In the fourth chapter 4, I develop my theory and hypothesis, followed by a discussion of methods and data in the next chapter. In the sixth chapter 6, I quantitatively test the hypothesis and discuss the findings of the research. In the last chapter, I

discuss conclusions, policy recommendations, and suggestions for future research. The appendix presents several models including alternative measures and a brief discussion for some of the independent variables discussed in chapter 5.

#### LITERATURE REVIEW

#### How Civil Wars End

Numerous authorities have argued that civil wars are more difficult to end than interstate wars. Quoting Licklider, "interstate opponents will presumably eventually retreat to their own territories (wars of conquest have been rare since 1945), but in civil wars the members of the two sides must live side by side and work together in a common government after the killing stops. Compromise is particularly difficult because the stakes are control of this new government and is thus, literally, life and death for the combatants" (Licklider 1995: 681).

Licklider (1995) argues that governments have more resources at their disposal than the rebels. Thus governments can summarily crush most rebellions. However, rebels compensate for lack of resources with intense commitment. Military stalemate and a rough kind of equality can emerge. This situation is also known as a mutually hurting stalemate (Zartman 1993). "However, in an internal war the government abandons its legitimacy if it openly negotiates with the rebels. It is simply easier to withdraw from part of the country (usually to the capital) and continue normal life" (Licklider 1995: 683). Thus, both sides find stalemate more attractive than a negotiated settlement. Outsiders regard negotiated settlements as a good way to end civil violence. They result in fewer casualties than the alternative of military victory for one of the sides. Negotiated settlements typically involve some sort of power sharing arrangement among the two parties involved (Licklider 1995). Licklider (1995) finds that identity wars do not last any longer than political-economic wars and in general neither type of conflicts has any clear differences in casualty patterns.

Based on the work of Mason, Weingarten and Fett (1999), Mason and Fett (1996), and Stam (1996), wars particularly civil wars, have one of three possible outcomes: government

victory, rebel victory, or a negotiated settlement. This produces four possible outcomes resulting from the combined decision by both the rebels and the government: government wins, rebels win, the government and the rebels conclude a negotiated settlement or the war continues (Mason, Weingarten and Fett 1999: 241). Employing a rational choice model Mason, Weingarten and Fett (1999) make the argument that:

Each actor's decision is a function of that actors expected benefits from victory, the rate at which it is absorbing the cost and imposing them on its rival and the duration of the war... Each side will continue to fight unless the expected cost of fighting exceeds the expected benefits of victory. If only one side decides that the costs of continuing to fight will exceed the benefits of victory, that side quits and its rival wins. If both sides conclude that continued fighting will be more costly than the benefits of eventual victory, then both will quite fighting and enter a negotiated settlement. (Mason, Weingarten and Fett 1999: 241)

Mason and Fett (1996) developed a decision model based on utility calculations of the government and the rebels that implies that the likelihood that both the government and the rebels will agree to a settlement rather than continuing to fight each other will vary depending on each party's estimate of the probability of victory, its expected payoffs from victory versus the payoffs from a settlement, the rate at which the parties absorb the cost of conflict, and the parties' estimates of the length of time required to achieve a decision on the battlefield.

Mason and Fett (1996) found that war weariness is the most important determinant of the decision to seek a settlement. According to the authors, "ethnic conflicts were no more or less susceptible to negotiated settlement than non-ethnic conflicts and civil wars were no more or less susceptible to settlement then separatist wars" (Mason and Fett 1996: 563). It is important to note that these findings are at odds with much of the literature on ethnic conflicts and on the indivisibility of the stakes in a civil war. If the conflict lasts long enough and a quick victory is not achieved both the rebels and the government would prefer a negotiated settlement as apposed to a bloodletting with no conclusion in the foreseeable future (Mason and Fett 1996). Also,

political and economic factors, which are often depicted as the causes of civil wars, have little to do with determining the outcome of the civil conflict. Their model employed the decision calculus by which the participants in an intrastate conflict would choose between continuing to fight in anticipation of eventual victory or alternatively agreeing to a negotiated settlement of the war. Civil wars in which either the government or rebels are victorious tend on average to be shorter in duration than those ending in a settlement. Protracted civil wars were found to be four times more likely to end in a settlement than in a government victory and three times more likely to end in a settlement than in a rebel victory. Thus duration is the strongest predictor of a negotiated settlement. Mason, Weingarten and Fett (1999) produced similar findings: as wars become more drawn-out, interested third-parties should find both parties in the conflict more willing to submit to mediation. They also found that statistically speaking, continued fighting beyond a certain point in the history of the conflict stops being a quest for victory and instead becomes a desire to negotiate a settlement through the use of violence.

Luttwack (1999) makes this familiar argument that "it might be best for all parties to let minor wars burn themselves out" (Luttwack 1999:37). Cease fires and armistices tend to slow the war-induced exhaustion and allow the belligerents to reorganize and rearm their forces.

Peace only truly takes hold when the war is truly over. Peacekeepers have been unable, according to Luttwack (1999), to effectively protect civilians who are caught up in the violence or are deliberately attacked. He argues that the most disinterested of all interventions in wars and the most devastating are humanitarian relief activities. While Luttwack (1999) never specifically refers to negotiated settlements we can infer from his argument that negotiated settlements are doomed to fail because they prematurely interrupt the fighting before victory is achieved. Luttwack (1999) further implies that negotiated settlements will in fact intensify and

prolong the struggle once the negotiated settlement fails. Thus, peace derived through victory by the government or the rebels should according to his argument last longer than a peace derived through a negotiated settlement.

Pillar (1983) argues that negotiated settlements will occur more frequently in the international system. "This form of war ending, though infrequent in the past, will be more common in the future" (Pillar 1983: 4). Pillar's (1983) work only highlights the importance of studying negotiated settlements. While Pillar's (1983) work might be considered a relic of the Cold War, his predictions of negotiated settlements do have some validity and many scholars have begun focusing on negotiated settlements especially in intrastate conflicts.

Hartzell (1999) argues that the most important elements of a negotiated settlement are those that address the security concerns of the warring parties as the opposing parties move from a situation of anarchy<sup>2</sup> and self help to the rebuilding of the central state authority that depicts the end of civil war. "These concerns are (1) that one's opponent may gain control of the coercive apparatus of the new state, (2) that one's opponent may gain an advantage in the allocation of political power within the new state, and (3) that one's opponent may gain an economic advantage within the new state" (Hartzell 1999:4). Negotiated settlements that address these concerns are likely to reduce the vulnerability of warring parties. Thus, those negotiated settlements which institutionalize guarantees addressing these concerns are likely to prove more stable. Hartzell (1999) argues that a stable negotiated settlement equals a stable peace.

Interestingly, Hartzell (1999) finds that the development of these institutionalized guarantees

<sup>&</sup>lt;sup>2</sup> The theory of international anarchy was first coined by Kenneth N. Waltz who argued that "The obvious conclusion of a third-image analysis is that world government is the remedy for world war. The remedy, though it may be unassailable in logic, is unattainable in practice. ......Each state pursues its own interest, however defined, in ways it judges best. Force is a means of achieving the external ends of states because there exist no consistent, reliable process of reconciling the conflicts of interest that inevitably arise among similar unit in a condition of anarchy" (Waltz 2001: 238).

makes even identity conflicts flexible to negotiation and the outcome can result in stable negotiated settlements. Fortna (2003) makes similar arguments regarding the content of agreements and the durability of peace; however, the focus of the study was militarized interstate disputes.

Implementation is an important step to building an enduring peace in states emerging from violent civil conflict via negotiated settlements. By implementing the provisions of an agreement, the leaders of the groups making concessions are unambiguously signaling their genuine commitment to peace. These signals are understood to be credible because they are costly to the implementing parties in terms of both immediate loss of political power to either their competitors in the war or the loss of political power among members of their own immediate group. "It is this willingness to endure these costs in an effort to demonstrate a preference for stability that allows former antagonists to surmount security concerns and move toward a self-sustaining peace" (Hartzell and Hoddie 2003b: 318). They further argue that sharing or dividing of military power is strongly associated with long-term peace.

Hartzell and Hoddie (2003a) argue that the most effective means of addressing the common security concerns of parties emerging form a civil war via negotiated settlement is for the parties to create a multifaceted power-sharing arrangement. The larger the network of power-sharing institutions the competing parties agree to create, the less likely they are to return to the battle field to settle disputes. The most effective way of addressing security concerns and thus increase the probability of a stable peace is produced when power-sharing among the former antagonists includes political, territorial, military, and economic dimensions of the state power (Hartzell and Hoddie 2003a).

Political power-sharing measurement details the distribution of political power among the parties to the settlement. Hartzell and Hoddie (2003a) limit the political forms of power sharing to electoral proportional representation and executive proportional representation. The territorial measurement of power-sharing is defined as autonomy between levels of government on the basis of federalism or regional autonomy arrangements. Military power-sharing is the rules regarding the distribution of the state's coercive power among the warring factions in the civil war. The economic power-sharing defines the distribution among groups of economic resources controlled or mandated by the state<sup>3</sup> (Hartzell and Hoddie 2003a).

Coding rules and variable labels are available at <a href="https://www.polisci.tamu.edu/upload">www.polisci.tamu.edu/upload</a> images/18/AJPS%20Final%20Coding%20Rules%20and%20Variable%20Labls.htm

<sup>&</sup>lt;sup>3</sup>According to the coding rules each part of the four part typology is defined as:

<sup>&</sup>quot;Political power-sharing (politicalps): Score as "1" if the civil war settlement includes any of the following provisions: (a) electoral proportional representation (settlement or discussion of settlement must specify its use, it is not a revision to previous use of proportional representation); (b) administrative proportional representation (i.e., appointment of representatives of warring groups to courts, civil service, foreign service, and commissions); (c) executive proportional representation (i.e., appointment of representatives of warring groups to ministerial, subministerial, and cabinet positions)."

<sup>&</sup>quot;Territorial power-sharing (terrps): Score as "1" if the civil war settlement includes any of the following provisions: (a) divisions of political power between levels of government on the basis of federalism (either centralized federalism or decentralized federalism) or confederalism; (b) division of political power between levels of government on the basis of regional autonomy."

<sup>&</sup>quot;Military power-sharing (militaryps): Score as "1" if the civil war settlement includes any of the following provisions: (a) creation of state's security forces (i.e., army, navy, air force, state militia) through the integration of former antagonists' armed forces on the basis of a formula representative of the size of the armed groups; (b) creation of state's security forces (i.e., army, navy, air force, state militia) on the basis of equal numbers of troops drawn from the antagonists' armed forces, (c) appointment of members of armed faction(s) who do not dominate the state, or of weaker armed factions, to key leadership positions (i.e., general, commander, director, defense minister) in the state's security forces; (d) allow antagonists to remain armed (i.e., settlement does not specify any disarmament measures); (e) allow antagonists to retain their own armed forces."

<sup>&</sup>quot;Economic power-sharing (econps): Score as "1" if the civil war settlement includes any of the following provisions: (a) specification of pattern of resource distribution by the state to disadvantaged groups, either on the basis of a percentage of resources to be allocated to those groups or on a financial amount to be directed to those groups; (b) specification of policies to be used to direct economic assets toward groups on the basis of their group membership or geographic location (i.e., policies associated with provision of land; control or administration of natural resources; scholarships and admissions to schools, training centers, colleges; creation and/or set-asides of jobs, promotions; transfer of factories, capital, and credit; provision or creation of licenses to operate commercial enterprises and to practice professions or trades)."

It is important to note that the coding is based on the notion that if any portion of each one of these is included in the negotiated settlement. This does not in any way imply that any or all of these are actually implemented following the settlement.

Some civil war environments are more likely to result in stable peace settlements than are others. According to Hartzell, Hoddie and Rothchild (2001), "the most durable settlements are likely to be those that (1) concern states in which the previous stable regime was a democracy; (2) conclude civil conflicts of low intensity that lasted for extended periods of time; (3) include in the peace agreement provisions for the territorial autonomy of threatened groups; and (4) have security assurances offered to the former combatants by third parties or regional or international organizations" (Hartzell, Hoddie and Rothchild 2001: 202). They further argue that negotiated settlements in which the state lacks experience with democracy and the conflicts have been of short duration and high in intensity are more likely to fail (Hartzell, Hoddie and Rothchild 2001).

