Pathways To Civil War

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PATHWAYS TO CIVIL WAR:
A STUDY OF MULTIPLE PATHS TOWARD CIVIL WAR

by

SUSUMU SUZUKI

DISSERTATION

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of Wayne State University,

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2013

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Advisor                                                                 Date

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DEDICATION

This dissertation is dedicated to my parents, Sakae and Kazuko Suzuki, who have been a constant source of teaching and support.
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CHAPTER 1

INTRODUCTION

“If there is a ‘master model’ of civil wars, we still do not know what it is” (Tarrow 2007: 596)

“Much has been written on the causes of war; little has been learned about the subject” (Vasquez 2009: 3[1993:3])

1.1 The Puzzles

About forty years ago, the Correlates of War Project at the University of Michigan published *Resorts to Arms* (Small and Singer 1982). In the book, the authors presented a first systematic study of the frequency, intensity, and severity of civil wars across the world since 1816 and noted the importance of studying civil wars as follows:

> civil wars, insurgencies, and foreign interventions have come to dominate the headlines in our generation and many now play as important a role in the international community as traditional interstate war (Small and Singer 1982: 204-205).

Today the devastation and human costs of civil wars on the globe have dominated daily-headlines. A study published in 2003 estimated that our generation witnessed over sixteen million deaths in 127 civil wars within 73 countries compared to three million deaths in 25 interstate wars involving 25 countries between 1946 and 1999 (Fearon and Laitin 2003a).

Another study (Harbom and Wallensteen 2010) based on a different dataset confirms the prevalence of intra-state armed conflicts relative to interstate armed conflicts between 1946 and 2004 (see Figure 1.1: the solid line denotes the annual frequency of intra-state armed conflict involvements and the dash line traces the annual frequency of inter-state armed conflict involvements). According to Harbom and Wallensteen (2010), 94 percent of armed conflicts worldwide between 1991 and 2009 were intra-state armed conflicts between a central
government and at least one-armed opposition (i.e. the post-cold war era in the right-hand of the solid vertical line in Figure 1.1). As of the end of 2009, 36 intra-state armed conflicts were still active and six of them reached the intensity of war which yielded more than 1,000 battle-related deaths annually (Harbom and Wallensteen 2010).

**Figure 1.1 Trend of Inter-state and Intra-state Armed Conflict Involvements, 1946-2004 (state-year)**

Source: Generated by the author based on the UCDP Main Conflict Table, version 2012.¹

Despite a number of impressive efforts to remedy such deadly human epidemics by the international community, civil wars remain as the most perplexing of political, economic, and societal problems in our generation (Collier et al. 2003; Regan 2009). There are compelling reasons to prevent future civil wars, and to manage and stop ongoing civil wars or the ones that were not possible to prevent. However, civil wars are very little understood by the public, by the media, even by the policymakers who make a difference in the outcome of these wars (Collier et al. 2003; Collier and Sambanis 2005a, b; Olson Lounsbery and Pearson 2009; Regan 2009). Therefore, I argue that understanding causes and consequences of civil wars and ending and
preventing those wars remain one of central scholarly and policy concerns in the international community.

Still one would wonder why we would need to add another volume on studying the outbreak of civil war, as a large body of qualitative and quantitative literature on civil wars has emerged since the end of the Cold War in 1991. Lichbach (2009:152-153) notes, “It was nearly impossible to produce an inventory” of the civil war research. However, a number of scholars in the extant literature on civil war research have frequently pointed out that there is a dearth of theoretical synthesis with robust empirical evidence.2 Tarrow (2007: 596) claims that “If there is a ‘master model’ of civil wars, we still do not know what it is” (italic added). Dixon (2009: 731) further fulfills Tarrow’s concern by arguing that the extant research on civil wars “still lacks a hard core of generally accepted propositions…. most studies are still characterized by a laundry list of control variables unrelated to their central theory of civil wars” (italic added). Many others claim that the leading theoretical explanations of the causes of civil war have relatively little explanatory and predictive power regarding episodes of the outbreak of civil war (e.g. Thyne 2009; Ward et al. 2010; Young 2012). Moreover, as Hegre and Sambanis (2006) and Dixon (2009) point out, the meaning and significance of the existing findings on civil war onset are hardly self-evident due to inconsistencies and anomalies in the findings and differences in measurement and research design employed in the literature.3 Vasquez (2009[1993]) notes that “Much has been written on the causes of war; little has been learned about the subject” (Vasquez 2009: 3[1993:3]);4 so that we must put together a set of clues or pieces of a puzzle about what we know about causes of or escalation toward civil war.

Up to today, a handful of scholarly efforts have appeared by integrating a set of theoretical and empirical clues into a reasonable and somewhat comprehensive framework (e.g.
Regan (2009; Olson Lounsbery and Pearson 2009). Regan (2009) puts forward an argument about structural poverty as the root cause of civil wars by synthesizing the existing findings in the literature and his personal experience of civil wars. Olson Lounsbery and Pearson (2009) have presented an enriched effort to assess the validity of the extant understandings of civil wars by gathering overt empirical findings of positive or negative factors associated with the causes and consequences of civil wars.

The aforementioned efforts have shifted considerably the civil war scholarship toward new directions and, more importantly, have brought a number of understudied issues to light. One of such subjects is to investigate a variety of possible pathways of the militarization of political contests over territory, political representation, or controlling the central authority to a large-scale armed confrontation between a central authority and at least one armed opposition (Dixon 2009; Lichbach 2009; Olson Lounsbery and Pearson 2009; Regan 2009; Tarrow 2007). Moreover, understanding the militarized phase due to the dynamic tit-for-tat interactions between a central authority and its opponents before the outbreak of civil war would be crucially important to advance our knowledge of multiple dynamic pathways toward civil war. It would benefit practitioners in conflict management and prevention to establish a set of reasonable policy instruments to avoid escalating the hostility of violence, potentially allowing the international community to develop effective early warning mechanisms to prevent and manage the militarization of domestic political contents.

1.2 What are Puzzles in the Puzzles?

In order to avoid research pitfalls and search for policy-relevant knowledge with regard to pathways toward civil war (see chapter 6 for a discussion of policy-relevant knowledge),
considerable research has appeared during the past decade. The most notable example is significant contributions by the Uppsala Conflict Data Program (UCDP) at the Department of Peace and Conflict Research, Uppsala University in Sweden, which has undertaken a number of data collection projects. Of those, Melander, Möller, and Öberg (2009) provide a new dataset on Managing Low-Intensity armed Conflicts (MLIC), which contains the information of all conflict management efforts in internal armed conflicts with the threshold of between 25 and 999 battle-related deaths, and investigate the mitigated effects of international conflict management tools on escalating minor armed conflicts to civil wars. In the similar vein, Öberg, Möller, and Wallensteen (2009) compile a new dataset including all episodes of third party early-warning conflict preventive efforts into ‘very low scale’ (less than 25 battle-deaths) violent conflicts within states. It should be understood that these studies have improved our understanding of the effectiveness of conflict management and early-warning conflict prevention in both minor and small-scale militarized disputes between a central authority and its armed opposition, and have revealed the potential variances of the causes and dynamics of different levels of violent political contests. In particular, those studies have left out a set of important questions, specifically, about how some political contentions are likely to accompany massive violence and likely to elevate small-scale violent contentions to large-scale civil wars. What follow in this volume is my conceptual, theoretical, and empirical efforts to understand the militarized phase in escalatory process of violent political struggles, namely, *Pathways toward Civil War*.

To this point, I have talked about the objectives of my study, which are to examine how militarized political contests turn into hostile militarized confrontation such as civil war. Yet one would question why such a research agenda is unique enough to explore today because a growing number of new researchers from diverse social science fields (economics, business,
sociology, anthropology, and psychology in addition to political science) have tried to overcome
the theoretical and empirical puzzles in extant civil war research during the past few years. In
other words, what are puzzles in the puzzles in recent civil war literature and what are gaps
between theory and reality?

As Dixon (2009) and Sambanis (2004a) point out, two influential works (Collier and
Hoeffler 2004; Fearon and Laitin 2003a) have framed the vast majority of the growing scholarly
endeavors of understanding civil war. The most memorable accomplishment of those researches
was to objectify the classic grievance-based relative deprivation explanation of the outbreak of
violence conflicts and inter-communal wars. Grievance-based explanation (e.g. Gurr 1970, 1993,
2000) suggests that the lack of political and civil rights, income inequality, or ethnic cleavages
are the primary sources of emerging collective violence including strikes, demonstration, riots,
insurgency and armed rebellion as well as revolution. By questioning the grievance-based
explanation, Collier and Hoeffler (2004) forcefully argue that the greater economic opportunity
of rebellion measured by easy access to lootable natural resources (i.e., diamond, drug, oil, and
timber) by rebel leaders and poor nation-wide economic condition are two primary factors that
might encourage people to rebel against their central government. Similarly, Fearon and Laitin
(2003a) assertively claim that government’s weak capacity to deter insurgent activities is the
manifesting factor increasing the risk of civil wars in sovereign states with poor economic
condition, large population size, larger mountainous terrain, high oil export dependence, and
recent experience of political instability.

Despite the convincing arguments and findings by Collier and Hoeffler (2004) and
Fearon and Laitin (2003a), however, following studies have gradually posited serious doubts (e.g.
Dixon 2009; Hegre and Sambanis 2006; Ward et al. 2010). After reanalyzing two dominant civil
war models and findings, Sambanis (2004a) and Hegre and Sambanis (2006) conclude that there is only one robust explanatory variable, lower economic growth, for explaining the outbreak of civil wars. A number of other studies demonstrate that there might be different causal mechanisms of the causes of civil wars across different regions (e.g. Collier and Hoeffler 2002; Henderson 2002; Krause and Suzuki 2005a, b). Others argue that ethnic and non-ethnic civil wars might be correlated with different structural factors (e.g. Buhang 2006; Cederman et al. 2010; Sambanis 2001; Suzuki 2007; Toft 2003; Wucherpfenning et al. 2012). Furthermore, a series of new analyses with the newly compiled datasets and new measurements on ethnic cleavages within a society reveals that politicized ethnic groups within polities have played significant roles in emerging internal ethnic violent conflicts and civil wars (e.g. Cederman et al. 2010, 2011; Eck 2009; Jakobsen and de Soysa 2009; Walter 2009b; Wucherpfenning et al. 2012).

Furthermore, civil war researchers also have demonstrated the validity of new approaches by acknowledging the problems of the artificial boundary between civil war as a large-scale violent conflict and other forms of collective violence such as terrorism (e.g. Carey 2009; Davenport et al. 2008; Findley and Young 2012; Mason 2004; Regan and Norton 2005; Sambanis and Zinn 2006; Tarrow 2007). According to the new generation of researchers, civil wars are not independent phenomena, but rather can be understood as large-scale armed conflicts growing out of lower-level militarized interactions between a central authority and non-state armed challenger(s). Hence, to examine the cotangent effect from low hostile or nonviolent conflicts to civil wars, the students of civil war research must turn back to the enriched research tradition on social movements, political mobilization, and dissident-repression dynamics in studying the origin of civil wars (e.g. Gurr 1970, 1993, 2000; Lichbach 1987; Mason 2004; McAdam et al. 2001; Tilly 2003). Put differently, the current research suggests that two distinct
sub-fields must work together in order to resolve the theoretical and empirical puzzles of the causes of civil wars (Sambanis 2004b; Tarrow 2007). In this line of interest, Davenport et al. (2008) argue that we are unable to “understand civil war onset until we better understand the role played by lower-level conflict in the escalatory process” (26). If we can prove single or multiple escalatory processes, the linkage from lower to higher hostile conflict levels would allow us to develop a better theory and, hence, a better predictive model of the risk of large-scale violent conflicts. Such theoretical models have been lacking and would help us to establish much effective early-warning indicators of violent conflicts and collapsing states.7

There are four notable theoretical and empirical contributions in this direction. First, Regan and Norton (2005) focus on the role of political mobilization, which linked civil war research to the dissent-repression literature and examined three distinct collective violence stages—namely, protest, rebellion, and civil war—in civil conflict. Regan and Norton (2005) suggest that these three phenomena are significantly different, while government repression plays important roles in changing the course of the conflict dynamics. In end, Regan and Norton conclude that “the etiology of civil war is rooted in grievances and responses by the state to demands that are not necessarily initially expressed in terms of organized armed rebellion” (Regan and Norton 2005: 335).

Second, Davenport et al. (2008), building on the dissent-repression literature elaborated by Gurr (1970, 1993, 2000),8 posit that there would be three possible explanations of paths to civil war onset. The first argument (inflammation) suggests that civil wars emerge when government repression infuriates citizens; the second argument (incapacity) claims that civil wars occur when a central government is unable to use repression; the third argument (ineffectiveness) considers civil war as the failure of government repression.9 Reexamining
Fearon and Laitin’s (2003a) study, Davenport et al. conclude that there are distinct but complex paths to civil war and the existing explanations of civil war onset have obtained little support from their examination.

Third, Sambanis and Zinn (2006) presented another effort to examine the process of conflict escalation from non-violent social movement to violent conflict. Looking primarily at ethnic self-determination movements with their new dataset including 309 ethnic self-determination movements in 98 countries from 1945 to 2000, they reveal two distinct escalatory processes (a) from the organized non-violent movement to violent conflict via state repression as well as (b) from small-scale violent self-determination movements to large scale violent conflicts such as ‘territorial’ civil wars.

Fourth, unlike the aforementioned efforts, Young (2012) explicitly applies a process of war approach drawing on Bremer (1995) to civil war research. Exploring how weaker states (as job insecurity) repress their own citizens in escalatory paths from dissident-repression interaction to civil war, Young (2012) reports that levels of repression help predict in which state-year civil war is most likely to occur, and he concludes that the states using frequent repressions against their dissidents have the higher risk of experiencing civil wars. In short, greater or increasing government repression is the central manifesting factor to understanding the causes of civil war.

These studies have made a first step to overcoming the competing findings and explanations of the escalatory pathways toward civil war by posing the problem(s) as complex and dynamic political processes. However, those studies have not elaborated enough to explain the theoretical and empirical puzzles of why some militarized political contests escalate to
hostile armed conflicts but others do not. Furthermore, the extant studies have not yet broken through the dichotomous boundary: whether there is a civil war or not.

1.3 Introducing A Process Approach to Understanding Multiple Paths toward Civil War

1.3.1 Limits of Disaggregate, Micro-Level, and Dyadic Approaches

As noted above, there are growing efforts to overcome the theoretical and empirical puzzles in extant civil war research during the past few years. One of the promising avenues is a ‘disaggregate approach’ to civil wars in terms of the ‘level-of-analysis’ problems. Cederman and Gleditsch (2009) argue that “most existing studies treat civil war as an aggregate outcome at the level of the state and ignore all variations within states, actors, and regions experiencing conflict” (487). Thus, according to Cederman and Gleditsch, “many of the non-findings and conundrums in the existing cross-national research on civil war . . . appear to follow at least partly from the near exclusive reliance on country-level attributes” (488). A similar argument has been forcefully advocated by Kalyvas (2006; 2007; 2008), which proposes a ‘micro-dynamics’ approach to studying the violence especially against noncombatants within civil wars (see also Weinstein 2007). According to Kalyvas, the dominant state-centric aggregate approaches (e.g. Fearon and Laitin 2003a; Collier and Hoeffler 2004) have explored state behavior as a critical first step in making sense of civil wars, while ignoring both the significant variation within violence and the significant geographical variation within civil wars.

In a similar line of interest, Shellman (2006, 2008; Shellman, Hatfield, and Mills 2010) has proposed a new approach to disaggregating ‘actors (i.e. groups)’ and ‘incidents’ in intrastate conflicts because “intrastate conflict is not best characterized as something that countries or regions experience or produce” (Shellman et al., 2010: 84). According to Shellman (2006, 2008),
unlike the state-centric aggregate analysis, a disaggregate approach can benefit in understanding the dynamic interactions between a central authority and at least one non-state actor such as the reciprocal interactions between the Indonesian central authority and rebels in East Timor and in Aceh in every conflict incident, respectively.

Another approach is a ‘dyadic approach’ to civil war. Cunningham, Gleditsch, and Salehyan (2009) advocate a dyadic approach by showing the importance of studying dyadic characteristics of government-nonstate armed actor dyads within civil wars. DeRouen and Bercovitch (2008) emphasize another dimension of dyadic approaches, namely the enduring internal rivalry (EIR) framework by examining the roles of intractable conflicts (i.e. territorial rivalry) between a central government and at least one armed territorial challenger in civil conflict duration and recurrence of territorial conflicts. While both efforts established the substantive benefits of a dyadic approach to studying civil war duration, outcomes, and recurrence, there are overt differences between them. In short, Cunningham et al.’s (2009) approach focuses directly on studying the influence of the dyadic conflict attributes such as relative capability strength between a central government and its non-state antagonists in every militarized civil conflict, whereas DeRouen and Bercovitch’s (2008) approach examines the static presence of territorial rivalry in each militarized intrastate conflict.

As a whole, the recent advance of both the disaggregate and the dyadic approach commonly emphasize the problems of the state-centric aggregate research and the importance of examining the dynamic interactions between the central authority and at least one insurgent or rebel organization within intrastate conflicts. These new research developments in the civil war scholarship are welcomed in their expected directions (Diehl 2006; Dixon 2009; Suzuki, Krause and Singer 2002). Yet considerably less attention has been brought to the question about what
happens within escalatory paths from ongoing militarized confrontations to large-scale armed conflicts within states, in ways noted in the research on interstate crisis behaviors and militarized interstate disputes (see Bremer 1995; Diehl 2006). Specifically very few investigations have looked at ‘certain patterns’ (Leng 2000) and sequences which are highly associated with the escalatory processes of militarized political confrontations toward large-scale armed contests between anti-government insurgents and government security apparatus or counterinsurgency forces.

1.3.2 A Process Approach to Understanding Multiple Paths toward Civil War

Although both the disaggregate and the dyadic approaches have enriched our understanding of civil wars as static and isolated (i.e. independent) phenomena, we are still waiting to resolve the theoretical and empirical puzzles to understanding the multiple process of civil wars and its causal mechanisms. To fill such needs, as I will argue below, an analytical and theoretical framework that examines a causal pathway of the outbreak of a civil war as a multiple interdependent process will help us to discriminate the substantive differences of structural and contextual factors that might influence distinct but inter-related phases in different manners.

How can we systematically distinguish and compare different phases or multiple escalatory paths toward civil war as our central observation(s)? In the present study, I propose an alternative approach incorporating a dynamic process and multiphase approach of interstate conflict (Bremer 1995; Diehl 2006; Diehl and Geortz 2001; Huth and Allee 2002; Geortz, Jones, and Diehl 2005; Maoz and Mor 2002; Senese and Vasquez 2009) with the bargaining model of interstate wars (Fearon 1995; Lake 2003; Powell 1999, 2002, 2006; Reiter 2003). I argue that
some sort of a dynamic multiphase process approach would help us understand and further classify the outbreak of civil wars as a result of a series of prior bargaining failures between a central authority and at least one armed insurgent group (Filson and Warner 2002; Pearson et al. 2011; Walter 2009b).

Before moving forward, I must clarify what I mean by a ‘dynamic’ and ‘multiphase process’ in this volume, while a number of previous researches have employed similar terms in different contexts (e.g. Cunningham et al. 2009; Olson Lounsbery and Pearson 2009; Shellman 2006, 2008; Young 2012) . Drawing on Pierson’s (2004) work on incorporating ‘path dependence mechanism’ into historical institutionalism, I consider a dynamic multiphase process as an interrelated-phase process involving positive feedbacks, “which generate multiple possible outcomes depending on the particular sequence in which events unfold” (Pierson 2004: 20). Applying this logic, we can understand that the dynamics in one phase affect those that occur in later phases. This means that initial conditions in one phase might produce a range of different outcomes in next sequential phase(s). In other words, the same conditions in any phase in the course of conflict may lead to divergent outcomes based on the order in which they occurred in early phases.

Let me illustrate my argument visually with three different diagrams. Figure 1.2 displays one of the most conventional understandings of conflict escalation in terms of ‘conflict intensity’ measured by battle-fatalities in each conflict. As the diagram indicates, civil war is viewed, at least in the Correlates of War project’s definition (see chapter 2), as an independent episode with more than 1,000 battle-related fatalities in a given year. Other forms of militarized intrastate conflicts are identified with the number of fatalities in a given year or during the entire conflict period (see Sambanis 2004a, c, d). A notable example for this tradition is Fearon and Laitin
An extension of this approach can be seen in Regan and Norton (2005) and Sambanis and Zinn (2006) which separately investigate the causes of protests (no-militarized collective violent movements), rebellions (militarized violent but lesser hostile conflicts), and civil wars (full-fledged militarized violent conflicts), respectively.

**Figure 1.2 Escalation of Internal Armed Conflict (Conflict Intensity)**

An alternative approach is represented in Figure 1.3 which perceives the outbreak of civil war as a gradual ‘evolutionary’ pathway of conflict process. From this perspective, civil war would emerge as a product (or stage) of a natural biological evolutionary step (see a number of the horizontal arrows linking the boxes in Figure 1.3) generated by several different structural and contextual factors. An evolutionary process approach has been adopted to understanding evolutionary but separate steps from birth (rivalry onset) to death (rivalry termination) of common life process of enduring interstate rivalries (Diehl and Goertz 2001; Maoz and Mor 2002; Thompson 2000), while there are different patterns of evolutions of specific interactions between rival states. Much recent civil war scholarship has developed their research in line of an evolutionary process framework in order to examine the outbreak of civil war with notable
examples in DeRouen and Bercovitch (2008) on enduring intrastate rivalries (EIRs), Davenport et al. (2008) on steps to civil war, and Young (2012) on a process to civil war. For instance, DeRouen and Bercovitch (2008) report that 76 percent of the central authority-armed rebel conflict dyads which have fought over territorial claim(s) tend to turn in enduring intra-state rivalries (EIRs), and, then, those rivalries are likely to be involved in civil wars and resume another violent conflict or civil war after short-peace duration. The Aceh civil wars in Indonesia and the Sudanese civil wars in Sudan are notable examples. Hence, according to the authors, the EIRs approach helps us to increase our understanding of some part (especially, territorial dimensions) of conflict dynamics.

**Figure 1.3 an Evolutionary Conflict Process Model**

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Phase 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflict Onset (birth)</td>
<td>Conflict Dynamics (e.g. rivalry)</td>
<td>Civil War Onset (escalation)</td>
<td>War Termination (death)</td>
</tr>
</tbody>
</table>

Source: Generated by the author based on Diehl (2006:200).

One of considerable shortcomings of a ‘horizontal’ evolutionary process approach is that each phase of conflicts is recognized as an independent stage of a biological process and analyzed, for example, phase 2 as an isolated and static unit from phase 3 (civil war) (see Figure 1.3). In other words, the evolutionary approach tends to aggregate multiple interactions or episodes which might influence the development (e.g. escalation or resolution) of militarized collective violence during phase 2 into a single observation (e.g. rivalry or not), which makes it difficult for empirical tests to assess the causal processes operating at different stages—escalation, persistence (stability), and/or low intensity of violence, and conflict resolution.21
By contrast, a dynamic multi-interdependent phase process approach views similar conflict processes in very different and interdependent ways (see Figure 1.4). This approach differs visually from the prior-two approaches (Figures 1.2 and 1.3) in a number of respects. First, as Filson and Warner (2002) formally illustrated a logic formally, ‘peace and conflict’ can be considered as a sequential interdependent process (i.e. continuous multi-phase process) with different possible outcomes (i.e. war or other means of politics as suggested by von Clausewitz). This perspective of conflict process is crucially different from the extant understanding of peace and war as a dichotomous independent or isolated phenomenon (no war, or rivalry, or war).

Figure 1.4 Three Paths in a Dynamic Multiphase Process of Civil War (Suzuki)

Second, drawing on Zartman (1990, 2005), my approach considers pathways of internal armed conflicts as ‘a mushrooming of bargaining situations’ to change the status quo between
disputants during the conflict process. From this perspective, every conflict between a central authority and at least one opposition (or faction within an opposition) would follow several different decision-points and a civil war may emerge as one of multiple equilibria for both warring parties in a certain dispute due to bargaining failure over issues related to political reform, security, or accommodation (Bremer 1995; Walter 2009a). Here equilibrium means “each player is using the strategy that is the best response to the strategies of other players” (Dixit and Skeath 2004: 33). In this sense, we are able to elucidate different paths (e.g. escalation, persistence, or termination) as one of optimal outcomes among warring parties at a certain decision-point. In this theoretical framework, we are able to examine potential multiple pathways and their causal complexity in each episode (e.g. presence or absence of civil war) with a combination between statistical analyses and brief case narrative illustrations (see Braumoeller 2003, 2006; Franzese 2007; Gerring 2012; Goertz 2006b; King et al. 1994; Mahoney 2009; Ragin 1987, 2000). Due to empirical difficulty and limited data availability, however, my analysis and discussion in the following chapters focus exclusively on Path A (conflict escalation) and Path B (conflict persistence) in Figure 1.4, while my approach is also applicable to Path C (conflict termination) as a multiphase interdependent process in conflict resolution pathway(s) (e.g. see Pearson et al 2011).

Third, unlike previous approaches, my approach is a ‘dynamic’ model because each phase or stage moves based only on strategic decisions by both players (Bremer 1995). ‘Strategic decision’ here implies that player B’s decision is taking into account the anticipated actions (or no actions) and responses of player A’s decision with the intention of maximizing its own profit. In other words, my approach builds on a conflict-cooperation reciprocal (i.e. tit-for-tat) process, while it have been noted that measuring such tit-for-tat conflict-cooperation patterns
is very complex and difficult in intra-state conflict contexts (Shellman 2006, 2008). Furthermore, as I will elaborate in chapter 3, my alternative explanation of conflict escalation can be considered for one of dynamic and strategic approaches because of concerning the roles of a two-sided mechanism of uncertainty (i.e. information asymmetry) for a central authority and for at least one armed challenger during conflict (Walter 2009a).26

Fourth, unlike biological evolutionary approaches discussed above, my approach will be able to take into account various different situations. For instance, ‘sudden death (a)’ (de-escalation of violence, see dash arrows in Figure 1.4) indicates one-sided or two-sided ceasefire or one-sided decisive victory. ‘Sudden intensification (b)’ (escalation of violence, see bold arrows in Figure 1.4) implies the circumstance due to recurring fighting after failing a negotiated settlement or ceasefire at any stage or point of each game’s progress between the same players.27

Let us look at three hypothetical dynamic pathways in Figure 1.4. The first important notation is that each black circle on each line indicates a certain decision point (as a phase or stage) that emerges when either player decides to make a certain move (i.e. action or no action). Thus, there will be numerous spontaneous decision points (i.e. multiphase) in the course of every conflict. The second important notation is that every solid arrow denotes any escalation of violence (always upside direction) whereas every dash arrow represents any de-escalation of violence (always downside direction). The third is the presence of the horizontal line in red in the center of the diagram indicating that the levels of violence never reaches the civil war threshold (discussed in chapter 2) while sustaining violent interactions between the same players.

The top of the diagram shows the two hypothetical conflict escalation pathways from ongoing conflicts to civil wars (Path A). The most left solid arrow (denoted as a-1) represents a sudden escalation path to a civil war, for example, within one year (the 1979 Iranian revolution
and the 2011 Libyan revolution are notable examples). The next solid arrow (denoted a-2) depicts another escalation path to a civil war due to a sudden escalation of intensive military interactions following the several years-long militarized protracted conflicts (the Chechens civil wars in Russia and the Aceh civil wars in Indonesia would be notable examples). There would be multiple-decision points of escalating violence from low to high level by either a central authority or at least one armed rebel group before reaching the threshold of civil war in a given year, by the Correlates of War project’s definition (Sarkees and Wayman 2010). There were 84 episodes of such a civil war worldwide between 1976 and 2000 (see the appendix to chapter 4 for a list of such civil wars). As I will illustrate in chapter 5, a notable example is the second Lebanese war of 1975-76, which emerged from armed combats between a central government and multiple armed oppositions organized by different political/religious factions following a series of street-level communal violence. An observer described Lebanon’s inter-communal interactions and political confrontations among political factions before and after the outbreak of the 1975-76 war as follows:

Before 1975, Lebanon had few of the attributes of a real nation, but at least its innumerable factions contrived a degree of mutual toleration. That comity has completely disintegrated. There is no Lebanon (Brogan 1990: 306).

A horizontal line in the center of Figure 1.4 represents Path B (conflict persistence), despite several variations in level of violence and fatalities through the course of each conflict. Arguably, a notable example would be the Northern Ireland conflict of 1970-1998 (see chapter 5 for my discussion), while several observers have considered it as a civil war (see Sambanis 2004d: 229). Yet, being consistent with my judgment, a British observer points to the reason for sustaining the relatively low-fatilities in Northern Ireland as follows:

…almost 20 years of terrorism [by the IRA, added] have reinforced Protestant determination to have nothing to do with the Republic, and there can be no doubt at all
that a British withdrawal would be followed by a civil war—which the Protestants would win (Brogan 1990: 382).

For these two cases, although inter-ethnic/religious communal tensions and institutionalized political and economic discriminations were persistently present before initial violent contentions emerged, the presence of my key explanatory factor \( X \) or \( X^* \) (i.e. a different value of \( X \)) might affect to determine \( Y \) (civil war) in Lebanon and not \( Y \) (no civil war) in Northern Ireland. In chapter 5, I will elaborate my discussion through a brief comparison of a conflict narrative analysis of the second Lebanese war with that of the Northern Ireland conflict.

The bottom of Figure 1.4 depicts the conflict termination path (Path B) where player A defeats player B (one-side victory) or both players (A and B) reach a negotiated ceasefire arrangement or sign conflict settlement to stop fighting. Each dash arrow (downside direction) represents one of possible termination paths (de-escalation of violence) during any course of every conflict. Of course, one would wonder that some actors (or factions) in either side resume fighting after ending the prior-fighting with a decisive victory by one-side or signing the conflict settlement agreements. Although understanding such recurring conflicts in part of a dynamic process are important, I excluded them from the diagram in Figure 1.4. Arguably, notable cases for recurring conflicts were the third (1978), the fourth (1983-84), and the fifth (1989) civil wars in Lebanon after ending the second Lebanese war in 1976, while some observers considered these sequential wars as a single protracted war despite involving different internal armed actors and external interveners (see Sambanis 2004d).\(^{28}\)

In Figure 1.4, I have displayed a brief overview of three hypothetical conflict paths from a dynamic multiple-interdependent process approach and discussed a number of its potential advantages relative to previous approaches to understanding the dynamics of conflict process. In the following chapters, I will provide the validity and utility of my approach to understanding
paths to civil war as a dynamic multi-interdependent process and will present a new theoretical explanation for my empirical analyses drawing on an information asymmetry explanation of the cause of civil war (Walter 2009a).

Lastly, it is important to note that my proposed approach would benefit from analyzing data on multiple-interdependent conflict processes disaggregating each decision of central authority side and armed rebel group side as focal point of the interest respectively. However, the present study has relied largely on the state-year aggregated data on government repression levels and rebel resistance levels prior to civil war as the primary unit of analysis because of the complexity and lacking the information of civil war battlefields across the cases (e.g. Gleditsch et al. 2012; Sambanis 2004a, d; UCDP 2012). To fill the gap between my theoretical argument (chapter 3) and statistical analysis (chapter 4), the present study conducts a comparative case illustration (chapter 5) through the new light of my theoretical arguments and statistical findings.

1.4 Roadmaps for Study

In this introduction, I have emphasized the puzzles in extant civil war research and the limits of the existing approaches to understanding civil war as a dynamic process, and proposed a dynamic process approach to conceptualizing a peace-war nexus as a dynamic interdependent-phase process with different outcomes. The proceeding chapters in this volume are organized as follows:

In chapter 2 (What is a Civil War?), I revisit the thematic and conceptual issues of studying civil war as an outcome of a dynamic interdependent conflict process. Drawing on the recent advanced approaches to social science concept formation (Collier et al. 2012; Collier and Gerring 2009; Gerring 2007, 2012; Goertz 2006a), I examine a set of attributes of civil wars
including an international classification of civil wars as armed conflicts ‘not’ of an international character. I also survey various scholarly classifications (or typologies) of civil war, which would significantly influence theory construction regarding civil war in general, and multiple pathways toward civil war in particular. In chapter 2, I also present a few brief statistical analyses in order to demonstrate empirically the conceptual differences between civil wars and other forms of political violence.

In chapter 3 (Explaining Patterns of Conflict Escalation), my study focuses primarily on possible theoretical explanations of ‘certain patterns’ (Leng 2000) which are highly associated with the escalation toward civil war. Building on the extant literature (e.g. Davenport et al. 2008; Eck 2009; Regan and Norton 2005; Sambanis and Zinn 2006; Young 2012), I present four testable hypotheses, namely, inflammation, incapacity, ineffectiveness, and ethnic-attribute explanations of conflict escalation, respectively, with a brief discussion of empirical discrepancies. Criticizing the shortcoming of each theoretical explanation, I introduce an alternative theoretical explanation of conflict escalation building on an asymmetric information explanation of interstate war as a bargaining failure (Fearon 1995; Reed 2003; Slantchev 2005). In particular, unlike the extant theoretical work based on costly signaling and commitment problem explanations of war (Lake 2002; Öberg 2002; Walter 2002, 2009a), I elaborate a two-sided uncertainty mechanism of conflict escalation introduced by Walter (2009a). In the appendix to chapter 3, I present a brief lexicon of the concept and terminology (e.g. private information, strategic perspective, costly signal, and conflict spiral) relevant to my theoretical argument based on the bargaining theory of war.

Chapter 4 (Testing Conflict Escalation to Civil War) presents my research design, statistical analysis, and empirical findings with advanced model-fitness tests. Two features in
chapter 4 are (1) a brief discussion of measuring ‘uncertainty’ for central authority and for rebel, respectively, and (2) a discussion of methodological complexity of estimating a non-recursive causal model with a binary dependent variable and ordered categorical explanatory variables. Unlike conventional way to interpret p-value and statistical significance in each model, I interpret substantive effects and predicted probabilities of core variables from my theoretical argument on my dependent variable (i.e. civil war onset) and report a number of the model-fit to evaluate the predicting performance of my proposed statistical model (e.g. Beck et al. 2004; Ward et al. 2010). In the appendix to chapter 4, I provide a list of civil wars used in my analysis (appendix 4.1), technical notes to statistical analysis (appendix 4.2), and the results from a number of robustness tests (appendix 4.3).