# The Effect of Third Parties on Ending Civil Wars

The typology of conflict management techniques can be broken down into seven categories, according to Dixon (1996): (1) Public appeals that require a minimal commitment of the agent or actor; (2) Communication between the disputing parties which range from the provision of goods offices support to the simple articulation of relevant issues; (3) Mediation which is drafting and promotion of plans for conflict resolution; (4) Observation where the third party conducts field investigation and fact-finding expeditions; (5) Intervention which is any direct physical involvement by the managing agent; (6) Humanitarian aid in the form of food, medicine and clothes distributed in a conflict, might have an effect of reducing the anxieties and tensions of the combatants; and (7) Adjudication which is a highly specialized form of management practiced exclusively by a small number of international judicial bodies (Dixon 1996: 658). Interventions include peacekeeping missions or any other attempt to coerce the combatants to ending the conflict such as arms embargos, economic sanctions, quarantines,

and/or military assistance to either party. Interventions can be biased or unbiased. According to Enterline and Balch-Lindsay (2000), "regardless of whether third parity interventions are benevolent or malevolent, their actions are strategic." These conflict management techniques are used by third party intermediaries, which consist of nation-states or a coalition of states, transnational or subnational organizations, ad hoc commissions, individuals, or any other actor with international standing (Dixon 1996).

Bercovitch and Regan (1997) explore how mediation achieves the goals of a state at risk by comparing mediation performance and effectiveness of states to those with a history of past conflict and a considerable risk of future conflict compared to other states. Risk is defined as the probability that an action or its absence may produce an undesirable outcome. Bercovitch and Regan (1997) found that actual states at risk have not used mediation as a way to manage their conflict. They further argue that mediation is resorted to with an equal frequency by all states. They also found that risky states would not experience more directive strategies and that these strategies are more likely to transform a relationship than other strategies. Risky states are predisposed to engage in successive conflicts and incur the risk of engaging in further militarized disputes.

Mediation success is influenced by five contextual factors, which relate to the "ripeness" of the situation. Greig (2001) examines ripeness for mediation between enduring rivals by focusing on mediation success in both the short term and the long term. The unit of analysis of the study is mediation attempt. Short-term mediation outcomes are tested using ordered logit and is measured using trichotomous mediation outcome variables, which are differentiated as full

<sup>&</sup>lt;sup>4</sup> According to Enterline and Balch-Lindsay (2000), "some third parties might prefer to end civil wars rapidly for humanitarian reasons, other third parties might prefer to prolong the duration of civil wars with an eye toward plundering the natural resources of the civil war state, or draining the resources of a rival third party." Also,

success (full settlement of the issue under mediation), partial success (cease fires, partial agreement), and failures. The waiting time until the next use of force is tested using a conditional Cox hazard model, and duration until the nest use of force is measured in the months. Lastly the rivalry severity of change is tested using ordered logit. The measurement of severity is derived for from Diehl and Goertz (2000). Mediation is which there is no severity reduction or an increase in the severity of the next dispute is coded as a 0. Moderate improvement in the severity of the dispute or severity reduction between 1 and 80 units was coded as a 1. Sizeable improvements in the severity level of the next dispute or severity reduction larger than 80 points are coded as a 2. The dispute severity is measure on a 0 to 200-unit scale, which reflects the general level of hostility and the number of battle deaths resulting for the dispute (Greig 2001: 700-706).

Although Greig (2001) proposes that these steps relate to interstate mediation success, they can be applied to intrastate conflicts.

First, the cost and pain that develops throughout the lifetime of a rivalry carry important consequences for the ability of mediation efforts to improve the rivalry relationship. Second, the perception among rivals that they are unlikely to unilaterally alter the rivalry status quo in their favor is likely to encourage them to begin to pursue more cooperative strategies toward one another. Third, the level of threat, both inside and outside the rivalry, perceived by the rivals is likely to have a powerful influence on the degree to which rivals are open to international mediation efforts. Fourth, internal political changes within rivals are open to international mediation efforts will translate into an improvement in the rivalry relationship. Finally, the belief among rivals that a basis for settlement, a way out, exists improves the prospect for mediation success. (693).

Third-party interventions can be in the form of economic, military or a mixture of both economic and military. Regan (1996) assumes that third parties intervene in intrastate conflicts to end the violence connected with the underlying quarrel. He further assumes that third parties

see Carment and Rowlands (2003) for a case study of Sri Lanka 1987 and Kosovo 1998 and the effects of biased of interventions.

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do not exacerbate or prolong the fighting and consciously excludes the role of trying to resolve the underlying issue involved in the dispute from the motivations behind the decision to intervene.<sup>5</sup> According to Regan (1996), the clearest result of his analysis is that the strategy for intervention is of great importance in terms of the probability of success of achieving the desired goals. Regan (1996: 353) finds that a mixed strategy of economic and military intervention is the most effective strategy for third parties. Regan found that the probability of successful intervention in ethnic or religious conflict is 17% while; the probability of success when ideological issues predominate is 12%. 6 Military intervention by a major power is 23% more likely to succeed than military intervention by a minor power. Major power intervention on behalf of either the government or the opposition has a higher likelihood of success (29%) over a minor power intervention. When focusing on the strategy for intervention, mixed strategies are more effective than solely economic or military intervention (approaches 40% probability of success). In terms of the interveners 40% (76 cases) of the interventions were carried out by the major powers, 5% (10 cases) of the interventions were under the auspices of the UN, and the remainder was carried out by minor powers. There were 96 interventions in support of the

<sup>&</sup>lt;sup>5</sup> This may be too strong an assumption and in doing so Regan (1996) ignore biased interventions. This also ignores the motivations behind interventions by the superpowers during the Cold War. More recent work such as Enterline and Balch-Lindsay (2000) find that interventions lengthen the conflict as thus the violence.

<sup>&</sup>lt;sup>6</sup> The conflict type (religious, ethnic, or ideological) may have been a control variable and it is unfortunate that Regan (1996) did not explore this finding in more detail. It may also be that based on his assumptions and he saw no need to further explore this finding. The data for this journal article is not available; however, I used the data from his book (Regan 2000) to determine the break down between these two types of conflict as coded by Regan. The data from the book (Regan 2000) covers intrastate from 1945 to 1999. Where as the data for the JCR article covers intrastate conflict form 1944 to 1994. According to the data from the book (Regan 2000) there were 245 separate intrastate conflicts and 195 total interventions. Interventions in ethnic/religious conflicts occurred 107 times (54.8%) and interventions in ideological conflicts occurred 88 times (45.1%). Based on the coding by Regan (1996 and 2000) it appears that ethnic/religious conflict did have more interventions than ideological. However, it should also be noted that Regan (1996) collapsed two types of conflict into one ethnic/religious, following the original coding scheme interventions in ideological conflicts occurred most often.

<sup>&</sup>lt;sup>7</sup> Based on the figures provided by Regan (1996) it appears that there may have been some rounding of his breakdown of interventions by major powers versus minor powers. Of the 195 total interventions 76 (actually 38.77%) were by a major power, 10 (actually 5.1%) under auspices of the UN, and 110 (actually 56.1%) were by a

government, 95 interventions supporting the opposition, and 5 neutral interventions. In terms of the type of interventions 70% were military, 7% economic and 23% were economic (Regan 1996: 345).

Enterline and Balch-Lindsay (2000) found that third party interventions have a greater likelihood that a stalemate will emerge and that the civil war will endure for a significantly longer time period. According to the authors, regardless of the intentions, the impact of third party interventions in ongoing civil wars is at least in part contingent upon the behavior of other third party actors. Enterline and Balch-Lindsay (2000) found that third party interventions increase the likelihood that a stalemate will emerge and that the civil war will endure for a significantly longer time.<sup>8</sup> According to the authors the scenario involving third parties is one that promises a long civil war with the attendant levels of death and destruction. Regan (2002) produced similar findings concerning duration and intervention. He observed that an intervention tends to increase the expected duration of the conflict. Interventions supporting the governments had no effect on the duration of the conflict (no statistical significance). However, the timing of an intervention supporting the opposition was statistically significant, but the substantive impact was small. Any conflict that attracts opposing interventions is more likely to remain ongoing. Interventions carried out under the auspices of international organizations have no independent effect on the expected time until a conflict ends. This was due to the fact that international organizations are not always impartial, and neutrality during an ongoing conflict may not be sufficient to convince the actors or combatants that stopping the fighting is in their best interest.

minor power. It appears that minor power interventions are the dominant form of intervention, based on the data from Regan (1996).

<sup>&</sup>lt;sup>8</sup> These findings are at least at odds with the findings of Fortna (2004a). Peace keeping does seem to make a difference in the duration of peace after a civil war. "Ceteris Paribus, when the international community deploys peacekeepers the risk of another round of fighting drops by almost 70%" (Fortna 2004a: 282).

These findings suggest that if the intervener wishes to shorten a conflict, the use of outside military or economic intervention is not an effective strategy.

Regan (1998) defines intervention 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). States self select themselves out of potential intervention opportunities, which are related to both domestic and international considerations. Interventions have a long time horizon, a low probability of success and do not have the support of a significant portion of the population. This creates a selection bias for the potential interveners because political leaders will not be expected to intervene in conflicts in which they expect to fail. "If success is unlikely, there would be few payoffs from a failed intervention... The longer the time horizon, the greater the ration of cost to benefits. As the intervention draws out, material cost generally increase while the potential benefits would generally remain constant or possible decline... The lack of domestic support would increase the domestic audience costs without increasing the potential benefits" (Regan 1998:757-758). We can also assume that in terms of the domestic cost as the number of deaths to the peacekeepers (enforcers) increases so would the domestic cost. These are the main reasons why states will choose not to intervene.

Regan (1998) found that the Cold War was a major factor in the decision to intervene even though the majority of conflicts were not ideological. When the Cold War ended so too did the idea that these types of conflicts are a zero sum game. Subjective estimates of the likely outcome play a crucial role in the decision calculus to intervene. The greater the number of shared borders, the less likely an intervention. It should also be pointed out that not only do

these measures of success determine intervention, but also humanitarian issues matter in a political leader's decision calculus.

Settlements of internal wars have a number of features to commend then to the students of international relations. Settlements of internal wars can reduce the amount of violence and serve as a clear marker beyond which the renewed use of violence becomes illegitimate.

Settlements take into account a wider range of interests and reflect more accurately the state of political forces in the society. Settlements, according to Modelski (1964), are a rational way of ending a period of violence and are an appropriate method for inaugurating a period of domestic peace. Settlements are not the only method of ending internal wars, and in a great number of cases it is indeed in applicable. In some political systems, nothing short of separation can restore order. According to Kaufmann (1996) separation is only necessary in civil wars involving ethnic secession. In other cases, outright victory may be easier to come by such that it is unnecessary to resort to negotiations, and it goes against the grain of human nature to seek a negotiated solution when one's will can be imposed merely by demanding it (Modelski 1964: 149).

A contradiction found in the literature concerns the effect of partition on a civil war. Hartzell and Hoddie (2003a) find that each additional category of institutional power- sharing provision (Political, Military, Territorial and Economic) included in the settlement reduces the probability of settlement failure by 53%. The territorial dimension characterizes the divisions of independence between levels of government on the basis of federalism or regional self-rule arrangements (Hartzell and Hoddie 2003a: 320). Kaufman (1996) argues that partition does not resolve ethnic hatreds; rather it may only reduce them. Prior research pertaining to partition,

<sup>&</sup>lt;sup>9</sup> Fearon (1995) makes a similar argument pertaining to international war, "under broad conditions the fact that fighting is costly and risky implies that there should exist negotiated agreements that rationally led states in dispute would prefer to war. This claim runs directly counter to the conventional view that rational states can and often do face a situation of deadlock, in which war occurs because no mutually preferable bargain exists" (409).

according to Walter (2004), attempts to address the notion that settlements based on some form of partition between or among the combatants is more likely to bring peace. However, Walter (2004) finds that partition increases the likelihood of another civil war occurring. Sambanis (2000), testing the Kaufman (1996) hypothesis, similarly finds that partition does not significantly prevent another civil war which suggests that separating ethnic groups does not resolve the problem of violent ethnic resentment. Sambanis (2000) finds that partitions are more likely after costly ethnic/religious conflicts, after rebel victory or truce, and in countries with better-than average socioeconomic conditions. Partitions are more likely where ethnic groups are large and are less likely to occur as the degree of ethnic heterogeneity increases.

"Civil wars are high-stakes conflicts over the organizing principles and fundamental rules of the polity. Because the issues are so basic, the means adopted are often totalistic and the outcome fearsomely destructive" (Rothchild 2002: 134). When the civil war is perceived as unacceptably costly and unwinnable, negotiators may produce something equivalent to what Rothchild (2002) calls a "cold peace." The transmission of fears and uncertainties that survive the war creates problems of reliable information about the adversary's intentions and credible commitments to peace accords that are difficult to overcome. The distrust of an adversary's intentions after a civil war may be logical given the extensive uncertainty that a rival will cheat on its commitments and take advantage of the temporary opportunity to commence a preemptive military attack. Due to this problem of shared fears surrounding the preliminary transition process, adversaries of internal conflicts will likely insist on knowing in detail the provisions made in the settlement for their security and political participation after the agreements have gone into effect (Rothchild 2002).

These short-term priorities, which focus on security, can have unfortunate consequences for future peacebuilding. "The very incentives required to reassure weaker parties and gain commitment to a bargain in the initial period can cause political instability later on, if rigid power-sharing institutions come in a unitary state structure" (Rothchild 2002: 135). The comprehensive strategies of formal group-based security building and individually-based security building generate their own diverse fears of domination and immobilization. "It makes sense to institutions such as proportional appointments and allocations, proportional representation, and group cultural and social autonomy arrangements that cut across both strategies. Such institutions can promote respect for group rights without threatening the majority-backed state elite's political leadership" (Rothchild 2002:135). Bridging the gap between these two strategies of intergroup relations may make it possible to help stabilize peace agreements for the long-term (Rothchild 2002).

Stedman (1996) argues that the international community does not truly provide the guarantees necessary for the parties to make peace. Punishing leaders and soldiers for war crimes might have to be sacrificed in some cases as the price for peace. Mediators and the implementers of peace agreements must be able to discern between leaders who can be convinced to make peace and those who cannot or will not. Stedman (1996) further argues that if the international community is not going to provide the resources needed to see the implementation of peace settlements through, it should not be in the business of mediating civil wars at all (Stedman 1996: 376). This earlier research points out the importance of a third party guarantor in negotiated settlements and highlights the more recent research of Walters (1997, 1999 and 2001).

Walter (1999) theorizes that to end a civil war through a negotiated settlement, the combatants must be able to not only resolve the underlying issues over which the civil war was fought but also design credible guarantees on the terms of the agreement. According to Walter (1999), designing credible commitments is the biggest challenge facing civil war opponents, rather than resolving issues such as land reform, majority rule, or any of the underlying grievances that started the war. "Groups that obtain third party security guarantees for the dangerous demobilization period following the signing of an agreement, and internal political, military, or territorial guarantees, will implement their settlements more successfully. If an outside state or international organization is not willing or able to provide such guarantees, the warring factions will reject a negotiated settlement and continue their war" (Walter 1999: 129-130). Hartzell and Hoddie (2003) testing the Walter (1997, 1999 and 2001) theory confirm that third party enforcers do increase the duration of the peace follow a negotiated settlement. Fortna (2004) produces similar findings pertaining to third party enforcement of the peace; however, Fortna (2004) finds that this effect is only in the post-Cold War period.

Walter (1997 and 2001) argues that mediation success in intrastate conflicts is not only dependent on the conflict being in a state of ripeness but also depends on a third-party guarantor or outside enforcer who "steps in to guarantee the terms of commitments to disarm and share political power," only then does cooperation become successful (Walter 1997: 336). The credible commitments by a third party are more critical in civil wars than interstate conflicts. Walters' analysis suggests some surprising implications. First, the only type of peacekeeping that appears to help end a war is that which is backed by a promise to use force. So, observers and/or unarmed peacekeepers with no military backup will have little positive effect on either negotiations or treaties. Second, if a state wishes to limit its involvement or share responsibility

by working through a multilateral organization, such as the UN, it will be much more difficult to make a convincing commitment to enforce the settlement, and this type of involvement is more likely to fail to foster an agreement. Third, according to the historical records, successful guarantors should be willing to stay through the establishment of the new government and a new national army. Fourth, strict neutrality by the third party does not appear to be necessary (Walter 1997: 361).

## Long-term Stability and the Recurrence of Civil War

Walter (2004) offers a theory of civil war recurrence that emphasizes the importance of individual economic and political incentives to fight. "The argument rests on the simple observations that for a civil war to resume, hundreds or thousands of individual citizens must actively choose to re-enlist with a rebel organization" (Walter 2004: 374). She argues that low quality of life and barriers to political participation can help predict which countries will continue to experience civil war and which will not. According to the Walter (2004) argument, enlistment and reenlistment are likely to become attractive when two conditions hold. First, the status quo must be perceived to be worse than death in combat. Second, there must be an absence of the nonviolent means for change. Among the variables intended to measure quality of life, infant mortality, life expectancy and illiteracy are significant. She also examines the characteristics of the previous war's effect on the recurrence of civil war, finding that partition increases the likelihood of another conflict and more costly wars reduce the likelihood that a country would face another war.<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> Walter (2004) test the argument of Hegre et al. (2001) that the relationship between democratic openness and violent conflict is inverted U-shaped, with mature democracies and mature autocracies less likely to experience violent internal conflict than those in the middle. However, clear democracies and clear autocracies are operationalized as a dummy variable. Semi-democracies are also operationalized as a dummy variable. Walter

Few studies have theoretically investigated the variables which might lead to the renewal of conflict. There is only one study that examines the individual incentives which influence the individual's decision to join the rebel group again for a new round of combat. However, the bulk of the work and some of the most interesting variables have been used to examine duration of negotiated settlements. The Walter (2004) study is the only one that examines the recurrence of conflict. No study has theoretically explored the duration variables effects on the recurrence of a civil war. For example, Collier, Hoeffler, and Soderbom (2004) make the argument that the duration of a civil war is affected by what they call "rebellion as a business," in which rebel victory is not necessarily the goal. Rebels might prefer a truce, where they are allowed de facto control of a region. One way that this theory has been measured is the presence of lootable goods, which has been found to increase the duration of the civil war.

Most of this literature leads us to a question: What is the prospect of long-term stability for countries that have been plagued with civil war? If peace is the goal of all of the research on civil wars then what is desirable is not only the end of armed conflict but also the long-term stability which civil wars interrupt. Given that empirically we know that countries that have experienced a civil war are much more likely to experience another and another, where do we go from here?

This research argues that the first step to long-term stability of countries, and regions for that matter, is an understanding of what causes a civil war to recur. Countries that are continually dealing the problems of civil war are at best limited in their ability to contribute to

(2004) finds that semi-democracies are not quite significant at the .07 levels. The N in this study ranges from 999 to 1,073. This large N does not justify the acceptance of anything less than the conventionally accepted levels of statistical significance .05 or less.

The operationalization of these variables does not truly measure the inverted U-shape relationship of democracy and conflict. Using the square of the Polity II score for each country should measure this relationship more accurately.

the larger international community of states. By understanding the causes of recurrence of civil wars, policy makers and international organizations can work to bring these countries into the fold and contribute to the larger international community. These causes of the recurrence of civil wars I argue will shed some light not only on the recurrence of war following a negotiated settlement but also in the larger set of all civil wars, i.e., those that end in government victory, rebel victory and negotiated settlement.

Plus this would have allowed Walter (2004) to predict the relationship as being negative. The Polity II ranges from a negative 10 representing a mature autocracy to positive 10 representing a mature consolidated democracy.

#### THEORY AND HYPOTHESES

### The Theory

This study analyzes the long-term stability following a civil war as the lack of the recurrence of another civil war by arguing that recurrence is a collective action problem. I contend that once the rebel leaders have solved the collective action problem once by mobilizing, fielding an army and fighting in a civil war, it is much easier for them to solve the collective action problem again. In addition to the knowledge gained by participating in a civil war, the environment in which rebel leaders operate also plays an equally important role in the solutions to the collective action problem. The environment in which the civil wars take place, the state, can influence rebel leaders' ability to solve collective action problem. The participants in the conflict as well as interested outside parties can manipulate the environment making it more or less difficult to solve the collective action problem again. For example, the settlement from the previous civil war including a third party or the government's application of repression influences the ability of the rebel to solve the collective action problem. I make a case that we are likely to see the recurrence of civil war in instances where experienced and knowledgeable rebel leadership is operating in an environment conducive to their success. Environments that are favorable to their success are, as my theory will later argue, instances in which the government uses repression on dissident movements, the occurrence of partition following the original war, and in countries that are semi-autocratic or semi-democratic.

The theoretical approach is that of a rational actor model. Borrowing from the Lichbach (1995) discussion of the collective action problem, I assume that individuals are utility maximizers and, given the alternative states of their environment, they assess the outcomes of

their possible actions.<sup>11</sup> Political demands (and the fruits of war) are characteristically a public good and the group of potential supporters is very large. Large groups have the power to affect government policies. However, each individual's contribution has no noticeable influence on the group's success at winning the acceptance of its policy, in this case the rebellion (Lichbach 1995: 12). Rebels must be able to revise at least one or more of these suppositions to solve the Rebel's Dilemma (Lichbach 1995).

Tarrow (1999: 95) argues that because members of a specific group have participated in confrontations and protest (forms of collective action) in the past, it is easier for the group's leaders to persuade the members to join in the same form of collection action. However, it should be noted "these acts are not intended to overthrow the government. Indeed, in many instances, such actions can be mobilized with a minimum of dissident leadership and organization because they involve existing mobilization structure and forms of contention with which the participants are familiar. However, such actions are often short-lived and narrowly focused on a limited range of issues" Mason (2004: 45). This research extends Tarrow's (1999) theory by arguing that once rebel leadership has mobilized and participated in a civil war it is much easier for them to do so again. Civil wars for the most part draw their manpower resources from the same finite source: individuals within the state. Thus, a rebellion that lasts any length of time develops the necessary leadership and infrastructure to conduct and coordinate a civil war. They have now solved logistical problems, obtained weapons, established weapons caches, constructed a command structure and created combat tactics all of which have been tested in war. Following

problem see Lichbach (1995). Also see Moore (1995) for a discussion of overcoming the free rider problem through the use of select incentives as it pertains to rebellions. See Van Belle (1996) and Frohlich and Oppenheimer (1970) for a discussion of leadership and the role of benefits in the collective action problem.

<sup>&</sup>lt;sup>11</sup> See Olson (1996 and 1982) for a fully developed discussion of the collective action problem and the effects of group size on the ability of the group to meet its defined goals. For a thorough discussion of the collective action problem as it applies to rebel (leaders) groups and the selective incentives used to solve the collective action

the conclusion of a civil war the fighters (this includes high level leaders, mid-level leadership, and the individual recruits who are expected to do the bulk of the fighting) may go home, but the knowledge and connections stay with the members of the group even when they disperse. All that is needed now is for the existing leadership or even new leadership who were mid level leaders in the previous war to utilize this knowledge to start another civil war provided that they have the necessary charisma to motivate the masses.<sup>12</sup>

"No revolutionary movement has ever succeeded in building a base of popular support sufficient to challenge the regime (much less overthrow it) by relying exclusively or even predominately on selective incentives. Social movements- and revolutionary movements especially- require something more" (Mason 2004: 87). Organization leadership is necessary to persuade the malcontents to create or pirate a preexisting organization to sustain the collective action over the length of time necessary to fight a war. Leaders must persuade the malcontents that their plight is common to all the aggrieved, that their plight is unjust and that the state is responsible (Mason 2004: 88).

This theory does not diminish the importance or relevance of leadership in civil wars.

However, I do argue the environment in which rebel leaders operate affects their solution to the collective action problem. The environment resulting from the conclusion of the first or previous war alters their solutions, and the ability of rebel leaders to solve the collective action problem.

Parties both within and outside the state can alter the environment (or utility calculations) in which leaders of rebel movements as well as the individuals that chose to either participate or

<sup>&</sup>lt;sup>12</sup> Among the solutions at the disposal of the leadership of a rebel group used to solve the collective action problem are selective incentives, which can be either positive or negative. A selective incentive is a solution the collective action problem that applies to individuals selectively depending on the whether they do or do not contribute to the provision of the collective good (Olson 1982: 21).

free ride operate. Thus these parties can influence the solutions to the collection problem as well as cause new leadership to arise.

Thus, this analysis of civil war recurrence as a collective action problem focuses on variables that alter the environment in which rebels operate and thus the solution to the collective action problem. These include variables reflecting their ability to affect the stability of peace, economic variables that affect individuals' decision calculus to join a rebel group, and also the rebel leaders ability to provide solutions to the Rebel's Dilemma, and those that affect the conditions following the first war or the post war environment that either encourage or hinder the ability of rebel leaders to solve the Rebel's Dilemma.

This research makes two contributions to the literature of civil wars and the study of the collective action problem. First by arguing that once the collective action problem has been solved once it is easier to do so a second time, I believe that this concept opens the door to new theoretical possibilities in studying the collective action problem. This implies that the knowledge gained from solving the collective action problem can be fruitfully applied to the next time the collective action problem emerges. This is similar to the biological theory of survival of the fittest. Those rebel groups that are successful in finding solutions to the collective action problem learn from their accomplishment and can apply this new knowledge to solving the collective action problem again. On the other hand, rebel leaders who are not successful in solving the collective action problem may not even survive the failed attempt; at the very least they will either be imprisoned or banished from the country. Thus, those rebel leaders who successfully solve the collective action learn from their previous success and adapt to the changing environment. Secondly, by studying recurrence of civil war this research directs future exploration to focus on the long-term stability of a country that is equally important as the study

of short-term stability. While this research does not approach any form of a grand strategy in terms of long-term stability it does point to the idea that long-term stability should receive equal attention in the literature.