Chapter 5 (Unpacking Internal Dynamics in Civil Wars) presents a brief comparative case illustration of a positive case, in which conflict escalation does occur (path A in Figure 1.4), and a deviant case, in which conflict escalation does NOT occur (i.e. conflict persistence, path B in Figure 1.4). Relying on case selection techniques (Gerring 2007, 2012), I select the second Lebanese war of 1975-76 as a matching case (e.g. Becker and Reyelt 2002; Makdisi and Sadaka 2005; O’Balance 1998; Schwerna 2010; UCDP 2012) and the Northern Ireland conflict of 1969-1994 as a deviant case (e.g. Coogan 2002a, b; English 2003; O’Brien 1993; UCDP 2012; Woodwell 2005). Applying a conflict narrative analysis, I present a brief case narrative illustration of each conflict phase primarily looking at emergence/entry of primary armed groups as analytical focal points to examine mobilization levels and uncertainty levels for primary conflict agents and conduct a comparison of two contrasted cases. In the case of second Lebanese civil war, primary armed groups are the Lebanese National Movement (LNM) as an anti-government force, and the Lebanese Front (LF) as a pro-government force. In the case of the
Northern Ireland conflict, primary armed groups are the Provisional Irish Republican Army (PIRA) as an anti-government force, and the Ulster Volunteer Force (UVF) and the Ulster Defense Association (UDA) as a pro-government force.

In chapter 6 (Conclusions: Summary and Future Research), I present a brief overview and summary of my efforts and findings in this volume and provide a discussion of policy-relevant knowledge as well as future research. Considering the importance of multiple complexities and the mutual interactions among theory construction, hypothesis testing, and policy-relevant knowledge in social science research (e.g. Geller and Singer 1998; George and Bennett 2005), I will end my study in this volume by endorsing to the following statements:

(a) the biggest hurdles are those that must be solved with creative thinking and theorizing first, not by methodological adaptation (Diehl 2006: 208)

(b) Better theory is not a panacea. Better theory does not change the fact …., and better theory does not automatically translate into better policy. Better theory is a prerequisite for better policy (Jakobsen, 2011: 167)
Notes:

1 The latest data are obtained from http://www.pcr.uu.se/research/UCDP/data_and_publications/datasets.htm (last accessed on October 10, 2012).


3 Of course one of serious problems in quantitative civil war research is about missing data (e.g. Honaker and King 2010; Ward et al. 2010). For instances, because of a significant number of missing data for key variables including GDP and Polity IV data for civil war states, most quantitative civil war models (e.g. Fearon and Laitin 2003a; Collier and Hoeffler 2004) dropped off important cases such as Bosnia’s civil wars of 1990-94 and 1995-99 (see Kalyvas and Sambanis 2005; Sambanis 2004a, b).


For an overview of UCDP’s efforts, see http://www.pcr.uu.se/research/UCDP/data_and_publications/datasets.htm. For a number of consultations regarding the UCDP data collection efforts and specific data coding inquiries, my thanks are due to Joakin Kreutz and Frida Möller of the UCDP team.

For example, see Collier et al. (2003), Hewitt et al. (2012), Goldstone et al. (2010), and Marshall and Cole (2008, 2009).

Gurr’s relative deprivation and ethnic mobilization argument has been extended by Lichbach (1987) with an action-reaction model and Moore (2000) with a policy substitution model.

Although Davenport et al. (2008) omitted, another possible path would be the psychological frustration-aggression model (Gurr 1970).

Note that Walter (2006a, b, 2009b) investigates the escalation from non-violent ethnic self-determination demands to violent ethnic self-determination war at ‘group-year’ level, while Sambanis and Zinn (2006) examine data at ‘state-year’ level. See also Toft (2003) on the territorial component of ethnic civil wars.

The recent advanced research on the government repression-dissident dynamics emphasizes the role of different designs of various political institutions (see Carey 2009; Davenport 2007a, b).

On the theoretical and empirical implications with regard to the levels of aggregation, see Singer (1961). See an application of the levels of analysis to interstate conflict research (Geller and Singer 1998), democratic peace research (Ray 2001), civil war research (Olson Lounsbery and Pearson 2009), and ethnic conflict research (Jesse and Williams 2011).

Note that one of the considerable concerns related to disaggregate and micro-level analyses is lacking necessary data on structural and contextual variables which are mainly measured in the
state-year as the unit of analysis (e.g. per capita income, gini index, regime types, leadership types, government repression and so on) (see Cunningham et al. 2009; Findley and Young 2012; Shellman 2006).


15 Note that understanding ‘multiple interdependent process’ is not equivalent to examining multiple or complex causality which means that the outcomes (e.g. civil war onset) that researchers seek to explain, understand, or predict have many causes or have more than one or other potential causes presented in any given contexts (e.g. Franzese 2007; Goertz 2006b; Ragin 1987, 2000). As Ragin (1987) notes, unlike the true experimental laboratory research, almost all social phenomena have multiple causes in some contexts and everything pretty much cause everything in social, political, economic reality. Hence, a growing number of recent studies have emphasized that context matters. As Franzese (2007) succinctly summarizes, we should be aware of at least three aspects of the ‘context matters’ literature. (1) Almost everything matters (i.e. multiple causality). (2) The effects of each cause on outcomes tend to vary across context (i.e. context-conditionality). (3) The many outcomes and many assumed causes in political worlds that we seek to understand tend to cause each other to some degree rather than some factors being only causes and others being only effects (i.e. endogeneity, simultaneity, reverse causality, or bi-and multi-dimensional causality).

16 Pearson et al. (2011), Findley (2012), and Lichbach (2009) have proposed a similar multi-interdependent stage or phase approach to understanding the distinct but interrelated stages within civil war escalation and resolution processes.
On historical institutionalism, see Thelen (1999, 2004), Pierson (2004) and Mahoney and Thelen (2010). Here ‘path dependence mechanism’ implies that a pattern of causation in which events or processes at one point in time strongly constrain subsequent events or process (Pierson 2004; Mahoney 2009).

This argument is drawn from Diehl (2006: 206-207).

For a good discussion of evolutionary and learning process in conflict dynamics, see Bremer (1995), Diehl and Goertz (2001), Leng (2000), and Maoz and Mor (2002) in the context of interstate armed conflicts and interstate enduring rivalries. On various biological evolutionary process approaches to interstate conflict, see Diehl and Goertz (2001), Goertz et al. (2005), and Siverson and Miller (1995).

Notes that there are some variations in evolutionary patterns among enduring rivalries (see ‘Figure 9.1. Patterns of Rivalry Evolution’ in Diehl and Goertz (2001:171). Diehl and Goertz (2001) endorse a punctuated equilibrium model to understand ‘stability’ and ‘sudden change’ (death or escalation) of enduring rivalries instead of the biological evolutionary model (Thompson 2000).

Huth and Allee (2002) and Diehl (2006) have made a similar argument with regard to the static interstate conflict research.

See Blainey (1988) on the Clausewitzan view of conflict process and war.

Note that a similar approach has been elaborated in Huth and Allee (2002: 34-55) who have been theorized in the context of the evolution of inter-state (territorial) disputes in terms of four distinct decision stages—(A) dispute initiation stage, (B) the challenge the status quo stage, (C) negotiation stage, and (D) military escalation stage. In Huth and Allee’s (2002) analytical framework, each stage has treated as an ‘independent’ critical decision point (see Pearson et al.
2011 and Walter 2002 for a discussion of multiple critical decision points in the context of conflict resolution).

24 For a brief discussion on a multiple interdependent stage or phase analysis in conflict resolution process, see Walter (2002) and Pearson et al. (2011). On analytical difficulties, see Huth and Allee (2002) which performed their statistical analyses of critical decision points by separating the conflict escalation stage from the conflict negotiation stage.

25 A different form of my process approach to conflict resolution as a four-interrelated multiphase process is presented in my collaborative work with Frederic S. Pearson and associates in ‘Figure 1 Negotiation Game’ in Pearson et al. (2011: 45). Findley (2012) presents a similar interdependent stage approach to examining conflict resolution as three distinct but interrelated steps identified by Walter (2002). Notes that Findley’s theoretical consideration on moving phase A to phase B in conflict resolution process is very implicit than what Pearson et al. (2011) describe in their analysis.

26 For a formal proof of how actor A’s military mobilization during interstate crisis bargaining influences prior-information structure of actor B’s perception and uncertainty, see Slantchev (2003, 2005).


28 There are various theoretical and empirical platforms to identify the end or termination of armed conflicts and civil wars in the literature. See Gates and Strand (2004), Hartzell and Hoddie (2007), Kreutz (2010), Regan (2002) and Walter (2002) as well as Pearson et al. (2011), for examples.
CHAPTER 2
WHAT IS A CIVIL WAR?
A CONCEPTUAL ANALYSIS AND THEORETICAL IMPLICATIONS

“Civil war is a phenomenon prone to serious semantic confusion, even contestation” (Kalyvas 2007: 416)

“Civil war is a phase in a cycle of violence” (Sambanis 2004d: 268)

2.1 Do we all know what a civil war is? If so, what is it?

What is a [civil] war? I always ask this of my students in the beginning of classes or seminars on the subject. Students tend to answer by providing a list of tragic violence based on their personal experience or their country’s recent carnage of ordinary citizens across the African continent or the Middle East; yet no students provided a clear-cut definition of war or ‘civil’ war. Vasquez (2009: 15) notes that many individuals speak about such phenomena using everyday or ordinary definitions such as “we all know what a war is” because [civil] wars have been persistent in our generation. Yet there is no universal definition of the phenomena employed by scholars, international legal experts, foreign policymakers, practitioners, and news media organizations, as well as ordinal citizens (e.g. Olson Lounsbery and Pearson 2009; Regan 2009).

Let me illustrate further with the discussion over ongoing Iraqi’s armed struggles since 2003 after the collapse of the Saddam Hussein regime. Is it a civil war? Commentators in news media and practitioners in humanitarian aid agencies have repeatedly stated that a civil war is ongoing in Iraq and all armed conflict including sectarian purges and Sunni-Shiite revenge killings and violence against the coalition forces led by the United States are part of it. Using quite similar conceptualizations and definitions, a group of scholars term ongoing violence in Iraq as the ‘Iraqi Resistance’ and classify it as an extra-state war, while another group of scholars
views the same event as an internationalized internal war.² On the other hand, when violent conflicts occur, news media organizations such as BBC and CNN tend to use interchangeably a wide variety of terms including carnage, crackdown, resistance, uprising, upheaval, insurgency, guerrilla warfare, and rebellion without clearly defining any of them. Do those have the same meaning? A quick answer is no. For instance, an ‘insurgency’ can be defined as “a violent, often protracted, struggle by nonstate actors to obtain political objectives such as independence, greater autonomy, or subversion of the existing political authority” (Lyall 2010: 175). ‘Guerrilla warfare’ can be seen as “a strategy of armed resistance that (1) uses small, mobile groups to inflict punishment through hit-and-run strikes while avoiding direct battle when possible and (2) seeks to win the allegiance of at least some portion of the noncombatant population” (Lyall 2010: 175). According to Lyall (2010: 175), insurgencies “are not necessarily synonymous with ‘civil wars’ since these can be fought conventionally between opposing armies, with guerrilla tactics, or through nonviolence.”³

The debate over how we call ongoing killings in Iraq is ongoing, despite James D. Fearon alerted the U.S. Congress and the international community by stating that “there is a civil war in progress in Iraq, one comparable in important respects to other civil wars that have occurred in postcolonial states with weak political institutions” (Fearon 2007: 2, italic added). Because of complexity of Iraqi political instability and future,⁴ policymakers cautiously avoided labeling it as a civil war for various reasons having to do mainly with legal, policy, and political implications.⁵ The similar debates restored in the recent cases of Libya and Syria (e.g. Pape 2012).

As Sadako Ogata (2005), a former United Nations Higher Commissioner for Refugees (UNHCR), pointed out, there are several considerable gaps and dilemmas between international
laws and practices. It should be understood that, unlike media reports or views by citizens, official international representatives in inter-governmental organizations (IGOs) and international legal practitioners in humanitarian-aid agencies such as the UNHCR and the Red Cross understand ‘civil war’ in very specific ways by referring to “Common Article 3 of the Geneva Conventions of 1949.” According to Common Article 3, civil war can be interpreted only as “armed conflicts not of an international character occurring in the Article 3” (italic added) and Article 3 can be applied only to the ‘high contracting parties.’ The Common article 3 strictly states:

In the case of armed conflict not of an international character occurring in the territory of one of the High Contracting Parties, each Party to the conflict shall be bound to apply, as a minimum, the following provisions:

(1) Persons taking no active part in the hostilities, including members of armed forces who have laid down their arms and those placed hors de combat by sickness, wounds, detention, or any other cause, shall in all circumstances be treated humanely, without any adverse distinction founded on race, colour, religion or faith, sex, birth or wealth, or any other similar criteria.

To this end, the following acts are and shall remain prohibited at any time and in any place whatsoever with respect to the above-mentioned persons:

(a) violence to life and person, in particular murder of all kinds, mutilation, cruel treatment and torture;
(b) taking of hostages;
(c) outrages upon personal dignity, in particular humiliating and degrading treatment;
(d) the passing of sentences and the carrying out of executions without previous judgment pronounced by a regularly constituted court, affording all the judicial guarantees, which are recognized as indispensable by civilized peoples.

(2) The wounded and sick shall be collected and cared for.

An impartial humanitarian body, such as the International Committee of the Red Cross, may offer its services to the Parties to the conflict.
The Parties to the conflict should further endeavour to bring into force, by means of special agreements, all, or part of the other provisions of the present Convention. The application of the preceding provisions shall not affect the legal status of the Parties to the conflict.

It should be aware that, as Ogata (2005) notes, Common Article 3 of the Geneva Conventions of 1949 do NOT provide any unified characteristics of what constitute a civil war. This shortcoming clearly illuminates the limitations of international laws and agreements as a universal contract among sovereign states under the United Nations Charter’s principle of no-intervention into internal affairs (e.g. Rochester 2006). Thus, international legal and foreign policy practitioners have been calling for establishing a new international norm or standards such as the Responsibility to Protect (R2P) regarding international humanitarian intervention into mass destruction of human lives.7

Further, as Kalyvas (2007: 416) points out, civil war as a social science concept is “a phenomenon prone to serious semantic confusion, even contestation. The description of a conflict as a civil war carries symbolic and political weight since the term can confer or deny legitimacy to a warring party. Indeed the very use (or not) of the term is part of the conflict itself” (italic added). Hence, according to Kalyvas, the civil war scholarship must have tried to elucidate the term ‘civil war’ as a social science concept from ordinal means.8

Table 2.1 presents a summary of a handful of the operational definitions of civil war/civil conflict/civil strife/internal armed conflict and war in the existing literature. As we can see easily, each project has identified somewhat different types of violent conflicts within a sovereign state as a primary dependent variable.9 A scholar put that “the reality of civil war is messy” but “our decision to code a period of violence as a civil war … hinges on rather vague criteria” (Sambanis 2004d: 268). Others (e.g. Dixon 2009; Kaylvas 2007; Sambanis 2002, 2004a, b; Tarrow 2007) have argued that the remaining conceptual ambiguity and different operational
definitions of civil war has fueled incoherent theory development and empirical findings not only in the extant large-N research but also in the small-n case research.

The objectives of the following section are twofold. First, employing a social science concept formation analysis approach (Gerring 2012; Goertz 2006a; King et al. 1994), this chapter provides an overview of disagreements among different operational definitions of, namely, ‘civil war,’ ‘internal war,’ ‘revolutionary war,’ ‘ethnic war,’ or ‘civil conflict,’ and so on. Then, I examine the semantic problems of the concept and remaining disagreements of theoretical expectations of the outbreak of civil wars in terms of the different classifications and theorizations of somewhat varied types and phenomena within internal armed conflicts. Second, this chapter presents a systematic analysis of the similarities and differences of various types of collective violence such as riots, anti-government demonstration, strikes, revolution, and guerrilla warfare that often considers as political instability among media and comparative politics scholars.

One would wonder what this chapter would intend to contribute specifically because there have been down several conceptual analyses of civil war (e.g. Kalyvas 2007; Olson Lounsbery and Pearson 2009; Sambanis 2004a). Yet, I argue that, if we want to understand ‘certain patterns’ of escalation to civil war, we need to isolate conceptually civil war from other potential explanations of ‘escalatory’ pathways of a variety of non-militarized and militarized collective violence by non-state actors with or without using arms weaponries in organized and systematic manners. In this chapter, I will demonstrate a number of distinctive features of the militarized phase in collective violence between a central authority and at least one non-state ‘armed’ actor who is ‘initially organized’ for violent conflict and ‘prepared to resist to attacks’ militarily against their central authority. From this perspective, my analysis pays little attention
to the causes and escalation of non-state conflicts such as street inter-communal ‘street-level’ violence between unarmed ethnic groups or radical youths and between criminals or drug cartels as well as any one-sided violence such as civilian killings and massacres.\textsuperscript{11}

This chapter divides into three proceeding sections. In the next section, I conceptually distinguish civil war from other large-scale domestic violence and provide a simple classification of internal war. Then I move onto my conceptual and empirical analysis of the differences between civil war and other forms of domestic non-violent and violent collective actions in extant work.

**Table 2.1 Operational Definitions of Civil War**

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<thead>
<tr>
<th>Project Name</th>
<th>Operational Definitions</th>
<th>Number of Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small and Singer (1982:210, 213)</td>
<td><strong>Civil war</strong> is “any armed conflict that involves (a) military action internal to the metropole, (b) the active participation of the national government, and (c) effective resistance by both sides” plus “at least 1,000 deaths per year” including both civilian and military deaths.</td>
<td>106 conflicts between 1816 and 1982.</td>
</tr>
<tr>
<td>Sarkees, Wayman, and Singer (2003: 59)</td>
<td><strong>Intra-state wars</strong> are “those between or among two or more groups within the internationally recognized territory of the state” and include (a) civil wars involving the state government and a non-state actor; (b) inter-communal conflicts involving two or more groups, none of which is the state government; (c) extra-state wars involving a territorial state and a non-sovereign entity outside the borders of the state.</td>
<td>214 civil wars (excluded inter-communal conflicts and extra-state wars) between 1816 and 1997.</td>
</tr>
<tr>
<td>Fearon and Laitin (2003a:76)</td>
<td><strong>Civil war</strong> (a) involved fighting between agents of (or claimants to) a state and organized, nonstate groups who sought either to take control of a government, to take power in a region, or to use violence to change government policies; (b) killed at least 1,000 over its course, with a yearly average of at least 100; (c) at least 100 were killed both sides (including civilian attacked by rebels).</td>
<td>127 conflicts between 1945 and 1999.</td>
</tr>
<tr>
<td>Source</td>
<td>Definition</td>
<td>Number of Conflicts</td>
</tr>
<tr>
<td>-------------------------------</td>
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</tr>
<tr>
<td>Sambanis (2004a:829-830)</td>
<td><strong>Civil war</strong> is (a) the war takes place within the territory of a state that is a member of the international system with a population of 500,000 or greater; (b) the parties are politically and militarily organized, and they have publicly stated political objectives; (c) the government must be a principal combatant; (d) the main insurgent organization(s) must be locally represented and must recruit locally. (e) The start year of the war is the first year that the conflict causes at least 500 to 1,000 deaths. (f) Throughout its duration, the conflict must be characterized by sustained violence.</td>
<td>145 conflicts between 1945 and 1999.</td>
</tr>
<tr>
<td>Gurr (1970)</td>
<td><strong>Internal war</strong> “occurs when both the masses and some sector of the elite are affected by relative deprivation. This category includes major guerilla wares, large-scale rebellions, and revolutions.”</td>
<td></td>
</tr>
<tr>
<td>Marshall et al. (2010)</td>
<td><strong>Revolutionary wars</strong> are “episodes of violent conflict between governments and politically organized groups (political challengers) that seek to overthrow the central government, to replace its leaders, or to seize power in one region.” <strong>Ethnic wars</strong> are “episodes of violent conflict between governments and national, ethnic, religious, or other communal minorities (ethnic challengers) in which the challengers seek major changes in their status.” <strong>Operationalization:</strong> a mobilization threshold, wherein each party must mobilize 1000 or more people (armed agents, demonstrators, troops), and a conflict intensity threshold, whereby there must be at least 1000 direct conflict-related deaths over the full course of the armed conflict and at least one year when the annual conflict-related death toll exceeds 100 fatalities.</td>
<td>67 episodes of revolutionary wars and 81 episodes of ethnic wars between 1955 and 2005</td>
</tr>
<tr>
<td>Regan (2000)</td>
<td><strong>Civil conflict</strong> is “an organized combat between groups in conflict in which at least 200 fatalities were recorded.”</td>
<td>151 conflicts between 1946 and 1999</td>
</tr>
<tr>
<td>Gleditsch et al. (2002)</td>
<td><strong>An armed conflict</strong> is a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state,</td>
<td>163 conflicts between 1945 and 2001</td>
</tr>
</tbody>
</table>
results in at least 25 battle-related deaths. **Intrastate armed conflict** is a conflict between the government of a state and one or more internal opposition group(s) without intervention from other states. **War** is a conflict with at least 1,000 battle deaths in a given year.

| Wimmer et al. (2009) | Ethnic wars involve conflicts over ethnonational self-determination, the ethnic balance of power in government, ethnoregional autonomy, ethnic and racial discrimination (whether alleged or real), and language and other cultural rights. Non-ethnic wars are “all other wars.” | 110 ethnic wars and 105 non-ethnic wars between 1945 ad 2005 |

Source: Compiled by the author. Every operational definition (or criteria) is obtained from the original text.

### 2.2 Defining a Civil War

Selecting dependent (outcome) variable for scientific research is important for both constructing a theoretical model and making either descriptive or statistical inference (Gerring 2012; King et al. 1994). In social science research, rigorous concept formation and selection rules for specific dependent variables are crucial components of scientific inquiry whether researchers decide to employ either a qualitative-small-n or a quantitative-large-n research method (Brady and Collier 2004, 2010; Gerring 2007, 2012; Goertz 2006a, b; Mahoney and Goertz 2006; Sartori 2009a [1970], b [1984]). Building upon Sartori’s work on conceptual stretching and the ladder of generality in social science concept analysis, Goertz (2006a: 27) argues that “the core attributes of a concept constitute a *theory* of the *ontology* of the phenomenon under considerations.”

From such a perspective, examining what constitutes a civil war is the most important first-step for the students who intend to understand the state of arts within the civil war research
and to construct a coherent theoretical argument on causal mechanisms of civil war. As Sartori and others repeatedly suggest, the lack of conceptual clarity prevents developing a ‘master model’ of the causes of civil wars (Sartori 2009a, b; Collier and Gerring 2009; Goertz 2006a). My primary inquiry in this section focuses on identifying the essential elements of characterizing civil war in the existing literature.

In their seminal work on compiling data on civil wars, Small and Singer (1982) provide the first systematic criteria identifying civil wars in terms of (1) internality, (2) types of participants, and (3) the degree of effective resistance. Small and Singer (1982: 210) define civil war as “any armed conflict that involves (a) military action internal to the metropole, (b) the active participation of the national government, and (c) effective resistance by both sides.” A few pages later, Small and Singer (1982: 213) posit their battle death/fatality threshold of war, which becomes one of the most controversial coding decision of identifying civil war in the recent debate, by stating that “we are interested here only in wars that resulted in at least 1,000 deaths per year” including both civilian and military deaths. Small and Singer’s intention was clearly stated in the text: “we differentiate civil wars from other types of internal violent conflicts” (1982: 210-211). In order to do so, Small and Singer made another important coding decision of “effective resistance by both sides,” while it is an arbitrary coding procedure. According to the Small and Singer (1982: 215), effective resistance is operationalized if “(a) both sides are initially organized for violent conflict and prepared to resist to attacks of their antagonists, or (b) the weak side, although initially unprepared, is able to inflict upon the stronger opponents at least five percent of the number of fatalities it sustains” (italic added). ‘Initially organized’ and ‘prepared to resist to attacks’ are important considerations to identify at least one armed opposition. Arguably, the coding decision of ‘at least five percent of the number of fatalities’
caused by reciprocal damages in sustained violence might be seen the CoW’s most important and
distinct criterion for identifying war, while it is often ignored in the scholarly debate.\textsuperscript{14}

Another conceptual and operational definition of civil war has been carried out by the
Political Instability Task Force (PITF, formally named State Failure Task Force: SFTF) led by
Ted Robert Gurr, Barbara Harff, and Monty Marshall. In his seminal work on domestic
collective violence, Gurr (1970: 334-38) argues that internal war “occurs when both the masses
and some sector of the elite are affected by relative deprivation” and includes “major guerilla
wars, large-scale rebellions, and revolutions.”\textsuperscript{15} Building upon Gurr’s conceptualization, the
PITF has compiled a dataset on “Internal Wars and Failures of Governance” including
revolutionary and ethnic wars. According to the PITF,

\textbf{Revolutionary} wars are defined as “episodes of violent conflict between governments
and politically organized groups (political challengers) that seek to overthrow the central
government, to replace its leaders, or to seize power in one region” (PITF codebook,

\textbf{Ethnic} wars are “episodes of violent conflict between governments and national, ethnic,
religious, or other communal minorities (ethnic challengers) in which the challengers
seek major changes in their status” (Marshall et al. 2010: 6).

Both types of wars are operationalized with two important coding schemes: (1) \textit{mobilization} and
wherein each party must mobilize 1000 or more people (armed agents, demonstrators, troops),
and a \textit{conflict intensity} threshold, whereby there must be at least 1000 direct conflict-related
deaths over the full course of the armed conflict and at least one year when the annual conflict-
related death toll exceeds 100 fatalities.”

It should be understood that both the CoW’s and the PITF’s conceptual and operational
definition are highly consistent by emphasizing clearly that combatants’ resource mobilization
capacity is the significantly important factor to differentiate civil war from other forms of domestic collective violence such as terrorism, riots, and military coups. In addition, both definitions satisfy the criterion of the unit heterogeneity of dependent variable across temporal and spatial domains in their scientific inquiries (King et al. 1994).

Besides these definitions, there are more than a handful of the scholarly efforts to generate the so-called civil war list to be used for quantitative analyses and theory constructions (e.g. Doyle and Sambanis 2000; Fearon and Laitin 2003a; Gleditsch et al. 2002; Regan 2000; Sambanis 2001, 2004a; Wimmer et al. 2009). According to Sambanis (2004a), although there remain disagreements on coding decisions determining when civil war begins (onset) and ends (termination), most subsequent datasets are some extensions and modifications of the different elements of the CoW’s basic-level concept and coding rules.16 Who fights whom’ is obvious for the analysts of international conflicts, but it remains disputable in internal conflict research (Bremer 2000). Hence, the coding decision of the resource mobilization capacity for the combatants would be the unmistakably vital point to delineate between civil wars and other forms of violence. However, the operational definition becomes much problematic when the analysts begin to investigate the varieties of violent (terrorism) and non-violent (demonstration) actions within civil wars or micro-level of conflict behaviors as their unit of observation.17

An exhaustive effort to generate a new global list of armed conflicts since 1946 has been carried out by the Armed Conflict Data (hereafter ACD) which is a joint project between the Uppsala University’s Conflict Data Program (UCDP) in Sweden and the Peace Research Institute, Oslo (PRIO) in Norway. According to Gleditsch et al. (2002: 618-619), ACD defines an armed conflict as “a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a
state, results in at least 25 battle-related deaths.” There are two subsets for armed conflicts. *Minor* armed conflict is an armed combat with “at least 25 battle-related deaths per year and fewer than 1,000 battle-related deaths during the course of the conflict” (619) and *War* is a conflict with “at least 1,000 battle deaths per year” (619). Hence, ACD seeks to map armed conflicts at both the full-scale and at less overtly violent levels than in the COW and PITF tradition. Further, ACD distinguished the types of armed conflicts into interstate and internal armed conflicts. *Internal* armed conflicts is defined as “a conflict between the government of a state and one or more internal opposition group(s) without intervention from other states” (619) and *internationalized internal* armed conflict is a conflict “between the government of a state and internal opposition groups with intervention from other states” (619).18

Thus, ACD added four important features to the extant definition of civil wars. First, ACD distinguishes combat over governmental control and over territory (i.e., issue compatibility). Second, ACD goes down to the 25 battle-related death thresholds per year. Third, ACD also differentiates between the low intensity conflicts and high intensity conflicts with 1,000 battle-related deaths per year. Fourth, ACD has loosened the resource mobilization threshold for non-governmental opposition groups in direct combat against the state government. Regarding the last point, ACD considers ‘formally organized’ opposition groups, which overtly use *armed forces* against their opponent.19 Because of these features, ACD researchers have increased the number of observations. Compared with the recently released CoW intra-state war list (Sarkees and Wayman 2012), the ACD data contain 51 additional cases (215 cases for the ACD and 164 cases for the CoW) between 1946 and 2005.20
Figure 2.1 Comparison of CoW, PITF, and ACD datasets on Intra-state Armed Conflicts, 1976-2000 (State-Year)

Source: Generated by the author based on the data used in Chapter 4.
Note: BDT = Battle-Death Threshold

Figure 2.1 visualizes the similarities and differences among the lists of civil wars by CoW, PITF, and ACD, respectively. Solid-line (1) indicates the frequency of CoW’s intra-state war involvement, whereas dash-line (2) shows that of ACD’s internal armed conflict involvement. Dot-line (3) and dot-dash line (4) are the frequency of PITF’s ethnic war involvement and revolutionary war involvement, respectively. According to Figure 2.1, we can understand that the conflict trend in ACD is very similar to that in PITF’s ethnic war dataset, while ACD dataset contains much higher number of internal armed conflicts than other datasets. This also suggests that the vast majority of internal armed conflicts worldwide for the past three decades were the militarized political contentions yielded below 1,000 battle-fatalities.
Lastly, after considering different conceptual and operational definitions, Kalyvas (2006, 2007) defines civil war as “armed combat taking place within the boundaries of a recognized sovereign entity between parties subject to a common authority at the outset of the histories” (Kalyvas 2007: 417). Kalyvas’ stylized definition has three important features. First, civil war must be militarized between at least two competing parties, which formerly were ruled according to a common authority. Second, one of the warring parties must be a current authority of the sovereign entity that is directly challenged by other warring parties. Third, while Kalyvas does not explicitly mention in his definition, he also notes that one of competing parties must be “a relatively large rebel organization with military equipment and full-time recruits” (417, italic added). An important implication from Kalyvas’ definition is to add vaguely ‘relatively large’ rebel organization in order to distinguish a ‘primary rebel organization’ form other secondary or smaller rebels, local militias, drug- or gun-lords, and criminals.

Up to this point, I have looked at four different conceptualizations of a phenomenon as a civil war and have demonstrated that, unlike the common usage of the term civil war, the extant scholarship has commonly characterized a handful of the elements to identify a civil war. As the conceptual analysis literature (Sartori 2009a, b; Gerring 2007, 2012; Goertz 2006a) suggests, civil war is conceptualized at least two (basic and attribute) levels and therefore, it is constructed in a multi-dimensional manner as with the other social science concepts such as revolution, liberal democracy, and state capacity. Although there are some disagreements to make a coding decision when civil wars start and end across the four definitions, civil war is characterized according to the following five attributes or dimensions.

1. Aim: a domestic challenge directed against the current holder of sovereign authority either for control of government or territory.
2. Tool of combats: all participants must use of armed forces directly targeting their opponents.
3. Participants: there needs at least two competing participates (one actor is always regular army controlled by a legitimate or widely recognized central government and others are any domestic groups, which must meet the criterion 4 below).
4. Capacity of domestic antagonism: domestic antagonism must be a relatively large rebel organization with military equipment and full-time recruits.
5. Battle-related fatalities: the armed combat must cause deaths with more than 1,000 fatalities among combatants by actual and direct combat between participants.

It should be understood that these five attributes are considered in a hierarchical (sequential) manner. In other words, all five attributes are necessary conditions for civil war.\textsuperscript{22} Further, all definitions considered ‘(#2) tool of combats’ and ‘(#4) capacity of domestic antagonism’ as the important attributes to differentiate civil wars from other forms of collective violence. In sum, my concept analysis of civil war demonstrates that there are a handful of the core attributes of civil war, which researchers must consider in order to construct a theory of civil war.

2.3 Classifying Civil War

Conceptually civil war can be defined as an independent phenomenon and be distinguished from other forms of collective violence; yet civil wars have been classified in many ways in the extant literature. Classification is necessary to investigate the number of different observations in a scientific manner (Gerring 2007, 2012; King et al. 1994). However, classification might constitute different theories within the same concept. As noted earlier, Gurr (1970) proposes to classify both revolution and guerrilla warfare within the internal war category. Similarly, the CoW project (Small and Singer 1982) listed the Russian revolution of 1917-21 (intra-state war #677) and the Cuban revolution of 1958-59 (intra-state war #745) as well as many other rebellions in the intra-state war (civil war) list. However, as Kotowski’s (2009[1984]) conceptual analysis illustrated, guerrilla warfare, rebellions, or resistance do not
necessarily satisfy all attributes of ‘revolution’ in the existing literature (see Skocpol 1979; Goldstone 2000). Consequently, a theory of revolution might explain some cases of rebellion (succeeded revolts but not failed ones), but it cannot be a theory of both rebellion and civil war, as some rebellions (or counter-revolutions) may not reach the certain criteria of civil war that I articulated earlier.

Kotowski’s observation is consistent with what Sartori suggested with the ladder of generality and conceptual stretching. As Sartori suggested, the greater inclusion of the cases (it is called extension contrasted to intention) using a single concept might yield incoherent theory development and inconsistent findings. In other words, despite a minimum consensus on what constitutes civil war as a primary dependent variable in the extant literature, there is no master model of civil war because of the potential conceptual stretching in the increased number of observations. From this perspective, we must search variances in theoretical explanations for different attributes in civil wars, and, therefore, the classification of civil war would be the center of theory construction on the cause and escalation of civil wars.23

In this regard, Kalyvas (2007: 426-430) argues that there is an important distinction between ‘irregular (guerrilla)’ and ‘conventional’ warfare within civil wars and suggests the further de-classification is necessary. This argument might link to new theoretical explanations of rural insurgency (Fearon and Laitin 2003a) or to the geography of civil war (e.g. Buhang, Gates, and Lujala 2009). Many others such as Gurr (2000) and Sambanis (2002, 2004a) argue that a distinction between ethnic and non-ethnic conflicts is important, while Kalyvas (2001) and Kalyvas and Kocher (2007) conclude that there is no difference between ethnic and non-ethnic conflicts with regard to the level and framework of violence.24 Adding more complexity to the inconsistent theoretical arguments and findings, Fearon and Laitin (2003a, 2010) demonstrate
that ethnic-based ‘Son-of-the-Soil (SOS)’ wars and rural insurgencies are highly correlated with the eruption of civil wars, whereas others disagree with those findings.\textsuperscript{25} That is, the classification of civil wars remains problematic.