## The Collective Action Problem and the Stability of the Peace

The two variables considered to affect the stability of the peace are identity and democracy. Both of these variables are standards in the literature and are included in the analysis not only for control but because both of these variables can influence the ability of rebels to solve the collective action problem. Identity or at least elements of it can be used to solve the collective action problem. Especially in small groups environments a negative selective incentive can be applied to those who do not participate in the collective good of revolution. Censure or even ostracism of those who fail to bear their share of the burdens of collective action can sometimes be an important negative select incentive (Olson 1982: 23). Governments and rebel groups who attempt to repress certain identity groups within a state may in fact increase the ability of the identity groups to make their coalition work better. The encouragement of prejudices about race, ethnicity, culture and intergroup differences in lifestyle will make coalitions work better and the inculcation of these prejudices will increase the probability that the members will follow the rule of endogamy and strengthen the selective incentives by interacting socially with their own group, of their own accord (Olson 1982: 160). It may also be that particular groups – be it ethnic, religious, or political – are assumed by the government to be actively participating in the civil war even if individuals of the identity group had no intentions of fighting or contributing to the rebels. Consequently, individual members of the identity group have no alternative other than participation in the civil war. This situation may even lead to the government's use of repression of the identity group based on the assumption that all of the members of the identity group are participating in the civil war. Repression of the identity group can push the individual members of the group into the hands of the rebel leaders and strengthen the commitment of the identity group to participate in the civil war.

Democracy as it is conceived here is a limiting factor on the ability of rebel leaders to solve the collective action problem. This is the "domestic corollary of the democratic peace proposition .... that democracies are less likely to experience civil war because democratic regimes defuse revolutionary violence by diverting popular discontent into institutionalized channels of electoral competition and nonviolent protest. Dissident movements do not need to resort to organized violence against the state because they can seek to redress their grievances through electoral means and other forms of nonviolent collective action" (Mason 2003:27).

Fearon (2004:288) makes a similar argument that a political democracy will reduce the likelihood of civil war because democracies allow the dissident movements to work for remedies through an institutional means. Therefore it can be argued that collective action in a democracy will fall well short of war because voting can change the policies of the democratic state and voting is less costly than fighting.

#### The Previous Civil War and the Collective Action Problem

The conditions resulting from the original or in all too many cases the last civil war can also influence the capacity of rebels to solve the collective action problem. Third party guarantors restrict the rebel's ability to find solutions to the Rebels Dilemma in that they enforce and police the settlement. Complex agreements also restrict the options available to rebels.

There is less wiggle room for the rebels and the government.

One of the glaring contradictions in the literature is the effect of partition on the recurrence of a civil war. Addressing this contradiction fits nicely into the theory because it alters the environment in which the rebel leaders and the government operate. The partitioning of the land following a civil war increases the options available to rebel leaders. It introduces a wide range of select incentives that rebels can use to solve the 'Rebels dilemma.' Not only does partition signal the weakness of the government and encourage other dissenter groups to rebel with the prospect of a reward in the form of land, but partition also provides rebel leaders with select incentives necessary to reward the faithful with land and/or the produce from the land. Rebels can grow drugs and other agricultural products to provide income. Partition also provides another solution to the Rebel's Dilemma in that it reduces the transaction cost for the rebel's and possibly an ethnic group's de facto self-government. Partitioning of the land gives rebel leaders free reign to administer negative select incentives in the form of punishment for those who did not contribute to the cause.

## Societal Wealth and the Collective Action Problem

Economics factors can both increase and decrease the ability of rebels to solve the 'Rebels Dilemma.' Wealthy societies, - countries with high per capita income will resist rebellion because they have all that is necessary to sustain life and as such view civil war as too costly an option to induce political change. Thus countries with high per capita income may experience nonviolent collective action but as with democracies this usually will fall well short of war. In this sense high levels societal wealth, such as countries that are highly industrialized, limits the rebel leaders' ability to solve the collective action problem. On the other hand, countries with low levels of societal wealth provide rebel leaders with an adequate number of

discontents who will view change through civil war as a viable alternative to the status quo. It is easier for Rebel leaders to solve the collective action problem when they are operating in environments of low levels of societal wealth. Walter (2004) explores this aspect of rebel recruitment in addition to others, and her argument is similar to mine: "states with higher living standards and those with open, competitive political systems should be able to escape this conflict trap [of recurring civil war] simply by reducing the incentives for those individuals to fight... Individuals will have few incentives to enlist once their living standards have reached the point where the potential net benefits from fighting no longer exceed the status quo" (Walter 2004: 375). However, it should be noted that my theory diverges from Walter (2004) in that it focuses on the solutions to the collective action problem for rebel leadership and not on the individual incentives for enlistment.

## Repression and the Collective Action Problem

Mason (1989:192) argues that "Carefully targeted repressive violence may reduce the level of active popular support for the opposition, while wide spread indiscriminate violence may in fact produce increases in active support for the opposition." Repression by the state influences the rebel leader's ability to solve the collective action problem. State sponsored repressive violence directs the participants of nonviolent social movements to conclude that they have no choice but to shift to revolutionary violence (Mason 2004:88). Repression by the state not only increases the commitment of the rebel organization and leadership it also increases the size of the organization. Repression strengthens the resolve of the participants. It leads members of a rebel organization to conclude that if they are going to die they may as well die fighting. State sponsored repression induces many of those who might otherwise act as free riders to join the

organization because it leads the would-be free riders to conclude that fighting is no worse than not contributing. Thus the decision by the state to use repression alters the environment. This is especially true of countries that have experienced a civil war in the past because the knowledge necessary to solve collective action problems already exists.

## The Goal of this Research

The goal of this paper is to investigate the variables, previously used in the duration models and apply them to the overall set of all civil wars to determine the role they play in the recurrence of a civil war by providing solutions to the collective action problem. The factors that are expected to have the greatest impact on the recurrence of civil war and that have been employed in duration models are the variables that affect the stability of peace, economic variables that affect individuals' decisions calculus to join a rebel group and those that affect the conditions following the first war. Thus, those variables that increase the duration of a negotiated settlement should increase the likelihood of the recurrence of another conflict. On the other hand, those variables that have been found to decrease the duration of a negotiated settlement should decrease the likelihood that another civil war occurs.

It may be that negotiated settlements provide little if any exploratory power into the reasons why civil wars reoccur. However, negotiated settlements are the least durable of the three ways that a civil war can end. Approximately 38% of the negotiated settlements included in the Doyle and Sambanis (2000a) data set experience another civil war. Due to this fact they should provide us with some insight into what causes the recurrence of another war. If they don't provide us with any exploratory power into the reasons why civil wars reoccur, then there is something wholly unique about negotiated settlements as a subset of civil wars.

# Factors that Alter the Solutions to the Collective Action Problem: Hypotheses

Identity conflicts are considered to be more intense than a civil war that is political, revolutionary or ideological. They "would presumably be more likely to be ongoing, last longer, have higher casualties, and be more likely to involve genocide" (Licklider 1995: 685). Identity civil wars are those civil wars in which one or more of the groups competing for control of the state in the civil war define themselves along religious or ethnic grounds.

Kaufman (1996) argues that religious identities are hard because they depend on belief, and change generally requires the formal acceptance by the new faith, which may be denied. However, ethnic identities are the most difficult to change since they depend on language, culture, and religion, which are largely fixed by birth.

Ethnicity embraces differences identified by color, language, religion or some other characteristic attributed to common origins. For the sake of space and time, I will not digress into a discussion of how ethnicity is created or formed. However, what is important in the context of civil wars is once ethnic cleavages are formed or created in a society, conflict is more likely. In general, ethnic identity is strongly felt, behavior based on ethnicity is normatively sanctioned, and ethnicity is often accompanied by hostility to outgroups (Horowitz 1985). The international environment plays a part in the emergence and remission of ethnic conflict. "Often overshadowed by international warfare and masked by wartime alliances, ethnic allegiances are usually revived by wartime experience or emerge soon afterward" (Horowitz 1985: 4). In divided societies, ethnicity is at the center of politics. Control of the state and exemption by

<sup>&</sup>lt;sup>13</sup> See Horowitz (1985) for an excellent discussion of ethnic affiliation, dimension, motives and sources of ethnic conflict. Kaufman (1996) argues that ethnic war requires hostile masses, belligerent leaders and an interethnic security dilemma. "These factors cause ethnic wars by reinforcing each other in a spiral of increasing conflict; belligerent leaders stoke mass hostility; hostile masses support belligerent leaders; and both together

others are the main goals of ethnic conflict. For these reasons, states that have experienced a civil war that is based on identity should be more likely to experience another civil war. Thus, ethnicity especially in divided societies increases the ability of the rebel groups to solve the collective action.

Hypothesis 1: Civil wars including identity are expected to be more likely to recur.

Competitive and open political systems, traits that exemplify democracies, should be less likely to experience a war. Hartzell, Hoddie, and Rothchild (2001) argue that prior experience with democracy produces a much more stable settlement. It can also be argued that countries that have prior experience with democracy should be less likely to experience another civil war. Democracies reduce the likelihood of civil war because democracies allow the aggrieved parties to work for redress through institutional means and thus they are less likely to experience another civil war. <sup>14</sup> Individuals will not resort to arms to settle their complaints against the government and political elites when voting is much less costly. "In a democracy, the benefits of peaceful negotiation exceed the benefits of violent conflict; revolution is not necessary" (Mason 2003: 26). Thus, democracies severely limit the ability of rebel leaders to solve the collective action problem.

However, Hegre, Ellingsen, Gates, and Gleditsch (2001) argue that semidemocracies are partly open and yet are somewhat repressive. This leads them to argue that the relationship between democracy and violence is an inverted U-shape curve. We would expect strongly authoritarian regimes to either kill or jail rebels and malcontents, while consolidated democracies

threaten other groups, creating a security dilemma which in turn encourages even more mass hostility and leadership belligerence" (Kaufman 1996:109).

<sup>&</sup>lt;sup>14</sup> Fearon and Latin (2003), after controlling for per capita income, find no support for this widespread claim in their investigation of the determinants of civil war onset and magnitudes.

allow the malcontents to voice their grievances and use votes instead of rifles. Thus, consolidated authoritarian regimes and consolidated democracies are less likely to experience another civil war while weak authoritarian regimes and weak democracies are expected to be more likely to experience another civil war.

Hypothesis 2a: A post conflict democratic environment should be less likely to result in the recurrence of a civil war.

Hypothesis 2b: Consolidated democracies and autocratic regimes should be less likely to experience another civil war.

Hypothesis 2c: Semi-democracies and weak authoritarian regimes are predicted to be more like to experience a recurrence of a civil war.

Wealthy people do not fight, and even people who are living relatively comfortably don't fight. Every country has a fairly fixed pool of individuals to draw from both for the rebels and the government. We would expect countries with high per capita income to experience relatively few civil wars and even fewer multiple civil wars. In order for rebels to field an army, they must convince the average citizen that fighting is better than the status quo. Recruitment will be low when the average citizen is living relatively comfortably. Along with high per capita income comes better living conditions and more opportunities for those people who might otherwise feel trapped and view the risk of fighting as a viable alternative to sharecropping or grinding out a living in the city. This implies greater absolute risk with smaller relative gains. War must be perceived as the only available tool for the average citizen to improve his or her living conditions.

It can also be argued that civil wars bleed a country dry of its resources and destroy its infrastructure of buildings, roads, train tracks, factories, water treatment facilities and other necessities required to increase the living standards, which must be either repaired or rebuilt.

Without assistance from the outside this further diminishes the average citizen's opportunities. Countries that have relatively low economic development and experience a civil war would be much more likely to experience another and another. Countries with high per capita income limit the ability of the rebels to solve the collective action problem because few individuals view the select incentives offered by a rebel group as worth the risk of dying. However, countries with low per capita income will have the opposite effect on the collective action problem.

Hypothesis 3: Countries with low economic development are expected to have a higher probability of the recurrence of another civil war.

Fearon (2004) finds that the availability of drugs and/or gemstones (contraband) in a conflict zone tends to lengthen civil wars. Stedman (2001) reports similar findings that lootable goods decrease the duration of a negotiated settlement. "Loot is not usually the root motivation for conflict, but it may become critical to its perpetuation, giving rise to the conflict trap" (Collier et al. 2003). Collier, Elliot, Hoeffler, Reynal-Querol and Sambanis (2003) argue that while the production of drugs rise sharply during conflicts, it is not completely eliminated in post conflict situations and that the production of drugs prevails long after the civil war ends.

The argument parallels those of Collier, Hoeffler and Soderbom (2004) regarding rebellion as a business. Countries that have experienced one civil war and have gem mining and/or drug production have already developed the necessary underground economy, technical expertise and trafficking routes outside the country for the financing of rebel groups. Rebel groups will find it much easier to recruit and reward individuals when they have a steady income stream funded by these lootable goods. Thus, we can expect the likelihood of another civil war in countries that have a marketable lootable good to be high. This source of income increases the ability of rebels to solve the collective action problem.

Hypothesis 4a: Post civil war countries that have lootable goods are expected to experience another civil war.

The ripe conditions for what Tilly (1978) refers to as multiple sovereignty occur in situations of weak authoritarian regimes and weak democracies. In consolidated authoritarian regimes we would expect the state to either crush or jail any resistance. In consolidated democracies, malcontents can gain a voice through voting, and resistance movements can seek equitable recourses through voting and courts. It is in situations when countries fall to the bottom of the inverted U-shape that we are most likely to see resistance groups fully utilizing lootable goods as a source of revenue to fund a new round of conflict.

Hypothesis 4b: The bottom of the inverted U-shape of democracy is when we are most likely to see lootable goods have the strongest impact on the recurrence of another civil war.

Enterline and Balch-Lindsay (2000) and Regan (2002) find that third-party interventions have a great likelihood that a stalemate will emerge and that the civil war will endure for a significantly longer time period. Walter (1997, 1999 and 2002) and Fortna (2004) find that a third-party guarantor who offers credible commitments to the former combatants provides security guaranties and in effect enforces the peace limiting the conflict trap. Peacekeeping operations that include third party guaranties alter the environment and limit the ability of the rebels to solve the collective action problem again. In short, multidimensional peacekeeping operations that offer third- party guarantors improve the prospect for a stable peace and reduce the likelihood of the recurrence of another civil war. The presence of a third party guarantor has received a great deal of attention in the literature, in part because it implies that third parties can have a positive influence on the length of a civil war. It is because of this attention that I intend to test the effect of a third party guarantor on reoccurrence.

Hypothesis 5: Peacekeeping operations that include third-party guarantors decrease the

likelihood of another civil war.

Fortna (2003) finds that the strength and complexity of the agreement reduce the risk of another war. Hartzell and Hoddie (2003) present similar findings, i.e., settlements that contain political, territorial, military and economic power sharing reduce the risk of returning to war. Complex agreements reduce uncertainty by specifying the conditions of the cease-fire. They may also stimulate cooperation under the security dilemma faced by civil war adversaries.<sup>15</sup> Providing explicit rules for the cease-fire helps define compliance and noncompliance, which in turn helps prevent misunderstanding and avoid unnecessary tension. The more complex the agreement, the less doubt there will be about what constitutes fulfillment (Fortna 2003). Complex agreements alter the environment of the peace following the civil war limiting the ability of the rebels to solve the collective action problem again. We would expect that civil wars that are concluded with a complex agreement are less likely to experience another civil war. Hypothesis 6: The greater the complexity of the agreement, the less likely there will be a

recurrence of another civil war.

Hartzell and Hoddie (2003a) argue that institutions matter and their argument is based on the notion of political power sharing. Power sharing includes the following aspects: political, territorial, military and economic. Their argument is that the more complex the power sharing arrangements, the greater the likelihood of peace. However, Walter (2004) finds that partition actually increases the likelihood of conflict because it signals that the government is weak.

Institutions do matter. However, when the government agrees to make demographic changes and adjust the borders, this signals the government's weakness and will either signal to

<sup>&</sup>lt;sup>15</sup> Jervis (1978) has an excellent discussion of cooperation under the security dilemma as it pertains to the interstate conflict, which can also be applied to intrastate conflict.

the rebels to increase their demands in the settlement process, or signal to other would be rebel groups that the government is weak and a rebel movement is likely to be successful. Therefore, civil wars that end with a partition are expected to be more likely to be followed by another than a civil war that did not end in partition. Partition provides the rebels with a wide range of possible solutions to the collection action problem. Rebels can reward those who were loyal to the cause through grants of land, a portion of the income from contraband and a portion of the income form agriculture. Given that the rebels now control some of the land they can also punish those who did not contribute to the cause.

Hypothesis 7: Civil wars that end in the partition are expected to be more likely to experience another civil war than those that don't end in partition.

State sponsored repression alters the decision environment of those who might other wise free ride on a rebel movement. Rebels leadership can much more easily present them selves as the solution to the collective action problem in such an environment. Large-scale repression leads individuals to conclude that fighting is a better alternative than doing nothing. State sponsored repression can also force other groups who might have used less violent means to change the political system to resort to rebellion instead of demonstrations. Thus, state sponsored repression alters the environment by increasing the ability of the rebels to solve the collective action problem.

Hypothesis 8: High levels of state sponsored repression increase the probability that another civil war will recur.

## DATA AND METHODS

The method employed to test the model is logit. The choice of logit is based on the simple interpretation of logit coefficients as odds ratios. The choice between the logit and probit models "is largely one of convenience and convention, since the substantive results are generally indistinguishable" (Long 1997: 83). It should however be pointed out that extremely large samples are needed to distinguish whether observations were generated from the logit or probit model (Chambers and Cox 1967).

I have utilized the Doyle and Sambanis (2000a) data set which includes 124 civil wars to test the hypotheses. This includes all civil wars from (begin in) 1944 to (ended before) 1997. The data set also includes wars that were ongoing as of December 1999, but which had at least one significant settlement or truce or third party peace operation, signaling the parties' desire to terminate the war and start a peacebuilding process. All civil wars that have not concluded by the end of 1997 are dropped form this analysis because the recurrence of another war has not been observed. This reduces the number of cases to 114.

Doyle and Sambanis (2000a) classify armed conflict as a civil war if it meets the following criteria: "the war has caused more than one thousand battle deaths; the war represented a challenge to the sovereignty of an internationally recognized state; the war occurred within the recognized boundary of that state; the war involved the state as one of the principle combatants; and the rebels were able to mount an organized military opposition to the state and to inflict significant casualties on the state" (Doyle and Sambanis 2000b:2). It is important to note that this definition of civil war is similar to the COW (Sarkees 2000) data set and the Licklider (1995) data set. However, it deviates from the COW (Sarkees 2000) and the Licklider (1995)

<sup>16</sup> Data set notes for the Doyle and Sambanis (2000a) APSR are available at: http://www.worldbank.org/research/conflict/papers/peacebuilding/

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definition in that it requires 1,000 battle deaths total over the course of the entire war and not 1,000 battle deaths annually. This definition is similar to the Regan (2000 and 2002) data set but is more stringent by requiring a 1,000 battle deaths threshold instead of 200 deaths throughout the life of the war.

The Doyle and Sambanis (2000a) data set is a relatively good data set; however, like all data sets it does have some errors. Nonetheless, there are a number of reasons for the choice of the Doyle and Sambanis (2000a) data set. First, it contains an extensive number of variables which required limited coding on new variables. Most of the variables used to test my hypothesis are already coded. Excluding the dependent variable "recurrence," I coded two new variables. Second, the data set has more observations than most of the civil war data sets based on the Correlates of War (Sarkees 2000). Third, the data set or variables from the data set have been used widely throughout much of the civil war literature. Lastly, the partition variable used by Walter (2004) and Sambanis (2000) is based on this data set.

## Measuring the Dependent Variable

The dependent variable for this study measures the recurrence of civil war. A war is coded as "recurrence" and coded as "1" if the country experienced a subsequent civil war following the original civil war. This variable is date driven; obviously a country cannot experience another civil war if the current civil war is still ongoing. Thus, the initial civil war must end for the state to experience another. A war is coded as reoccurring if another civil war occurs after the end date of the original war or earlier war. A war was coded as "0" if a country did not experience another civil war following the original war.

## Measuring the Independent Variables

To determine if the issues driving the initial war affected the likelihood of a subsequent war or wars, several variables were included in the analysis. Stability variables include identity, democracy (Polity score) and democracy (Polity score)<sup>2</sup> squared. The first measures whether or not the type of war was an identity war. The variable employed to measure this is the variable "Wartype" which Doyle and Sambanis (2000a) coded as "1" if the type of war is an ethnic, religious and/or identity conflict and "0" if it was ideological, revolutionary and/or another type of war.

Two variables were used to measure a nation's level of the economic development, GDP per capita and the infant mortality rate, both of which are standards in the literature. Economic development is somewhat difficult to measure due to the fact that several of the countries in the data set's GDP numbers are based on estimates because it is difficult and sometimes dangerous to get the data when fighting is still going on. Doyle and Sambanis (2000b) use a variety of sources to fill in the missing gaps; however, there may be some measurement problems. The two primary sources are the World Bank (data is reported in 5-year period averages from 1960-1995) and the Banks Crossnational Survey, 1949-1991. The next variable intended to measure

<sup>&</sup>lt;sup>17</sup> The sources used by Doyle and Sambanis (2000b) are the World Bank, Country Data and WDI; Banks Crossnational Survey, 1949-1991; Penn World Tables 5.1 Barro and Sala-I-Martin (1995) for the years 1960, 1985, and 1990.

World Bank data reported reflects 5-year period averages from 1960-1995. If war is more than 11 years from 1976, 1986, or 1996 they do not report World Bank data but rather the Bank's Crossnational Survey.

GDP in the Banks Crossnational survey data is consistently lower than that of the World Bank data for the same countries and years. Doyle and Sambanis (2000b) used the Banks Crossnational survey data for the following countries: Algeria I, Argentina, Bolivia, Cambodia (data for the first observation is used in the second), China I & II, Columbia I, Costa Rica, Cuba, Cyprus, Dominican Republic, Ethiopia, Guatemala I, India I, Indonesia I & II & III, Iraq I & II, Korea I & II, Laos, Lebanon I & II, Paraguay, Philippines I, Rwanda I, Sudan I, Uganda I, and Yemen II.

Banks' Crossnational survey data are not necessarily for the beginning year of the war, but the year closest to that was selected (Doyle and Sambanis 2000b).

the economic well being of a country is life expectancy at birth which Doyle and Sambanis (2000b) label "Lifes."

The last economic variable is lootable goods. There is unfortunately no systematic coding scheme for lootable goods (contraband) in the literature, so I have relied on Ross (2004a and 2004b)<sup>18</sup> and Fearon (2004)<sup>19</sup> for the definition, which is coca, opium, cannabis or gemstone production. In addition to Ross (2004) and Fearon (2004), I also consulted the CIA World Factbook to determine if a country produces drugs (coca, opium or cannabis)<sup>20</sup> and gemstones.<sup>21</sup> Not all drug production is the same for all countries. Only countries that produce coca, opium, and cannabis in large quantities for shipment to other countries were coded as lootable goods. This eliminated those countries which produce coca, opium and cannabis on a small scale or for domestic use. I argue that only those countries which produce coca, opium and cannabis on a large scale for shipment to other countries have the necessary skills and infrastructure developed for rebel leaders to hijack to assist in providing the financial resources to fund a war. This definition of lootable goods also means that the drug traffickers have already established the connections with the black-market for the supply of arms as well as selling drugs. Lootable goods is coded as "1" if one or more of the sources records the production on a large scale for the shipment to other countries of opium, cannabis, coca or gemstones and "0" otherwise. The

<sup>&</sup>lt;sup>18</sup> Ross (2004b) qualitative analysis of civil wars in the 1990s finds ten cases in which countries involved in a civil war produce opium, cannabis, coca or gems, they include: Angola, Democratic Republic of Congo, Liberia, Russia, Sierra Leone, Afghanistan, Burma, Cambodia, and Peru.

<sup>&</sup>lt;sup>19</sup> Fearon (2004) claims to have reviewed the "secondary literature on the 128 cases for evidence of major reliance by the rebels on income from production of trafficking in contraband" and he "coded 17 such cases" (Fearon 2004: 284).

<sup>&</sup>lt;sup>20</sup>The lootable goods variable includes both the production of gemstone and the production of drug. The CIA World Fact Book not only lists the large scale producers of a drug but also countries in which small amounts are suspected to be grown largely for domestic use. Only the countries that are the large scale producers which are produced for sale to other countries are coded as a drug producer. See the Transnational issues section for a country-by-country break down of drug related issues.

interaction effect between the inverted U-shape of democracy and lootable goods is simple the (Polity score)<sup>2</sup> multiplied by the lootable goods dummy variable.

Variables that measure the conditions following the war are complexity of the agreement, partition, and peacekeeping operations. Complexity of the negotiated settlement/agreement is measured with the number of paragraphs in the agreement text. The coding scheme developed by Fortna (2004) was utilized to create the complexity variable. The partition variable is a war outcome variable and is based on the Sambanis (2000) definition and is coded, "1" if an event of partition is observed and "0" otherwise. Sambanis (2000) defines partition as a war outcome that involves both border adjustments and demographic changes. In order to determine the effect of partition, the territorial power sharing variable from Hartzell and Hoddie (2003a) was coded as a dummy variable "1" if territorial power sharing was part of the negotiated settlement and "0" otherwise. Thus, we can compare the two variables in different models. The last variable considered is peacekeeping operations that include a third-party guarantor. This variable has become a standard and I relied on the coding criteria developed by Walter (1997 and 2001).