2.3.1 *Ethnic vs. Non-Ethnic War*

Let me begin with my analysis of classifying ethnic and non-ethnic conflicts in civil wars. In general, this classification in the extant literature emphasizes the presence of social cleavages within a sovereign state. Yet, there are many variations, which generally have implications for what is or is not included in any given theoretical models including process theories.\textsuperscript{26}

A good start of my survey would be Horowitz’s *Ethnic Groups in Conflict* (1985, see also Horowitz 2000). According to Horowitz (1985), ethnicity is based on “a myth of collective ancestry, which usually carries with it traits believed to be innate” (52) and “embraces groups differentiated by color, language, and religions; it covers ‘tribes,’ ‘races,’ ‘nationalities,’ and castes” (53). Ethnic conflict is “a worldwide phenomenon” (3) because of political usage of the boundary of ethnicity. Drawing on his definition, Horowitz (1985) made an exhaustive list including “The recurrent hostilities in Northern Ireland, Chad, and Lebanon; secessionist warfare in Burma, Bangladesh, the Sudan, Nigeria, Iraq and the Philippines;...ethnic riots in India, Sri Lanka, Malaysia, Zaire, Guyana, and a score of other countries…” (3). Thus, Horowitz’s analysis centers the role of ethnicity in the wide-range of identity-based conflicts.

The Minority at Risk Project (MAR 2009) led by Gurr (1993; 2000) is another milestone in this line of research. Gurr (2000: 65) defines the term ‘ethnopolitical’ conflict as conflict “in which claims are made by a national or minority group against the state or against other political actors.” Unlike Horowitz (1985), Gurr characterized an ‘ethnopolitical’ conflict in two ways.
First, it is carried out by ethnopolitical groups—i.e. groups conscious of ethnic identity that have gone beyond mere ethnicity to politicize their struggle for recognition and rights. Each ethnopolitical group “suffers or benefits from, systematic differential treatment vis-à-vis other groups in a society” and is “the basis for political mobilization and action in defense or promotion of its self-defined interest” (Gurr 2000: 7).

Second, Gurr (2000: 29) characterized ethnopolitical conflict as a strategy of ‘unconventional politics’ contrasted to ‘conventional politics’ in which politically organized communal groups pursue their interests through institutional framework such as elections, lobbying, or control of local and regional government. Ethnopolitical groups consider protest and rebellion as two general unconventional political actions. Protest is defined as a strategy “to mobilize a show of support that prompts officials to take action favorable to the group” (29) and rebellion is a strategy “to mobilize enough coercive power, or cause sufficient disruption, that governments are compelled either to fight or to negotiate challenge” (29). The highest level of collective action in ethnopolitical conflict is labeled “large-scale guerrilla activity with more than 1,000 armed fighters, frequent armed attacks (more than six reported per year), and attacks affecting a large part of the area occupied by the group” and “protracted civil war, fought by rebel military units with base area” (31).

Drawing from Gurr’s (1970) conceptualization, the Political Instability Task Force (PITF) (Marshall et al. 2010) provides a different classification of ethnic wars by defining them as “episodes of violent conflict between governments and national, ethnic, religious, or other communal minorities (ethnic challengers) in which the challengers seek major changes in their status” (Marshall et al. 2010: 6). It should be noted, however, that ethnic wars should be
considered an overlapped category for the two highest categories of ethnopolitical conflicts in the MAR data (MAR 2009).

Similar to the MAR project, Sambanis and Zinn (2006:9) center their analysis on ethnic self-determination movements at the state-year aggregated level, which are defined by “a group-defined claim to the right of self-government within the boundaries of a given territory.” Notable ethnic self-determination movement organizations are the Sudanese People’s Liberation Army (SPLA) in Sudan and the Moro National Liberation Front (MNLF) and the Moro Islamic Liberation Front (MILF) in the Philippines as well as the Irish Republican Army (IRA) in Northern Ireland. Including all non-violent and violent self-determination movements, they identify 309 ethnic self-determination movements from 1945 to 1999. Of these 103 self-determination movements (33 percent) escalated to violent conflicts, whereas 206 movements (67 percent) remained non-violent movements.27

Sambanis (2009) provides an alternative definition of ethnic wars by primarily focusing on the aims of the armed organizations and their recruitment and alliance structures. According to Sambanis (2009), ethnic wars can be defined as “conflicts over ethnonational self-determination, the ethnic balance of power in government, ethnonational autonomy, ethnic and rational discrimination (whether alleged or real), and language and other cultural rights.” By this definition, Sambanis introduced another term-‘ethnonational’ self-determination, which might imply ‘ethnic’ self-determination movement in his early study (Sambanis and Zinn 2006). Although Sambanis-dataset on ethnic wars is unavailable, employing his definition of ethnic war, Wimmer, Cederman, and Min (2009) have compiled a new dataset on ethnic armed conflicts at state-year aggregated level based on the ACD data from 1946 to 2005 (the ACD definition can be found in Table 2.1). Table 2.2 shows the distribution of the ethnic and non-ethnic armed
conflicts in Wimmer et al. (2009). Of 215 internal armed conflicts between 1945 and 2004, 110 cases (51 percent) were coded as ethnic conflicts and 105 cases (49 percent) were as non-ethnic conflicts. Within ethnic conflict category, Wimmer et al. further distinguish secessionist (i.e. ethno-territorial conflicts) (52 percent) from non-secessionist (i.e. over government or political status change) (48 percent) conflicts (see Table 2.2). It should be understood that Wimmer et al. (2009) linked “all ethnic conflicts to the political relevant ethnic category in the name of which an armed organization instigated the conflict” (Wimmer et al. 2009) and disaggregated several conflicts with different ethnic claims made by ethnic armed organizations into different ethnic armed conflicts.

<table>
<thead>
<tr>
<th>Ethnic Armed Conflict</th>
<th>Non-ethnic Armed Conflict</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secessionist</td>
<td>57 (52%)</td>
<td>3 (3%)</td>
</tr>
<tr>
<td>Non-secessionist</td>
<td>53 (48%)</td>
<td>102 (97%)</td>
</tr>
<tr>
<td>Total</td>
<td>110 (51%)</td>
<td>105 (49%)</td>
</tr>
</tbody>
</table>

Source: Based on Wimmer et al. (2009)

Finally, Fearon and Laitin (2003a) propose a different operationalization of ethnic wars by defining them “in which the fighters were mobilized primarily along ethnic lines” (79). Based on this definition and their own data on ethnic and cultural diversity (Fearon 2003), they identified 79 ethnic wars (57 percent), 24 mixed or ambiguous conflicts (17 percent), and 36 non-ethnic wars (26 percent) out of their 139 civil wars list (between 1945 and 2008) (Fearon and Laitin 2010). One might think that these figures are relatively lower than ones in Sambanis and Zinn (2006) and Wimmer et al. (2009). Yet Eck (2009), applying Fearon and Laitin’s operational definition, reports 108 ethnic conflicts (53 percent), 91 non-ethnic conflicts (45 percent), and 3 conflicts that shift between ethnic conflicts to non-ethnic ones at state-year aggregated level within the ACD internal armed conflicts between 1946 and 2004.
Comparing the three datasets on ethnic armed conflicts at state-year unit of analysis compiled by Sambanis and Zinn (2006) Wimmer et al. (2009), and Eck’s (2009), we might see that these datasets have illustrated quite different landscapes of ethnic violence and ethnic territorial and ethnic but ‘non-territorial’ civil wars while identifying very similar numbers. Primarily looking at ethnic (nationalist) self-determination movements between 1946 and 2000, Sambanis and Zinn (2006) recorded 108 (including 51 wars) violent ethnic self-determination movements between 1946 and 2000. In contrast, relying on the ACD internal armed conflict data, Wimmer et al (2009) identified 110 ethnic armed conflicts between 1946 and 2005 and Eck (2009) coded 108 ethnically motivated armed conflicts between 1946 and 2004. Importantly, as Wimmer et al. (2009) reported, not all ethnic conflicts were associated with ‘secessionist’ motives or territorial-based objectives. What do these suggest for theory construction and empirical findings of either ethnic civil war or civil war?

First, a theory of ethnic wars or ethno-territorial wars cannot be a unified theory of civil wars (c.f. Cederman et al. 2010; Eck 2009; Fearon and Laitin 2003a). Notes that there are some converged theoretical explanations that ethnically motivated self-determination movements are highly associated with hostile violent conflicts between ethnic minority-based armed rebels and their central authorities because of crucial issues over the indivisibility of territory (Toft 2003) or the government’s primary incentives to avoid future ethnic territorial challenges (Walter 2009b). The Chechen war (1994-96 and 1999-ongoing) in Russia and the Mindanao war (1971-ongoing) in the Philippines as well as the East Timor war (1975-1999) and the Aceh war (1990-91 and 1999-2002) in Indonesia are the notable examples. It should be noted, however, that, according to Weidmann (2009), a number of ethno-territorial conflicts are driven by opportunity mechanism where ethnic groups’ concentration facilitates their coordination for collective action.
rather than a motivation-driven mechanism where the existence of a well-defined ethnic-based group territory (e.g. ethnic homeland) makes the group more likely to fight for it.

Second, despite such theoretical and empirical foci on explaining ethnic-minority self-determination (territorial) armed conflicts, as Wimmer et al. (2009) illustrated, nearly 50 percent of ethnic-based armed conflicts are NOT associated with secessionist goals or motives. In other words, if researchers focused on self-determination or ethno-territorial component of ethnic conflicts, we might over-specify the ethnic minority-based self-determinant movements and ignore other alternative causal heterogeneities of non-secessionist ethnic conflicts from our observations. According to the Ethnic Power Relations (EPR) project (Cederman et al. 2010; Wimmer et al. 2009), several ‘politically relevant’ ethnic groups excluded from central government or power-elites are more likely than other ethnic groups to revolt against their central authority using armed campaigns (Cederman et al. 2010) and to continue fighting until achieving their political objectives (Wucherpfenning et al. 2012). From the EPR’s perspective, for example, the IRA was formed largely by educated Catholic middle-class as a discriminated group from central power and its primary goal was to change the disproportional political power status relative to the dominant Protestants elites in Northern Ireland rather than gain territorial independence or autonomy from the British government. The African National Congress (ANC) and the Pan African Congress (PAC), respectively, against the Apartheid regime in South Africa and the Kurdistan Workers’ Party (PKK) in Turkey as well as the Sudan People’s Liberation Movement (SPLM) are notable examples of rebel organizations with linkages to ‘excluded’ ethnic groups from power center.29

Third, all data projects have considered the Sudan People’s Liberation Movement and Army (SPLM/A) in Sudan and the Moro National Liberation Front (MNLF) and the Moro
Islamic Liberation Front (MILF), which is a radical military wing separated from the MNLF in the Philippines, as the notable active armed organizations. As Cunningham et al. (2009) and Wucherpfenning et al. (2012) demonstrate empirically, however, every organization depending upon its organizational capacity and resource mobilization capacity needs to determine different types of armed resistances and tactics. Several ethnically motivated rebel organizations such as the IRA in Northern Ireland and the ETA in Spain might have to rely on relatively limited armed resistances such as assassinations and urban bombings and continue low intensive violent campaigns for more than 30 years due to their central government’s unwillingness to make concession. In contrast, despite their central government’s unwillingness to offer any concession, others like the SPLA in Sudan and the ANC in South Africa who mobilized ample resources and recruited active armed combatants (30,000 and 10,000, respectively) through ethnic (racial-) line fought prolonged wars while employing intensive armed campaigns.30

In sum, different empirical findings accompanied with specific illustrative cases might suggest that there will be multiple and complex pathways toward ‘ethnic’ civil war rather than a single causal and escalatory path from ethnic armed conflict to civil war (Cederman et al. 2010; Wimmer et al. 2009). Thus, researchers must seriously consider in rigorous investigations of various patterns and causal paths in different types of ethnic armed conflicts and wars. In doing so, future researches must recognize the possibility of multiple and complex pathways from non-ethnic movements to non-militarized collective violence as well as from small-scale ethnopolitical conflicts to large-scale violent conflicts. In addition researchers need to isolate necessary and sufficient factors affecting the causes of violence as well as the escalation to civil wars, independently or interdependently (Sambanis 2004a, c; Wimmer et al. 2009).
2.3.2 Guerrilla vs. Conventional Warfare

The distinction between ethnic and non-ethnic conflicts would be a good venue for theory construction of multiple pathways towards civil wars. However, there is a significant disagreement with such a classification of civil wars. Kalyvas (2007: 427), for example, notes “to analyze the civil wars in the Sudan as just (or primarily) an ethnic or a religious war is problematic.” According to Kalyvas (2007), a distinction between ‘irregular (guerrilla)’ and ‘conventional’ warfare would benefit for theory construction and empirical testing in the civil war research program. Such a distinction at the warfare level has considerable support by scholars who focus on rural or peripheral insurgency (e.g., Fearon and Laitin 2003a, 2009) and the geography of civil wars (e.g. Buhang and Gates 2002; Buhang, Gates, and Lujala 2009). In general, they argue that there is a high level of overlap between civil war and irregular warfare.

What is irregular warfare? Kalyvas (2007: 428) describes that the eruption of irregular warfare as follows:

The state (or incumbents) fields regular troops and is able to control urban and accessible terrain, while seeking to military engage its opponents in peripheral and rugged terrain; challengers (rebels or insurgents) hide and rely on harassment and surprise. Such wars often turn into wars of attrition, with insurgents seek to win by not losing while imposing unbearable costs on their opponent. There are many variations to this stylized scenario, involving outside intervention or assistance that may lead the insurgents to gradually switch from irregular war to conventional war (e.g., China); conversely, the progressing deterioration of the state may force incumbents to opt for irregular war as well (e.g., Sierra Leone).

One notable feature of irregular (guerrilla) warfare is a manifestation of military asymmetry between the central authority and rebel groups in terms of their fighting and logistic capacities. Indeed asymmetrical warfare in general has come to be recognized as the dominant form in recent years at both the civil and international levels (e.g. Arreguín-Toft 2001, 2005; Butler and Gates 2009; Lyall 2009). Another feature is that, although conventional warfare tends to erupt
either out of failed military coups or secession attempts in federal or quasi-federal states or quasi-federal states, irregular wars emerge incrementally and slowly from the periphery and take place with a very diverse range of goals (Kalyvas 2007: 428-9). Consequently, drawing on his typological analysis, Kalyvas (2007) claims that understanding the different types (conventional vs. non-conventional plus symmetry vs. asymmetry) of warfare might help better research to construct a theory of conventional and irregular civil war with better policy implications.

Differentiating civil wars from ethnic wars, Fearon and Laitin (2003a) develop a theoretical argument for a rural insurgency explanation of civil war onset. Unlike Kalyvas’s conceptualization of irregular (guerrilla) warfare, Fearon and Laitin (2003a: 79) define insurgency as “a technology of military conflict characterized by small, lightly armed bands practicing guerrilla warfare from rural base areas.” Applying this definition, Fearon and Laitin consider guerrilla warfare as an attribute for insurgency, conceptually.31 According to Fearon and Laitin (2003a: 79-82), because insurgents are fundamentally weak relative to the governments, the presence of rough terrain and cross-border sanctuaries should favor guerrilla insurgency and, then, lead to civil war. Fidel Castro’s ascension to power in Cuba as the result of the Cuban revolution of 1958-59 (CoW Intrastate War #745; UCDP ID#45) is a notable example.32 After the failure of his first revolt in July 26, 1953, against the Cuban government under President Fulgencio Batista y Zaldivar, Castro and his followers were imprisoned and then left for Mexico following a general amnesty for political prisoners in May 1955. In December 1956, Castro and his 81 followers returned Cuba from Mexico where they reorganized their plan to overthrow the Cuban dictator, but the Batista government soon captured most invaders and pushed the rest in the rugged Sierra Maestra Mountain range in Oriente Province. In the rugged Mountain, Castro stated rebuilding his forces and recruiting among the peasants with having continuous financial
supports from Cuban exiles in the United States. Castro’s ‘the 26th of July movement’ force grew across 1957 and 1958 from a force of only a few 100 to over 3,000 active combatants and gained in strength against the Cuban army. In May 1958, Batista’s Cuban government launched a massive offensive against Castro and his guerillas forces, using 13,000 troops. On January 1, 1959, however, President Batista fled to the Dominican Republic and Castro soon became premier of Cuba.

As Castro’s activities after his 1953 failure illustrated, insurgent leaders need a sustainable supply of arms and other logistic materials, as well as money to buy them and recruit new fighters. Because of such financial and logistical demands for their survival, the presence of lootable natural resources (e.g. drugs, timbers, oils, and diamonds) and diasporas’ financial support have come to be important sources for sustaining guerrilla warfare. As Fearon and Laitin (2003a) expected, their statistical analysis found that the conditions for insurgencies are highly correlated with the risk of civil war onset in weaker governments. A significant theoretical and empirical pitfall in Fearon and Laitin’s insurgency explanation is, however, that it has articulated neither causal mechanisms nor paths from insurgency to civil war. Could the cause of insurgency be considered as the cause of civil war? What does it account for the escalation stage(s)?

To fill several shortcomings in Fearon and Laitin’s insurgency explanation, the extant civil war literature has attempted to extend analytical scope by focusing on the geography of civil war and the rebellion’s relative capacity. Looking at geography of the outbreak and duration of civil conflicts, Buhang and Gates (2002) and Buhang et al. (2009) report that internal armed conflicts are more likely to erupt in geographically rural areas of a state than the capital of a state, and such rural conflicts last longer than other conflicts. This explanation might be put into a conflict diffusion model whereby the rural birth of insurrection then matures, with increased
fighting capacity and advantages over a weakened government, and comes to the cities. Salehyan (2006) further demonstrates that the presence of cross-border sanctuaries is associated with the risk of civil wars. Closely looking at the rebel mobilization and fighting capacity relative to central government, Cunningham et al. (2009) suggest that attributes of rebel capacities are better predictors of civil war duration and outcome rather than onset, and complements factors such as peripheral location and rough terrain.

A series of new findings would help us to construct a better theoretical explanation of the causes of civil war; yet, as Kalyvas (2007) notes, these empirical findings might be problematic due to the careless classification of different types of civil warfare. Indeed, Davenport et al. (2008) complement Kalyvas’s concern. Unlike the Fearon and Laitin’s (2003a) statistical model, Davenport et al. have explicitly considered the differences between urban contention (i.e. riots and anti-government demonstrations) and rural contention (i.e. guerrilla war) using Banks’ Cross National Time Series Data Archive (Banks 2008) and demonstrated that two different types of contentions predicted different sets of civil war onsets across the world. According to Davenport et al. (2008), urban contention better predicts civil war onsets in China (1991), Ethiopia (1992), India (1982), and Iran (1979), whereas rural contention does well for predicting civil war onsets in Cambodia (1978), Nicaragua (1978), South Africa (1983), and Zimbabwe (1983). In some cases, according Davenport et al, both urban and rural contentions help predict civil war onset in El Salvador (1979) and Somalia (1991). In short, they conclude that there might be multiple origins (or paths) of civil wars, although these multiple paths and causal mechanisms must scrutinize in rigorous manners.

2.3.3 Summary
The concept formation literature (Collier and Gerring 2009; Gerring 2007, 2012; Goertz 2006a; Sartori 2009a, b) suggests that social science concepts can be constructed at two levels—basic and attributes. In the preceding section, I have analyzed the concept of civil war and identified five common elements of civil war. In this section, I have examined how civil wars have been classified in the existing literature. My analysis suggests that the scholars have used different attributes of civil wars to develop their core theoretical arguments of the phenomenon in their specific interests, and have tested contrasting (possible) causal pathways. In other words, a theory of ethnic conflict expects to explain ethnic-dimensions of civil wars, whereas a theory of insurgency tries to explain insurgent-dimensions of civil wars’ outbreak and spread (internal diffusion). Such different classifications have created the gray zone of the classification for theoretical explanation of civil wars. My analysis of the core attributes in different explanations in the extant civil war literature illustrates that the remaining inconsistent theoretical predictions and contradicted findings in the literature are closely associated with the different classifications of distinct attributes of civil wars. Hence, the ethnic and non-ethnic explanations as well as the rural and irregular war explanations describe, explain, and predict somewhat different types of causal paths of civil wars. This would suggest that future research might need to discriminate causal mechanisms of each type and form of civil war from others both theoretically and empirically.

2.4 Civil Wars and Other Forms of Collective Violence

My concept analysis suggests that the extant literature has differentiated civil wars from other forms of domestic violence by characterizing five important attributes. I have further argued that ‘participants’ and ‘capacity of domestic antagonism’ are two necessary conditions for
civil war concepts. The recent scholarly attention, however, has brought such a distinction back to the drawing board (e.g. Kydd and Walter 2006; Findley and Young 2012). Sambanis (2004c: 268) reminds scholars by saying that “civil war is a phase in a cycle of violence,” implying that situations can oscillate back and forth between civil war and lesser violence or contestation. Tarrow (2007) and Lichbach (2009) suggest that students of civil war must begin to embed studies of civil wars in the research on the social movement and collective violence.33 Others such as Kydd and Walter (2006) and Findley and Young (2012) suggest that civil war scholarship should consider terrorism as the strategies taken by insurgents or rebels during or prior to, during, and after civil war.34 As it would appear in my discussion in chapter 1 and this chapter, a single important problem with this new research is that it “will risk becoming a specialty that guards its borders and ignores findings from research on adjoining forms of contention” (Tarrow 2007: 596). In other words, students of civil war may add attributes to the original concept under the umbrella of civil war without refining any theoretical framework. Thus, my last conceptual analysis in this chapter centers the conceptual and empirical differences between civil wars and other forms of domestic violence.

As a first step in this line of investigation, we must differentiate collective violence from other forms of dubious violence such as unorganized or coordinated criminal activities by individuals and sporadic gun-shooting violent crimes (see Eck et al. 2003; LaFree and Dugan 2007). According to McAdam et al. (1997: 143), “the study of contentious politics includes all situations in which actors make collective claims on other actors, claims which, if realized would affect the actor’s interests, when some government is somehow party to the claim.” Because of a broader definition of the phenomenon, every form of collective actions from hunger strikes and riots to guerrilla war and revolution has been considered as contentious politics.
To make a reasonable distinction among phenomena within contentious politics, Gurr and Lichbach (1986: 5), for example, attempt to differentiate ‘political’ conflict from other forms of collective violence. They define political conflict as “open physical confrontations between collective actors over political issues” (italic added) which must be sustained through the interactions by the same actors. Such sustained interactions of organized violence is the result of four interacting factors: (1) the demand for loot, (2) the demand for political change, (3) the opportunity to mobilize criminal or insurgent groups, and (4) the mechanisms (relational, emotional, cognitive, or environmental) that characterize claims making and resource extraction, according to Sambanis (2004c: 269).

The second important distinction is the difference between organized crimes and collective violence, articulating the role of unconventional politics. According to Gurr (2000: 29), collective violence must be a strategy of ‘unconventional politics’ contrasted by a strategy of ‘conventional politics’ without the legitimate political institutional arrangements within the recognized sovereign entity. Unconventional means employed by groups differentiates conflict from violence (Varsheney 2007: 278). Although the distinction between conventional and unconventional politics based on formalized institutional arrangements by law (not by people) are commonly used, however, it would be problematic because every political arrangement varies across different political institutions and different leaderships.35

Based on the analytical and conceptual framework of contentious politics and collective violence, the extant literature has employed five indicators of collective violence besides civil wars. Five indicators are anti-government demonstrations, general strikes, riots, revolution, and guerrilla warfare. Accordingly, Banks’s The Cross-National Time-Series Data Archive (CNTS),
which is the most commonly used dataset on collective violence across the world, defined each term as follows (Banks 2008: 11-12).

1. *Anti-government demonstrations* are any peaceful public gatherings of at least 100 people for the primary purpose of displaying or voicing their opposition to government policies or authority, excluding demonstrations of a distinct anti-foreign nature.
2. *General strike* are any strikes of 1,000 or more industrial or service workers that involves more than one employer and that is aimed at national government policies or authority.
3. *Riots* are any violent demonstrations or clash of more than 100 citizens involving the use of physical force.
4. *Guerrilla Warfare* is any armed activity, sabotage, or bombings carried on by independent bands of citizens or irregular forces and aimed at the overthrow of the present regime.
5. *Revolutions* are any illegal or forced changes in the top government elite, any attempt at such a change, or any successful or unsuccessful armed rebellion whose aim is independence from the central government.

The level of intensification increases from top to bottom. As Banks and others noted, these variables satisfy at least a criterion of mutually exclusiveness for reliable indicator construction and contain unique attributes of the phenomenon from peaceful movement to violent conflict, although formal civil war *per se* is not included.36

Table 2.3 exhibits the correlation matrix of five variables of collective violence from the CNTS dataset between 1946 and 1999.37 The bivariate correlation analysis indicates that, except for the high correlation between the ‘peaceful anti-government demonstrations’ and ‘riots’ (Pearson-r = 0.61), the correlations (Pearson-r) of other indicators are at the range from 0.07 to 0.42. Even, the correlations between guerrilla warfare and revolutions as violent collective actions are relatively low (Pearson r = 0.26). Because the results of the correlation analysis (Table 2.3) do not tell us about any dimensions of five collective violent indicators, I conducted a principal factor to determine the factor containing the highest correlations among the five
indicators. The results suggest that there are two clear-cutting dimensions of collective violence while some scholars used a three-way classification (i.e. peaceful, small-scale, and large scale dissident) (e.g. Carey 2009). The first dimension consists of ‘peaceful’ or non-violent anti-government demonstration (89 percent), general strikes (42 percent), and riots (90 percent).³⁸ The second dimension is based on guerrilla warfare (78 percent) and revolutions (71 percent). These two dimensions suggest that there are militarized or non-militarized phases in collective violence, while they do not prove any sequential or interdependent paths.

Table 2.3 Correlation Matrix of Collective Violence Indicators

<table>
<thead>
<tr>
<th></th>
<th>Anti-Government Demonstration</th>
<th>General Strikes</th>
<th>Riots</th>
<th>Guerilla Warfare</th>
<th>Revolutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-Government Demonstration</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Strikes</td>
<td>0.24***</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Riots</td>
<td>0.61***</td>
<td>0.42***</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guerilla Warfare</td>
<td>0.10***</td>
<td>0.17***</td>
<td>0.15***</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Revolutions</td>
<td>0.07***</td>
<td>0.07***</td>
<td>0.08***</td>
<td>0.26***</td>
<td>1</td>
</tr>
</tbody>
</table>

Notes: *** p < .001

In order to demonstrate further the similarities and differences of different forms of collective violence, I present the replicated result of a multivariate statistical analysis reported in Regan and Norton (2005). Employing the data on ethno-political conflicts from the Minorities at Risk (MAR) project between 1976 and 1997 (MAR 2009), Regan and Norton examine the eruption of three distinct types of collective violence. According to the MAR project (MAR 2009), all ethno-political conflicts ranging from minor-protest to sustained armed rebellion are coded in a 12-point ordinal scale.³⁹ Using the MAR’s 12-point ordinal scale, Regan and Norton construct three separate variables, namely protest, rebellion, and civil war. The protest variable is based on instances of ‘verbal opposition’ and ‘symbolic resistance’ as well as ‘large demonstrations.’ The rebellion variable includes the occurrence of ‘banditry and sporadic terror’ up to ‘intermediate guerrilla activity.’ The civil war variable is based on ‘large-scale guerrilla
activities’ with more than 1,000 armed fighters, frequent armed attacks affecting a large part of the area occupied by the group, and ‘protracted civil war’ fought by rebel military units with base areas. Using these three distinct phenomena as separate dependent variables for their analysis, Regan and Norton (2005) estimate three multivariate logistic regression models with eight independent variables derived from the extent civil war literature (e.g. Collier and Hoeffler 2004; Fearon and Laitin 2003a; Sambanis 2004a). Table 2.4 reports the result.

### Table 2.4 Results of Multiple Logit Analysis of the Onset of Civil Conflicts (Regan and Norton 2005)

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Protest Onset</th>
<th>Rebellion Onset</th>
<th>Civil War Onset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discrimination</td>
<td>0.086 (.075)</td>
<td>0.507 (.043)**</td>
<td>0.835 (.096)**</td>
</tr>
<tr>
<td>GDP per Capita</td>
<td>-0.092 (.176)</td>
<td>0.449 (.105)**</td>
<td>-0.193 (.136)</td>
</tr>
<tr>
<td>Repression One Year Lagged</td>
<td>-0.249 (.126)*</td>
<td>0.138 (.063)*</td>
<td>1.18 (.115)**</td>
</tr>
<tr>
<td>Extractable Resources</td>
<td>0.076 (.281)</td>
<td>0.052 (.149)</td>
<td>-0.454 (.207)*</td>
</tr>
<tr>
<td>Population Size (Logged)</td>
<td>-0.115 (.089)</td>
<td>0.238 (.046)**</td>
<td>0.523 (.069)**</td>
</tr>
<tr>
<td>Democracy</td>
<td>-0.040 (.102)</td>
<td>0.300 (.052)**</td>
<td>0.082 (.079)</td>
</tr>
<tr>
<td>Democracy Squared</td>
<td>0.001 (.005)</td>
<td>-0.011 (.002)**</td>
<td>-0.0045 (.004)</td>
</tr>
<tr>
<td>Ethno-linguistic Fractionalization</td>
<td>-0.003 (.005)</td>
<td>0.008 (.002)**</td>
<td>0.013 (.003)**</td>
</tr>
<tr>
<td>Peace-years</td>
<td>-5.01 (.421)**</td>
<td>-7.59 (.086)**</td>
<td>-9.37 (.147)**</td>
</tr>
<tr>
<td>Spline 1 (time dummy)</td>
<td>-0.434 (.041)**</td>
<td>-0.009 (.004)**</td>
<td>-0.011 (.005)**</td>
</tr>
<tr>
<td>Spline 2 (time dummy)</td>
<td>0.093 (.001)**</td>
<td>0.001 (.003)</td>
<td>0.002 (.006)</td>
</tr>
<tr>
<td>Spline 3 (time dummy)</td>
<td>-0.022 (.004)**</td>
<td>0.003 (.002)</td>
<td>0.005 (.005)</td>
</tr>
<tr>
<td>Constant</td>
<td>5.55 (2.01)**</td>
<td>-8.44 (1.2)**</td>
<td>-10.90 (1.60)**</td>
</tr>
<tr>
<td>Log-likelihood</td>
<td>-315.99</td>
<td>-806.68</td>
<td>-394.50</td>
</tr>
<tr>
<td>Wald $\chi^2$</td>
<td>541.50***</td>
<td>481.14***</td>
<td>259.58***</td>
</tr>
<tr>
<td>Observations</td>
<td>2019</td>
<td>2019</td>
<td>2019</td>
</tr>
</tbody>
</table>

Notes: Robust standard errors in parentheses. * p<.05, ** p<.01. Peace-years and Splines indicate time dependence variables generated by BTSCS program by Beck et al. (1998). The results in table are estimated with STATA 10.1 (SE) using the replication data provided by Regan and Norton (2005).

Focusing on conflict dynamics (from nonviolence to violence) of ethno-political conflicts reported in Table 2.4., Regan and Norton indicate that three types of collective violence are associated with different structural factors and thus, conclude these are somewhat different phenomena. Regan and Norton’s central findings and my concerns related to their findings are as follows:
a) Government’s discrimination program has a positive impact on predicting the risk of violent conflicts (rebellion and civil war), but not the risk of nonviolence\(\rightarrow\) in other words, potential roots of political, economic, and social discrimination as grievance do not influence the eruption of nonviolence movement! (c.f. Cederman et al. 2010, 2011; Gurr 2000; Olson Lounsbery and Pearson 2009; Sorens 2010).

b) Prior-year’s state repression is negatively associated with the eruption of protest whereas it is positively related to the outbreak of rebellion and civil war\(\rightarrow\) this might suggest that repression is ineffective to quell violent campaigns or might spark such violent strategy (c.f. Gurr 2000; Chenoweth and Stephen 2011; Sambanis and Zinn 2006).

c) Higher GDP per capita significantly increases rebellion onset statistically and decreases the risk of protest and civil war\(\rightarrow\) implying that the root of rebellion, conceivably in relative deprivation terms, may differ from the cause of civil war (c.f. Fearon and Laitin 2003a; Hegre and Sambanis 2006; Ward et al. 2010).

d) The presence of extractable resources (i.e., diamonds) has statistically significant impact only on civil war onset but the direction is negative\(\rightarrow\) rebels who are already resource sufficient might be the ones to sustain violent campaigns (c.f. Gates et al. 2009; Lujala 2009; Theis 2010).

e) Greater levels of ethno-linguistic fractionalization as a proxy of ethnic diversity is a statistically significant factor to predict the eruption of rebellion and civil war, but not protest\(\rightarrow\) which may suggest that ethnic diversity influences only ethnic rebellion and ethnic civil war, but may not do so for lower levels of armed conflict and other types of civil war (c.f. Fearon and Laitin 2003a; Collier and Hoeffler 2004).

f) Political regime type variables matter only for predicting rebellion onset but not for protest and civil war. The statistical significant relation is an inverse U curve, which implies that states under anocracy or semi-democracy (i.e. regime transition or political instability) have a higher likelihood of ethnic rebellion\(\rightarrow\) leading us to wonder what unobserved factors also matter (c.f. Gates et al. 2006; Goldstone et al. 2009)

The divergence of these results indicates once again that pathways to civil war are likely to vary considerably according to types of conflict. Although I have made a few comments and speculations concerning Regan and Norton’s (2005) findings, the substantively important point here is that different types of collective violence can be distinguishable and the eruption of protest, rebellion, and civil war in the range from peaceful movement to the large-scale political conflict is correlated with the different structural factors. This empirical clue, while it needs further empirical investigations, would suggest that three different phenomena could be led by
different causal mechanisms and there are considerable reasons that scholars distinguish civil war from other forms of collective violence conceptually and empirically.

As presented in chapter 1, my survey suggests that there would be at least two distinct paths before the eruption of civil war. The first path is from non-violent social movements to street-level collective violence accompanied with minor violent incidents led largely by some radical youths, criminals, or loosely organized paramilitary (semi-armed) groups. The second path is the militarized phase of conflict escalation from small-scale militarized contests directly against the central authority by one-armed non-state organizations initially organized for violent conflict and prepared to resist to attacks militarily to large-scale militarized conflicts against a central authority. These two paths should be isolated one another from future investigations theoretically and empirically (see chapter 3).