Peacekeeping operations including a third-party guarantor are coded as a "1" and "0" otherwise.

Lastly repression will be measured using the Political Terror Scale developed by Mark Gibney. This scale ranges from 1 to 5 where level "1" one is the lowest level of repression and there are few if any political murders. Level "5" which represents countries where there is large

<sup>&</sup>lt;sup>21</sup> In instances where Ross (2004b) contradicted Fearon (2004) or vice-versa, I relied on the CIA World Factbook to rectify these discrepancies.

<sup>&</sup>lt;sup>22</sup> Fortna (2004) developed a measure for the complexity of the agreement based on the number of paragraphs included in the agreement and/or settlement using Doyle and Sambanis (2000a); Doyle and Sambanis (2000b); and Hartzell and Hoddie (2003a) to identify negotiated settlements and agreements. The paragraph variable used by Fortna (2004) measured interstate agreements.

<sup>&</sup>quot;Counting rules: count paragraphs of agreement text or UN resolution, not including preamble nor details of boundary markers. Count all numbered or lettered or full paragraphs (e.g. 1...2...a...b...=4, but 1...2a...b...=3). Don't count correspondence unless agreement terms were only spelled out in correspondence. If there was a series of agreements in quick succession, use most detailed" (Fortna 2004c: 19).

scale political imprisonment as well as murders, disappearances, and torture are a common part of life of the whole population.<sup>23</sup> Unfortunately the data begins in 1980 and ends in 2003.<sup>24</sup> Thus, this variable will be employed in model 2 is left censored.

<sup>&</sup>lt;sup>23</sup> Level one is intended to measure the "countries under a secure rule of law, people are not imprisoned for their view, and torture is rare or exceptional. Political murders are extremely rare" (Gibney: 2003b: 1). Level two comprises "a limited amount of imprisonment for nonviolent political activity. However, few persons are affected, torture and beatings are exceptional. Political murder is rare" (Gibney: 2003b: 1). Level three refers to "extensive political imprisonment, or a recent history of such imprisonment. Execution or other political murders and brutality may be common. Unlimited detention, with or without a trial, for political views is accepted" (Gibney: 2003b: 1). Level four refers to the "practices of level 3 are expanded to larger numbers. Murders, disappearances, and torture are a common part of life. In spite of its generality, on this level terror affects those who interest themselves in politics or ideas" (Gibney: 2003b: 2). Lastly, level five represents "the terrors of level 4 have been expanded to the whole population. The leaders of these societies place no limits on the means or thoroughness with which they pursue personal or ideological goals" (Gibney: 2003b: 2).

<sup>&</sup>lt;sup>24</sup> Stata 8 was employed to run the two models testing the theory and hypotheses. Instead of trying to approximate the measure of state repression for each state from 1944 to 1979, I chose to leave them as missing values. Stata 8 dropped any case from the model that has a missing value. This reduced the number of observations in Model 2 down to 42.

## DISCUSSION

The results of the logit regression are reported in Table 1 including two models. The results are reported utilizing robust standard errors with "recurrence" of civil war as the dependent variable. The logit regression tests a series of factors related to the collective action problem in an effort to determine how they affect the recurrence of civil war and thus the long-term stability of a country following a civil war. It should be noted that the only interpretation that can be drawn from the coefficients themselves are: (1) we can determine which of the coefficients are significant and (2) based on the sign of the coefficients we can determine (using only those that are statistically significant) what effect they have on the dependent variable "recurrence" by either increasing or decrease the likelihood of another civil war.

Why is it that some countries that have experienced a civil war build long-term stability from the rubble, while others repeat the experience of another civil war and all too often experience multiple civil wars? Models 1 and 2 present the results of the logistic regression of the dependent variable "Recurrence." Model 1 presents all of the variables intended to test my hypothesis except for the repression variable because it causes the data set to be left censored. Model 2 presents the full model including the repression variable. The models test a series of factors related to the rebel leaders' ability to solve the collective action problem in an effort to determine how each factor affects the likelihood of another civil war.

Several broad implications can be drawn from the analysis. First, rebellion as a business, i.e., providing a financial incentive or some form of monetary reward to would-be rebels as an inducement to join the rebellion, may have less to do with the ability of rebel leaders to solve the collective action problem than was originally suspected. In fact, the presence of lootable goods had little effect on the likelihood of recurrence and thus the ability of rebel leaders to solve the

collective action problem using rewards as an inducement for service to the rebellion. This suggests that the material reward of rebellion is reserved for the elites of the rebellion and not the soldiers who do the actual fighting. These findings contrast the predictions of Collier, Hoeffler, and Soderbom (2004).

Second, the ability of rebel leaders to solve the collective action problem is a direct result of the political environment following the first war. Factors that measured the political environment resulting from the previous civil war, including partition and level of democracy, were significant. Interestingly, partition affected the recurrence of civil war in the opposite direction predicted by hypothesis 7. Partition actually decreases the likelihood of another civil war and thus has a positive effect on long-term stability of a country.

Democracy was highly significant in both of the models. Democracies are less likely to experience another civil war. Intuitively this makes sense for democracies allow the malcontents to have an influence on the government and effect change through voting instead of revolution. Therefore, democracies limit the ability of the rebel leaders to solve the collective action problem. Consequently, democracies decrease the likelihood of recurrence of a civil war.

Lastly, forces outside of the state involved in the war can alter the solution to the collective action problem of the Rebel's Dilemma. Third-party enforcement of the peace was significant. This suggests that third parties can influence the long-term stability of a country following a civil war.

Due to the difficulty of interpreting the magnitude of the effect from the logit regression discussed above, Table 3 transforms all the significant coefficients from Model 1 into marginal effects presenting them at incremental levels so that we can determine their effects on the dependent variable through a wide range of outcomes for each of the significant independent

variables. Finally, Table 4 presents the marginal effects at their minimum and maximum so that we can determine their overall effect on the dependent variable. In all other cases, the independent variables were held at their predicted values based on the theory and hypothesis.

The control variable was held at its hypothetical mean.<sup>25</sup>

There are a few words of caution about small sample size and maximum likelihood estimates:

It is risky to use maximum likelihood with models smaller than 100, while sample sizes over 500 seem adequate. These values should be raised depending on the characteristics of the model and the data. First, if there are a lot of parameters in the model, more observations are needed. Second, if the data are ill conditioned or if there is little variation in the dependent variable, a larger sample size is required. Third, some models such as [ordered logit and ordered probit models], require more observations. While the standard advice is that with small samples you should accept larger *p*-values as evidence against the null hypothesis, given that the degree to which [the] M[aximum] L[ikelihood] estimates are normally distributed in small samples is unknown, it is more reasonable to require smaller *p*-values in small samples. (Long 1997:54)

Based on these caveats, we must be careful not to infer too much from the models presented in this study.<sup>26</sup>

The results in presented Table 1 and 2 point to a number of important findings. First, the long-term stability of a country that has experienced a civil war is related to the type of government that follows the conclusion of the civil war. The hypothesis 2a, level of democracy, was highly significant in both of the models. The democratic governments decrease the probability of recurrence by (.29). This supports the notion that rebellion is less likely when

<sup>&</sup>lt;sup>25</sup> Stata 8 was used to produce the logit regression and the marginal effects. When creating the margin effects unless told otherwise Stata 8 will hold all variables at their hypothetical mean. This means that in cases of dichotomous variables Stata 8 will hold the dummy variables at their means of 0.5. In these cases of dichotomous variables it is not theoretically possibly for an event occur halfway at 0.5 - it either occurs or it does not. Thus all dummy variables were held at the value predicted by the theory and hypothesis.

<sup>&</sup>lt;sup>26</sup>A correlation matrix was employed to examine the variables to determine if there were any potential problems with multicollinearity. The level of democracy and the level of democracy squared were collinear; however, this is to be expected since they measure the same thing. They were both left in the models because I believe that I had a strong theoretical argument for doing so.

states are democratic thereby providing those who are discontented with institutionalized means for change, such as voting. In instances of countries that have experienced multiple civil wars, rebel groups may acknowledge that democracy may be the only way to have a voice in government. Examples of this can be found in the Sudanese civil wars following the unsuccessful settlement of the Addis Ababa Accord of 1972 and the second Sudanese civil war that followed. The rebels now demanded a more democratic political system throughout Sudan as a whole rather than succession (Atlas and Licklider 1999). There is, at best, limited support for the acceptance of hypothesis 2b and 2c. In model 2, the level of democracy squared is significant suggesting that semi-democracy and weak authoritarian regimes may influence the recurrence of civil war independent of the effects of repression.

TABLE 1
Logistic Regression of Recurrence of Civil War

Variable	Model 1	Model 2
Complexity	-0.000 (0.002)	-0.000 (0.003)
Lootable Goods	-0.365 (0.798)	-3.138 (1.927)
Lootable Goods x Level of Democracy	-0.000 (0.003)	0.010 (0.007)
Wartype	0.808 (0.541)	0.829 (0.843)
Level of Democracy	-0.034 (0.017)**	-0.054 (0.030)*
Level of Democracy <sup>2</sup>	-0.000 (0.002)	-0.010 (0.004)**
Third Party Enforcement	1.482 (0.759)**	1.941 (1.359)
Partition	-1.622 (0.794)**	-3.448 (1.449)***
Life Expectancy	0.0147 (0.032)	0.072 (0.057)
Real GDP Per capita	-0.000 (0.000)	-0.000 (0.000)
Repression (1 year after end of War)		0.420 (0.330)
		(table continues)

Table 1 (continued)

Variable	Model 1	Model 2
Population (Logged)	0.348 (0.191)**	0.330 (0.418)
Constant	-7.437 (3.744)**	-8.086 (7.843)
N	97	42
Log pseudo-Likelihood	-57.214334	-20.081401

Figures are coefficients with robust standard errors in parenthesis. \*p < .10; \*\*p < .05; \*\*\*p < .01

Secondly, partition is highly significant and governments that agree to partition are less likely to experience another civil war. Partition decreased the probability of recurrence by (.37). This is an interesting finding because it seems to vindicate the theory of Kaufmann (1996) that partition promotes long-term peace; and it also differs from the findings offered by Walter (2004).<sup>27</sup> While this finding is different than the one hypothesized, it is interesting nonetheless. Intuitively we would expect that the effect of partition is greatest in large populations and Table 4 presents the probabilities of recurrence in small and large populations. In large populations the probability of recurrence when partition is not present is (.84). It is interesting that even in small populations the probability of recurrence when partition is not present is still relatively high at (.57), while in small populations when partition occurs the probability of recurrence is (.21).

The influence of third-party enforcement of the peace following a civil war is surprising.

The introduction of third-party enforcement of the peace increases the likelihood that another civil will recur and reduces the long-term stability of the country. The overall effect of third-

<sup>&</sup>lt;sup>27</sup> It is also interesting that Walter (2004) employees the coding scheme of Sambanis (2000), which is also used in this study. In fact the partition variable and data set used in this study is the same partition variable used in the Sambanis (2000). There may be two reasons for this discrepancy in the finding of this study and the Walter (2004) study. First, Walter (2004) uses the Correlates of War data set that defines a war as a total of 1,000 battle deaths annually whereas the Sambanis (2000) data set defines a civil war as a total of 1,000 battle deaths over the course of the conflict. Secondly, the dependent variables used by Walter (2004) differ from the dependent variable used in this study. However, it is curious that our results differ so starkly since we both employed the same independent variable partition.

party guarantors on recurrence was (.27). This finding is startling, given that much of the literature focusing on negotiated settlements found that third-party enforcement has the opposite effect. However, this study does at least in part agree with the findings of Enterline and Balch-Lindsay (2000) that the presence of third parties tends to exacerbate intrastate conflicts.

TABLE 2
Probability of the Recurrence of Civil War Based on Model 1

	Polity2	Partition	Third Party Guarantors	Log Population
Min.	.48	.77	.13	.18
10%	.48			.28
25%	.44			.32
50%	.40			.40
75%	.24			.49
90%	.20			.60
Max.	.19	.40	.40	.78

Probabilities are calculated varying the independent variables that were found to be significant.

Both third party enforcement of the peace and population size (control variable) are significant in the models. However, they are not significant in the left censored models, which include the variable that measures the level of repression one year following a civil war. The control variable, population (logged), is not all that surprising. Large populations in politically repressive regimes seem to experience more civil wars. The overall effect of population size on recurrence is (.60). Recurrence of civil war is more likely in large populations because large populations provide the rebel leaders a greater supply of human resources and in large populations it is less difficult to find a surplus of malcontents. In small populations the aggrieved parties can retreat into the hinterland.

TABLE 3

Marginal Effects of Level of Democracy, Third Party Enforcement, Partition, and Population Size on the Predicted Probability of the Recurrence of Civil War Based on Model 1

	Level of Democracy	Partition	Third Party Guarantors of the Peace	Population (Logged)
Minimum	.48	.77	.13	.18
Maximum	.19	.40	.40	.78
Prob. of Recurrence	29	37	.27	.60

The probabilities are presented employing the marginal effects at their minimum and maximum.

I believe that there are several reasons for this discrepancy in the findings. First, all of the scholars, with the exception of Fortna (2004a), have built their data sets based on the Correlates of War project, which as previously discussed, has a different threshold for a war than the Doyle and Sambanis (2003a) data set. Fortna (2004a) employs the same data set as used in the present study, from Doyle and Sambanis (2003a). However, Fortna (2004a) finds that peace enforcement only has an effect on the duration of peace in the post-Cold War era.

Second, Hartzell and Hoddie (2003) and Fortna (2004) employ duration models while Walter (1997) employs Pearson correlation coefficients analysis, and Walter (2004) employs an ordered logit model. Other studies of third-party guarantors have either employed other maximum likelihood estimation methods or used different dependent variables than this study.

TABLE 4
Probability Civil War Recurrence: The Effect of Partition on Small and Large Populations

	Partition	No Partition
Small Population	.21	.57
Large Population	.51	.84

The effect of partition on the probabilities of small and large populations is from the 10<sup>th</sup> and 90<sup>th</sup> precentle. The other independent variables were held at their predicted values based on the theory and hypothesis. The control variable (logged population) was held at their mean.

There is little evidence that the presence of lootable goods affects the likelihood of recurrence. It may be that the use or misuse of lootable goods exacerbates and lengthens the conflict, as suggested by Collier et al. (2004). However, they had little effect on the recurrence and thus the long-term stability of a country. This finding is at odds with the arguments of Collier et al. (2004).

It should also be noted that repression was not significant in model 1 and 2. However, I also argue that repression's influence on the recurrence of another civil war was not sufficiently disproved due to the dearth of observation. It is likely that if we had the data on repression for the full time period covered by the Doyle and Sambanis (2000a) data set, we may see a different result.

What was not significant is just as interesting as what was significant. Among those variables that were found to not have an effect or limited effect on the recurrence of civil war were the level of complexity of the agreement following the first war, the presence of lootable goods, the relationship of lootable goods in countries that were either mildly democratic or mildly authoritarian, identity wars, and the level of economic development. Interestingly, this study does not support the findings of Hartzell and Hoddie (2003a) and Fortna (2003). The complexity of an agreement in all of the models did not reach the standard acceptable levels of significance. <sup>28</sup> The life expectancy during the year before the war was also found to have little

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<sup>&</sup>lt;sup>28</sup> Complex agreements measured in terms of the number of paragraphs in a settlement (Fortna 2003) and the measure purposed Hartzell and Hoddie (2003a) were found to not be significant. However; it should be noted that I could not find the text on the agreements for the following civil wars coded by Doyle and Sambanis (2000a and 2000b) as having a settlement: Central Africa 1995-1997, Chad 1965-1979, Djibouti 1965, Djibouti 1991-1995, India Partition 1946-1948, Lebanon 1958, Lebanon 1975-1978, Mali 1990¬1995, Namibia 1965-1989, Philippines-NPA 1972-1992, Russia-Chechnya 1994-1996, Rwanda 1990-1994, Sudan 1963-1972 and Zimbabwe/Rhodesia 1972-1980. These settlements were left as missing values and were thus left out of the logit regressions. I searched all the sources mentioned by most of the authors in the literature review as well as several internet source including: The United States Institute for Peace, The Jewish Virtual Library, International Conflict Research and the Yemen Gateway. It is arguable that the inclusion of these missing cases may well have effect the findings; however, since

effect on recurrence. I deemed this to not be sufficiently statistically supported to accept hypothesis 3, even on a limited basis. Nonetheless, this is an interesting finding because Walter (2004) finds life expectancy to be highly significant. Nor do I find support for the low quality of life arguments of Walter (2004) leading to another civil war. It may be that poor quality of life, as measured by economic wealth and life expectancy, is just one of the symptoms of a much larger problem which may lead to the recurrence of another civil war; however independently, had little effect of the recurrence of another civil war.

Among the other variables that had little effect on the likelihood of recurrence were the type of conflict measured by the variable "Wartype" and the wealth of countries measured by "Real GDP Per Capita." Identity conflicts had little statistical effect on the likelihood of recurrence. These findings mirror those of Licklider (1995). The relative wealth of a country measured in real GDP per capita had little statistical effect on the likelihood of recurrence. These findings, it is hoped will stimulate other research in the collective action problem and the recurrence of civil war.

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the complexity variable is only significant at the level of 30% it is unlikely to have made a large enough effect to make this variable significant.

## **CONCLUSION**

This study attempted to explain why some countries experience multiple civil wars while others who have experienced a civil war build long-term stability from the rubble of conflict. In this study I defined long-term stability as the lack of the recurrence of another civil war. My explanation of why civil war recurs focuses on the collective action problem and centers on the rebel leaders' ability to solve the Rebel's Dilemma. It is difficult to measure the leadership abilities of various rebel groups; however we can measure the environment, which either helps or hinders the rebel leader's ability to solve the collective action problem. I further argue that once the Rebel's Dilemma has been solved once it is much easier for rebel leaders to solve it again and again.

The empirical findings suggest that the political situation resulting from the first war plays a strong role in the solutions to the collective action problem and thus the long-term stability following a civil war. In particular the level of democracy, partition and third party enforcement of the peace all affected the ability of the rebel leaders' to solve the collective action problem and the likelihood of another civil war. The level of democracy was found to have a negative effect on recurrence. The presence of partition was also found to have a similar and somewhat strong effect on the likelihood of another civil war. Interestingly, the presence of a third party guarantor following a civil war was found to increase the probability of another conflict. The findings do not support the notion that the presence of lootable goods makes recurrence more likely. Nor is an identity conflict more or less likely to recur. Quality of life also had little effect on the likelihood of recurrence.

This analysis also suggest that in the research agenda focusing on civil wars it may be necessary for researchers to agree to some "basic" definitions such as what is a civil war. It is

interesting that when different data sets are employed to study different research questions that contain similar variables the result are polar opposite. It may be necessary to issue a call to arms to researchers interested in studying civil wars, not in the traditional sense of the word, but to create a program such as Eugene to create data set based on similar definitions.

What implications can we glean from this study? In instances in which the international community decides to act, it should consider encouraging the government to become more democratic. Democracy may be one of the most valuable weapons that the international community has in its arsenal to encourage long-term stability. It may be just a useful in terms of long-term peace to provide incentives for the settlement of conflicts and inducements to become more democratic. The findings also suggest that third party guarantors are not the only solution to ending a civil war. In reaching settlements concerned parties should realize that complex settlements for their own sake might not help in terms of the recurrence of another civil war. Partition has been and probably will remain a politically difficult way to aid in the settlement of conflict; however, partition should not be ignored as a possible means to aid in the prevention of another conflict.

In future research I think it might be interesting to use game theory to study the sequential form of the game in which both the rebels and the government interact. If the government decides to use repression, are we more likely to a recurrence or "peace"? I am not sure that I satisfactorily answered this question. The same can be applied to the rebels; if they decide to act in a violent manner are we more likely to see peace or recurrence. It may be interesting to also explore the various types of actions and investigating the outcomes. I also think that it would be interesting to apply the models presented in this paper to several of the widely used data set to see if the results are consistent. I further believe that it would be

Gibney's (2003a) data set, so that we can better determine the effects of repression on the recurrence of civil war. As it stands now I am reluctant to reject the notion that repression had little effect on the recurrence of civil war.

Also, not all countries and NGOs are willing to act as third-party guarantors in most civil wars. The political cost of choosing this form of intervention is fairly high, especially for the elected leaders of democracies. If the intervention becomes protracted and costly, the politicians in power may be voted out of office. Thus, it may be worth exploring the effects of economic interventions, and a mixed strategy of military and economic interventions, as suggested by Regan (1996), on the recurrence of civil war. This may increase our understanding of the alternatives that democracies can pursue to limit the recurrence of civil war.

# APPENDIX LOGIT REGRESSION RESULTS FOR FOUR MODELS

TABLE 5
Logistic Regression of Recurrence of Civil War

Variable	Model 3	Model 4	Model 5	Model 6
Complexity (Hartzell & Hoddie 2003a)	0.129 (0.210)	0.024 (0.343)	-0.302 (0.369)	0.079 (0.246)
Lootable Goods	-0.395 (0.747)	-3.683 (1.890)**	-2.786 (1.464)**	-0.317 (0.754)
Lootable Goods x Level of Democracy	0.000 (0.003)	0.012 (0.007)*	0.010 (0.005)*	0.000 (0.003)
Wartype	0.534 (0.468)	0.353 (0.856)	-0.466 (0.830)	0.349 (0.449)
Level of Democracy	-0.037 (0.016)**	-0.065 (0.026)***	-0.029 (0.024)	-0.031 (0.015)**
Level of Democracy <sup>2</sup>	-0.001 (0.001)	-0.013 (0.004)***	-0.009 (0.003)***	-0.001 (0.001)
Third Party Enforcement	0.995 (0.637)*	1.532 (1.282)	0.667 (0.941)	0.736 (0.606)
Partition	-1.424 (0.744)**	-4.241 (1.404)***		
Partition (Hartzell & Hoddie 2003a)			1.266 (1.454)	0.004 (0.767)
Life Expectancy	0.027 (0.287)	0.114 (0.060)*	0.032 (0.062)	0.010 (0.028)
Real GDP Per capita	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
Repression (1 year after end of War)		0.631 (0.352)*	0.341 (0.314)	
Population (Logged)	0.431 (0.187)**	0.296 (0.305)	0.286 (0.266)	0.368 0.168)**
Constant	-8.572 (3.634)***	-9.089 (5.003)*	-4.762 (3.960)	-6.763 (3.274)**
N	110	48	48	110
Log pseudo- Likelihood	-57.21334	-21.795634	-25.800889	-68.620037

Figures are coefficients with robust standard errors in parenthesis. \*p < .10; \*\*p < .05; \*\*\*p < .01

The results of the logit regression reported in Table 5 include four models. The models test alternative measures of complexity and partition, as proposed by Hartzell and Hoddie (2003a). Neither of the measures for complexity or partition approach the standard levels of significance. Most of the results from models 3, 4, 5 and 6 mirror the findings reported in the

sixth chapter. However, in models 4 and 5, lootable goods and lootable goods multiplied by democracy squared were both significant. It is important to note here that lootable goods are in the opposite direction as predicted by hypothesis 4a. In model 4, repression is significant and in the predicted direction of hypothesis 8. However, I maintain that given the small number of observations in model 4, we should be cautious in accepting this finding. The results of Table 5 were reported in an effort to be thorough. I also think that it is interesting to allow the reader to compare the alternative measures of complexity and partition to those selected by the author. Since the findings are similar to those of models 1 and 2, I chose to include them in the appendix.

## REFERENCE LIST

- Bercovitch, Jacob and Patrick M. Regan. 1997. "Managing Risk in International Relations: The Mediation of Enduring Rivalries." *Enforcing Cooperation: Risky States and Intergovernmental Management of Conflict.* New York, NY. St. Martin's Press, Inc.
- Bercovitch, Jacob and Jeffery Langley. 1993. "The Nature of the Dispute and the Effectiveness of International Mediation." *The Journal of Conflict Resolution* 37: 670-691.
- Carment, David and Dane Rowlands. 1998. "Three's Company: Evaluating Third Party Intervention in Intrastate Conflict." *Journal of Conflict Resolution* 42(5) 572-599.
- Carment, David and Dane Rowlands. 2003. "Twisting One Arm: the Effects of Biased Interveners." *International Peacekeeping* 10(2): 1-24.
- Central Intelligence Agency. 2005. *The World Factbook*. Washington, D.C. CIA Office of Public Affairs. Available at: http://www.cia.gov/cia/publications/factbook/index.html
- Chambers, Elizabeth A. and D.R. Cox. 1967. "Discrimination Between alternative Binary Response Models." *Biometrika* 54(3/4): 573-578.
- Collier, Paul, Anke Hoeffler and Mans Soderbom. 2004. "On the Duration of Civil War." *Journal of Peace Research* 41(3): 253-273.
- Collier, Paul; Lani Elliot; Havard Herge; Anke Hoeffler; Marta Reynal-Querol and Nicholas Sambanis. 2003. *Breaking the Conflict Trap: Civil War and Development Policy*. World Bank Policy Research Report. Oxford: Oxford University Press. Available at: <a href="http://econ.worldbank.org/prr/CivilWarPR">http://econ.worldbank.org/prr/CivilWarPR</a>
- Davies, James C. 1962. "Toward a theory of Revolution." *American Sociological Review*. 27:5-18.
- DeRouen, Karl R and David Sobek. 2004. "The Dynamics of Civil War Duration and Outcome." *Journal of Peace Research* 41(3) 303-320.
- Diehl, Paul F.; Daniel Duckman; James Wall. 1998. "International Peacekeeping and Conflict Resolution: A Taxonomic Analysis with Implications." *Journal of Conflict Resolution* 42(1) 33-55.
- Diehl, Paul F.; Jennifer Reifschneider; Paul R. Hensel. 1996. "United Nations Intervention and Recurring Conflict." *International Organization* 50(4) 683-700.
- Diehl, Paul F. and Gary Goertz. 2000. *War and Peace in International Rivalry*. Ann Arbor, Michigan: University of Michigan Press.
- Dixon, William J. 1996. "Third-Party Techniques for Preventing Conflict Escalation and Promoting Peaceful Settlement." *International Organizations* 50 (4): 653-681.