2.5 Concluding Remarks

In this chapter, I have presented civil war and other/related forms of politicized contention conceptually, theoretically, and empirically. My analysis above suggests that there are considerable conceptual overstretching and complications in the newly emerging research in civil war (e.g. Findley and Young 2012; Kydd and Walter 2006; Lichbach 2009; Tarrow 2007). It also indicates that a scholarly consensus emerges in the line that a civil war may emerge or evolve as one of distinct phases of the militarized political confrontations (embedded perhaps in a larger notion of ‘revolution’). A crucial distinction between civil war and other forms of collective violence is the presence/emergence of principal armed actors who are ‘initially’ organized for violent conflict with full-time and fully equipped combatants against a central authority.
Typologically, there are considerable variances in ethnic and non-ethnic explanations as well as in conventional and irregular (guerrilla) warfare explanations for the different origins and dynamics of civil wars. Put these positively that there would be multiple-pathways to (and conceivably from) civil wars. A number of contentious politics scholars have called that there is a necessary step to incorporate the contentious politics research into civil war scholarship in order to comprehend the origins and internal dynamic processes of civil wars (Tarrow 2007; Lichbach 2009). However, my analysis in this chapter suggests that such a converging approach needs to follow a series of serious reexaminations of previous research, and especially the different causal mechanisms between ‘non-militarized’ phases and ‘militarized phases’ of collective violence. In the next chapter, I will examine and evaluate a handful of the extant theoretical arguments to explain different pathways toward civil war and will present an alternative explanation to capture a dynamic and sequential strategic conflict process toward the outbreak of civil war.
Notes:

1 See Wong (2006) and Sambanis (2006).

2 An updated list of intrastate (civil) wars between 1816 and 2007 compiled by the Correlates of
War Project (Sarkess and Wayman 2010) classifies the Iraq’s resistance as an extra-state war
between the occupying power and armed oppositions (ID#482). According to an updated ACD
conflict list (Harbom et al. 2008), the same episode was coded as an internationalized internal
war (see ID#62 in Harbom et al. 2008). Similarly, the CoW project (Sarkees and Wayman 2010)
classifies the Taliban insurgency as an extra-state war (ID#481 the Afghan Resistance of 2001)
while the ACD (Harbom et al. 2008) codes the same episode as an internationalized internal war
(ID#137). Note that there are different starting dates of each episode between the two datasets.

3 See Lyall and Wilson (2008) on creating their new dataset on counterinsurgency (COIN)
warfare differentiated from those of civil wars or intrastate armed conflicts (Lyall and Wilson

4 For example, Hafez (2007) identifies more than 50 uncoordinated Sunni groups that were
involved in insurgent attacks between 2003 and 2006 in Iraq.

5 In the case of Afghanistan, the United Nations and the international community including the
United States government have avoided using the term ‘civil war’ when they described the
situation related to the Taliban insurgency in Afghanistan since 2002 (Jones 2008).

6 For the full document of the Common Article 3 of the Geneva Convention for the Amelioration
of the Condition of the Wounded and Sick in Armed Forces in the Field, Geneva, 12 August
accessed on December 22, 2012).
See Pape (2012) for an overview of recent debates over universal standards for humanitarian intervention including recent cases in Afghanistan, Iraq, Libya, and Syria.

See Gerring (2012), Goertz (2006a) and King et al. (1994) for a detailed discussion of what is social science ‘concept.’

A detailed analysis and an empirical comparison of operational definitions of various datasets on civil wars can be found in Sambanis (2004a) and its supplement (Sambanis 2004c) available at [http://pantheon.yale/~ns237/](http://pantheon.yale/~ns237/) (last accessed on April 14, 2010). See Eck (2005) for a brief user’s guide for a number of different lists of internal armed conflicts and civil wars.

See Krause (2010) for different case analyses of the politics of non-state armed group formation and the roles of armed groups in contemporary conflicts. Bates (2008a, b) considered forming a guerrilla force with some territorial control as the onset of state failure in terms of political disorder within a sovereign state.

Eck, Sollenberg, and Wallensteen (2003) provide a primer to these terms and a number of the limitations for data collection and data analyses of those. See also Harbom and Pettersson (2010) for UCDP’s specific coding decision of ‘non-state’ ‘armed’ ‘actors’ and Kreutz and Eck (2005) for UCDP’s Non-State Conflict Codebook. On UCDP’s dataset on One-sided Violence such as mass civilian killings by central authorities, pro-, or anti-government non-state armed actors, see Eck and Hultman (2009). It is noteworthy that the Correlates of War project (Sarkess and Wayman 2010) creates a new category of ‘Non-State Wars’ including inter-communal wars, while the CoW project has not provided a comprehensive list of non-state geo-political units or non-state (armed) actors.
In addition, the growing number of civil war scholars has also recognized the numerous gaps between theoretical arguments and ‘ad hoc’ empirical modeling in extant research (see Baltman and Miguel 2010; Walter 2009a).

The definition and coding rules of civil war provided by Small and Singer (1982) are an extension of their original effort of data generation on international war. Small and Singer (1982) simply contrasted ‘civil’ with ‘international’ war without any theoretical intents but intended to provide an overview and one of reasonable lists on both international and civil wars to the international conflict scholarship.

Indeed, although many scholars employed the CoW dataset on civil wars, a handful of previous studies have referred to the coding criterion of effective resistances (Henderson 2002; Henderson and Singer 2000; Krause and Suzuki 2005a, b). See Sambanis (2004a: 823-825) for a brief illustration of a sustained effective-resistance criterion for identifying a civil war.

A detailed discussion of Gurr’s concept formation with regard to revolution can be found in Kotowski (2009[1984]).

See Gleditsch (2002) for reclassifying the CoW intra-state and extra-state wars (Sarkees 2001) based on the different coding scheme identifying a political and geographical unit as an independent state (Gleditsch and Ward 1999). Note, however, that Gleditsch (2002) acknowledged the important distinction of ‘wars’ from other forms of armed conflicts.

The category of internationalized internal armed conflict is a similar category of internationalized civil wars in the CoW. The CoW has classified internationalized civil wars to extra-state wars after the 2000 update (see Sarkees 2001; Sarkees and Wayman 2010).

Regarding this point, see Harbom and Pettersson (2010) for the UCDP’s coding decision of non-state armed actors and Gleditsch et al. (2012) for extended discussions on non-state armed actors. See Krause (2010), Staniland (2012), and Weinstien (2007) about organizational and networking capacity across ‘urban’ and ‘rural’ armed rebel groups worldwide.

Note that, applying a minimum 200 annual-fatality threshold during the full conflict period (i.e. from birth to death of conflict), Regan (2002) compiled a list of 151 internal ‘civil’ conflicts between 1946 and 1999. Three primary differences between Regan (2002) and Sarkees and Wayman (2010) are (a) to code the end of each conflict, (b) to determine the date of either renewal or recurring conflicts, and (c) to identify a violent event as a conflict with a minimum 2000 annual fatality-level. In doing so, Regan (2002) includes the Northern Ireland war in his civil conflict list, whereas Sarkess and Wayman (2010) exclude the conflict from their war list.

For the issues and methods of concept formation, see Collier and Gerring (2009) including Sartoi’s original work. Also, see Goertz (2006a) and Gerring (2007) for the multi-stage concept formation. See also Sobek (2010) on state capacity, and Levitsky and Way (2011) on competitive autocratic regimes, as well as Goertz (2006a) and Gerring (2012) on liberal democracy.

For an excellent treatment of necessary and sufficient conditions in social science concept formation, see Goertz (2006b).

A similar argument I made here can be found in Vasquez (2009[1993]) with regard to theory construction of causes and expansions of ‘world’ wars instead of ‘major’ or ‘great’ power rivalry wars.
Sambanis (2001) and Suzuki (2007) rely explicitly on the PITF’s distinction between ethnic and revolutionary war and find the significant differences between ethnic (identify based) war onset and revolutionary (non-identity based) war onset.

See Wimmer et al. (2009), Cederman et al. (2010), and Sambanis (2001; 2009) as well as Suzuki (2007).

For a good summary and discussion of different dimensions of social cleavages in political science literature, see Deegan-Krause (2006). There are the varieties of theoretical arguments with respects to the relationship among state formation, ethnicity, and ethnic conflict. See Varshney (2007) for an institutionalist perspective; Chandra (2006) for a constructivist perspective; Fearon and Laitin (1996, 2002) for a rational-constructivist perspective; and Wimmer (2002) for a political-sociological perspective.


See Buhaug (2006) for the objective-based distinctions between territorial-based and government-based internal conflicts utilizing the coding scheme of issue compatibility of armed conflicts in conflict employed the ACD dataset.

See Gleditsch et al. (2012) and Wucherpfenning et al. (2012).

For the information regarding active armed combatants, see Gleditsch et al. (2012: 235-237, 526).

Note that Fearon and Laitin’s understanding of ‘guerrilla’ warfare are substantively different from Lyall’s (2010) focusing on the COIN warfare.

For an extensive review of the social movement literature, see McAdam et al. (1997; 2000).

Note that there are different definitions and classifications of terrorism (see Hoffman 1998; Findley and Young 2012). Here I take the Global Terrorism Database’s (GTD) definition which considers terrorism as “the threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious or social goal through fear, coercion or intimidation” (LaFree and Dugan 2007:184).

The further scrutiny of this conceptual issue is beyond the scope of this chapter. For a recent advanced research on this subject, see Cheibub et al. (2010), Davenport (2007a, b), Gates et al. (2006), and Goldstone et al. (2010).

A similar and more detailed classification employed in Gurr (2000) based on the Minority at Risk (MAR) Project (MAR 2009).

I employed the data compiled by Bueno de Mesquita et al. (2003) from Banks’ CNTS. The data are available from http://www.nyu.edu/gsas/dept/politics/data/bdm2s2/Logic.htm (last accessed on April 14, 2010).

Percentage in parentheses indicates the correlation level to the common factor. The high value means that the variables are highly correlated with the factor.

See MAR’s updated codebook (MAR 2009) and data are available online at http://www.cidcm.umd.edu/mar/ (last accessed on April 14, 2010).
CHAPTER 3
EXPLAINING PATTERNS OF CONFLICT ESCALATION

IS THERE A SINGLE THEORY OF CONFLICT ESCALATION?

“certain patterns of …escalation are highly associated with war” (Leng 2000: 235)

“severe state repression is more likely to prolong and intensify conflict than to suppress it” (Gurr 2000: 132)

3.1 Searching certain patterns of conflict escalation

The aim of this chapter is to present an analytical framework and its theoretical implications for explaining the patterns of how small-scale violent political confrontations between a central authority and its armed opposition(s) breed large-scale militarized political contests such as civil war. In doing so, this chapter reviews a number of extant explanations of conflict escalation process toward civil war and presents an alternative explanation of conflict escalation.

Between 2010 and 2012, millions of ordinary citizens collectively protested and challenged their central authorities worldwide. Participants to anti-government movements or uprisings often have posed varied grievances or complaints towards the central or local authorities. In 2010, for instance, a group against Egyptian President Hosini Mubarak requested an increase in daily food supply or access to public goods such as fresh water, basic education, and/or daily health services. Others such as Muslim-Brotherhood and other political groups demanded major status changes in political representation, while a very few number of armed groups have expressed publicly that they seek to overthrow their central authority.¹ Each of the groups involved in the so-called ‘Arab Spring’ during 2010-2012 has relied on different tactics.²
Some anti-government protesters have employed solely non-militarized collective campaigns (e.g. boycotts, hunger strikes, anti-government protest, and demonstration) while others relied heavily on militarized collective ones (e.g. armed rebellions, urban terrorism, and guerrilla warfare).

Each episode passed through different trajectories and found different outcomes. In April 2010, for example, two violent conflicts emerged in two different capital cities in two different countries and ended with diverse outcomes. In Kyrgyz’s capital Bishkek, a violent rebellion led by the provisional government leaders swept into the capital and ousted President Kurmanbek Bakiyev within two days. In Thailand’s capital Bangkok, thousands of loosely organized nonviolent anti-government demonstrators led by the People’s Alliance for Democracy (PAD, a.k.a. Yellow-Shirts) and the United Front of Democracy against Dictatorship (UDD, a.k.a. Red-Shirts) marched in the streets and demanded various political reforms including fair elections. Between April 10 and May 19, 2010, however, some radical youths in nonviolent anti-government protests ran into sporadic violent riots and clashed with the Thai Royal military. The clash yielded at least 42-54 unarmed civilian deaths and more than 1,400 wounded people. Kyrgyzstan’s political elite-driven revolutionary challenge successfully replaced a political leader with a new government, while Thai’s bottom-up nonviolent and violent movements had trouble gaining any meaningful political concessions from the central authority. Both episodes sparked a series of violent incidents in each country, yet neither turned into civil war under the Correlates of War project’s definition (see chapter 2).

However, two other episodes of political uprisings in 2011-2012 went with different conflict paths. Since February 15, 2011, various loosely organized rebel and tribal groups launched individually ‘minor’ military campaigns against the al-Gaddafi regime in Libya.
While Libyan rebels had faced a number of major military offensive operations by the al-Gaddafi’s security forces and private army, the rebels gradually formed its central command structure under the National Transitional Council (NTC) and gained substantial military support from the North Atlantic Treaty Organization (NATO) and destroyed the al-Gaddafi regime militarily over seven months. On the contrary, Syria’s mainly nonviolent anti-government protesters in 2011 demanded political reforms of the Syrian government under the Baath-Party led by President Bashar al-Assad. Following his family tradition, al-Assad’s regime continuously sought to suppress not only non-violent demonstrations but also increased violent anti-government campaigns in various cities by deploying well-equipped security forces. As of July 14, 2012, the United Nations Supervision Mission in Syria (UNSMIS) estimated that more than 10,000 people, mostly civilians, had been killed in Syria and tens of thousands displaced since the uprising against President Al-Assad began in 2011. As of writing this section, Syria’s armed straggles are ongoing while a loosely organized rebel forces coalesced and began receiving higher levels of outside arms and financial support. Although strongman Al-Gaddafi was assassinated, President al-Assad clings to power, and the response of the ‘international community’ has been quite contrasting in the two cases. Yet both cases reached levels of civil war in the midst of the armed straggles between the powerful repressive regimes and loosely organized multiple armed rebels.

All four episodes exhibit some of the observable dynamic and strategic tit-for-tat processes. As presented in chapter 1(Figure 1.4), I define a ‘dynamic process’ as a multiphase process involving positive feedbacks, “which generate multiple possible outcomes depending on the particular sequence in which events unfold” (Pierson 2004: 20). The two-way tit-for-tat interactions illustrate at least two interesting conflict dynamics. First, a central government tends
to impose strategically severe repressive policy by deploying police force or security force against its citizens or rebel group(s) when the government met anti-government challenges, whereas anti-government challengers are likely to intensify strategically their challenge against the central authority when anti-government movement met serious repressive actions via the central authority. Second, conversely, if a government offers any cooperative deal, some rebel groups may respond in a cooperative manner. According to the recent study (e.g. Stephan and Chenoweth 2008; Chenoweth and Stephan 2011), nonviolent civil resistance strategy compared with major armed campaigns such as civil war is an effective tool to achieve specific group objectives. Yet, four episodes above suggest that violence begets violence by either side (e.g. Lichbach 1987; Mason 2004; Moore 1998, 2000; Shellman 2006, 2008) at least until major changes in incentive structure for either side occurs or situational changes such as one-side clear military advantage or ‘mutually hurting stalemate’ (Zartman 1990, 2005) sets in the course of armed conflicts.9

Table 3.1 presents a brief comparison of four episodes drawing largely on the Correlates of War Project’s criteria for classifying a violent episode as a civil war (see chapter 2).10 Looking at the case comparison in Table 3.1, there will be a number of questions. The first question is what we can observe of similarities or differences across the four cases. Second, are there any systematic patterns to explain conflict dynamics across the episodes? Third, what are primary factors that differentiate conflict dynamics of one from others? Fourth, why do some small-scale violent conflicts turn to large-scale armed conflicts in some countries? Fifth, why did some episodes go through very similar trajectories in the course of conflicts but end up with very different consequences?
### Table 3.1 Summary of Four Cases

<table>
<thead>
<tr>
<th></th>
<th>Kyrgyzstan in 2010</th>
<th>Thailand in 2010</th>
<th>Libya in 2011</th>
<th>Syria in 2011-2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of Resistance</strong></td>
<td>Armed campaign</td>
<td>Non-violent and armed campaign in the full period</td>
<td>Armed campaign after February 2011</td>
<td>Armed campaign after March 2011</td>
</tr>
<tr>
<td><strong>Meet CoW civil war criteria?</strong></td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Government Repressive Capacity</strong></td>
<td>Weak</td>
<td>Strong</td>
<td>Strong to medium due to defections; loyalists and private army</td>
<td>Strong to medium due to defections; loyalists and Russian and Iranians support</td>
</tr>
<tr>
<td><strong>Rebel fighting capacity</strong></td>
<td>Strong</td>
<td>Very weak: sporadic violence by one radical group</td>
<td>Weak to strong: change over time with foreign supports</td>
<td>Weak to strong: change over time with foreign supports</td>
</tr>
<tr>
<td><strong>Clarity of goals of resistance</strong></td>
<td>High: overthrowing the incumbent</td>
<td>High: demands for political institutional reform</td>
<td>Unclear: change over time from political status change to overthrowing the regime</td>
<td>Unclear: change over time from political status change to overthrowing the regime</td>
</tr>
<tr>
<td><strong>Armed rebel group coherence</strong></td>
<td>High: the central command</td>
<td>No central command; only one radical group used arms weapons</td>
<td>Low to high: from loose-alliances to central command</td>
<td>Low to high: from loose-alliances to central command</td>
</tr>
<tr>
<td><strong>Role of ethnicity</strong></td>
<td>None</td>
<td>Negligible</td>
<td>Low (ethnic tribal) *</td>
<td>Medium: ruling minority vs. excluded majority</td>
</tr>
<tr>
<td><strong>Duration of conflict (Months)</strong></td>
<td>2 weeks</td>
<td>2 months</td>
<td>more than 7 months</td>
<td>more than 24 months</td>
</tr>
<tr>
<td><strong>Outcome of conflict</strong></td>
<td>Leadership change in power elite</td>
<td>No regime change, but leadership change occurred in the 2012 elections</td>
<td>Regime change</td>
<td>Unknown</td>
</tr>
<tr>
<td><strong>Battle-deaths 1,000+</strong></td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>External Support</strong></td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Source: Compiled by the author based on case narratives. All materials concerning my assessments are basis of various expert reports from the International Crisis Group (ICG) and the Institute for Studies of War (ISW). A list of all references and case narratives can be seen in ‘case narratives and case materials’ section in the bibliography.

Note: *Libya’s ethnic-linguistic divisions and tribal relations are complex because of al-Gaddafi’s patronage and favoritism politics in order to divide and manipulate tribal-linguistic based local communities and minority groups.*

These questions remain understudied subjects in extant literature on collective violence as well as the growing body of the literature on civil war (Dixon 2009; Sambanis 2004a; Tarrow...
Before moving forward, a usual caution is important. Unlike the enriched body of the literature on social movement and contentious politics which primarily studied how and why some nonviolent movements breed into violent campaigns while others do not, my primary focus in this chapter is exclusively on how militarized collective violence evolves to much large-scale armed confrontations (see Libya and Syria in Table 3.1). This emphasis is consistent with what a growing body of civil war scholarship has repeatedly proposed (Dixon 2009; Olson Lounsbery and Pearson 2009; Regan 2009), namely that understanding ‘certain patterns’ of conflict dynamics before a civil war breaks out, will be a great impetus to increasing our knowledge of why some countries are more likely than others to fight prolonged or intensified armed conflicts and why the outcomes of such fighting vary (e.g. Libya and Syria). Moreover, understanding such prior-civil war dynamics is significantly important for the new generation of civil war researchers in order for them to “move toward the specification and testing of disaggregated causal pathways and mechanisms” of civil wars (Kalyvas 2007: 431).

3.2 Existing Explanations of Patterns of Conflict Escalation or Paths to Civil War

A large body of the recent literature on civil war onset focuses primarily on insurgent’s decisions to rebel against the central authorities in terms of creed, greed, grievance, or opportunity-cost. This theoretical and empirical literature has identified various structural factors associated with the occurrences of (successful or unsuccessful) rebellion or (successful or unsuccessful) revolution; yet the findings across the studies remain inconsistent. One of the primary theoretical and empirical puzzles arising from the inconsistent findings is that this literature has treated all politicized armed contentions before civil war as an unobserved latent variable. Brubaker and Laitin (1998: 426) put the puzzle differently “where violence is clearly
rooted in preexisting conflict, it should not be treated as a natural, self-explanatory outgrowth of such conflict.” In other words, civil war may occur because of the incumbent’s policies over some period along with insufficient repressive strategy targeting antagonists or because of rebels’ active recruiting its supporters or combatants and operating successful anti-government campaigns under observed or unobserved structural conditions. To understand such roots in preexisting conflict, namely ‘pathways to civil war,’ a growing number of scholars propose that the new generation of civil war research must incorporate the enriched theoretical and empirical literature on the repression-dissident activities (see chapter 1).

Although there are several different explanations within the repression-dissident literature, my survey focuses on four theoretical explanations of the patterns toward or pathways to civil war in the state-centric approach, namely ‘inflammation,’ ‘incapacity,’ ‘ineffectiveness,’ and ‘ethnic descent-based attributes’ explanations, respectively. In part of the ethnic explanation, a number of researchers emphasize a group-level analysis of the ethno-territorial concentration in breeding ethno-nationalist armed resistance such as Chechen’s Islam radical-jihadists in Russia and Abkhaz’s marginalized ethnic community in Georgia (Toft 2003); yet my survey leaves out the ethno-territorial explanation because of largely its group-level observation (discussed below).

The ‘inflammation’ explanation views civil war as emerging when prejudicial government policies and repression prompts dissidents to increase their rebellious efforts (Sambanis and Zinn 2006). In this explanation, prior-repressive activity enrages citizens who subsequently increase dissident behavior to the level of civil war. Gurr (1970, 2000) argues that, because repression increases people’s (from psychological to physical) sense of political, economic, and social deprivations, repression increases dissident activity. Gurr and Moore
(1997) further suggest that levels of repression and levels of mobilization influence each other, and in turn, such tit-for-tat interactions increase the probability of large-scale rebellion by an ethnopolitical group.16

Drawing on the theoretical and empirical insights from contentious politics, Sambanis and Zinn (2006) examine the escalatory process from small-scale armed conflicts to large-scale armed conflicts (more than 1,000 fatalities) in the context of ethnic self-determination movements. They demonstrate that the government’s repressive strategy targeting an ethno-nationalist self-determination campaign sparks ethnic division and radicalizes lesser hostile armed contentions to highly hostile violent confrontation between a central government and an armed group, breeding civil war. This argument and empirical finding posits the following testable hypothesis.

- **Hypothesis 1: the greater repression the government imposes, the greater likelihood of civil war the government experiences.**

Two (Libya and Syria) out of four cases in Table 3.1 meet this prediction. It should be noted that the government security apparatus in Libya and Syria largely defeated non-violent demonstrators and sporadic and uncoordinated armed challenges by a variety of groups who have different interests at the early stage. However, the both governments had lost gradually territorial controls and supports through a number of systematic armed campaigns by coordinated and trained combatants with foreign military support. Unlike Libya and Syria, Thailand’s pro-democracy movements in Bangkok and 24 provinces across north east of Thailand faced the central government’s harsh suppression including an ‘emergency law’ and later the military crackdown targeting against members of the so-called ‘men in black’—a radical group separated from the UDD (Red-Shirts)—, and other anti-government radicals.17 At the early stage, the Red-Shirts as a pro-Thaksin Shinawatra (former ousted Prime Minister) movement gained valuable political
endorsements and financial donations from both central and local leaders and allegedly gathered arms and weaponries such as shotguns for future guerrilla tactics against the dictatorial government. However, despite growing public sympathy to the appeal for democracy, the divided leadership among anti-government and pro-democratic movement groups failed to mobilize either political-elites or the Thai military loyal to the government to the anti-government movement. Indeed, the vast majority of central and local political leaders and Bangkok residents stayed largely silent and separated from any violent campaign. Further, the Thai military and police force under Prime Minister Abhisit Vejjajiva used ‘limited’ repressive strategies by primarily targeting to a number of sporadic urban-terrorist attacks led by the Red-Shirts. In addition, despite anti-government leaders’ calls for involving a joint anti-government resistance campaign, Muslim self-determination insurgency in southern regions of Thailand stayed out entirely from Bangkok’s political upheavals.

The narrative (no civil war) of Thailand’s April 2010 violent incidents compared with the cases (civil war) in Libya and Syria gives us the rationale to look into the roles of government repressive capacity in breeding relatively minor armed political contests into major armed confrontations between government security forces and institutionalized rebel organizations with full-time and fully equipped combatants.

The ‘incapacity’ explanation perceives that large-scale armed contention emerges when central authorities are unable to apply ‘significant’ levels of government repression, while a certain level is uncertain before stopping or ending certain dissident activities. In other words, when repressive behavior is initially low, challengers perceive a weakness in government coercive power (which reduces the potential costs of collective action), and in this context, dissidents increase their rebellious efforts (e.g. mobilized resources) to civil war (c.f. Regan and
Norton 2005). This explanation suggests that civil war is associated with the incapacity of the government to apply substantive coercive action (and/or to enact satisfactory reforms) (Lichbach 1987; Mason 2004; Fjelde and de Soysa 2009). The escalation of armed struggles in Libya and Syria would be notable examples. Although this argument commonly brings to mind the rationalist conception of ‘costs’ and ‘benefits’ discussed in civil war research (e.g. Lichbach 1987; Mason 2004), it is consistent to the concept of ‘political opportunity’ found in the social movement literature as well (e.g. McAdam 1996; Tilly 2003). The work by Lichbach (1987) on dissidents’ strategy suggests that dissidents as rational actors are likely to adapt their strategies in response to government repressive strategies (Mason 2004; Moore 1998; 2000; Shellman 2006).

Empirically, the findings associated with the ‘incapacity’ explanation are diverse, even in the recent research. Carey (2010) reports that only guerrilla warfare significantly increased the probability that a government would intensify levels of repression, while Young (2009) suggests that overall dissident activities generally boost the magnitudes of government’s coercive response against citizens. Regan and Norton (2005) show that government repressive actions have varying impacts on the different levels of rebels’ violent activities, namely, protest, rebellion, and civil war. According to their findings, government coercive actions significantly reduce the probability of protest, whereas government repressive strategy increases largely the likelihood of manifesting rebellion and large-scale civil war. Looking at the different types of state capacity, Fjelde and de Soysa (2009) report that greater government’s coercive capacity compared with co-opting capacity significantly reduced the likelihood of the small-scale armed conflicts and the large-scale armed conflicts. This finding complements the cases in Kirgizstan (weaker government vs. the united powerful provisional government force) and in Thailand.
(powerful government vs. loosely ailed weak rebels). The government ‘incapability’ explanation and its diverse empirical underpinning posit the following hypothesis.

- **Hypothesis 2:** greater government repression and repressive capacity reduce the likelihood of rebellion and civil war as the opportunity of rebellion is constrained and insurgent costs rise.

The ‘incapability’ explanation indeed illuminates a number of different internal conflict dynamics as well. For instances, the Thai government’s repressive strategy (and the roles of the monarch) successfully avoided spreading urban violence to rural violent conflict, while the powerful repressive government in Libya and Syria failed to either destroy or deter sporadic violence at major cities or remote villages which then, spilled in a series of military battles with armed rebels across the country. This reality would shift our attention to another possible explanation of conflict escalation, namely ineffectiveness of either government repression policy or military offensives under some conditions.

The third explanation involves so-called the ‘ineffectiveness,’ and is derived from the insurgency-weak government argument (Fearon and Laitin 2003a) which argues that large-scale armed confrontation most likely emerges when governments apply a series of severe coercive measures and dissidents outlast or outfight the government. This would be the case of Syria and Libya, after loosely allied rebels formed the central command structure and their intelligence coordination increased military support from foreign powers. According to Fearon and Laitin (2003a), although societal members hold a wide variety of grievances and desires derived from diverse political, economic and geographic factors, what accounts most for civil war in line with the greed argument (i.e. money seeking) is the presentation of an opportunity (Collier and Hoeffler 2004). Unlike Collier and Hoeffler’s (2004) economic opportunity or rebel economic incentive model as a quasi-economic organization, Fearon and Laitin (2003a: 79) argue that
large-scale confrontation is most likely to emerge only when structural conditions are right, that is “when small, lightly armed bands practicing guerrilla warfare from rural base areas” can survive government efforts at counter-insurgency and policing. In particular, according to Fearon and Laitin (2003a:79-82), state repressive capacity is undermined and challengers are favored when the economy is poor, population is high, there is large mountainous terrain, there is non-contiguous territory and political life is fragile. Thus, under these circumstances, rural-based insurgency may be able to resist even formidable government repressive efforts through a number of military offensives and produce civil war. Empirically Fearon and Latin (2003a) and Sambanis (2004a) provide strong support of ‘ineffectiveness’ or rebel fighting capacity relative to government. Complementing this argument further, other recent studies (Cunningham et al. 2009; Salehyan et al. 2011) reveal that moderately strong armed-rebel organizations are most likely to fight against government security forces and receive external supports.  

- **Hypothesis 3: Armed rebels under certain insurgent-favorable conditions are likely to outfight the government and engage civil war.**

Davenport et al. (2008) empirically show that all three explanations discussed above have some explanatory powers regarding civil war onset in different countries and different temporal period. Davenport et al. (2008) conclude their study by stating that:

Inflammation helps predict some civil wars, but so do incapacity and ineffectiveness. In fact, our results identify that through rural and urban strategies and through ineffectiveness, inflammation and incapacity - there are many ways states and dissidents can interact which result in civil war. Not only does this research shed light on hypotheses that were previously ignored or proxied with some structural variables, but it radically transforms the way we think about these (seemingly) competitive theories of civil war onset. Indeed, by revealing that there are distinct paths to civil war it suggests that in the future our investigations must be more pluralistic in nature. In short, there is no silver bullet for understanding civil war; there is a magazine of different bullets that must be employed.
Another long-standing, and arguably, standard explanation points to the argument that ‘ethnic descent-based attributes’ (or the ascriptive nature) of ethnicity cannot be transcended and, thus, that ethnic-based conflicts quickly become intractable. This is due to the rigid nature of ethnic identities, which are inherently difficult to resolve, and tend to last longer recurrence and breed deadly violence in armed conflict conditions despite experiencing various levels of government repressions (Eck 2009; Horowitz 1985, 2000; Kaufmann 1996, 1998; Kaufman 2001, 2006; Peterson 2001). Syria’s current civil war and civilian killings targeting specific ethnic minority groups are a notable example (see column 4 in Table 3.1). Much of this research referred to the deadly ethnic violence and ethnic civil wars accompanied with ethnic cleansing in Yugoslavia, the former Soviet Union (Russia), Burundi, and Rwanda, and Sudan as paradigmatic (Kaufmann 1996, 1998; Kaufman 2001, 2006). Of these, Kaufmann (1998: 138) points out that,

Ethnic conflicts are disputes between communities, which see themselves as having distinct heritages, over the power relationship between the communities, while ideological civil wars are contents between factions within the same community over how that community should be governed. The key difference is the flexibility of individual loyalties, which are quite fluid in ideological conflicts, but almost completely rigid in ethnic wars.

According to this explanation, since ethnic affinity is important to bonding between ethnic political elites and followers, because both can anticipate each other’s future loyalty or disloyalty (i.e. disobedience and defection), ethnic elites on either side exclusively attract their members in order to gain loyal support from their constituency by outbidding or excluding other ethnic groups.24 This dynamic process can be seen in the situation before the eruption of the Bosnia war in 1992.25 According to Kaufman (1996, 2001, 2006), Serbian leader Slobodan Milošević’s symbolic and harsher policy statement as outbidding and ethnic hostility targeting Selbia’s Albanian minority tend to rally Serbs around Milošević as hard-line belligerent political elites rather than softer ones. In this context, ethnic elites in both side of a conflict mobilize their
followers for violence by engaging in outbidding, competing with each other. Note that the ethnic identity-based explanation (a.k.a. primodialist explanation) tends to over-specify the direct roles of biological ethnic ties and ethnic violence resulting from antipathies and antagonisms between ethnic groups. However, other scholars (based on the rationalist explanations, see Fearon and Laitin 1996, 2000, 2003a) have undermined the dominant effects of ethnic bonds in explaining ethnic-based mobilization and costly armed resistance against the central authority. Although the theoretical basis for the ethnic-identity based explanation of conflict escalation is increasingly questionable, this leads to the following testable hypothesis.

- **Hypothesis 4:** Armed rebels that mobilize along ethnic lines are more likely to engage a full-fledged civil war, even in the presence of repression, than those that do not mobilize along ethnic lines.

Empirically, Eck (2009) provides strong and positive evidence for hypothesis 4, while others (Cederman et al. 2010; Wimmer et al. 2009) reject the manifesting effects of ethnic identity in escalating ethnic inter-communal violence to ethnic civil wars. According to the latter argument, as Wimmer (2002, 2012) claims, ethno-nationalist politics, especially political challenge by excluded ethnic groups from central political arena, is the significant factor leading both small-scale ‘ethno-nationalist’ conflicts and large-scale ‘ethno-nationalist’ civil wars. Note that, although Wimmer et al. (2009) and Cederman et al. (2010) have made invaluable contributions to the theory development on the cause of ethno-nationalist conflicts and wars, I leave out their proposed institutionalist explanation because they have not articulated any specific causal mechanisms of conflict escalation.27

As I discussed in chapter 2, the ethnic identity-based explanation is easily confused with the ethno-territorial explanation of ethnic violence and territorial wars. Yet, we should keep in mind that all ethnic conflicts were not associated with secessionist motives and, more
importantly, the majority of self-determination movements demanding territorial independence and political autonomy have been resolved in peaceful manners or through conventional political means such as elections (Quinn and Gurr 2003; Sambanis and Zinn 2006; Walter 2009b). A number of severe and prolonged violent conflicts over territory (i.e. homeland) had occurred due to the cognitive gaps over land’s specific importance between a central authority and an ethnic group in certain geographical areas such as Chechnya in Russia and Abkhazia in Georgia (Toft 2003). In contrast, other ethnic groups such as the Sudanese Liberation Movement/Army in Sudan and the African National Congress in South Africa fought ethnic-based wars to change their political status or representations (Wimmer et al. 2009). As such, although the ethno-territorial explanation gives us an important focus in terms of the indivisibility of territory, it did not articulate a primary causal mechanism under which a minority group settled in a certain area can fight not only minor violent territorial conflicts but also civil wars (Buhaug 2006).28

While the four above conflict escalation explanations have been presented individually, it is important to acknowledge that these are not necessarily competing or mutually exclusive perspectives. To date, the mainstream social science epistemology takes a position that one theoretical explanation must underlie all civil wars.29 My study does not take this position. Instead, it is possible that different escalatory processes and trajectories, involving one or more of the four explanations (Davenport et al. 2008; Olson Lounsbery and Pearson 2009), could explain different civil wars (either in the same country or in different countries).

3.3 An Alternative Explanation: Uncertainty and Civil War

The findings in the extant studies discussed above remain diverse, but suggest that the levels and circumstances of repression matter to predicting civil war. Confirming the diverse
findings in the literature on repression-dissident interactions, recent studies of civil war onset suggest that the different magnitudes of state coercive policy would affect differently the risk of various forms of domestic collective violence (Carey 2010; Regan and Norton 2005; Sambanis and Zinn 2006; Young 2009, 2012). Further, this literature indicates that there are the multiple paths of the escalation to civil war via government repressive abilities (Davenport et al. 2008).

However, existing theoretical and empirical foci are limited. First, the extant literature suggests that different escalatory processes could explain different types of civil wars and there would be ‘multiple equilibria’; yet they do not explain why such different or multiple equilibria emerge. Second, none of the extant studies (except for Young 2012) have explicitly examined both the direct and indirect effects of the strategic interactions between government repression and rebel resistance levels on the pattern of civil war onset and have explained why such strategic and dynamic interactions tend to breed civil war. Third, those studies have paid very limited attention to the issues of endogeneity (e.g. two-way reciprocal relationships) between repression and dissident activities which might be influenced by explanatory variables of each empirical model and be correlated with the error term in the civil war model (Hegre and Sambanis 2006). Fourth, as Walter (2009a) questions, much research largely assumes that any government leaders must fight against domestic challengers who confront their legitimate authorities, but this assumption is too vague and might be wrong. According to Walter, government leaders whose focus is to deter future territorial demands or political challenges by potential challengers are more likely to use force against the current challengers. Moreover, as Tir and Jasinski (2008) demonstrate, the unpopular government leaders are more likely to attack targeting a specific ethnic minority group within their country to divert public attention and rally supporters. These studies suggest that the government leaders do not impose repressive strategies
as spontaneous reactions, but they are likely to make rational and strategic decisions with specific intentions, especially, if the central government knows that an alternative might replace him/her when repressive actions fail to compel ongoing anti-government resistance. Why then does the central authority use severe repression against insurgents?  

Walter (2009a) and Lake (2003) as well as Öberg (2002) suggested that the bargaining explanation of war provides several useful theoretical venues to explaining diverse pathways to civil war (see Appendix A). As a basic presumption, the bargaining theory of war claims that two states are likely to fight a war when their bargaining fails due to private information problems in terms of information asymmetries (i.e. uncertainty), credible commitment, and/or issue indivisibility (Fearon 1995; Gartzke 1999; Lake 2010/11; Powell 1999, 2002; Reiter 2003; Wagner 2000; 2007). Of three private information problems as bargaining obstacles, the information asymmetries (i.e. uncertainty) explanation is particularly important for explaining why states fail to prevent or avert fighting (Fearon 1995; Gartzke 1999).

The information asymmetries explanation articulates that war will occur if either party (or both) has some asymmetric information about another’s military strength and/or willingness to resolve. Because one party is unsure of another’s relative strength and willingness to resolve, it is unable to assess accurately its counterpart’s reservation points that make each party indifferent between accepting and rejecting a bargain. At the same time, either party may find it difficult to exchange their private information to avoid war because of insufficient trust to one another’s promises. As both parties prefer to gain as good a deal as possible while presumably preferring not to fight, either party has a strong incentive to exaggerate or bluff one’s military capabilities and resolve in order to extract better deals (Fearon 1995; Morrow 1999). Given the higher uncertainty about each other’s private information and the strong incentives to misrepresent it,
either uninformed party may send costly signals to screen its counterpart’s true incentives (Fearon 1995).

The central promise of the information asymmetries explanation of war is why an uninformed party sends costly signals to her opponents despite its greater risk of engaging in militarized dispute. According to Fearon (1995), for signals to be informative (i.e. convince other or deter aggression), they must be costly (relative to cheaply talk) in a way that distinguishes between actors with different values for the war outcomes. The actor’s resolve affects what it will have to accept if there was a war. Therefore, the actor will have an incentive to exaggerate its willingness and capabilities to the opponent, trying to look as resolute as possible. Since the opponent knows that other players might be trying to bluff, she will not be convinced unless the signal is costly in a way that makes it relative less likely that an actor with low resolve would send it. Thus, for a signal to change the opponent’s beliefs it must somehow distinguish between bluffing actors with low resolve, and actors with genuinely high resolve. This distinction is accomplished by making the signal costly or risky to the sender. Only an actor with genuinely high resolve would be prepared to take a real cost, or run a real risk of war. Costly signals will force the opponent to revise his or her estimates of the sender’s resolve. The mechanisms of costly signals that the information asymmetries (i.e. uncertainty over what type of opponent one is facing) explanation would shed light on why neither central governments nor ethnic rebel leaders avoid fighting before a civil war breaks out.33

According to Walter (2009a), two types of information asymmetry problems may increase the likelihood of civil war. The first problem is uncertainty for governments regarding rebel capabilities including logistic, financing, internal coherence, alignment with other domestic groups, domestic popular support, and/or external actor support. These uncertainties would lead
greater or lesser levels of all types of government repression. The second is uncertainty for rebel groups about a government’s willingness to resolve peacefully. Because the information problems are two-sided, either a central government or rebel group(s) might resort to military force in order to reveal counterpart’s strength and willingness to resolve. The information asymmetry explanation further suggests that, while they are fighting, either party has a strong incentive to overstate or bluff its military capabilities and resolve in order to obtain better deals. Hence, both parties may continue to fight. This logic from the information asymmetry explanation may help to understand the variations about why some countries at the same risk of civil war avoid war but others do not. Yet, we need to keep in mind that the important feature of civil war appears to be capability asymmetry (i.e. power preponderance), which means that generally a central government has greater military and economic capability to mobilize a variety of resources relative to any armed oppositions within the same sovereign boundary (Butler and Gates 2009; Cunningham et al. 2009; DeRouen and Bercovitch 2008; Krause 2010). This reality generates the interesting dynamics of different pathways toward civil war.

I argue that a two-sided mechanism of different types of uncertainty influence the strategic calculation by both a central authority and its armed opposition differently and separately. The majority of central authorities presumably would prefer to avoid fighting but are unwilling to offer deals to every potential armed opposition that make demands and threaten to use violence. This is particularly true early in political contests as offers could be interpreted as recognizing armed rebels as legitimate parties rather than ‘terrorists’ or ‘criminals.’ Therefore, central authorities have strong incentives to uncover rebel capabilities that can hurt them if they refuse to offer any terms. Government leaders want to know “(a) how obvious it is that the rebels are weak or strong and (b) how easy it is for governments to observe and monitor rebel strength
and support” (Walter 2009a: 250). In practice, however, it may be difficult for government leaders to identify who are the armed rebels, monitor their numbers and activities, and gauge the armed rebels’ relative strength, including support by other domestic groups and the international community, without engaging in fighting. Because of a variety of difficulties in assessing armed rebel capabilities, governments may send a costly signal (i.e. use of force) to their potential rivals in part to determine relative strength. Thus, not all government repression may be designed evenly to crush opponents. Analyzing the risk of conflict intensification from small-scale conflicts (25-999 battle-related deaths) to civil wars (1,000 battle-related deaths) in the UCDP-ACD conflict data, Eck (2009) reports that the vast majority of conflicts (53 out of 88 cases) reached the 1,000 battle-death level within the first year (as the Libyan revolution of 2011 and the Syrian civil war of 2011-ongoing). However, the duration of civil wars (after exceeding the 1,000 battle-death) averaged six years of fighting, quite a period to identify how strong and resolute an armed rebel is (Eck 2009). Thus, longer-period repression may become more and more aimed at required survival.

The information asymmetry explanation helps us to understand this puzzle further in two ways. The first comes from the nature of rebels’ military strategy, which is generally “characterized by small, lightly armed bands practicing guerrilla warfare from rural base areas” (Fearon and Laitin 2003a: 79). As many anecdotes from battlefields in Afghanistan, Pakistan, and Iraq as well as elsewhere suggest, rebel fighters often hide among civilians and use sporadic military tactics of attacking particular targets without seeking a full confrontation with government security force. Therefore, when governments want to unveil rebels’ private information over military strength, they must sustain military campaigns against rebels. This could take more than months or years.
The second point is that, even though rebel groups may have very limited capabilities or are weaker relative to government military strength, they may still choose to fight (as the IRA in the Northern Ireland conflict, see English 2006). As the information asymmetry explanation suggests, a weak rebel group has strong incentives to exaggerate its military strength using sporadic attacks including suicide bombing, kidnapping, or assassination in order to convince governments to offer better deals. In addition, weak rebel groups would decide to stand against a central authority to obtain important information over their ability to gain domestic and/or external (logistic or financial) support, recruit additional combatants, and sustain combat. Because of all of these uncertainties related to rebels’ private information, fighting begins and may or may not persist, while it may not escalate or intensify.37

From the rebels’ standpoint, uncertainty about government’s willingness to resolve is a crucial factor by which groups determine whether to fight on or do not (Walter 2009a). A higher uncertainty over whether governments are willing to fight or compromise increases the probability that rebels choose to fight to better uncover government’s private information. Thus, fighting begins and may persist. Existing empirical evidence suggests that governments with lacking full either democratic or autocratic institutional strength rather than national capability or under political instability are more likely to meet rebel challenges than highly institutionalized democratic and autocratic governments (Gates et al. 2006; Gleditsch and Ruggeri 2010; Goldstone et al. 2009; Hegre et al. 2000).38 Highly institutionalized democratic and autocratic governments send potential rebels a credible signal with threat of violence that they are highly unlikely to compromise any political demands.39 In contrast, governments with weakly political institutions or under political transition due to coups or other political struggles among power elites find it difficult to send any credible information over whether they are willing to use force
or make a deal because they may be experiencing internal challenges or threat of potential
defection by ruling elites or military forces within the regime. These states with weak
institutional set-up may have little perceived alternative but to signal resolve by fighting.

In the real world, the vast majority of governments including democracies (England,
Israel, and Spain) and autocracies or dictatorships (China, Egypt, Iran, Libya, and Syria) are
likely use security force to deal with militarized challenges to the central authority and
legitimacy within the territory (see Table 3.1, for instances). In many instances, armed
challengers know that governments are stronger than they are. Yet some challengers have strong
incentives to fight in order to gain some form of negotiated deals from the central government, to
assess the government’s stomach for war, or assess their ability to obtain domestic or
international support to better their chances (see chapter 5 for a brief discussion on these conflict
processes). Moreover, the information asymmetry explanation implies that a government leader
with weak institutions (e.g. the Lebanese government in 1975) has a strong incentive to
misrepresent or exaggerate their military strength and resolve. On the other hand, rebels are
likely to continue to fighting because they are uncertain about the government’s true willingness
to resolve outcomes, the resources the government is able to mobilize, and the tactics it will
likely employ. Hence, the uncertainty over government’s willingness to resolve peacefully
increases the probability that rebels engage in fighting.

The two-sided uncertainty mechanism, one from government’s and another from rebels’
perspective, suggests that uncertainty over one another’s private information increases the
probability that governments and rebels continue fighting to uncover one’s true incentives. This
helps explain why government repression may end rebellion early in one case but causes
increased rebel resistance in another. In these dynamic and strategic (i.e. player A’s decision
influence player B’s one) situations, conditional and structural factors might produce a range of different outcomes or ‘multiple equilibria.’ Put it differently that some goes to war but other do not; some stay to fight, while others end it due to the different levels of uncertainty that government leaders and armed rebel leaders obtained from fighting as one communication tool.

Based on my argument above, I posit the following two testable hypotheses.

**Hypothesis 5:** The greater uncertainty over rebel strength the government experiences, the higher the probability the government experiences a civil war.

**Hypothesis 6:** the greater uncertainty over government willingness to resolve peacefully the rebel group faces, the higher the probability of a civil war.

In the next chapter, I will present my research design and a series of empirical analyses for testing theoretical hypotheses presented.
Notes:


2 For narratives of violence and political confrontations in the Arab Spring, see a series (I-VII) of expert reports “Popular Protest in North Africa and the Middle East” by ICG (2011a-d; 2012a-d).

3 For detail, see ICG (2010) “Kyrgyzstan: A Hollow Regime Collapses.”

4 For detail, see ICG (2010) “Bridging Thailand’s Deep Divide.”

5 My assessment and discussion of the evolution of collective violence in Libya through the year 2011 are based on a series of expert reports (Bell and Witter 2011a, b; and Witter and Bell 2011; Tempelhof and Omar 2012; ICG 2012a, b).


7 On conflict-cooperation dynamic processes in the context of dissident-repression nexus, see Shellman (2006, 2008). Similar to Shellman (2006), I view a series of dissident-repression interactions as a ‘reciprocal and strategic’ process. From this perspective, reciprocal interactions can be understood that when actor A offers a cooperative deal to actor B, actor B reciprocally gives a cooperative one for actor A, for instance. On the empirical differences between reciprocal process and action-reaction dynamics, see Shellman (2006, 2008) and Shellman et al. (2010). An effort of possible modeling of conflict-cooperation dynamics in the causes of interstate conflicts, see Crescenzi, Enterline, and Long (2008). On a basic discussion of the tit-for-tat strategy to resolve ‘repeated two person prisoner’s dilemma’ games, see Axelrod (1984). Axelrod’s study was set with a number of specific experimental assumptions. For example, each player has only
two choices (defect or cooperate) and transitive preference of outcomes (payoff, cooperation ($3) is better off than defect ($1) as well as both must play infinite repeated games. Thus, according to Axelrod, the shadow of future for each player would determine the game of cooperation as reciprocity as an optimal option.

8 For a similar argument of understanding conflict as multiple and interdependent processes, see Diehl (2006), Huth and Allee (2002), Pearson et al. (2011) and Findley (2012).

9 The concept “mutually hurting stalemate” (MHS) has frequently used and largely misused in extant conflict resolution and intervention literature in a number of different manners (e.g. Findley 2012; Hartzell and Hoddie 2007; Walter 2002) beyond Zartman’s original intention (see Zartman 1990, 2005). From a concept formation perspective (see chapter 2), the MHS needs to be analyzed and measured much carefully with regard to its adjective (i.e. mutually and hurting) components (see Pearson et al 2011; Pearson and Olson Lounsbery 2009).

10 The selection of each variable in Table 3.1 does not reflect any theoretical perspectives and each assessment was cross-referenced with at least two reliable expert reports.

11 My assessment of Libya’s intra-tribal and intra-ethnic relations during the conflict is drawn on ICG (2012) and Bell and Witter (2011a) as well as Tempelhof and Omar (2012) which are local expert reports based on a number of primary face-to-face interviews with Libyan officials and inhabitants regarding al-Gaddafi’s patronage and favoritism politics. Note that, after the fall of the al-Gaddafi regime, numerous foreign diplomats and local experts in Libya increasingly refer to the presence of ‘ethnic’ divisions or ethnic-based social and economic cleavages across Libyan communities (see ICG 2012).

12 An extensive review of extant theoretical and empirical work in civil war research is beyond the scope of this chapter. See Dixon (2009), Sambanis (2004a, b), Collier and Hoeffler (2007),
Blattman and Miguel (2010), Tarrow (2007), and Walter (2009a) as well as Olson Lounsbery and Pearson (2009), for instances.

13 See Carey and Poe (2011) and Davenport (2007a).

14 These labels are drawn from Davenport et al. (2008) for the first three as well as Cederman et al. (2010) and Eck (2009) for the last.

15 Similar to a number of recent work (e.g. Cederman et al. 2011; Wimmer et al. 2009; Walter 2009b), I argue that the ethno-territorial explanation may over-specify or over-emphasize the roles of individuality of ‘territory’ as geographic ethno-territorial concentration, which means that certain ethnic-religious-linguistic inhabitants composited a dominant residency in local cities or villages in potential causal arrows to ethno-territorial civil war. In other words, the ethno-territorial violence explanation does not tell us under which conditions a particular group of people who settled in a specific geographic area stands up with arms against either their local authorities or central authorities.

16 Similarly, Hibbs (1973) argues that there is a positive relationship between government repressive acts and violent dissident responses because the increased levels of physical threats by dissidents to the government are more likely that the government increases repressive actions to suppress the dissidents.

17 For detail about the conflict dynamics and warring parties in the violent conflict in Thailand, see ICG (2010) “Bridging Thailand’s Deep Divide.”


19 For the status and the evolution of the Muslim insurgency in Southern Thailand, see ICG (2012) “The Evolving conflict in the South.”

20 See expert reports about Libya and Syria (ICG, 2012).
On the contrary, Jakobsen and de Soysa (2009) find that government repressive strategies have no direct effect on the probability of civil conflict with over 25 battle-related deaths and the risk of civil war with more than 1,000 battle-related deaths. Yet, the effect of government repression changes in the context of the levels of ethnic diversity measured by ethnic fractionalization index (see Chapter 4 for a discussion) in a country. According to the authors, severe government repression in such contexts dramatically reduces the risk of the large-scale armed conflicts, whereas government coercive policy in the context of the highly homogenous societies increases the probability of the small-scale violent conflicts.

See expert reports about Libya and Syria (ICG, 2012a, b).

For a theoretical effort to model the power asymmetry-war dynamic process in the context of civil conflicts, see Buttler and Gates (2009).

See also Chandra (2006) and Fearon and Laitin (2000) for social construction of ethnic identity through either bottom-up (street level) or up-down (elite-driven) dynamics.

As Fearon and Laitin (2000) commented, it is important to understand that Woodword (1995) emphasizes the roles of street-level violence exercised by criminals and radicalized youths who never affiliated with any armed rebel groups in expanding daily communal violence and increasing unarmed civilian deaths in Bosnia. The similar street-level violence by criminals and radicalized youths was one of substantive roots generating the Rwandan Genocide in April 1994 (Fujii 2009; Gourevitch 1996; Prunier 1995). Similarly, persistent street-level violence by criminals and radical youths has exacerbated insecurity in the Niger Delta region in Nigeria (see Hazen and Horner 2000) compared with a new series of ethnic tensions in Northern Nigeria (see ICG 2010. “Northern Nigeria: Background to Conflict”).
Hostile retaliations targeting not only political elites but also unarmed citizens between the ruling ethnic group and non-ruling ones deepen social cleavage ethnically and grow up insecurity in the society. Under ethnic security dilemma without central authority, daily street-level ethnic armed contention spirals to civil war with massive fatalities of not only armed combatants but also unarmed inhabitant civilians in local communities (see Posen 1993).

A comprehensive view of Wimmer’s political sociological and institutional approach can be found in Wimmer (2002, 2012).

Regarding the roles of ethnic group settlement patterns in the onset of ethno-territorial conflicts (Toft 2003), Weidmann (2009) has examined two competing mechanisms. First, a motivation-driven mechanism where the existence of a well-defined ethnic group based territory (e.g. ethnic homeland) makes the group more likely to fight for it and second, an opportunity-driven mechanism where ethnic groups’ concentration facilitates their coordination for collective action. Employing the group-level geo-coded conflict data, Weidmann found that the effect of group concentration on ethno-territorial conflicts is likely driven by the strategic advantages for group coordination. Yet, it is important to note that the unit of analysis is the ethnic group-level.

A survey of the ongoing epistemological and methodological debates in social science research is beyond the scope of this chapter. A good discussion on the epistemology for social science research, see Brady and Collier (2004, 2010), King et al. (1994) and Gerring (2012).

For a discussion of political leader’s survival incentives in democracies and autocracies, see Bueno de Mesquita et al. (2003) and Bueno de Mesquita and Smith (2009), as well as Chiozza, Gleditsch and Goemans (2004) and Chiozza and Goemans (2011).

These issues pointed here are crucial to extend our understanding of how civil war evolves from the minor armed political confrontations. Furthermore, there is a broad consensus that, by
definition, civil war emerges from the strategic interactions between the central authorities and armed contenders within the state boundary and, therefore, the future research needs to incorporate such strategic and multiple-sequential processes. As noted earlier, I consider ‘reciprocal and strategic’ process based on conflict-cooperation dynamics instead of action-reaction mechanism (see Shellman 2006, 2008). For a brief discussion on theoretical arguments on policy substitutability and modeling problems with data generation in civil war research, see Suzuki and Krause (2011).

32 To build my argument here, I received a number of suggestions from Magnus Öberg (Uppsala University) who shared his unpublished manuscripts and dissertation (Öberg 2002).

33 Another plausible explanation is a commitment problem as a bargaining obstacle to reach a negotiated settlement before a civil war occurs due to higher uncertainty over credible commitments to ex-post negotiated deals by either central authority or rebels (see Fearon 2004; Lake 2003; Walter 2009a, b). The commitment problem explanation would be a great impetus of future research by elucidating why neither central governments nor rebel groups may enter into formal negotiations, or if negotiations occur, why neither party ever reaches a negotiated settlement prior to the outbreak of civil war. However, testing such commitment problem explanation of the outbreak of civil war is beyond the scope of my study because it requires further detailed information on multiple stages in conflict processes (see Chapter 1 of this volume; Bremer 1995; Diehl 2006; Findley 2012; Pearson et al. 2011).

34 In other words, there are ‘multiple realities’ rather than a unified perception of two sides of a coin from different actors (see Jervis 1978). This idea comes up through my discussion with Fred Pearson (Wayne State University) in summer 2010. Interestingly, David Lake (2010/2011) points out cognitive variances with regard to differences between Saddam Hussein’s perception
on the 1991 Gulf War and the 2003 Iraq War and the U.S. government in 1991 and 2003. Although multiple realities exist in individual actor’s cognitive manners, they are difficult to conceptualize and measure in the state-level aggregation analysis. However, it might be possible with actor-based analysis to model actor’s cognitive bias through bounded rationality (e.g. Findley and Rudloff 2012).

35 Drawing on crisis bargaining power model, Butler and Gates (2009) elaborated further the principal roles of power asymmetry, power party, and relative power shift in explaining civil war onset. According to Butler and Gates, civil war is more likely under both asymmetric and parity power relationships between a central government and at least one rebel, while the empirical findings by Cunningham et al. (2009) present somewhat contradicted predictions.

36 Any formal proof is beyond the scope of my study; yet a set of primary promises relevant to my arguments are drawn from Slantchev (2003, 2005) and the discussions by Walter (2009b) and Lake (2003, 2010/11).

37 See Slantchev (2005), for example.

38 Keep in mind that I refer ‘weak or strong’ government in terms of its institutional strength rather than its physical (military or economic) capacity. For a good discussion of differences between institutional strength and physical capacity, see Gates et al. (2006) Goldstone et al. (2010), and Levitsky and Way (2011).

39 Walter (2009b) confirmed this argument using comparative within-case study of the Indonesian governments under President Sukarno (dictator) President Suharto (dictator), President Habibie (former Vice President under Suharto), and President Megawati (democratically elected leader)) against Aceh, West Papua, and East Timor. Walter (2009b) also did the similar within-case study of the Pilipino government under President Ferdinand Marcos.
(dictator), President Corazon ‘Cory’ Aquino (democratically elected leader) against the communist insurgency in North and the Moro insurgency in South. However, there are other variations among different leaders in the same political regimes. For instance, a series of different (dovish or hawkish) responses by each Israeli government to the Palestinian issues over time and a variety of different actions taken by each British government toward the IRA violence in the Northern Ireland Conflict are the cases in the point (see chapter 5 for a brief discussion).
CHAPTER 4
TESTING CONFLICT ESCALATION TO CIVIL WAR

“Ethnic groups seeking self-determination and facing severe government counterinsurgency measures were involved in full-fledged rebellion against central authorities” (Quinn and Gurr 2003: 36)

“Self-determination disputes aren’t the most conflict-prone type of dispute…. are violent because of the difficult strategic situation governments and ethnic groups find themselves in, and the incentives create to fight” (Walter 2009b: 211)

4.1 Introduction

This chapter presents an empirical test of the four extant theoretical explanations of conflict escalation and an alternative explanation discussed in chapter 3. Recall that, combining the extant research and four armed conflict episodes including two positive cases (i.e. escalation to civil war in Libya and Syria) and negative cases (i.e. no civil war in Kirgizstan and Thailand); I posited four testable hypotheses as follows:

- Hypothesis 1: the greater repression the government imposes, the greater likelihood of civil war the government experiences.
- Hypothesis 2: greater government repression and repressive capacity reduce the likelihood of rebellion and civil war as the opportunity of rebellion is constrained and insurgent costs rise.
- Hypothesis 3: Armed rebels under certain insurgent-favorable conditions are likely to persist and engage civil war, and outfight the government.
Hypothesis 4: Armed rebels that mobilize along ethnic lines are more likely to engage in a full-fledged civil war, even in the presence of repression, than those that do not mobilize along ethnic lines.

The dependent variable for all four hypotheses is the outbreak of a new civil war (yes or no) in a given year. The primary explanatory variable for H1 and 2 is a government repression variable, while the core variable for H3 and 4 is an ethnically mobilized armed resistance variable. I will discuss each variable later in detail.

As an alternative theoretical model (section 3.3 in chapter 3), I have proposed a two-sided uncertainty mechanism of conflict escalation derived from an asymmetric information explanation of the causes of war and, then, posited Hypotheses 5 (government uncertainty) and 6 (rebel uncertainty) as follows:

- Hypothesis 5: The greater uncertainty over rebel strength the government experiences, the higher the probability the government experiences a civil war.

- Hypothesis 6: the greater uncertainty over government willingness to resolve peacefully the rebel group faces, the higher the probability of a civil war.

The primary dependent variable for H5 and H6 is the outbreak of a new civil war in a given year. However, as I discussed in chapter 3 (section 3.3), two core explanatory variables for H5 and 6 are government leaders’ and rebel leaders’ uncertain belief regarding their opponents’ military strength or willingness to resolve peacefully which should directly affect both actors’ decisions as to whether they should continue fighting or not. This argument differs from H1-4, which posit that observable government repression and observable rebel challenge have the direct (i.e. manifest) effects on the probability that a state experiences a new full-fledged civil war in any given year. Yet, complementing the H1-4 and Quinn and Gurr’s (2003) findings, hypotheses 5
and 6 bring our attention to other segments of the causal story toward the outbreak of civil war as pointed to by Walter (2009b: 211), who argues that the ‘difficult strategic situations’ in which governments and armed groups respectively ‘find themselves in’ and the incentives create to fight. In particular, H5 and 6 pertain to the indirect (latent) effect of government repression levels and armed rebel resistance levels on the likelihood of civil war. In order to examine H 5 and 6, I consider such indirect (i.e. unobserved latent) effects as the two-sided uncertainties perceived by government leaders and rebel leaders through mutual interactions during small-scale armed conflicts before a civil war onset. Drawing on the asymmetric information explanation of war (e.g. Fearon 1995; Slantchev 2005), I argue that the more costly it is for each leader in any disputes to obtain its opponent’s private information, the more uncertain he/she should be about the opponent’s potential persistence. This mutual guessing game during militarized political contentions tends to breed much hostile militarized confrontations unless either disputant avoids using force and/or offers compromise(s) at any given points. Hence, the uncertainty variables (discussed below) are not only important explanatory variables in the determinants of civil war onset, but also important endogenous variables for determining a current level of government repression and armed rebel challenge, respectively.

As discussed in chapter 3 on the repression-dissident literature, those two primary explanatory variables are reciprocally correlated one another, and a number of structural factors determining civil war onset may be correlated directly with the government repression variable and the rebel resistance variable. These correlations, namely endogeneity (discussed below), produce serious threats (i.e. bias) in drawing causal inferences (e.g. x causes y; y causes x) from statistical analysis (Gerring 2012; King et al. 1994). In order to treat endogeneity problems statistically, I adopt a non-recursive (two-way causal) model (e.g. Berry 1984). As standard
econometric textbooks illustrate (Greene 2006; Kennedy 2003; Wooldridge 2003), applying non-recursive modeling helps researchers to estimate a reciprocal causal relationship (e.g. government repression causes rebel resistance while rebel resistance causes government repression) simultaneously and to determine how the manifest variables relate to the latent variables. In addition, these reciprocal relationships may directly and indirectly influence causal pathways to civil war onset.

In order to estimate such complex (multiple and reciprocal) causal paths toward civil war onset efficiently, I adopt a two-stage conditional maximum likelihood (2SCML) estimation, which provides consistent coefficient estimates with standard errors as well as performs explicitly a test for endogeneity (i.e. reciprocal causal paths) (Maddala, 1983; Rivers and Vuong 1988; Alvarez and Glasgow 1999). I will discuss later (see section 4.5) how such modeling will help our understanding of civil war causation and how I estimate a non-recursive causal model with a binary dependent variable in this chapter. In end, if the 2SCML model attains statistical significance as a civil war onset predictive model than two alternatives by passing a number of rigorous statistical model-fitness tests and robustness tests, it will confirm that my statistical considerations for reciprocal causal paths are appropriate and causal inferences drawn from a parsimonious model below are substantial.

4.2. Case Selection

The spatial and temporal domain of my investigation of ‘path(s) to civil war onset’ comprises all sovereign states from 1976 to 2000 identified based on the Correlates of War Project’s State System Membership List, version 2012. The unit of observation in my analysis is a state-year. State-year observation is appropriate for this study to generate statistical
inference because much data on economic and demographic indicators as well as on government repression, armed rebel resistance, and civil war in this analysis are designed in a state-year format, while there are missing data for civil war-prone, transitional-governments, and developing states worldwide. Because of the availability of the government repression data (data collection begins in 1976, see Gibney et al. 2010) and the armed rebel resistance variable (Marshall et al. 2010), my investigation begins in 1976 and ends in 2000.

One might wonder why more than 100 sovereign states are included, with states such as Japan, Norway, Sweden, and the United States since 1976 never experiencing civil war. The primary reason for this broad inclusion of cases is to avoid selection bias in large-n research by maintaining randomness for statistical inference and generalization of findings to all countries; determining the ‘true relevant’ population is always challenging in social science research, and, especially, in political science research (Gerring 2012; King et al. 1994).6

4.3 Measuring Key Variables: Conceptualization, Measurements and Data

The theoretical framework in chapter 3 and above suggests that my study needs to look at four key variables: (1) civil war onset as a dependent variable, (2) government repression levels per year, (3) rebel resistance levels per year and (4) uncertainty for government and rebel. Let me elaborate briefly each respectively.

Civil War Onset as the Dependent Variable

As discussed in chapter 2, there are a handful of different datasets on internal armed conflicts and civil wars. This study relies on the data on CoW’s intrastate war, which defines intrastate (civil) war as “any armed conflict that involves (a) military action internal to the metropole, (b) the active participation of the national government, and (c) effective resistance by
both sides,” plus (d) “at least 1,000 deaths per year” (Small and Singer 1982: 210-213). This CoW operational definition of civil war provides a very important distinction and the criterion of “effective resistance by both sides,” which differentiates civil wars from non-organized and other organized forms of armed collective violence between central authorities and uncoordinated and spontaneous dissidents or criminals, and also sets aside ‘potential’ non-state wars between various rebellious factions or militias (see chapter 2, section 2.5).

For the coding procedure, 1 is assigned to a civil war onset year when I first observe that a state meets the criteria of civil war. No new civil war onset years are coded as 0. All ongoing civil wars (i.e. civil war involvement-years) in subsequent years are coded as missing data (see Bennett and Stam 2000; Fearon and Laitin 2003a; Sambanis 2004a). This procedure (i.e. missing) helps researchers to differentiate non-civil war years from civil war involvement years. The data are obtained from the CoW’s Intra-State War Data, version 4.1 (Sarkees and Wayman 2010). Thus, my dataset contains 84 new civil war onsets between 1976 and 2000 (see Appendix B: A list of civil wars).7

Government repression levels

A growing number of researchers have conceptualized and measured state repressive or infrastructural capacities in a variety of ways.8 In recent civil war studies, a handful of scholars (e.g. Bapat and Bond 2009; Fjelde and de Soysa 2009; Young 2009) have employed the data on relative political extraction (RPC) developed by Kugler and Arbetman (1997) as a proxy of government repressive power. RPC is the measure of a ratio of extracted taxes relative to the expected taxes, providing that a fiscal measure that assesses the government’s efficiency at extracting resources from the population, compared with other states with similar resource endowments and levels of development. Although the RPC scores would advance our
understanding of state capacity, it does not give us the severity of government repression in any
given years.⁹ An alternative measure may be the degree of state militarization measured by a
ratio of military personnel per total population or a ratio of military spending per total GDP. As
Herbst (2004) convincingly argued, however, government’s military preparedness or military
spending do not gauge any severity of government repression in any given years. Hence, one
would argue that we should focus on government’s military offensives or specific counter-
insurgency strategy.¹⁰ Although it would be feasible for researchers to identify various episodes
of military offensives and counter-insurgency strategies in a given year, there are no clear
operational definitions applicable to all country-years worldwide. Another alternative is to
include the military regime (dichotomous) variable (e.g. Sukarno and Suharto in Indonesia) to
gauge government repressiveness (e.g. Poe and Tate 1994; Poe et al. 1999; Davenport 2007a).
This alternative is more problematic than the previous alternatives because it measures no
severity of military regime’s repressiveness in a time-series manner and excludes various
important observations such as Iraq’s Saddam Hussein and Syria’s Bashar al-Assad who are
classified as a personalist regime (Geddes 1999) or a civilian dictator (Cheibub et al. 2010).

Due to considerable shortcomings of the alternatives and compatibility with previous
research regarding Hypotheses 1-4, I rely on data on the Political Terror Scale, PTS (i.e. state
violations of human rights records in every year since 1976). PTS score is commonly used in the
literature (Gibney et al. 2010; Wood and Gibney 2010), although a handful of shortcomings (e.g.
western human rights’ bias) of the PTS have been acknowledged (e.g. Cingraelli and Richard
2008; Poe et al. 2004). PTS records the violations of human rights or state-sponsored terror for
every state in a given year worldwide (Wood and Gibney 2010). PTS classifies imprisonment,
disappearances, torture, and/or murder in five ordinal scales as follows:
Level 1 if secure rule of law (i.e. rare repression)
Level 2 if restricted repression for nonviolent political activity (i.e. limited repression)
Level 3 if widespread repression for expression of political views (i.e. widespread repression)
Level 4 if regular repression for interest in ideas and politics (i.e. extensive repression)
Level 5 if unlimited repression for pursuit of personal, ideological goals (i.e. systematic repression)

In the following analysis, level 5 implies the most severe repression in any given state-years while level 1 denotes no or rare repression that a central authority imposed in any given state-years. Between 1976 and 2000, the distribution of the five levels in my data is as follows: value 1 = 1005 state-years (25.4 percent), value 2 = 1132 (28.6 percent), value 3 = 1059 (26.8 percent), value 4 = 521 (13.2 percent), and value 5 = 239 (6.0 percent), respectively. This shows some variance across the repressiveness levels. Gamma (close to 1 means a strong relation) and $\chi^2$ tests between the five ordered levels of government repression and the civil war onset variable (0 or 1) suggest that there is a statistically positive and strong relationship (Gamma = 0.90, $\chi^2 (4) = 364.3, P < 0.001$), i.e. as hypothesized, the higher government repression levels, the higher the outbreak of civil war.