- Doyle, Michael W. and Nicholas Sambanis. 2000a. "International Peacebuilding: A Theoretical and Quantitative Analysis." *American Political Science Review* 94(4): 779-801.
- Doyle, Michael W. and Nicholas Sambanis. 2000b. Data Set Notes for "International Peacebuilding: A Theoretical and Quantitative Analysis." *American Political Science Review* 94(4): 779-801. Available at: http://www.worldbank.org/research/conflict/papers/peacebuilding/
- Enterline, Andrew J. and Dylan Balch-Lindsay. 2000. "Killing Time: The World Politics of Civil War Duration, 1820-1992." *International Studies Quarterly* 44: 615-642.
- Enterline, Andrew J. and Seonjou Kang. 2003 "Stop the Killing Sooner? Assessing the Success of United Nation Peacekeeping in Civil Wars." (Unpublished) Prepared for the annual meeting of the Peace Science Society (international), Tucson, AZ November 1-3, 2002. Available at http://www.psci.unt.edu/enterline/conferencepapers.html
- Fearon, James D. 1995. "Rationalist Explanations for War." *International Organizations* 49(3) 379-414.
- Fearon, James D. 1998. "Bargaining, Enforcement, and International Cooperation." *International Organization* 52(2) 269-305.
- Fearon, James D. 2004. "Why Do Some Civil Wars Last So Much Longer Than Others?" *Journal of Peace Research* 41(3) 275-301.
- Fortna, Virginia P. 2003. "Scrapes of Paper? Agreements and the Durability of Peace." *International Organization* 57: 337-372.
- Fortna, Virginia P. 2004a. "Does Peacekeeping Keep Peace? International Intervention and the Duration of Peace after Civil War." *International Studies Quarterly* 48(2): 269-292.
- Fortna, Virginia P. 2004b. *Peace Time: Cease-Fire Agreements and the Durability of Peace*. Princeton, New Jersey: Princeton University Press.
- Fortna, Virginia P. 2004c. *Peace Time: Cease-Fire Agreements and the Durability of Peace*. Princeton, New Jersey: Princeton University Press. Codebook available at <a href="http://www.columbia.edu/~vpf4/research.htm">http://www.columbia.edu/~vpf4/research.htm</a>
- Frohlich, Norman and Joe A. Oppenheimer. 1970. "I Get a Little Help from My Friends." *World Politics* 23(1): 104-120.
- Gibney, Mark. 2003a. "Political Terror Scale 1980 2003." Available at: <a href="http://www.unca.edu/politicalscience/faculty-staff/gibney.html">http://www.unca.edu/politicalscience/faculty-staff/gibney.html</a>
- Gibney, Mark. 2003b. "Political Terror Scale Notes." Available at: <a href="http://www.unca.edu/politicalscience/faculty-staff/gibney.html">http://www.unca.edu/politicalscience/faculty-staff/gibney.html</a>

- Greig, Michael J. 2001. "Moments of Opportunity: Recognizing Conditions of Ripeness for International Mediation between Enduring Rivals." *Journal of Conflict Resolution* 45(6) 691-718.
- Hartzell, Caroline and Matthew Hoddie. 2003a. "Institutionalizing Peace: Power Sharing and Post-Civil War Conflict Management." *American Journal of Political Science* 47(2): 318-332.
- Hartzell, Caroline. 1999. "Explaining the Stability of Negotiated Settlements to Intrastate Wars." *Journal of Conflict Resolution* 43(1): 3-22.
- Hartzell, Caroline and Matthew Hoddie, and Donald Rothchild. 2001. "Stabilizing the Peace after Civil War: An Investigation of Some Key Variables." *International Organization* 55(1): 183-208.
- Hartzell, Caroline and Matthew Hoddie. 2003a. "Institutionalizing Peace: Power Sharing and Post-Civil war Conflict Management." *American Journal of Political Science* 47(2): 318-332.
- Hartzell, Caroline and Matthew Hoddie. 2003b. "Civil War Settlement and the Implementation of Military Power-Sharing Arrangements." *Journal of Peace Research* 40(3): 303-320.
- Hedge, Harvard. 2004. "The Duration and Termination of Civil Wars." *Journal of Peace Research* 41(3) 243-252.
- Hegre, Havard; Tanja Ellingsen; Scott Gates; and Nils Peter Gleditsch. 2001. "Toward a Democratic Civil Peace? Democracy, Political Change, and Civil War, 1816-1992." *The American Political Science Review* 95(1): 33-48.
- Horowitz, Donald. 1985. Ethnic Groups in Conflict. Berkeley: University of California Press.
- Jervis, Robert. 1978. "Cooperation under the Security Dilemma." World Politics 30(2) 167-214.
- Kaufmann, Chaim. 1996. "Possible and Impossible Solutions to Ethnic Civil Wars." *International Security* 20(4) 136-175.
- Kaufman, Stuart J. 1996. "Spiraling to Ethnic Conflict: Elites, Masses, and Moscow in Moldova's Civil War." *International Security* 21(2): 108-138.
- Keegan, John. 1993. A History of Warfare. New York, New York: First Vintage Books.
- Lichbach, Mark I. 1995. The Rebel's Dilemma. Ann Arbor, Michigan. The University of Michigan Press.
- Licklider, Roy. 1995. "The Consequences of Negotiated Settlements in Civil Wars, 1945-1993." American Political Science Review 89(3): 681-690.

- Licklider, Roy and Pierre M. Atlas. 1999. "Conflict among Former Allies after Civil War Settlement: Sudan, Zimbabwe, Chad and Lebanon." *Journal of Peace Research* 36(1): 35-54.
- Long, Scott J. 1997. *Regression Models for Categorical and Limited Dependent Variables*. Thousand Oaks, California: Sage Publications, Inc.
- Luttwack, Edward N. 1999. "Give War a Chance" Foreign Affairs 78(4): 336-44.
- Mason, David T. and Dale A. Kane. 1989. "The Political Economy of Death Squads: Towards a Theory of the Impact of State-Sanctioned Terror." *International Studies Quarterly* 33(2): 175-198.
- Mason, David T., Joseph P. Weingarten, and Patrick J. Fett. 1999. "Win, Lose or Draw: Predicting the Outcome of Civil Wars." *Political Research Quarterly* 52(2): 239-268.
- Mason, David T., and Patrick J. Fett. 1996. "How Civil Wars End: A Rational Choice Approach." *Journal of Conflict Resolution* 40(4): 546-568.
- Mason, David T. 2003. "Globalization, Democratization, and the Prospects for Civil War in the New Millennium." *International Studies Review* 5(4): 19-35.
- Mason, David T. 2004. *Caught in the Crossfire: revolution, Repression, and the rational Peasant.* Lanham, Maryland: Rowman and Littlefield Publishers Inc.
- Modelski, George. 1964. "The International Relations of Internal War." *International Aspects of Civil Strife*. Ed. James N. Rosenau. Princeton, New Jersey: Princeton University Press.
- Modelski, George. 1964. "International Settlement of Internal War." *International Aspects of Civil Strife*. Ed. James N. Rosenau. Princeton, New Jersey: Princeton University Press.
- Moore, Will H. 1995. "Rational Rebels: Overcoming the Free-Rider Problem." *Political Research Quarterly* 48(2): 417-454.
- Morrow, James D. 1992. "Signaling Difficulties with Linkage in Crisis Bargaining." *International Studies Quarterly* 36(2) 153-172.
- Most, Benjamin A. and Harvey Starr. 1989. *Inquiry, Logic, and International Politics*. Columbia, South Carolina: University of South Carolina Press.
- Olson, Mancur. 1998. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge, Massachusetts: Harvard University Press.
- Olson, Mancur. 1982. The Rise and Decline of Nations: Economic Growth Stagflation and Social Rigidities. New Haven, Yale University Press.
- Pillar, Paul R. 1983. *Negotiating Peace: War Termination as a Bargaining Process*. Princeton, New Jersey: Princeton University Press.

- Posen, Barry R. 1993. "The Security Dilemma and Ethnic Conflict." Ethnic Conflict and International Security. Ed. Michael E. Brown. Princeton, New Jersey: Princeton University Press.
- Regan, Patrick M. 2002. "Third-Party Interventions and the Duration of Intrastate Conflicts." *Journal of Conflict Resolution* 46(1): 55-73.
- Regan, Patrick M. 1996. "Conditions of Successful Third-Party interventions on Intrastate Conflicts." *Journal of Conflict Resolution* 40(2): 336-359.
- Regan, Patrick M. 1998. "Choosing to Interventions in Internal Conflicts." *The Journal of Politics* 60(3): 754-779.
- Regan, Patrick M and Russell J. Leng. 2003. "Social and Political Cultural effects on the outcomes of Mediation in Militarized Interstate Disputes." *International Studies Ouarterly* 47: 431-542.
- Regan, Patrick M. 2000. Civil Wars and Foreign Powers: Outside interventions in Intrastate Conflicts. Ann Arbor: University of Michigan Press.
- Ross, Michael L. 2004a. "What Do We Know About Natural Resources and Civil War?" *Journal of Peace Research* 41(3): 337-356.
- Ross, Michael L. 2004b. "How Does Natural Resources Wealth Influence Civil War? Evidence from 13 Cases." International Organization 58(1):35-67.
- Rothchild, Donald. 2002. "Settlement Terms and Postagreement Stability" *Ending Civil Wars: The Implementation of Peace Agreements*. Ed. Stephen J. Stedman, Donald Rothchild, and Elizabeth M. Cousens. Boulder, Colorado. Lynne Rienner Publishers, Inc.
- Sambanis, Nicholas. 2000. "Partition as a solution to Ethnic: An Empirical Critique of the Theoretical Literature." *World Politics* 52: 437-483.
- Sarkees, Meredith Reid (2000). "The Correlates of War Data on War: An Update to 1997," Conflict Management and Peace Science, 18/1: 123-144.
- Sikes, Timothy D. 1996. *Power Sharing and International Mediation in the Ethnic Conflicts*. New York, NY Carnegie Corporation.
- Stam, Allen C. 1996. Win, Lose, or Draw: Domestic Politics and the Crucible of War. Ann Arbor, University of Michigan Press.
- Stedman, Stephan J. 1996. "Negotiation and Mediation in Internal Conflict." *The International Dimensions of Internal Conflict*. Ed. Michael E. Brown. Cambridge, Massachusetts: The MIT Press.

- Stedman, Stephan J. 2001. "Implementing Peace agreements in Civil Wars: Lessons and Recommendations for Policymakers." International Peace Academy and Center for International Security and Cooperation. New York, June. <a href="http://www.ipacademy.org/Publications/Publications.htm">http://www.ipacademy.org/Publications/Publications.htm</a>
- Tarrow, Sidney. 1995. "Cycles of Collective Action: Between moments of Madness and the Repertories of Contention." edited by Mark Traugott. *Repertories and Cycles of Collective Action*. Durham, N.C.: Duke University Press.
- Tilly, Charles. 1978. From Mobilization to Revolution. New York, NY. McGraw-Hill Publishing Co.
- Van Belle, Douglas A. 1996. "Leadership and Collective Action: The Case of Revolution." *International Studies Quarterly* 40: 107-132.
- Walter, Barbara F. 2004. "Does Conflict Beget Conflict? Explaining Recurring Civil War." *Journal of Peace Research* 41(3): 371-388.
- Walter, Barbara F. 1999. "Designing transitions from Civil War: Demobilization, Democratization and Commitments to Peace." *International Security* 24(1): 127-155.
- Walter, Barbara F. 1997. "The Critical Barrier to Civil War Settlement." *International Organization* 51(3): 335-364.
- Walter, Barbara F. 2001. Committing to Peace: The Successful Settlement of Civil Wars. Princeton, N.J., Princeton University Press.
- Waltz, Kenneth N. 2001. *Man the State and War: A Theoretical Analysis*. New York: Columbia University Press.
- Zartman, I. W. 1993. The Unfinished Agenda: Negotiating International Conflict. *Stop the Killing: How Civil Wars End.* Ed. R. Licklider, 20-34. New York, New York: New York University Press.