Armed Rebel Resistance Levels

Measuring rebel activities and magnitude of rebel resistance levels in given state-years before the outbreak of civil war (by the CoW definition) is not straightforward because many of the previous datasets have considered different levels of rebel behavior as part of civil war or ethnic war (see chapter 2). In order to test Hypotheses 3-4, the most desirable indicator for armed rebel resistance levels during the militarized phase must contain at least information about (a) armed collective movements to seek specific political objectives (e.g. political status change or territorial independence) and (b) an organized group’s ability to mobilize active armed combatants in sustaining armed resistances, and recruit new combatants. Because hypothesis 4
specifically emphasizes the ethnic dimension of armed resistance against central authorities relative to non-ethnically-motivated (i.e. revolutionary) armed resistance, this study treats ethnically motivated-armed resistance levels (hereafter simply armed resistance) as its primary focus (e.g. Eck 2009; Sambanis 2001; Suzuki 2007).\textsuperscript{12}

Eck (2009) employed a measure of ethnic war as a proxy of ethnic armed mobilization relative to non-ethnic armed mobilization, coded as a dichotomous variable (0 or 1). From my theoretical argument in chapter 3, Eck’s approach is preferable to alternatives relying on an ethnic composition index (i.e. the proportion of the size of ethnic population relative to the size of total population), or the Minorities at Risk (MAR) data focusing exclusively on ‘politically discriminated’ ethnic minority groups.\textsuperscript{13} However, Eck’s proxy measure is also problematic for two reasons. First, though Eck’s approach has differentiated ‘armed’ ethnically-mobilized movements from non-armed ethnic-based grievances, it is still lacking information about armed rebel resistance levels such as a number of active armed combatants during a course of violent conflict. Second, the nature of a dichotomous coding is problematic because it submerges the dynamic feature of armed resistance levels during the conflict into a very static form.

To remedy the abovementioned issues in Eck’s ethnic mobilization variable, this study employs an ordered categorical value of magnitudes of ethnic war (i.e. mobilization) from the Political Instability Task Force (PITF).\textsuperscript{14} Marshall et al. (2010:6) define ethnic wars as “episodes of violent conflict between governments and national, ethnic, religious, or other communal minorities (ethnic challengers) in which the challengers seek major changes in their status.” Ethnic war episodes identified with a minimum threshold of 100 fatalities per year are assigned with a magnitude based on numbers of combatants or activists in each episode in a given year (Marshall et al., 2010: 8). Its four ordinal values are as follows:
Level 0: 0 to below 100 active armed combatants;  
Level 1: 100-1,000 active armed combatants;  
Level 2: 1,000-5,000 active armed combatants;  
Level 3: 5,000-15,000 active armed combatants;  
Level 4: more than 15,000 active armed combatants.

In my dataset from 1976 to 2000, the distribution of each category is: level 0 = no armed resistance or below 100 active armed combatants (including revolutionary armed resistance), 3,745 state-years (88.6 percent); level 1 = 48 state-years (1.1 percent); level 2 = 127 state-years (3.0 percent); level 3 = 69 state-years (1.6 percent); and level 4 = 239 state-years (5.7 percent). In the following analysis, level 4 is highest costly signal while level zero is the least signal with no cost. Gamma (close to 1 means a strong relation) and \( \chi^2 \) tests between the five ordinal values of armed rebel resistance and civil war onset suggest that there is a statistically positive and strong relationship (Gamma = 0.9, \( \chi^2 \) (4) = 433.5, P <0.001), i.e. the higher armed resistance levels, the higher the outbreak of civil war.

**Uncertainty**

The last core variable is ‘uncertainty’ for central government leaders and for rebel leaders, which may directly influence conflict decisions and, therefore, may indirectly affect the outbreak of civil war (hypotheses 5 and 6). How can we conceptualize and gauge ‘uncertainty’ by considering substantive implications with regard to very limited data available for militarized collective violence? There are no standard definitions and operationalization for several reasons. One of those reasons would be that ones ‘uncertainty’ is significantly influenced by his/her cognitive and emotional reality, namely cognitive perception or ‘bounded rationality.’

Of several recent efforts to incorporate an ‘uncertainty’ variable in predicting the likelihood that insurgents may join a negotiation or stop fighting, Bapat (2005: 708) tried to gauge uncertainty as a certain value in “the government leader’s risk-taking in a given year.”
Bapat (2005) assumes each value as government leadership’s willingness to take risks, which gives the insurgents some ability to predict whether the leader will negotiate. Employing foreign policy similarity scores, namely $S$-score (Signorino and Ritter 1999), Bapat argues that if the variance is high, the insurgent group knows that there is some possibility that the leadership will behave hawkishly. Consequently, the group may make concessions early to avoid the possibility of severe repercussions. Conversely, if governmental leaders are dovish, the government might acquiesce early to the insurgents’ demands. If the insurgents face a hawkish leadership, the leadership may resort to very severe tactics to put the group down. With perfect information, insurgents would prefer dovish leaders. Yet, since the insurgents lack information (thus uncertainty) about type of the government that they are facing because the government displays behavior consistent with both types (showing willingness to fight and compromise), the insurgents would posit some belief that a leadership consists of hawkish-hardliners. Hence, according to Bapat, insurgents may continue to challenge against the central authority. Drawing on Bapat’s uncertainty argument, we can predict that a high uncertainty over the type of the government that is willing to resolve peacefully increases the probability that the rebel leaders continue to fight in part to better gauge government’s true resolve. This prediction is consistent with hypothesis 6 (uncertainty for rebel leaders in conflict).

From a two-sided uncertainty argument, unfortunately, though Bapat has made an important step-forward to model the degree of the one-sided uncertainty perceived by rebel leaders, the $S$-score measures a pair (dyad) of states’ foreign policy similarity based on military security alliance portfolio. Thus, $S$-score provides information about neither uncertainty for government leaders’ nor uncertainty for rebel leaders’ willingness and capability to resolve
peacefully in the context of internal armed conflict. Hence, we still need to re-conceptualize *uncertainty* in order to consider two-sided uncertainties.

In this regard, Slantchev (2005: 545) suggests that “uncertainty drives actors to choose mobilization levels that may change the bargaining context and render capitulation unpalatable to either side despite complete revelation of information.” Slantchev assumes that actors are likely to fight “because they create a situation where they have incentives to do so [or disincentives not to do so], and this situation arises because of the actors’ crisis behavior under uncertainty.” In other words, Slantchev explains,

> Asymmetric information [i.e. uncertainty, added] causes actors to risk committing too much [so that they would not want to back down if resisted, added] but not quite enough to force their opponent to back down [and so the opponent resists, added]. Military moves may enable one to create and communicate commitments credibly, but because they are costly and because they can be countered, there are limits to how effective, they will be (Slantchev 2005: 545).

Applying Slantchev’s conceptualization of uncertainty via military mobilization as a costly signal by either actors, we may be able to capture a value of uncertainty for government leaders when they impose a certain level of repression in given state-years and a certain value of uncertainty for rebel leaders when the groups can orchestrate armed resistance in given state-years, respectively. If one actor’s uncertainty over another’s willingness to resolve peacefully is extremely high, it would be reasonable to expect that this uncertainty may have strongly influenced actor’s strategic calculations whether they should stay in the fight or not. Of course, it should be noted that, as Slantchev (2005) pointed out, there would be a number of multiple equilibria and there might be non-monotonic relationships between uncertainty (i.e. information asymmetry) and the resultant increase/decrease in war probabilities.

To obtain the information about two-sided uncertainty, I will rely on an approach, which is similar to determining U.S. voter uncertainty about a candidate’s policy position before voting
As I will discuss later in detail, to obtain government uncertainty, I estimate a set of the ordered logit and OLS regression models predicting each government repression level (ordinal values) as a function of armed rebel resistance levels (ordinal values) and other political, economic, and demographic factors predicting the use of government repression. Similarly, to determine rebel uncertainty, I estimate a set of the ordered logit and OLS regression models predicting each armed rebel resistance level (five ordinal values) as a function of government repression levels (ordinal values) and other political, economic, and demographic factors predicting the onset of armed rebel campaign. I will use the information about uncertainty obtained from these equations in predicting a new civil war onset and compare the model with the uncertainty information and another model without the uncertainty information statistically. If a number of statistical tests verify that the Model 9 outperforms Model 8, it suggests that including the uncertainty variables (i.e. unobserved latent factors) in predicting civil war onset adds substantively useful information (see section 4.5 for a discussion).

4.4 Control Variables: Definition, Measurement, and Data Source

In each statistical estimation, I include a set of control variables as structural factors influencing government repression (e.g. Carey 2010; Poe et al. 1999; Young 2009), ethnonationalist conflict (e.g. Regan and Norton 2005; Sambanis 2001), and civil war outbreak (Dixon 2009; Fearon and Laitin 2003a; Hagre and Sambanis 2006; Krause and Suzuki 2005a). Each control variable, measurement, and data source with a brief comment on expected relationships are as follows (Table 4.1 reports summary statistics).
### Table 4.1 Summary Statistics

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Observations (n)</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>County Code</td>
<td>4236</td>
<td>456.178</td>
<td>257.064</td>
<td>2</td>
<td>990</td>
</tr>
<tr>
<td>Civil War Onset (0 or 1)</td>
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<td>.01586</td>
<td>.124953</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Government Repression (ordered)</td>
<td>3956</td>
<td>2.458291</td>
<td>1.175833</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Government Repression t-1</td>
<td>3776</td>
<td>2.457892</td>
<td>1.175614</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Armed Resistance (ordered)</td>
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<td>4</td>
</tr>
<tr>
<td>Armed Resistance t-1</td>
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<td>.4677579</td>
<td>1.341087</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Democracy (&gt;7) (0 or 1)</td>
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<td>.3934919</td>
<td>.4885911</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Autocracy (&lt; -7) (0 or 1)</td>
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<td>.4036095</td>
<td>.490688</td>
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<td>1</td>
</tr>
<tr>
<td>Anocracy (-6 to +6) (0 or 1)</td>
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<td>.2028986</td>
<td>.4022126</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Political Instability (0 or 1)</td>
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<td>.1525719</td>
<td>.3596266</td>
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<td>1</td>
</tr>
<tr>
<td>Economic Development</td>
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<td>7093.271</td>
<td>281.26</td>
<td>46064.72</td>
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<tr>
<td>Economic Development (Logged)</td>
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<td>8.280975</td>
<td>1.086575</td>
<td>5.639279</td>
<td>10.7378</td>
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<tr>
<td>Population Size</td>
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<td>1.10e+08</td>
<td>18000</td>
<td>1.26e+09</td>
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<tr>
<td>Population (Logged)</td>
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<td>1.971692</td>
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<td>20.95344</td>
</tr>
<tr>
<td>Ethnic Fractionalization (Logged)</td>
<td>3441</td>
<td>.4089054</td>
<td>.2841654</td>
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<td>.9250348</td>
</tr>
<tr>
<td>Mountain Terrain (Logged)</td>
<td>3441</td>
<td>2.092791</td>
<td>1.432565</td>
<td>0</td>
<td>4.55703</td>
</tr>
<tr>
<td>Oil Exporter (0 or 1)</td>
<td>3441</td>
<td>.1595466</td>
<td>.3662383</td>
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<td>1</td>
</tr>
<tr>
<td>Non-Contiguous Territory (0 or 1)</td>
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<td>1</td>
</tr>
<tr>
<td>Civil War Involvement (0 or 1)</td>
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<td>.2888226</td>
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<td>1</td>
</tr>
<tr>
<td>Interstate War Involvement (0 or 1)</td>
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<td>.1220569</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Notes: Discrepancies in the number of observations across data indicate missing data or no data availability for some countries in some years.

- **Level of Economic Development** is measured as natural log of per capita GDP in constant 1996 U.S. dollars. Adjusted data are obtained from Gleditsch’s (2002) Expanded Trade and GDP Data, Version 4.1. Overall, I expect that states with higher level of economic development are less likely to use government repression and face serious rebel challenges, and thus, less likely to experience civil war, while there are a handful of notable exceptions (e.g. IRA in England and ETA in Spain).

- **Size of Population** is based on natural log of total population. The data are from Gleditsch’s (2002) Expanded Trade and GDP Data, Version 4.1. The extant literature suggests that, because populous states tend to have difficulty providing substantive public goods for citizens efficiently, those states are likely to experience armed challenges and civil wars, and, conversely, to use various repressive policies over years. China and India as well as Indonesia are notable examples.
Democracy is coded as 1 if Polity IV score is from +7 to +10; 0 if the score is below 7, while Autocracy is coded as 1 if Polity IV score is from -7 to -10; 0 if the score is above -7. The data are from Polity IV Project (Marshall and Jaggers 2004). If both values are statistically insignificant in statistical analysis, it suggests that polity under semi-democracy (e.g. inconsistent political institutions) is associated with some phenomena of interest.

Ethnic fractionalization is the proportion of the largest group and the log of the number of languages spoken by at least 1 percent of population. The data are from Fearon and Laitin (2003a). Previous studies have linked ethnic fractionalization to lower levels of public goods provision and heterogeneous states tend to experience violent conflicts and use government repression to quell such ethnic-based violence. India and Indonesia are notable examples.

Oil Exporter is a dichotomous variable coded 1 if a state whose fuel exports make up more than 33 percent of all its merchandise exports; 0 otherwise. The data are from Fearon and Laitin (2003a). Many previous studies have found a positive connection between oil wealth and violent rebel challenges and civil wars, and easy money from resources can lead to competition or to administratively underdeveloped states as rulers do not have to build institutions of extraction (i.e. rentier states, see Ross 2006 and Smith 2004). Angola, Indonesia, Nigeria, and Sudan are notable examples.

Mountainous Terrain is measured as the natural log of the proportion of a state’s territory covered by mountains. The data are from Fearon and Laitin (2003a). Previous studies have established that states divided by rough terrain and covered by mountainous terrain, which allows rebels to hide and retreat easier are more likely to experience insurgency,
and, thus, tend to impose harsher repressive tactics to increase the cost of insurgency.\textsuperscript{29} Afghanistan, Angola, and Pakistan are notable examples.

- Noncontiguous state is a dichotomous variable coded 1 if a country is separated from the land area containing the capital city either by land or by 100km of water; 0 otherwise. The data are from Fearon and Laitin (2003a). Previous studies have found that relative distance from the capital city enable insurgents sustain resistance easily, while it makes government repressive operations be less effective.\textsuperscript{30} Afghanistan, Democratic Republic of Congo (DRC, formerly Zaire), and Somalia are notable examples.

- Political Instability is a dichotomous variable coded 1 if a state has moved from one of the three polity categories in Polity IV scales into another of the categories within the past five years. The data are from Fearon and Laitin (2003a).\textsuperscript{31} Previous studies noted that some sorts of institutional instabilities (e.g. military coup, assassination of president, or irregular political leader’s turn over) signal government’s weakness to rebel leaders, and, thus, states experiencing political instability are likely to experience major armed challenges and breed into civil war (Fearon and Laition 2003a; Gleditsch and Rugueri 2010). Further, the literature suggests that the greater rebel challenges the government faces, the greater likelihood that the government uses unlimited repression (e.g. Carey 2010; Young 2009). Civil wars in Liberia, Rwanda, and Sierra Leone are notable examples.

- Civil War Involvement is a dichotomous variable coded 1 only when the Correlates of War Project records civil war involvement in a state in given year; 0 otherwise. The data are from the Correlates of War Project’s Intra-State War Data, Version 4.1 (Sarkees and Wayman 2012a). Previous studies have demonstrated that civil war-states in a given year
are likely to be challenged by another armed rebel groups because of reducing the cost of opportunity for armed rebellion (e.g. Fearon and Laitin 2003a; Collier and Hoeffler 2004). Other studies consistently have reported that states experience civil war likely increase the severity of government repression (Poe et al. 1999; Carey 2010; Young 2009).

- Interstate War Involvement is a dichotomous variable coded 1 when the Correlates of War Project records interstate war in a state in a given year; 0 otherwise. Data are from Correlates of War Project’s Interstate-State War Data, Version 4.1 (Sarkees and Wayman, 2012b). Similar to civil war involvement, previous studies have determined that a state involvement in interstate war with a neighboring state in a given year reduces the opportunity cost for armed insurgency, and thus, likely increases of chances of a new civil war (e.g. Fearon and Laitin 2003a; Collier and Hoeffler 2004). Other studies show that a state involved in interstate war tended to increase the severity of government repression (Poe et al. 1999; Carey 2010).

As commented above, a handful of causal relations between each control variable and between predictor (explanatory) and outcome variables are undetermined and sometimes disputed because there are several factors which are correlated with predicting government repression and armed rebel resistance as well as the factors determining civil war onset (e.g. Collier et al. 2003; Hegre and Sambanis 2006; Sambanis 2001). 32 A number of contrasted findings for a specific causal direction might result from measurement errors of certain variables (ethnic diversity and natural resources, civil war vs. small-scale armed conflict, interstate war vs. militarized interstate crisis or dispute, etc.). It also may be a product of multiple causality and causal complexities because political science research cannot control factors with observed (i.e. past) events (e.g. Gerring 2012; King et al. 1994).
4.5 Model Specification

In the previous sections, I introduced how I test six hypotheses efficiently and simultaneously and discussed how I measure the dependent variable, primary explanatory variables, and a number of control variables. In this section, I provide relatively brief discussion of model specification, and explain how I deal with a number of methodological considerations related to binary time-series cross-section (BTSCS) data analysis to determine a proper estimator predicting civil war onset.

Before dealing with a non-recursive causal modeling with logit estimator, I begin my discussion of how I obtain the information about a certain value of uncertainty for government leader (hypothesis 5) and for rebel leader (hypothesis 6) during fighting at least on a small-scale armed confrontation in any given state-years.

Recall my discussion earlier; the government repression level variable, and the armed rebel resistance level variable have ordinal values and each variable is one of main explanatory variables for one another. To estimate a regression model predicting an ordered outcome variable (e.g. no war=0, minor-war=1, and major war=2), researchers tend to estimate an ‘ordered logit/probit’ estimator. It is because the OLS estimator will only correspond (roughly) to the correct ordered outcome—i.e. all are measured in the same threshold or same distance apart (Greene and Hensher 2009; Kennedy 2003; Long 1997; Woodridge 2002, 2003). Ordered logit/probit estimation is an extension of logit/probit estimation with maximum likelihood estimation (MLE) for a binary choice outcome variable (e.g. yes or no; civil war or not). MLE is based on a random utility model in which decision makers who have two choices (A or B) are assumed to be utility maximizers, and the probability (0 to 1) that decision maker chooses one choice (A)
due to relative utility to another (B) is influenced by factors that influence decision maker’s utility to choose (A) over (B). In essence a maximum likelihood estimation makes the observed outcome variable (e.g. civil war onset) more likely (King 1989). Ordered logit/probit estimation extends the idea of a binary random utility maximum function to each ordered response value (e.g. strongly disagree, disagree, agree, and strongly agree; minor violence, intermediate violence, and major violence).

Applying an ordered logit estimation to my study, I estimate the probability that a certain level of government repression is a function of a certain level of rebel challenge and other structural conditions including political regime types, level of economic development, population size, ethnolinguistic fractionalization and so on. Similarly, I can attain the probability that a certain level of armed rebel resistance is a function of a certain level of government repression (below I discuss why these are measured simultaneously rather than with lags) and other structural conditions including political regime types, level of economic development, population size, ethno-linguistic fractionalization, and so on. The results from ordered logit analysis are reported in Tables 4.2 (government repression) and Table 4.4 (armed rebel Resistance), respectively.

However, one might be concerned that each category of ordered explanatory variable may not influence the ordered outcome variable linearly. To deal with such a non-linearity concern, I re-estimate an ordered logit model with five dummy variables (a lowest value is a reference category omitted from estimation) created by dichotomizing each category (0 or 1) of government repression and armed rebel challenge, respectively. The binary decomposition approach is appropriate here in order to confirm that the coefficients for each level of the original ordered variable are all increasing or decreasing in roughly equal intervals, and to conclude that
the relevant explanatory factor (e.g. each government repression level) is linearly related to the outcome variables (e.g. a certain level of armed resistance). In such a case, the interpretation of the given ordered variable as being on a continuum has been validated and the measure can be used as an interval-level measure in OLS regression analysis. In contrast, when the coefficients are neither uniformly increasing nor decreasing, nonlinearities are evident. The results can be found in Table 4.2 (Model 2), and Table 4.3 (Model 5) in the next section. My findings confirm the linearity, which means the higher value of an ordered explanatory variable is statistically correlated with increases in a value of the outcome variable.

As just pointed out, because it is reasonable to treat each ordered explanatory variable as an interval-level variable—scaling each value in equal distance—in an OLS regression analysis, it enables me estimate an OLS regression model predicting the ordered government repression level variable and the ordered armed rebel resistance level variable as outcome variables, respectively. According to Menard (2002) and Allison (1999), an ordered variable with more than five categories measured in an interval-level can be considered as a continuous variable (I will discuss later in detail why I need this assumption). Thus, I replicate Model 1 and Model 4, respectively, with an OLS regression estimation including the same control variables from the two ordered logit models in Table 4.2 and Table 4.4 in the next section. The results from each OLS will be reported in Tables 4.2 (Model 3), and Table 4.4 (Model 6) in the next section. The coefficients for the explanatory variables in both the OLS and logit estimations are statistically significant and are in the same directions, while, as expected, the coefficients between the ordered logit (MLE) and the OLS (linear estimation) are different.35

Lastly, in order to determine the substitutability between the ordered logit and the OLS estimations efficiently, I compare the statistical information of model-fitness based on the results
from both the ordered logit model specification and the OLS model specification reported in Tables 4.2 and 4.4 by employing Akaike’s information criterion (AIC) and the Bayesian information criterion (BIC).\textsuperscript{36} Both the AIC and the BIC information can be used to assess fit of a model and for comparing competing or nested models between the ordered logit specification and the OLS specification statistically. More importantly, the information also suggests that if researchers are cautious one might substitute the statistical inference from the OLS model specification for those from the ordered logit model specification. This statistical verification is important when estimating a non-recursive causal model with an ordered explanatory variable and a dichotomous outcome variable (see below).

Turning to a discussion of modeling a non-recursive causal estimator with a dichotomous outcome variable, recall that the primary dependent variable testing H1-6 is a ‘new’ civil war onset in any state-year, measured as a dichotomous (categorical) variable (0 or 1). However, utilizing a single equation estimator such as a binary response model (i.e. logit/probit) to examine the effects of my main regressors (government repression and armed rebel resistance) on civil war would give biased estimates because both regressors are directly affected by one another (i.e. reciprocal relationship) and by other variables in the civil war onset model. Potential issues in the estimations are produced largely by endogeneity problems because researchers cannot have the opportunity to manipulate explanatory variables.\textsuperscript{37} In order to treat endogeneity problems, researchers are advised to employ instrumental two-stage or instrument-variable regression (a.k.a. ivreg) modeling or structural equation modeling (SEM), specifically a two-stage least squares (a.k.a. 2SLS) modeling with continuous manifest and latent variables (e.g. Berry 1984; Greene 2006; Kennedy 2003; Maddala 1983; Wooldridge 2003). However, as Achen (1986) and others (Kennedy 2003, Maddala 1983) pointed out, if the dependent variable
in the second stage equation is a binary choice variable such as civil war onset (0 or 1), adjusting the standard errors is exceptionally complicated. In addition, as econometric textbooks (Greene 2006; Kennedy 2003; Wooldridge 2003) note, applying a common 2SLS (two-stage least square regression) modeling to my study is inappropriate in two ways. First my two endogenous (reciprocal) variables are measured as a categorical and ordered value rather continuous; and second, my dependent variable of civil war onset is a dichotomous variable, which makes it much difficult to adjust standard errors for statistical inference.

In order to treat these modeling issues I adopt a Two-Stage Conditional Maximum Likelihood (2SCML) estimation, which provides consistent coefficient estimates with consistent standard errors and includes an explicit test for exogeneity— two implicated variables are determined outside of the model (Maddala 1983; Rivers and Vuong 1988; Alvarez and Glasgow 1999). The 2SCML estimation is designed specifically for estimating a two-stage (non-recursive causal) model between a continuous instrumental variable for the first-stage equation and a dichotomous dependent variable for the second-stage equation. In addition, Rivers and Vuong’s (1988) approach allows researchers to examine the presence of endogeneity explicitly. In my study, I expect to reject the null hypothesis—i.e. two variables of interest are independent— and see that there is endogeneity. As of today, there is no statistical modeling to estimate a two-stage (non-recursive causal) model with two separate first-stage ordered instrumental variables and a binary dependent variable in the second stage. Because of the 2SCML’s methodological requirements, I therefore estimate a set of multiple OLS regression models predicting an ordered categorical outcome variable—government repression levels and armed rebel resistance levels, respectively—for the first-stage equation. As I discussed earlier, it is methodologically appropriate in this instance to substitute the results from the OLS estimation
for those from the ordered logit estimation (see Tables 4.2 and 4.4 for the statistical results). In end, I estimate a two-stage non-recursive causal model within a 2SCML framework using the following three equations (see Appendix C: technical notes):

The first stage equations are:

\[ \text{Government Repression}_t = f(\text{Government Repression}_{t-1}, \text{Armed Rebel Resistance}_t, \text{control variables}) \] \hspace{1cm} (1)

\[ \text{Armed Rebel Resistance}_t = f(\text{Armed Rebel Resistance}_{t-1}, \text{Government Repression}_t, \text{control variables}) \] \hspace{1cm} (2)

The second stage equation can be is as follow:

\[ \Pr (\text{Civil War})_t = f(\text{Government Repression}_{t-1}, \text{Armed Rebel Resistance}_{t-1}, \text{Government Repression residuals}, \text{Armed Rebel Resistance residuals}, \text{control variables}) \] \hspace{1cm} (3)

Before ending this section, I must comment on a handful of additional methodological considerations in order to analyze Time-Series Cross-Section (TSCS) panel data efficiently and appropriately. In general, although TSCS panel analysis has a number of merits including ability to control for unobservable factors and ability to resolve causal ordering, researchers need to treat a number of issues with regard to (a) ‘time-series’ panel (i.e. year) and (b) cross-section panel (i.e. state or country) separately (e.g. Beck 2001; Wooldridge 2002). Let me explain briefly three issues relevant to my study.

First, one important consideration for BTSCS data is serial correlation (i.e. temporal dependence) within a dichotomous dependent variable. In order to treat potential temporal dependence of civil war onset, I include cubic splines (i.e. four parameters) generated by the BTSCS (Binary Time-Series Cross-Section) program available for STATA (Beck et al. 1998). The BTSCS program computed a baseline hazard rate for peace-spells with smoothing functions.
for 1, 3, 5, and 7 year-periods (i.e. no-event years) from the last event (i.e. civil war) by applying a duration (event history) model. \(^{40}\) According to Beck et al. (1998), cubic splines help researchers to interpret the baseline hazard much better than the temporal dummies, while there are some disagreements.\(^{41}\) If the coefficients of four cubic splines variables (1, 3, 5, and 7 years for my study) are statistically insignificant, researchers can conclude that there are no temporal dependences. For a comparison, I replicate Model 9 civil war onset model using generalized equation estimation (GEE) with logit link and first-order autoregressive error process (i.e. AR1) (Zorn 2001a, 2005). As expected, the GEE model reproduces my main findings (i.e. direction and statistical significance) while there are some differences in the coefficients (see Appendix D: Table 4.8, Model 13).

Second, another methodological consideration for TSCS panel data is ‘unobserved heterogeneity’ in the primary unit (i.e. country or independent state) because I correct standard errors by using robust standard errors clustered on country/independent states (Wooldridge 2002; Zorn 2001b). Such a clustering approach (it is also called the cluster-robust estimator) is necessary to obtain unbiased standard errors for statistical inference but it induces unobserved heterogeneity (by reducing cross-sectional variance and time-series variance) across clusters, namely ‘dirty pool’ (Green, Kim, and Yoon 2001), especially, in TSCS panel data (Beck and Katz 2011; Zorn 2001b). This is a specific issue for TSCS data, where the independent or control variables (e.g. regime type, ethnic fractionalization, and most of demographic and geographic variables in my data analysis) may change very slowly or not at all over time. If any independent or control variable does not change over time in any given units, it is completely collinear with the dummy variable for my primary units. In order to treat unobserved heterogeneity across clusters, researchers are advised to estimate one of either fixed effects (FE),
random effects (RE), or complete pooling modeling approaches, while there are no standard recommendations for which particular procedure should be used for political science TSCS data. In my case, the fixed effects (FE) might be an issue within a state across the different panels (i.e. years). The random effects (RE) might be a problem between the different states in each panel and across years because of time-invariant explanatory (e.g. government repression levels and armed rebel resistance levels because they are observed in state-year over times) and control variables (especially, for dummy variables (yes = 1, or no = 0) such as democracy, autocracy, and oil exporter variables. In order to examine any influence of the fixed effects and random effects, respectively, on my main findings, I replicate my final civil war onset model (Table 4.6, Model 9) with both the FE and RE models. There are no changes in the main findings (direction and statistical significance), while the coefficients are much larger than the original model’s ones due to the different sample sizes and aggregations (see Appendix D: Table 4.8, Models 14 and 15).

Third, one might be concerned that the probability of rare events such as civil war in advanced industrial states and regime change by foreign power may be underestimated due to the biased coefficients because civil war onsets are also rare events (84 new civil war onsets out of 4236 state-years in my data) (King and Zeng 2001a, b). To attain nonbiased coefficients for a rare event binary dependent variable, King and Zeng (2001a, b) have proposed the rare events logit approach (a.k.a. ReLogit). According to King and Zeng, the rare events logit approach helps researchers avoid introducing careless and intuitive bias of selecting a number of certain relevant cases—e.g. selecting conflict prone-states for the analysis— from the entire dependent variable because of too much irrelevant information—e.g. no civil war state-years and non-civil war prone-states— in the dataset (King et al. 1994). Employing the ReLogit software available
for STATA (King and Zeng 2001a, b), I replicate Model 9 to check the sensitivity of my main findings with the systematically drawn sample by correcting rare event selection bias. The replicated findings with the ReLogit are alike the main findings (direction and statistical significance), while the coefficients of most of variables are largely improved (see Appendix D: Table 4.8, Model 16).

Note that both the FE/RE approach and the ReLogit approach are utilized in order to strengthen my main findings with systematically drawn different sample sizes fixed by regions, conflict-prone states, or specific year contagious effect without adding any cost of new data collection and avoiding careless sampling bias (King et al. 1994; King and Zeng 2001a). Yet, one might be concerned whether findings, especially coefficients for a number of control variables, would be influenced by differently drawn fixed observations such as Asia and Sub-Saharan Africa (see Fearon and Laitin 2003a; Collier and Hoefler 2004; Krause and Suzuki 2005a). These speculations would breed a number of different studies which specifically articulate a series of temporal and special hypotheses for testing regional variations, spatial diffusion effects, or temporal contagious effects (e.g. Cederman et al. 2009; Gleditsch 2009); but this has been left out from the present study due to different research objectives. Instead, I replicate my main findings reported in Table 4.6 (Models 7-9) by substituting the ACD/UCDP’s major (civil) war data (1,000 BDT+, discussed in chapter 2) for my dependent variable from the CoW’s civil war data. The results are reported in the Appendix D (Table 4.7, Models 10-12). Although there are small differences in the coefficients, the main findings (i.e. direction and statistical significant levels) from all three additional models are very similar.

Lastly, a brief discussion of the findings from the robustness tests is presented in the Appendix D (Tables 4.7 and 4.8) in order to focus on my key argument and findings. Note that
the primary objectives of additional sensitivity analyses are: (1) to attain an efficient and better prediction to draw statistical inference from statistical analysis and (2) to avoid engaging largely careless selection bias problems which likely undermine causal inference from statistical analysis. Overall, the results from those statistical treatments strengthen my main findings further, while there are some differences in the coefficients in each model.

4.6 Results and Interpretation

Before discussing the main findings testing Hypotheses 1-6, I begin this section with a brief discussion of the uncertainty variable.

As noted in the previous section, I have estimated a set of three separate regression models to assess government leader uncertainty and rebel leader uncertainty, respectively. Table 4.2 displays the results predicting the probability of government repression level (a five ordered outcome variable) in response to armed rebel resistance levels (a five-ordered explanatory variable). Columns 1 and 2 present the results from an ordered logit (Model 1) and an ordered logit model with five binary decomposition variables (Model 2); column 3 shows the result from an OLS model (Model 3) replicating Model.

In each model, I include a set of control variables associated with use of government repression, i.e., violations of personal integrity rights/state sanctions (e.g. Bueno de Mesquita et al. 2005; Carey 2010; Carey and Poe 2004; Davenport 2000, 2007a; Poe et al. 1999; Thoms and Ron 2007; Young 2009). Considering Table 4.2 (Models 1-3), one would wonder why these models do not include any lagged armed rebel resistance level variables because previous studies have reported that the past (lagged one-year) dissident activities variable is positively correlated
with an increase in government repression level (e.g. Poe et al. 1999, 2000; Carey 2010; Young 2009).

Table 4.2 Impact of Armed Rebel Resistance on Government Repression

<table>
<thead>
<tr>
<th></th>
<th>Model 1 Government Repression (Ordered Logit)</th>
<th>Model 2 Government Repression (Ordered Logit)</th>
<th>Model 3 Government Repression (OLS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Repression t-1</td>
<td>1.166*** (0.053)</td>
<td>1.160*** (0.054)</td>
<td>0.645*(0.023)</td>
</tr>
<tr>
<td>Rebel Resistance (ordered)</td>
<td>0.093*** (0.028)</td>
<td></td>
<td>0.057*** (0.015)</td>
</tr>
<tr>
<td>Rebel Resistance Level 1</td>
<td></td>
<td>0.243 (0.249)</td>
<td></td>
</tr>
<tr>
<td>Rebel Resistance Level 2</td>
<td></td>
<td>0.366** (0.147)</td>
<td></td>
</tr>
<tr>
<td>Rebel Resistance Level 3</td>
<td></td>
<td>0.382** (0.170)</td>
<td></td>
</tr>
<tr>
<td>Rebel Resistance Level 4</td>
<td></td>
<td>0.405** (0.159)</td>
<td></td>
</tr>
<tr>
<td>Economic Development (Log)</td>
<td>-0.183*** (0.040)</td>
<td>-0.177*** (0.041)</td>
<td>-0.084*** (0.020)</td>
</tr>
<tr>
<td>Population Size (Log)</td>
<td>0.111*** (0.026)</td>
<td>0.112*** (0.027)</td>
<td>0.059*** (0.013)</td>
</tr>
<tr>
<td>Democracy</td>
<td>-0.487*** (0.070)</td>
<td>-0.484*** (0.071)</td>
<td>-0.242*** (0.036)</td>
</tr>
<tr>
<td>Autocracy</td>
<td>-0.085 (0.057)</td>
<td>-0.076 (0.057)</td>
<td>-0.048 (0.032)</td>
</tr>
<tr>
<td>Ethnic Fractionalization</td>
<td>-0.272** (0.131)</td>
<td>-0.274** (0.134)</td>
<td>-0.134*** (0.066)</td>
</tr>
<tr>
<td>Oil Exporter</td>
<td>0.239** (0.077)</td>
<td>0.237** (0.079)</td>
<td>0.120*** (0.040)</td>
</tr>
<tr>
<td>Mountainous Terrain (Log)</td>
<td>0.066*** (0.024)</td>
<td>0.068*** (0.024)</td>
<td>0.031*** (0.011)</td>
</tr>
<tr>
<td>Noncontiguous state</td>
<td>-0.246* (0.130)</td>
<td>-0.266 (0.139)</td>
<td>-0.114** (0.057)</td>
</tr>
<tr>
<td>Political Instability</td>
<td>0.128** (0.068)</td>
<td>0.123* (0.068)</td>
<td>0.065* (0.038)</td>
</tr>
<tr>
<td>Civil War Involvement</td>
<td>0.600*** (0.131)</td>
<td>0.660*** (0.134)</td>
<td>0.367*** (0.075)</td>
</tr>
<tr>
<td>Interstate War Involvement</td>
<td>0.291 (0.157)</td>
<td>0.311* (0.161)</td>
<td>0.159* (0.078)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.685** (0.259)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cut 1 Constant</td>
<td>1.348*** (0.540)</td>
<td>1.418*** (0.549)</td>
<td></td>
</tr>
<tr>
<td>Cut 2 Constant</td>
<td>3.144*** (0.546)</td>
<td>3.213*** (0.555)</td>
<td></td>
</tr>
<tr>
<td>Cut 3 Constant</td>
<td>4.892*** (0.560)</td>
<td>4.969*** (0.569)</td>
<td></td>
</tr>
<tr>
<td>Cut 4 Constant</td>
<td>6.434*** (0.584)</td>
<td>6.522*** (0.593)</td>
<td></td>
</tr>
<tr>
<td>Observations (N)</td>
<td>3087</td>
<td>3087</td>
<td>3087</td>
</tr>
<tr>
<td>Pseudo R²</td>
<td>0.419***</td>
<td>0.421***</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td></td>
<td>0.730***</td>
</tr>
<tr>
<td>AIC</td>
<td>1.748</td>
<td>1.750</td>
<td>1.812</td>
</tr>
<tr>
<td>BIC</td>
<td>-19305.2</td>
<td>-19282.2</td>
<td>-19124.6</td>
</tr>
</tbody>
</table>

Notes: All models were estimated with STATA 10.01 (SE). Robust standard errors appear in parentheses. All significance levels (P-values) are based on two-tailed tests: * p<0.10, ** p<0.05, *** p<0.01
For Model 2, the reference category (armed rebel challenge level 0) is omitted.

Yet, one might question the inclusion of such lagged variables by arguing that both repressive governments in Libya and Syria in recent violent episodes had increased the severity of government repression by responding daily or weekly to armed rebel resistance levels, and thus, the inclusion of the one-year lagged explanatory variable may be inappropriate and unnecessary in state-year aggregated data. In addition, I argue that my no-lagged-year approach
will be appropriate to keep as much available information as possible in analyses in state-year aggregated data; there are no substantive rationales for the inclusion of how many lagged explanatory variables to evaluate possible reciprocal relationships.\textsuperscript{46} Further, one could insist that researchers should carefully account for the unobservable information regarding past-armed rebel resistance levels, which might be accomplished with a one-year lagged government repression level variable, while correcting temporal correlation in time-series panel data. Note that these theoretical and empirical issues should be addressed by future research including dynamic modeling using actor-event-based disaggregated data rather than the state-year aggregated data (see Shellman 2006, 2008; Moore 1998; 2000).

The outcome variable in Table 4.2, Models 1-3, is the government repression level variable ranged from Level 1 (secure rule of law) to Level 5 (unlimited repression), and the main explanatory variable is the armed rebel resistance level variable ranged from level 0 (no challenge) to level 4 (over 15,000 active armed combatants). According to Table 4.2, armed rebel resistance levels are positively correlated with greater government repression levels, although rebel resistance level 1 (100-1,000 armed combatants) has no statistical significant relations with government repression levels (see Table 4.2, the middle column, Model 2 with the binary decomposition variables). Governments would appear to take notice of and respond repressively to higher levels of rebel resistance, which would appear to fit with the impression of governmental uncertainty and concern about potential rebel staying power. Also note that the coefficients of the binary decomposition variables in Model 2 are much greater than those in Model 1, meaning that each level of the armed rebel resistance variable has different effects on the probability of each level of government repression.
Looking at the results for control variables, all of them are in line with the extant findings (Carey 2010; Poe et al. 1999; Young 2009). States with better economic conditions, highly democratic institutions, ethnically heterogeneous societies, and a lesser distance between their capitals and border areas have less repressive governments, and there is perhaps less need for repression since armed resistance is relatively rarer. States that are more populous, highly oil-dependent, and very mountainous and states with experience of political instability, civil war and interstate war in a given year endure more repressive governments. Regarding the last point, one would be concerned that the positive and linear relationship may be reinforced by a reciprocal relationship; such concerns will be discussed later (see Table 4.4). Lastly, looking at the AIC and BIC information reported in the bottom of Table 4.2, I can conclude that Model 1 performs better than Models 2 and 3 because the AIC value of Model 1 is smaller and the BIC value of Model 1 is much negative than those of the alternatives. Accordingly, my discussion below focuses on Model 1’s substantive effect of armed rebel resistance levels on government repression.

Because each coefficient from Model 1 (ordered logit model) represents the partial effects of explanatory variables, which is dependent on what other variables are included in model, one cannot interpret the coefficients from Model 1. Hence, I compute a set of predicted probabilities examining the extent of how a change in five ordinal values of armed rebel resistance level influences a predicted probability that a government increases the repression level while holding all other variables set at medians. Table 4.3 represents the predicted probabilities of five different outcomes in context of five different scenarios. Each cell reports both a predicted probability (from 0 to 1) and a 95 percent confidence interval. If the difference of the confidence intervals is larger, it suggests that there is the greater uncertainty of the predicted probability.
Table 4.3 Predicted Probabilities of Government Repression Levels

<table>
<thead>
<tr>
<th>Government Repression Level</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
<th>Scenario 4</th>
<th>Scenario 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>0.01</td>
<td>0.25</td>
<td>0.61</td>
<td>0.13</td>
<td>0.00</td>
</tr>
<tr>
<td>95% CI</td>
<td>[0.00, 0.01]</td>
<td>[0.20, 0.30]</td>
<td>[0.57, 0.64]</td>
<td>[0.13, 0.13]</td>
<td>[0.00, 0.00]</td>
</tr>
<tr>
<td>Level 2</td>
<td>0.00</td>
<td>0.17</td>
<td>0.62</td>
<td>0.20</td>
<td>0.01</td>
</tr>
<tr>
<td>95% CI</td>
<td>[0.00, 0.01]</td>
<td>[0.13, 0.20]</td>
<td>[0.57, 0.66]</td>
<td>[0.20, 0.21]</td>
<td>[0.00, 0.02]</td>
</tr>
<tr>
<td>Level 3</td>
<td>0.00</td>
<td>0.14</td>
<td>0.61</td>
<td>0.23</td>
<td>0.01</td>
</tr>
<tr>
<td>95% CI</td>
<td>[-0.00, 0.00]</td>
<td>[0.11, 0.17]</td>
<td>[0.56, 0.66]</td>
<td>[0.22, 0.24]</td>
<td>[0.00, 0.02]</td>
</tr>
<tr>
<td>Level 4</td>
<td>0.01</td>
<td>0.28</td>
<td>0.60</td>
<td>0.12</td>
<td>0.00</td>
</tr>
<tr>
<td>95% CI</td>
<td>[0.00, 0.02]</td>
<td>[0.23, 0.32]</td>
<td>[0.57, 0.63]</td>
<td>[0.11, 0.12]</td>
<td>[0.00, 0.00]</td>
</tr>
<tr>
<td>Level 5</td>
<td>0.00</td>
<td>0.16</td>
<td>0.62</td>
<td>0.21</td>
<td>0.01</td>
</tr>
<tr>
<td>95% CI</td>
<td>[-0.00, 0.01]</td>
<td>[0.12, 0.19]</td>
<td>[0.57, 0.66]</td>
<td>[0.21, 0.22]</td>
<td>[0.00, 0.02]</td>
</tr>
</tbody>
</table>

Notes: Scenario 1: Semi-democracy faces no armed rebel resistance.
Scenario 2: Semi-democracy faces level 3-armed rebel resistance.
Scenario 3: Semi-democracy faces level 4-armed rebel resistance.
Scenario 4: Democracy faces level 4-armed rebel resistance.
Scenario 5: Autocracy faces level 4-armed rebel resistance.
95% confidence interval in parentheses.

In order to interpret the differences among probabilities meaningfully, I set up five scenarios by looking at the armed rebel resistance variable and the democracy and autocracy variables and set other variables at medians. Scenarios 1-3 show how semi-democratic regimes (between democracy and autocracy category) respond to a different level of armed rebel resistance. Based on scenario 1, semi-democratic governments largely impose level 2 (restricted repression) at $t + n$ (25 percent) and level 3 (widespread repression) at $t + n$ (61 percent) when there is no armed rebel resistance. This might be evidence of how semi-democratic leaders continuously feel insecure during their tenure. Scenario 2 with the 5,000-15,000 armed rebel resistance level and scenario 3 with the over 15,000 armed rebel resistance level represent sharply different probabilities indicating that semi-democratic governments are likely to change their repressive strategy from widespread repression (62 percent and 60 percent, respectively) at $t + n$ to extensive repression using political imprisonment (20 percent and 23 percent, respectively). In all scenarios, using level 5 repression such as unlimited civilian killings or systematic genocides at $t + n$ is very rare, while semi-democratic leaders might employ such “final solution”
strategies when they have experienced massive armed resistance with more than 5,000 active
armed combatants (1 percent for scenarios 2 and 3, respectively). Recent violent political
confrontations in Syria and Yemen unfortunately would appear to meet these scenario criteria.

While it is very unlikely, according to scenario 4 democratic governments experiencing
more than a 15,000 level of armed rebel resistance might be comparatively restrained and
confine repressive strategies to level 2 (restricted repression) at $t + n$ (28 percent) and level 3
(widespread repression) at $t + n$ (60 percent). Repressive policies in India and Israel would be
examples. The findings are consistent with Davenport and Armstrong (2004) and Davenport
(2007a) as well as Bueno de Mesquita et al. (2005). Scenario 5 reveals that, if autocratic
governments such as Iran today confront anti-government resistance with more than 15,000
armed combatants, they tend to pursue either widespread repression (60 percent) at $t + n$ or
extensive repression using political imprisonment at $t + n$ (21 percent). In a few cases, they might
employ level 5 repression as well with unlimited civilian killings or systematic genocides at $t + n$
(1 percent).

These variations would support the argument that governments appear attuned to
demonstrated levels of armed rebel attacks but may not always increase repression, depending on
type of regime and how much government leaders perceive threats from rebel armed resistance
(e.g. Carey 2010; Gurr 2000; Mason 2004; Moore 2000; Poe et al. 2000; Tilly 2003; Young
2009). In short, I could conclude that government leaders do respond strategically to armed rebel
resistance levels by assessing armed rebels’ willingness to compromise and military strength or
staying power. This is considered being a reflection of government uncertainty.

Moving to examination (Table 4.4) of how changing level of government repression
affects the probability of armed rebel resistance levels, recall that, unlike previous research
(Regan and Norton 2005; Sambanis and Zinn 2006; Wimmer et al. 2009; Walter 2009b) which looked solely at the onset of ethnic rebel conflicts or armed self-determination movements, the outcome variable here is measured as five ordered values ranged level 0 (no challenge) to level 4 (over 15,000 active armed combatants s). The explanatory variable is the ordered value of government repression levels ranged from level 1 (secure rule of law) to level 5 (unlimited repression). Table 4.4, Models 4 and 5 displays the results from an ordered logit model and an ordered logit model with five binary decomposition explanatory variables, respectively; Model 6 is the result from an OLS model. Because there are no robust theoretical expectations of the extent to how armed rebels increase active armed combatants, I include a set of control variables associated with the onset of armed rebellion and insurgency in the context of government repression (e.g. Fearon and Laitin 2003a; Jakobsen and de Soysa 2009; Regan and Norton 2005; Sambanis and Zinn 2006; Young 2012).50

According to Table 4.4, all models (models 4-6) despite the different estimations, have shown that the greater level of government repression the greater armed rebel resistance levels, though, in Model 5 with the binary decomposition variables, the level 2 government repression (restricted repression for nonviolent political activity) has no statistically significant impact on the armed rebel resistance levels. This suggests that the coefficients of the binary decomposition variables in Model 5 are much greater than those in Model 4, indicating that each level of government repression has different effects on the probability of each armed rebel resistance level. Finally, noting the model-fitness information based on the AIC and BIC reported at the bottom of Table 4.4 we see that Model 4 performs better than Models 5 and 6 because the AIC value of Model 4 is smaller and the BIC value of Model 4 is more negative than those of the
alternatives. Accordingly, my discussion below focuses on Model 4’s substantive effect of government repression on armed rebel resistance levels.

<table>
<thead>
<tr>
<th>Table 4.4 Impact of Government Repression on Armed Rebel Resistance Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 4</td>
</tr>
<tr>
<td>Rebel Resistance (Ordered Logit)</td>
</tr>
<tr>
<td>Rebel Resistance t-1</td>
</tr>
<tr>
<td>Government Repression (ordered)</td>
</tr>
<tr>
<td>Government Repression level 2</td>
</tr>
<tr>
<td>Government Repression level 3</td>
</tr>
<tr>
<td>Government Repression level 4</td>
</tr>
<tr>
<td>Government Repression level 5</td>
</tr>
<tr>
<td>Economic Development (Log)</td>
</tr>
<tr>
<td>Population Size (Log)</td>
</tr>
<tr>
<td>Democracy</td>
</tr>
<tr>
<td>Autocracy</td>
</tr>
<tr>
<td>Ethnic Fractionalization</td>
</tr>
<tr>
<td>Oil Exporter</td>
</tr>
<tr>
<td>Mountainous Terrain (Log)</td>
</tr>
<tr>
<td>Noncontiguous state</td>
</tr>
<tr>
<td>Political Instability</td>
</tr>
<tr>
<td>Civil War Involvement</td>
</tr>
<tr>
<td>Interstate War Involvement</td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>Cut 1 Constant</td>
</tr>
<tr>
<td>Cut 2 Constant</td>
</tr>
<tr>
<td>Cut 3 Constant</td>
</tr>
<tr>
<td>Cut 4 Constant</td>
</tr>
<tr>
<td>Observations (N)</td>
</tr>
<tr>
<td>Pseudo R²</td>
</tr>
<tr>
<td>R²</td>
</tr>
<tr>
<td>AIC</td>
</tr>
<tr>
<td>BIC</td>
</tr>
</tbody>
</table>

Notes: All models were estimated with STATA 10.01 (SE). Robust standard errors appear in parentheses. All significance levels (P-values) are based on two-tailed tests: * p<0.10, ** p<0.05, *** p<0.01
For Model 5, the reference category (government repression level 1) is omitted.

The results regarding control variables are not consistent with the extant findings, however, revealing the volatility of previous findings (Jakobsen and de Soysa 2009; Regan and Norton 2005; Sambanis and Zinn 2006; Young 2012). Note that my outcome variable in models 4-6 is an ordered-interval value of five armed rebel resistance levels ranged from 0 to 4 in state-
year aggregated data instead of the onset of new armed challenge in any given state-years. Hence, my findings should be interpreted as innovative but with some cautions.

Concerning the statistically insignificant and negative relation of the economic development variable, my finding conflicts with Jakobsen and de Soysa (2009) and Sambanis and Zinn (2006), while supporting Regan and Norton (2005) reporting that per capita income is statistically insignificant and negative in predicting the onset of non-violent protest and full-fledged civil war. Insurgent favored conditions such as oil exports and rough terrains (e.g. Regan and Norton 2005; Jakobsen and de Soysa 2009) do not appear statistically significant and are in wrong direction in this analysis for different levels of rebel resistance instead of the onset of armed challenge, though they are significant for government repression. Other supposed insurgent favored conditions such as larger population size and the greater distance from capital are positive and statistically significant in Model 4 and 5, while becoming weakly significant or no longer significant in model 6, indicating that those variables are largely sensitive to rebel resistance levels. Lastly, the democracy variable is negative and statistically insignificant, while the autocracy variable is correlated negatively with rebel resistance levels, suggesting that highly institutionalized autocratic governments are less likely to experience armed rebel challenge. This finding is rather intuitive; one might suspect the impact of different institutions, especially semi-democratic governments or inconsistent political institutions which are highly volatile and sensitive to armed rebellion worldwide (e.g. Gates et al. 2008; Goldstone et.al. 2010; Hegre et al. 2000).52

Examining how and what extent a change in government repression levels influences the probability that a state experiences greater armed rebel resistance level based on Table 4.4
(Model 4), I compute a set of predicted probabilities, employing the similar approach as for the government repression variable.53

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Predicted Probability (Level 0)</th>
<th>Predicted Probability (Level 1)</th>
<th>Predicted Probability (Level 2)</th>
<th>Predicted Probability (Level 3)</th>
<th>Predicted Probability (Level 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scenario 1</td>
<td>1.00 [0.99, 1.00]</td>
<td>0.00 [0.00, 0.00]</td>
<td>0.00 [0.00, 0.00]</td>
<td>0.00 [0.00, 0.00]</td>
<td>0.00 [0.00, 0.00]</td>
</tr>
<tr>
<td>Scenario 2</td>
<td>0.98 [0.97, 0.99]</td>
<td>0.02 [0.00, 0.02]</td>
<td>0.01 [0.01, 0.01]</td>
<td>0.00 [0.00, 0.00]</td>
<td>0.00 [0.00, 0.00]</td>
</tr>
<tr>
<td>Scenario 3</td>
<td>0.97 [0.97, 0.99]</td>
<td>0.01 [0.00, 0.01]</td>
<td>0.01 [0.01, 0.01]</td>
<td>0.00 [0.00, 0.00]</td>
<td>-0.00 [0.00, 0.00]</td>
</tr>
<tr>
<td>Scenario 4</td>
<td>0.95 [0.96, 1.00]</td>
<td>0.01 [0.00, 0.01]</td>
<td>0.01 [0.01, 0.01]</td>
<td>0.00 [0.00, 0.00]</td>
<td>-0.00 [0.00, 0.00]</td>
</tr>
<tr>
<td>Scenario 5</td>
<td>0.98 [0.97, 0.99]</td>
<td>0.01 [0.00, 0.01]</td>
<td>0.01 [0.00, 0.01]</td>
<td>0.00 [0.00, 0.00]</td>
<td>-0.00 [0.00, 0.00]</td>
</tr>
</tbody>
</table>

Notes: Scenario 1: Armed rebel faces no government repression under semi-democracy
Scenario 2: Armed rebel faces level 3-government repression under semi-democracy
Scenario 3: Armed rebel faces level 4-government repression under semi-democracy
Scenario 4: Armed rebel faces level 4-government repression under democracy
Scenario 5: Armed rebel faces level 4-government repression under autocracy
95% confidence interval in parentheses.

Table 4.5 reports a set of the probabilities of armed rebel changes in five different scenarios by looking at the government repression level variable and the democracy and autocracy variables, setting other variables at medians. At first glance, one would wonder that there are very low predicted probabilities of rebel resistance levels across different scenarios. Perhaps this form of ‘inelasticity’ would call the reflection of uncertainty into question. Recall, however, that historically the vast majority of citizens were disengaged from armed violent campaigns and terrorist activities against central authorities— see the case of Thailand’s urban turmoil during April-May 2010 (chapter 3) and the case of catholic communities in Northern Ireland (chapter 5) (Chenoweth and Stephan 2011; Lichbach 1989; Mason 2004; Tilly and Tarrow 2006). Indeed, my data indicate that armed rebel resistance with more than 100 active armed combatants is very rare (11.4 percent out of 4,228 state-years; level 1 (100-1,000 active combatants) is 1.1 percent; level 2 (1,000-5,000) is 3 percent; level 3 (5,000-15,000) is 1.6
percent, and level 4 (more than 15,000) is 5.7 percent). Thus, Table 4.5 would illuminate the realist view that rebellion is rare and dependent mostly on permissive acceptance of strategic interests rather than on active popular participation (e.g. Chenoweth and Stephan 2011; Lichbach 1987; Mason 2004).

Let me focus on the middle cells between the armed rebel resistance levels (1-2) and scenarios 2-5 in Table 4.5. All together they suggest that, despite different regime types, rebel leaders facing severe repression at level 4 (extensive repression using political imprisonment) are likely to mobilize armed combatants with more than 100-1,000 (level 1) or 1,000-5,000 (level 2) at the predicted probabilities of between 1 and 2 percent. The origin of the first Nigerian Civil War (a.k.a. the Biafra war) of 1967-1970 might meet this scenario and the origins of the recent violent resistances in Libya in 2011 and Syria since 2011 would beef up this scenario further.

One might interpret that high levels of government repression generate relative certainty about low probabilities of government concessions, although conceivably governments might repress hard and yet still be open to covert negotiations. However, it should be understood as well that there are a variety of unobserved and unmeasured factors which are excluded from this analysis, such as organizational and network capacities of armed groups (e.g. Staniland 2012; Weinstein 2007) in addition to armed groups’ logistic and financial resource availabilities (e.g. Krause 2010; Gleditsch et al. 2012).

The predicted probabilities of major armed resistance with more 5,000 active armed combatants are nearly zero apparently because such major uprisings had to face and defeat (or successfully evade) serious government repressive challenges implemented by the well-trained and heavily-equipped government security apparatus (see Table 4.3 for government repressive responses). These statistical findings indicate that the threshold of orchestrating major armed
resistance could be extremely high. Moreover, it suggests that a number of unobserved factors (external military support, leader defection from government security forces, and new alignments among rebel groups during conflicts) might influence the probability that rebel leaders decide to maintain their armed resistance by mobilizing a larger number of trained and equipped armed combatants (Butler and Gates 2009; Cunningham et al. 2009; Salehyan et al. 2011). Recall that the findings are consistent with what I discussed in chapter 3. Hence, as Walter (2009a) and Thyne (2009) pointed out, I claim that civil war researchers need to consider the roles of uncertainty seriously through actual armed rebel resistance levels in predicting civil war onset, while uncertainty is hardly measured in observed aggregated data alone (e.g. Shellman 2006, 2008).

In sum, my findings regarding the uncertainty variables in terms of government repression levels and armed rebel resistance levels are as follows: first, when governments confront greater armed rebel resistance levels, they tend to resort to more severe forms of repression (Table 4.2, models 1-3, and Table 4.3). Second, when armed rebels are victims of increased government repression, they are relatively unlikely to carry out increased resistances (Table 4.4, models 4-6, and Tabl.4.5). Third, as I discussed in section 3.3 in chapter 3, all together the patterns suggest that the tit-for-tat relationship between government repression and armed rebel resistance—both actors continuously take stock of each other’s action levels—can be characterized as a mutual signaling game due to the asymmetric information (i.e. uncertainty). Hence, as I argued, the inclusion of such a dynamic process before the breakout of a civil war would improve our explanatory and predictive power for civil war onset in future. Lastly, it should be noted that one of the considerable drawbacks of my approach here is that my proxy indicators do NOT gauge a cooperation dimension in two-sided tit-for-tat interaction due
to difficulties and limitations of data collection on reciprocal actor-based cooperative event data in civil conflict (Shellman 2006, 2008).

Testing Hypotheses

As I discussed in chapter 3, there are at least four possible explanations of conflict escalation (H1-4) as well as two additional hypotheses (H5-6) in terms of a two-sided uncertainty mechanism. In order to present the results testing hypotheses in a reasonable manner, I estimate three separate (nested) logistic regression models predicting civil war onset. The results are reported in Table 4.6 (Models 7, 8, and 9).55

<p>| Table 4.6 Effects of Government Repression and Armed Rebel Resistance on Civil War Onset |
|---------------------------------|---------------------------------|---------------------------------|</p>
<table>
<thead>
<tr>
<th></th>
<th>Model 7 (Base Model)</th>
<th>Model 8 (Restricted Model)</th>
<th>Model 9 (Unrestricted Model)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Repression t-1</td>
<td>0.774*** (0.152)</td>
<td>0.805*** (0.155)</td>
<td></td>
</tr>
<tr>
<td>Armed Rebel Resistance t-1</td>
<td>0.235*** (0.081)</td>
<td>0.260*** (0.090)</td>
<td>0.299*** (0.101)</td>
</tr>
<tr>
<td>Government Repression residuals</td>
<td></td>
<td></td>
<td>0.372*** (0.111)</td>
</tr>
<tr>
<td>Armed Rebel Resistance residuals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Development (Logged)</td>
<td>-0.581*** (0.153)</td>
<td>-0.507*** (0.153)</td>
<td>-0.622*** (0.178)</td>
</tr>
<tr>
<td>Population Size (Logged)</td>
<td>0.076 (0.080)</td>
<td>-0.058 (0.091)</td>
<td>-0.104 (0.097)</td>
</tr>
<tr>
<td>Democracy (dummy)</td>
<td>-1.079*** (0.408)</td>
<td>-0.538 (0.441)</td>
<td>-0.389 (0.460)</td>
</tr>
<tr>
<td>Autocracy (dummy)</td>
<td>-0.952*** (0.320)</td>
<td>-0.796*** (0.284)</td>
<td>-0.755*** (0.309)</td>
</tr>
<tr>
<td>Ethnic Fractionalization (Logged)</td>
<td>0.497 (0.466)</td>
<td>0.006 (0.383)</td>
<td>-0.311 (0.424)</td>
</tr>
<tr>
<td>Religious Fractionalization (Logged)</td>
<td>0.487 (0.673)</td>
<td>0.659 (0.604)</td>
<td>0.637 (0.612)</td>
</tr>
<tr>
<td>Oil Exporter (dummy)</td>
<td>0.659*** (0.312)</td>
<td>0.572** (0.264)</td>
<td>0.612 (0.313)</td>
</tr>
<tr>
<td>Mountainous Terrain (Logged)</td>
<td>0.234*** (0.098)</td>
<td>0.024 (0.097)</td>
<td>-0.031 (0.110)</td>
</tr>
<tr>
<td>Noncontiguous state (dummy)</td>
<td>0.446 (0.396)</td>
<td>0.552 (0.339)</td>
<td>0.604 (0.365)</td>
</tr>
<tr>
<td>Political Instability (dummy)</td>
<td>0.478 (0.310)</td>
<td>0.183 (0.344)</td>
<td>0.158 (0.406)</td>
</tr>
<tr>
<td>Interstate War Involvement (dummy)</td>
<td>0.495 (1.009)</td>
<td>-0.110 (0.889)</td>
<td>-0.327 (0.631)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.182 (1.810)</td>
<td>-0.963 (2.092)</td>
<td>0.765 (2.203)</td>
</tr>
<tr>
<td>Observations (N)</td>
<td>3074</td>
<td>2820</td>
<td>2807</td>
</tr>
<tr>
<td>Pseudo R^2</td>
<td>0.173***</td>
<td>0.222***</td>
<td>0.272***</td>
</tr>
<tr>
<td>LR Test</td>
<td>128.2***</td>
<td>140.4***</td>
<td>168.1***</td>
</tr>
<tr>
<td>(df=degree of freedom)</td>
<td>(df=15)</td>
<td>(df=17)</td>
<td>(df=19)</td>
</tr>
<tr>
<td>ACI</td>
<td>0.210</td>
<td>0.188</td>
<td>0.175</td>
</tr>
<tr>
<td>BIC</td>
<td>-23944.5</td>
<td>-21767.3</td>
<td>-21678.5</td>
</tr>
<tr>
<td>ROC</td>
<td>0.82***</td>
<td>0.87***</td>
<td>0.90***</td>
</tr>
</tbody>
</table>

Notes: All models were estimated with STATA 10.01 (SE). Robust Standard Errors in parentheses clustered on country. All models include variables for prior-state years with no civil war onset as well as three splines based on those variables to control for time dependence, using the Beck et al. (1998), omitted. All significance levels (p-values) are based on two-tailed tests:* p<0.1, ** p<0.05, *** p<0.01.
Model 7 is a base model, which replicates the findings in Fearon and Laitin (2003a) with the limited 1976-2000 data instead of the Fearon and Laitin’s original 1945-1999 data. Model 8 tests the direct relationships of the government repression level variable (H1 and 2) and the armed rebel resistance level variable (H3 and 4) and it is called a restricted model. Model 9 examines the government repression (uncertainty) variable with residuals and the armed rebel resistance (uncertainty) variable with residuals (H 5 and 6) using a 2SCML logit model of civil war onset and it is called the unrestricted or full model. Keep in mind that the primary difference of Model 9 from Model 8 is the inclusion of the information about government (repression) residuals and armed rebel (resistance) residuals, which were attained from the estimated results of Model 3 (government repression uncertainty model) and of Model 6 (armed rebel resistance uncertainty model), respectively (discussed earlier).

Table 4.6 displays the statistical findings as well as model-fitness statistical information attained from several different statistical tests. Model 7 (base model) generally reproduces Fearon and Laitin’s (2003a) findings with a few notable exceptions. First, as Fearon and Laitin reported, states under poor economic performance (a negative coefficient for economic development) and with semi-democracy (a negative coefficient for the democracy and the autocracy variables) have higher risk of a new civil war onset. Second, states with high oil export dependence and highly mountainous terrains are more likely than states without such insurgency-favored conditions to experience a new civil war. Third, the effects of population size, ethnic fractionalization, religious fractionalization, contiguous territory, past three-year’s political instability, and current interstate war involvement on a civil war onset are positive but statistically insignificant based on two-tailed tests.$^{56}$
Model 8 examines the direct (manifest) effect of prior-government repression (ordered values) (H1 and H2) and armed rebel resistance (ordered values) (H3 and H4) on the likelihood of a new civil war onset. As expected (Davenport et al. 2008; Regan and Norton 2005; Jakobsen and de Soysa 2009; Young 2012), greater government repression (H1 and 2) and greater armed rebel resistance (H3 and 4) increase directly the likelihood that a state experiences a new civil war. Although the autocracy variable and the oil export dependency variable remain statistically significant, several important control variables such as democracy variable and mountainous terrain become insignificant.

The two statistically significant variables suggest that governments under weakly established autocratic institutions and highly dependent on oil export revenue have much higher risk of a new civil war. In other words, civil wars tend to occur among rentier states largely ruled by a small political- and business-elite coalition. Are there any matching cases? At least 7 cases out of 84 new civil war onsets can be identified in my dataset. Civil wars in Iran in 1979, Angola in 1992 and 1998, and Russia in 1994 and 1999, as well as Azerbaijan in 1991 and Yemen in 1995 are those cases. However it may matter how researchers define oil revenue dependent states and weakly autocratic institutions or hybrid-regimes as well as competitive regimes (e.g. Colgan 2012; Levitsky and Way 2011; Ross 2004, 2006; Smith 2008). A brief case-by-case inspection suggests, however, that two qualifying cases in Russia were the war between the Russian government and the Chechen Islamists-seeking independence, which as an ethno-nationalist war seems only tangentially related to oil revenue dependence; whereas two civil wars in Angola also would be considered as the positive cases and probably resource related (see Ross 2006). Besides those cases, of course, there is a list of borderline cases and potential candidates (e.g. Iraq and Sudan). Still one might wonder how some governments avoided getting into civil war
while others could not. Do those matching cases suggest that government repression and armed rebel resistance independently and interdependently influenced the paths to civil war? What are the possible causal directions here?

One straightforward answer to the question can be that government repression and armed rebel resistance are more directly related to civil war onset than any structural variables. Indeed, the cases of Iran in 1979 and Angola in 1992 and 1998 indicate that either government continuously imposed repression level 4 (i.e. use of murders, disappearances, and torture) or 5 (i.e. unlimited civilian killings), whereas armed rebels mobilized at the 5,000 and 10,000 active resistance level when a civil war broke out. In other words, instead of structural conditions, as I discussed in section 3.3, these military mobilizations by either central authorities or armed rebels might increase directly and interactively the likelihood of a new civil war onset.

By definition, civil war is based on violent conflict between a threatened government and a mobilized armed opposition mounting effective resistance resulting in a minimum of 1,000 deaths per year (see chapter 2; Small and Singer 1982: 210-213). As this study considers government repression and armed rebel resistance during small-scale militarized collective violence, it would make sense to find that the higher the level of government repression and the greater the magnitude of armed rebel resistance the more likely the onset of civil war. Yet, this does not fully address the element of effective resistance, which would mean that a government uses repression to resist and break a mobilized armed opposition while an armed opposition mobilizes challenges to resist and break a repressive government (see chapter 2 for a detailed discussion). A better statistical model to understand the effects of government repression level and armed rebel resistance level on civil war onset must go beyond independent (direct) effects and take into account reciprocal resistances between a repressive government and a mobilized
armed opposition. Furthermore, because during civil war governments can be expected to be increasingly or highly repressive and armed groups may highly mobilized, we need also to take into account that both government repression level and armed rebel resistance level are endogenous (i.e. reciprocal) to civil war, meaning that government repression and armed rebel resistance not only affect one another but are also affected by civil war. Because of these theoretical, empirical, and methodological reasons, we need to estimate a joint 2SCML model with an unrestricted second-stage logit model of civil war onset (Model 9) that is linked by the information about the uncertainty variables estimated in Model 3 (Table 4.2) and Model 6 (Table 4.3).

Turning to a discussion of Table 4.6, Model 9 (an unrestricted model), it appears that the coefficients of the government repression level and the armed rebel resistance level variables are larger than those of Model 8, and, more importantly, two residuals variables from the first-stage OLS equations as uncertainty are highly statistically significant and positively correlated with civil war onset. These findings were expected and would reinforce the argument that the uncertainties for government leaders (H5) and for armed rebel leaders (H6) interdependently influence the likelihood of a new civil war onset. Because the residuals are statistically significant, it would suggest that unobserved (latent) and unmeasured factors associated with uncertainty over government willingness to resolve peacefully would increase the probability that a state experience a new civil war onset. Such unobserved (or unmeasured) factors can include institutional constraints on government repression, attempts at co-optation (i.e. compromise) to mollify armed rebel resistance, splinter rebel groups, or buy them off (Gurr 2000; Lichbach 1987; Mason 2004). They may include greater state penetration of society, which might make government repression more effective in deterring some armed rebel
challengers at some points as well as external military intervention or armed supply (Cunningham et al. 2009; Pearson et al. 2009; Thyne 2009). This would also suggest that there are unobserved (latent) and unmeasured factors associated with uncertainty over armed rebel resistance that could elevate the risk of civil war interdependently. Such (unmeasured) factors in my model could be motivations such as grievances or greed which could be reinforced by government repression so that armed rebel challengers, in greater numbers and with more resolve, become increasingly forceful as well as gaining external military support (e.g. Gurr 2000; Regan and Norton 2006; Salehyan et al. 2011; Suzuki and Krause 2012; Walter 2009b).

What does all this mean? A notable interpretation which is supporting H1-4 suggests that an increase in government repression levels is associated with an increased likelihood of civil war, while an increase in armed rebel resistance levels has statistically significant but weak direct effect on civil war (Model 8). At the same time, however, the statistically significant residuals variables could indicate that greater the uncertainty and threat potential for both government side and armed rebel side through prior-militarized interactions the greater risk a state engages in a new civil war (H5 and 6 tested with Model 9). As such it also could suggest, because observers cannot measure the extent or degree of uncertainty for either disputant, what factors increase the likelihood that a state engages in a new civil war (see Lake 2010/2011, Walter 2009a). Thus, as I posited in chapter 3, we see strong hints that leaders’ cognitive perceptions would matter more than the structural conditions which influence the leader’s cognitive boundary (i.e. bounded rationality) (Simon 1957; Lake 2010/2011; Levy 1998).

Arguably, these findings are consistent with what we observed in world today. The vast majority of central authorities maintain relatively well-equipped and trained military organizations with heavy weaponry; if necessary, they are able to deploy a substantial number of
additional security forces (military and police, and sometime pro-government militias) with heavy weaponry into frontlines or battlefields (Butler and Gates 2009; Krause 2010). Weaker governments, however, are unable to maintain or control coherent military organizations and carry out effective military operations despite the high level of military spending (Fearon and Laitin 2003a). Several studies have found that shaky governments’ greater military spending per capita or per income level are highly correlated with the onset of military coups, guerrilla warfare, and, then, civil wars (e.g. Collier et al. 2003; Henderson 2002; Krause and Suzuki 2005a; Thyne 2009). In contrast, given the nature of power asymmetry, armed rebel leaders may be unable to raise additional trained armed combatants and a small number of combatants may be easier for them to hide in rough terrains to resist (levels 1 or 2 above) government offensive military operations via guerrilla tactics (Gleditsch et al. 2012; Krause 2010; Lyall 2009). Further, rebel leaders might expect significant defections of high-ranking commanders and government officers as well as their followers from government security forces during military interactions (Kalyvas 2007). The Libyan Revolution of 2011 and ongoing Syrian civil wars since 2011 as well as the Cuban Revolution of 1958 are the notable examples.

To this point, I have discussed the findings from Table 4.6, Models 7-9. Are all models statistically significant? If so, which model is a better predictor? Is there endogeneity in Model 8? The bottom of the Table 4.6 reports a set of model-fitness statistics. As noted earlier, I conducted a number of sensitivity analyses of my findings for Model 9 and those results with a different data set and a number of different model specifications are reported in the Appendix D (Tables 4.7 and 4.8). First, pseudo $R^2$, which is computed by $1-[\text{final log-likelihood} / \text{initial log-likelihood}]$, tells us about model-fitness and statistical significance for each model. According to the information, all three models are statistically significant and values of pseudo $R^2$ for each
model are 0.173, 0.222, and 0.272, respectively, indicating Model 9 is a somewhat more fitted model than Models 7 and 8. Yet, pseudo $R^2$ is not designed for discriminating among models (Long and Freese 2006; Clarke 2006).

In order to compare the model-fitness, I rely on a likelihood ratio (LR) test, as well as Akaike’s information criterion (AIC) and the Bayesian information criterion (BIC). These additional statistics are necessary because three models are nested by adding additional variables to Model 7 (base model) (Long and Freese 2006; Clarke 2006), albeit with a number of observation changing across models due to missing data. According to the LR test, model 9 is much better than Models 7 and 8 ($\chi^2 = 12.19$, df = 2, $p < 0.01$ between Model 7 and 8, and $\chi^2 = 27.80$, df = 2, $p < 0.01$ between Models 8 and 9). More importantly, this LR test between Models 8 and 9 confirms that there are endogenous (reciprocal) relationships between the government repression level variable and the armed rebel resistance level variable, and hence, treating such endogenous relationship statistically gives us unbiased estimation. To further compare Model 9 with Model 8, I computed the model-fitness information based on Akaike’s information criterion (AIC) and the Bayesian information criterion (BIC) discussed earlier. The AIC value of Model 9 (0.175) is smaller than Model 8 (0.188) and, hence, I could conclude that Model 9 would have better predictive power than Model 8; whereas the BIC value (-21678 for Model 9 > -21767 for Model 8) disagreed with this conclusion (since the larger negative BIC value indicates the model fit better).

Thus, in order to determine the overall predictive performance of all three models in Table 4.6, I utilize the Receiver-Operator Characteristic (ROC) test (Beck, et al. 2004; King and Zeng, 2001, 2006; Ward et al. 2010). The ROC test systematically assesses relative costs of a Type I error (false negatives, missed cases of support) and a Type II error (false positives,
meaning that incorrectly predicted instances of support) and a ROC curve tells us how this tradeoff (between Type I and Type II errors) works for all possible cut-points. In my case, a Type I error is predicting a new civil war onset when one did not occur, whereas a Type II error is predicting no civil war onset when one actually happened.

Figure 4.1 ROC Plot comparison between Models 7-9

Figure 4.1 displays a ROC curve plot which graphs a continuous curve comparing the share of true and false positives from Models 7(dotted line), 8 (dashed line), and 9 (solid line) for a given prediction threshold. The y-axis captures sensitivity, which is the probability of correctly predicting a 1. The x-axis is 1-specificity, which is the probability of correctly predicting a 0. The 45 degree-line (i.e. reference) indicates how a model with no covariates makes the tradeoff between Sensitivity and 1-Specificity. The curved lines (ROC curves) come from covariates reported in Table 4.6. Any point on this line indicates how the probability of correctly predicting
a 1 is traded off against the probability of correctly predicting a 0. A single statistic that conveys this information is the area under the ROC curve. When this area is 1, we are not making any tradeoff between predicting 1s and 0s and the model is correctly predicting everything. This statistic falls as the model becomes worse. According to the ROC test, Model 7 (base model) has 0.82 of ROC value, Model 8 (restricted model) has 0.87 of ROC and Model 9 (unrestricted model) has 0.90 of ROC. The ROC test again suggests that Model 9 has much better predictive power than Models 7 and 8 ($\chi^2 = 14.86$, df = 2, P < 0.01).61

Lastly, one might wonder the extent to which Model 9 including the presumptive uncertainty variables has substantive effects on the predicted probability of a new civil war onset worldwide. To answer this question, I calculate a set of predicted probabilities of a new civil war onset based on the coefficients for Model 9 in the context of the combinations of five government repression levels and five armed rebel resistance levels when all other variables set at their medians.62

Figure 4.2 displays all predicted probabilities in a three-way graph plot. Y-axis is the predicted probabilities of civil war onset (0 to 100 percent), x-axis is each value of government repression level (1-5) and z-axis is each value of armed rebel resistance levels (0-4). On average, the baseline probably of civil war onset is 0.64 percent.

According to Figure 4.2, overall, the likelihood that a civil war emerges is sharply increased when a government imposes either widespread repression (level 4) or unlimited repression (level 5). Moreover, the impact of government repressive strategy on the probability of civil war onset increases (14 percent and 17 percent, respectively) when armed rebels successfully mobilize a large amount of active combatants with more than 10,000 (levels 3 and 4 armed rebel resistance, even if as I found that levels 4 and 5 resistance are relatively rare).
Ongoing violence in Syria since 2011 (chapter 3) and the second Lebanese war of 1975-76 (see chapter 5) are the notable examples.

**Figure 4.2 Predicted Probabilities of a Civil War Onset based on Model 9**

Here one might be concerned about a possible conceptual tautology here because the large number of active armed combatants as an element of effective resistance is necessary for civil war by definition (chapter 2). Yet, they are not sufficient for civil war. As the case of Syria and Lebanon illuminate, numerous uncoordinated and sporadic violent incidents mounting to large numbers of fatalities were observed before either central authority decided to shift its strategy from repression program to full military operations or before rebels adopted all out resistance strategies leading to more than 1000 fatalities. By definition, then, it should be emphasized that the central authority’s full military commitment as a primary conflict actor is a key element to understand paths to civil war.
More interestingly, Figure 4.2 displays that a number of different civil wars would arise in multiple and different circumstances in the context of government repression-armed resistance levels. This finding may bolster the fact that, as I discussed in chapter 1 (Figure 1.4), there would be multiple and different paths toward civil war which are largely influenced by the degree of reciprocal militarized interactions between central authorities and armed rebels. As I theorized in chapter 3, a certain degree of interactions could be generated by different levels of uncertainty that central government leaders and armed rebel leaders perceive through a course of the militarized political confrontations. If my above speculation is reasonable, one should wonder the extent to which different uncertainty levels affect the predicted probability of civil war.

To satisfy the question above in some degree because measuring a precise value of uncertainty is nearly impossible (without valid perceptual indicators), I compute a set of predicted probabilities with a 95 percent confidence interval for government repression levels and for armed rebel resistance levels separately, setting all other variables at medians. Figure 4.3 presents a combined plot of two predicted probabilities of civil war onset.

The left-side of the plot (A) in Figure 4.3 displays the predicted probabilities of civil onset (y-axis) with regard to government repression levels (x-axis) at the armed rebel resistance level 4 (more than 15,000 armed combatants). The solid line in the gray area (the 95 percent confidence interval) depicts a change of predicted probabilities (from nearly 0 to 17 percent) corresponding to each government repression level (from 1 to 5). More importantly, the plot (A) illustrates that, when a government repression level goes up, the difference of the 95 percent confidence interval become much greater and its ranges are between 0 and 33 percent at the government repression level 5, suggesting that there is much greater uncertainty and possibility even in predicting civil war onset.
In contrast, the right-side of the plot (B) in Figure 4.3 depicts the predicted probabilities of civil onset (y-axis) with regard to armed rebel resistance levels (x-axis) at the government repression level 4 (extensive repression using political imprisonment). The solid line in the gray area (the 95 percent confidence interval) denotes a change of predicted probabilities (from 0.2 to 1.6 percent) to corresponding to each armed rebel resistance level (from 0 to 4). This plot reveals that an increase in armed rebel resistance has the very limited effects on the probability of civil war onset even a central government has imposed the relatively serious level 4 repression. More importantly, when the armed resistance level has been increased from 0 to level 4, although the area of the 95 confidence interval is slightly enlarged, the distance of the confidence interval never exceeds 2 percent (between 0 and 1.6 percent) of the predicted probability at the armed resistance level 4. This would be further evidence that there is very slim marginal difference of the uncertainty with regarding to armed rebel resistance levels in predicting civil war onset.
All of these might confirm that unobserved or unmeasured factors might have substantially different influences on conflict escalatory processes from the limited-scale militarized collective action to a full-fledged civil war. One of the most critical elements relevant to unobserved factors would be the roles of external parties who support either central authority side or rebel side (e.g. Melander et al. 2009; Regan 2010; Salehyan et al. 2011; Thyne 2009; Ö burg et al 2009). Yet, as Regan (2010) and Zarman (2001) put it succinctly, previous studies have very little to say about the external influences on conflict dynamic process before a civil war emerges. My statistical findings in this chapter have provided some clues of the roles of uncertainty in predicting civil war onset, but do not explain all internal dynamics during the conflict. In order to investigate the internal dynamics further, I will conduct two case narrative illustrations in chapter 5, which include the role of outside parties. My case narrative analyses will reveal nuances and about internal dynamics in the Second Lebanese civil war and in the Northern Ireland conflict.

4.6 Concluding Remarks

In this chapter, I have presented a set of empirical findings supporting the four extant explanations as well as my theoretical expectations. Specifically, drawing on the information asymmetries explanation (see chapter 3), my study demonstrates that the extant explanations looking primarily at the direct effect of structural conditions would have relatively poor explanatory and predictive power compared with enhanced construct models. This is consistent with what Ward et al. (2010) argued by testing the predicting performance of the two dominant explanations of civil war onset (Fearon and Laitin 2003a; Collier and Hoeffler 2004). Furthermore, my study suggests that civil war might occur under differential conditions
generating varied levels of uncertainty where a central authority and its armed contender(s) are actively seeking to uncover their opponent’s private information about true willingness to resolve and military strength. This insight complements Walter’s (2009a: 203) succinct point that many structural and contextual variables considered in previous research on civil war might be proxies for some sorts of information problems and unobserved factors (e.g. misperception, bounded rationality due to prior-belief, or cognitive differences due to different political decision making mechanism under different institutional settings).

My study also provides a reasonable explanation about why severe government repression is more likely to prolong and intensify conflict than suppress it. According to the information asymmetries explanation, some (e.g. unknown type) central governments are more likely to escalate the level of repression though perhaps not to the highest levels, in order to uncover the ‘true’ (i.e. unknown) strength and willingness of resolve of any armed contenders. Conversely, the information asymmetries explanation also suggests that uninformed armed contenders are also more likely to launch a costly violent campaign, even though these are found to be rare occurrences, because they are uncertain about type of the government that they are facing. As I elaborated in chapter 3(section 3.3), the two-sided incomplete information mechanism—one would say that both actors are guessing one another’s true or expected value from the issue at stake—for more than two uninformed disputants might exacerbate ones private information problems such as misunderstanding one another’s true willingness and misevaluating one another’s military strength. In turn, because the private information problems are unobservable, uninformed disputants may continue to fight. This two-sided mechanism would give a clue to the puzzles of why some governments and some armed rebels have found that continuing to fight is a rational choice.
Lastly, this chapter suggests that future research on civil war needs to nail down a series of factors associated with multi-interdependent strategic decisions by government leaders as well as insurgent leaders (sometimes in different factions) simultaneously (Lichbach 1987; Mason 2004; Moore 1999; Walter 2009a). Contrary to previous research, my study, which tested different levels of repression and armed resistance for government and for rebel respectively, discovers that government repression bears largely direct responsibility for the onset of civil war while armed rebel resistance has very limited direct effects and largely influences interdependently civil war onset through government leaders’ excessive repressive ambition. I also find that some variables identified in the extant civil war literature (Dixon 2009; Hegre and Sambanis 2006; Sambanis 2004a) were statistically insignificant in predicting the onset of civil war when taking government repression into account, while those variables were significant when predicting a certain form of government repression and of armed rebel resistance, respectively. All together, this would suggest that strategic choices by either government leader(s) or rebel leader(s) are the central but unobserved factors likely leading militarized political contests to civil war (e.g. Lichbach 1987; Mason 2004; Moore 1999; Walter 2009a). That is, a central government might deter successfully both less and highly hostile armed resistance, and prevent elevating the militarized interactions to civil war by imposing severe government repression and providing substantive accommodations to armed rebels simultaneously. Conversely, armed challengers would make strategic decisions to challenge or not challenge (compromise) by responding to government’s ‘dual’ strategic choices with unobserved willingness. In future studies, students of civil war research need to pay much attention to the theoretical and empirical issues associated with strategic interactions, rival choices, and unobserved factors.
Notes:

1 Note that there are advanced methodological approaches to dealing with multiple causal paths to examine complex and multi-stage simultaneous equations models (SEMs) (see Beck and Katz 2011; Gelman and Hill 2007; Gelman, et al. 2003; Rabe-Hesketh et al. 2004a). As Braumoeller (2003) and Diehl (2006) have discussed succinctly, however, before applying such advanced methodologies, researchers need to examine and isolate a certain number of necessary factors affecting causal processes toward political events under investigation.

2 Note that Sambanis (2001) applied the similar technique to diagnose the potential endogeneity between economic growth (energy consumption per capita) and political regime predicting a new (ethnic) civil war onset, whereas Young (2012) utilized the same technique to detect the potential non-recursive relationship among dissident activities, government repression, and civil war onset.

3 For helpful guidance to explaining substantive meaning of methodological and technical issues relevant to this chapter, I consulted with lecture notes written by Brad Jones (University of California-Davis), Matt Golder (Penn State University), Richard Williams (University of Notre Dame), and STATA statistical team as well as practical textbooks such as Tarling (2009) and Angrist and Pischke (2009). Of course, any remaining errors and misinterpretations are my own.

4 An updated list is available from http://www.correlatesofwar.org/. Note that the Correlates of War project considers an ‘independent state’ when a ‘geo-political’ unit has minimum 500,000 inhabitants and receives diplomatic missions from two major powers and the United Nations (see Sarkees and Wayman 2010). For a criticism to the CoW coding of ‘independent state,’ see Gleditsch and Ward (1999). It also should be noted that the UCDP’s and PRIO’s data collection projects have been relied on Gleditsch-Ward’s (a.k.a. GW) list of independent states. Others such as the PITF (Marshall et al. 2010), Polity IV (Marshall and Jaggers 2004), the Global Terrorism
Database (LaFree and Dugan 2007), Banks (nd), the World Bank (nd), and the United Nations have employed own country or state identifiers differed from the CoW and the GW.

Note that a large number of recent researchers have relied on the ethnic minority group-level analysis (e.g. Toft 2003; Walter 2009b) or the government-(ethnic) rebel dyad analysis (e.g. Cunningham et al. 2009; Cederman et al. 2010; Wucherpfenning et al. 2012). Thus, though these recent findings are important, they are not directly comparable with my findings presented below.

As for selection bias for dependent variable, King et al. (1994: 124) noted; “We avoid selection bias in large-n studies if observations are randomly selected, because a random rule is uncorrelated with all possible explanatory or dependent variable” and “Randomness is powerful approach because it provides a selection procedure that is automatically uncorrelated with all variables.” Random selection in this context implies that “every potential unit has an equal probability of selection into our sample and successive choices are independent.”

See Appendix B for a complete list of civil wars used in this study. To compile the final list, I benefited valuable research assistances from Bernadette Rybak, Paul Glenn Stefanou, and Nina Fawaz through the internship program and the institutional support from Professor Fred Pearson and the Center for Peace and Conflict Studies at Wayne State University. Of course, all remaining errors and mistakes are my own.

See Hendrix (2010) and Soifer (2008) on issues related to conceptualization and measurement of state capacity.

Young (2009, 2012), for example, considered the RPC score as a variable for popular support to government instead of repressive capacity during repression and civil war.

For example, Hultman (2012a, b) and LaFree et al. (2009, 2012) examined the effectiveness of government’s military offensives and counter-insurgency strategy in a single country study using
monthly-level aggregated data. However, assessing the effectiveness of counterinsurgency policy is problematic due to multiple factors influencing the expected outcomes.

11 The updated data are available from [http://www.politicalterrorscale.org/](http://www.politicalterrorscale.org/). It should be noted that a growing number of scholars tend to substitute the PTS for Cingrælî-Richard’s measure of empowerment rights in order to check robustness of the findings across the different datasets, while there are significant coding differences between two projects (see Wood and Gibney 2010).

12 For a comparison of the onset and prevalence between revolutionary wars and ethnic ones, see Sambanis (2001) and Suzuki (2007).

13 See Esteban and Ray (2008) and Wimmer et al. (2009) on a critical view toward previous conventional approaches to measuring ethnic composition.

14 A handful of alternative datasets relevant to my study become available now. The first candidate is Cederman et al. (2010) that generate a new dataset, namely Ethnic Power Relations (EPR) data, which identify all politically relevant ethnic groups and record the level of access to state power worldwide. The second is Cunningham et al. (2009, see also Gleditsch et al. 2012) which compile information of non-state armed actors (NSA) in violent conflicts identified by the ACD internal armed conflict data. The third is ACD2EPR data (Wucherpfenning et al. 2012) which combined the NSA data (Cunningham et al. 2009) with the EPR data (Cederman et al. 2010). These alternatives, however, are insufficient for my analysis of interests due to lacking time-varying values of armed resistance levels in any given state-year.

15 Similar to government repression variable, I also created five dummy variables for each category and tested non-monotonic relationship using binary decomposition technique. For a brief discussion of binary decomposition approach, see Wooldridge (2002).
On bounded rationality, see Simon (1957) and Jones (1999). See Levy (1998) and Lake (2010/11) for a number of implications from psychological and cognitive theory to interstate conflict research.

Bapat’s (2005) conceptualization of uncertainty is based on Bueno de Mesquita (Bueno de Mesquita 1981, 2006; Bueno de Mesquita and Lalman 1992) who defined it as “the condition under which the probability of an event or condition is unknown.”

See Walter (2009a, b).

Besides Slantchev (2005), it is noteworthy that Merirowitz and Sartori (2008) also present a similar and advanced argument on a two-sided strategic uncertainty as a cause of interstate war with formal proofs. Note that neither work has provided any specific operational indicator of a two-sided strategic uncertainty.

Alvarez and Glasgow (1999: 156) describe the three factors accounting voter uncertainty of the candidate’s policy positions are (1) their personal information costs, (2) their exposure to information, and (3) the flow of information during the campaign. First, if it is more costly for a voter to obtain, personal information and others, he/she should be more uncertain about the candidate’s position. Second, the less exposed to information and the less attentive and interested the voter is, the greater his/her uncertainty about the position of the candidate. Third, the greater the amount of information available about the candidates, the less the uncertainty a voter will have regarding the positions of the candidates. These three different factors are expected to have strongly influenced to the voter uncertainty.

My theoretical rationale for the inclusion of certain variables in the ordered logit and OLS models are based on the recent state-level research on the cause of government repression (see Poe et al. 1999; Davenport 2000, 2007a; Young 2009, 2012; Carey 2010).
My theoretical rationale for the inclusion of certain variables in the ordered logit and OLS regression models is based on the recent state-level research on the cause of ethno-nationalist civil war and ethnic war (see Regan and Norton 2005; Jakobsen and de Soysa 2009; Wimmer et al. 2009).

As other scholars suggested, an alternative measure of uncertainty would concern the types of political institutions in the states. They argue that different political institutional configurations (e.g. presidentialism vs. parliamantalism; civilian dictator vs. military dictator) would generate some ‘uncertainty’ about their certain foreign and domestic policy decisions under different conditions due to facing different types of domestic audiences (e.g. Bueno de Mesquita et al. 2003; Cheibub et al. 2010). However, as discussed in chapter 3, uncertainty through different types of political institutional configurations is very difficult to measure. It is because a certain value of uncertainty may be a function of the size of minimum winning coalition for ruling elites (Bueno de Mesquita et al. 2003) or the probability of the leadership turnover or leader job insecurity (Young 2009, 2012) within certain political institutional settings. For instance, in the long Sri Lankan civil war, the Sri Lankan government changed on occasions through elections, with evidently more or less publicly stated resolve to seek negotiations or fight. This made for some overt signals of intent but uncertainties remained about how long the government would/could sustain its intention. See Senaratne (1997) and Nadarajah and Sriskandarajah (2005) for the history of political violence and domestic politics in Sri Lanka and Rotberg (19989) and Höglund and Svensson (2003) for peace process in Sri Lanka). Further different leaders in democracy or autocracy might signal different levels of uncertainty to armed opponents (e.g. Goemans and Fery 2009) and uninformed opponents’ perceive of central authority’s strength may be a function of opponent’s leadership itself or organizational structure (e.g. Findley and
Rudloff 2012). Because of these shortcomings and additional considerations, I do not consider political institutions as proxies of uncertainty in the present study.

The selection of my control variables are based on a parsimonious approach (e.g. Allison 1999; Angrist and Pischke 2009; Barry and Feldman 1985). It should be noted that there are considerable debates over what we should control for and how many control variables should include for avoiding omitted variable bias among political methodologists (Achen 2005; Clarke 2005, 2009; Hegre and Sambanis 2006; King et al. 1994). Here drawing on Achen’s (2005) suggestions to avoid estimating endless ‘Garbage-Can’ regression models which includes all ‘potentially relevant’ variables in the right-hand equation of a single multiple regression model, I included a handful of selected variables in my analysis in order to compare my statistical results with the extant findings such as Fearon and Laitin (2003a) as the base model. Evaluating which variables are necessary or sufficient conditions for predicting civil war onset is beyond the score of the present study (Ward et al. 2009). See Braumoeller (2003), Braumoeller and Goertz (2000), Franzese (2007) for an excellent discussion of complex causality and its modeling.

A number of researchers tend to substitute Polity IV scale for the Freedom House’s Freedom Index (FHI) as a democracy index ranged from 1 (no freedom) to 7 (full freedom) based on expert assessments (for the FHI methodology, see http://www.freedomhouse.org/report-types/freedom-world). Yet, a growing number of recent comparativists have pointed to the problems of Freedom House index’s conceptualization, measurement, and aggregation (e.g. Borggards 2010; Greeing 2012; Cheibub et al. 2010).

Vreeland (2008) presented the notable criticism to problematic coding scheme using the Polity scale for the periods in which there is a complete collapse of central political authority or regime transition (-88), foreign interruption (-66) and interregnum (-77). See Gleditsch and Ruggeri

27 See Fearon (2003), Esteban and Ray (2008), Krause and Suzuki (2005b), and Sambanis (2001, 2004a) for a comparison of a number of different measures of ethnic or religious or societal fractionalization and ethnic polarization such as Vanhanen’s (1999) ethnic heterogeneity index (EHI) and Taylor and Hudon’s (1972) ethnolinguistic fractionalization (ELF) index. For a debate over politically relevant ethnic groups, see Cederman et al. (2009) and Fearon et al. (2009).

28 As Ross (2006) pointed out, causality of the roles of lootable national resources in the cause of conflicts are highly debatable (see Fearon and Laitin 2003a and Collier and Hoeffler 2004). For an overview, see Ross (2004, 2006) and Humphreys (2005). For the new measure of different types of national resources, see de Soysa and Neumayer (2007) and Buhaug, Gates, and Lujala (2009).


Note that there are no multicollinearity problems—one explanatory variable perfectly predicts one or more remaining explanatory variables—among all variables including in my statistical analyses. To test multicollinearity, I compute Variance Inflation Factor (VIF) values for every variable in the right-hand equation after estimating each model. As Allison (1999) suggests, analysts should be concerned about multicollinearity if VIF value is above 2.5 (which is equivalent to a tolerance of 0.40). Tolerance can be calculated as 1-\(R^2\) after estimating a regression model. Concerning multicollinearity test for probit/logit estimation, Menard (2002:76) notes, “Because the concern is with the relationship among the independent variables, the functional form of the model for the dependent variable is irrelevant to the estimation of collinearity.” Hence, I compute VIFs from an OLS model by re-estimating a logit model that I report in this chapter.

Although probit and logistic regression models are developed on different transformation assumptions, the two models are virtually indistinguishable and invariable results in the same inferences (e.g. Long 1997; Menard 2002). Indeed, the coefficients from a probit model will be different to those from a logit model because the transformation from the coefficient to a probability in probit is different from the equivalent transformation in logit; yet logit and probit will produce similar predicted probabilities.

This procedure is called a binary decomposition approach (e.g. Kennedy 2003; Wooldridge 2003). Some relevant applications can be seen in Davenport and Armstrong (2004) which examine the monotonic and different impacts of each Polity II democracy score (from +6 to +10) on the level of the violations of human rights records in each country and Davenport (2007b) for dictatorship and autocratic regimes. See also Bueno de Mesquita et al. (2005) for a different approach to examining the relationship between democracy and state’s human rights records.
OLS can be seen as a maximum likelihood estimation under certain conditions (i.e. the error term is normally distributed). This is another reason why OLS is still used to estimate regression model (Allison 1999; Menard 2002).

See Long (1997; Long and Freese 2006) for the technical discussion to calculate a value of the AIC and BIC statistics after estimating models. Interpreting values of the AIC and BIC is such that the smaller value of the AIC and the more negative value of the BIC indicate that the model fit better than alternatives (Long and Freese 2006: 112-113).

Issues of endogeneity (e.g. reciprocal relations between government repression and ethnic violence as well as civil war in my study) are serious problems in order to make causal inference from a statistical model (see King et al. 1994:185-196). Because of threat of endogeneity, some researchers have omitted endogenous variables from the right-hand equation and, therefore, faced other problems, namely omitted variable problems, to make causal inference from the statistical model. Hence, proper methodological treatments are required. As Hegre and Sambanis (2006) noted explicitly, the vast majority of the extant civil war research have suffered from a variety of untreated endogeneity problems including endogenous (triangulated) relations among civil war, poor economic performance, and democratic institution, and among military regime, high military spending, and civil war (see Collier et al. 2003; Krause and Suzuki 2005a; Sambanis 2001).

I thank Mike Alvarez (California Tech), Garrett Glasgow (University of California-Santa Barbara), Volker Krause (Eastern Michigan University), Joe Young (American University), and Durson Pekson (University of Memphis) for corresponding with me on estimating a 2SCML in STATA. An alternative to the 2SCML is a two-stage probit least squares (2SPLS) modeling originally developed by Maddala (1983) and more practically implemented with CDSIMEQ.
command in STATA (Keshk 2003). Note that the 2SPLS procedure has been applied to studies of endogenous relationship between trade and conflict (Keshk, Pollins and Reuveny 2004), and democracy and conflict (Reuveny and Li 2003) as well as civil war and state capacity (Thies 2010).

39A similar procedure has been implemented by Krause (2004), Sambanis (2001), and Young (2012) and recommended by Garrett Glasgow (University of California-Santa Barbara) in personal communication. As noted earlier, an alternative is to estimate a two-stage probit least squares (2SPLS) model with CDSIMEQ command available in STATA (Keshk 2003). However, estimating a 2SPLS estimation is complicated in my case because my study is more than two endogenous variables (a personal communication with Omar Keshk of Ohio State University). Of course, an alternative is to estimate two 2SPLS models and compare the results.

40A few technical notes are necessary. A hazard rate (i.e. risk ratio) is not a number of counted time, but it is the baseline hazard $h_0(t)$ which is the probability of experiencing an event (e.g. civil war) at time $t_i$ given survival to time $t_i$ (e.g. next civil war) when all the independent variables are zero. In effect, it captures the hazard rate with respect to time only (Beck et al. 1998; Beck 2001).

41There are two alternatives. The first is to estimated the civil war onset model using generalized equation estimation (GEE) with logit link and first-order autoregressive-error process (i.e. AR1) (Zorn 2001a, 2005). The second is a new approach to interpreting temporal effects substantively proposed by Carter and Signorino (2010). For a good summary of how researchers should treat temporal dependence in TSCS model, see Beck (2001, 2010), Beck, and Katz (2011).

42For a good introduction of modeling issues related to fixed effects (FE) and random effects (RE) model, respectively, see Kennedy (2003) and Woodridge (2002, 2003). Note that Collier
and Hoeffler (2004), for example, used a complete 5-year pooled panel data in civil war research, while Fearon and Laitin (2003a) and Fearon (2005) pointed out the sensitivity of such a complete pooling approach in civil war due to larger number of missing data and rare events of civil war onset. See the supplement and additional findings for Fearon and Laitin (2003b) and Sambanis (2004b).

43 In practice, I estimate a logistic regression with fixed effects (fe command) and a logistic regression with random effects (re command), separately, in STATA. This procedure was also employed in Sambanis (2001, 2004a) and Wimmer et al. (2009) for checking robustness of their findings of civil war onset.

44 This is a routine procedure in recent civil war research (e.g. Sambanis 2001, 2004a; Wimmer et al. 2009).

45 My theoretical rationale for the inclusion of certain control variables in the ordered probit and OLS models is consistent with the literature (Poe et al. 1999; Davenport 2000; Young 2009, 2012; Carey 2010). To test multicollinearity, I compute Variance Inflation Factor (VIF) values after estimating the OLS estimation. All VIFs are between 1.05 (the lowest value is for interstate war involvement) and 2.34 (the highest value is for democracy) and are below 2.5 threshold (Allison 1999), suggesting that there is no multicollinearity problem among variables in my model.

46 If I include the one-year lagged explanatory variable for all countries in my dataset, it will drop out at least 100 available cases for armed rebel resistance level in the first state-year observation because of no observation prior to the first data point, and several dozens of cases due to missing data or no information for specific state-year. Methodologically, interpreting the
coefficients of the lagged ordered explanatory variable is problematic and complicated, especially predicting for an ordered outcome variable.

47 See Long and Freese (2006: 112-113) for a brief technical discussion of how to interpret the AIC and BIC statistics.

48 To compute a set of predicted probabilities, I used the Clarify 2.1 program in STATA (King et al. 2000; Tomz et al. 2003) as well as mfx2 utility in STATA (Williams 2007).

49 One might be interested in some dynamic temporal effects on prospective future in a forecasting setting. Although both a dynamic and forecasting modeling for ordered variables are useful (see Goldstone et al. 2010), it has been left out from the present study due to my theoretical focus in this study and various considerable limitations with regard to available state-year aggregated data and modeling issues (e.g. Beck and Katz 2011).

50 My theoretical rationale for the inclusion of certain control variables in the ordered logit and OLS models is based on the recent literature on ethno-nationalist civil war and ethnic war onset. To check multicollinearity, I computed Variance Inflation Factor (VIF) values for every variable after estimating the OLS estimation. All VIFs between 1.05 (the lowest value is for interstate war involvement) and 2.35 (the highest value is for democracy) were below 2.5, suggesting that there is no multicollinearity problem in my model.

51 See Long and Freese (2006: 112-113) for a brief technical discussion of how to interpret the AIC and BIC statistics.

52 I examine the extent to how semi-democratic governments influence the likelihood of a greater armed rebel resistance level by replicating Models 4 (ordered logit) and 6 (OLS) by substituting the semi-democracy variable as coded 1 if an independent state is classified in the range from -6 to +6 within Polity IV scale. -88 (a complete collapse of central political authority or periods of
regime transition), -66( foreign interruption) and (-77) interregnum are omitted from observations (Vreeland 2008); the military regime variable is coded 1 if an independent state classified as military regime in Geddis (1999) for the democracy and autocracy variables. The results reveal that, as suspected, states under semi-democratic rules are more likely to experience much severe armed rebel resistance, while the military regime variable is negative and statistically insignificant. After estimating the model replacing the democracy (dummy) and autocracy (dummy) variables for the semi-democracy (dummy) and military regime (dummy) variables, I also computed VIF values of every variable within the model and detected that there is no multicollinearity problem. Note that a handful of recent scholarly studies (e.g. Bueno de Mesquita et al. 2003; Cheibub et al. 2010; Fjelde 2012; and Goldstone et al. 2010) have examined the patterns between different types of political institutional configurations beyond the democracy-autocracy dichotomy and armed rebel resistance or state failure. Note that this underlining causal mechanism deserves for further investigation.

53 To compute a set of predicted probabilities, I used the Clarify 2.1 program in STATA (King et al. 2000; Tomz et al. 2003) as well as the mfx2 utility in STATA (Williams 2007).

54 Statistically, one would examine the reciprocal relationships among ordered endogenous variables by estimating a seeming unrelated ordered logit/probit estimation (a.k.a. bioprobit in STATA, see Sajaja 2008); yet before conducting such a complex estimation, one would be required to develop better proxy indicators of two endogenous ordered variables (e.g. Suzuki and Krause 2011). See Greene and Hensher (2010) and Rabe-Hesketh et al. (2004a) for much detailed discussion of modeling issues and interpretation.

55 Because one might be concerned about sensitiveness of my findings with different data, I also estimated models 7-9 by substituting the ACD/UCDP data on internal war (1,000 battle-deaths in
a given year) for the CoW civil war data. The main findings remain no different, while some coefficients are changed (see the Appendix D, Table 4.7).

56 Two notable differences from the extant findings are the omissions of the new state variable and the prior-civil war year variable from the estimation due to collinearity. It is because these two variables are correlated with anti-colonial wars and post-colonial wars—known as extra-state wars, which are excluded from my study. The Correlates of War Project (Sarkees and Wayman 2010) defines extra-state war as an armed combat between the external occupied forces (e.g. England and France) and local inhabitants (e.g. Algeria, Cameroon, and Malaysia). Another potential problem is the presence of missing data. Although there are several different strategies to deal with missing data systematically (e.g. Honaker and King 2010), I did not fill missing data with zero and other forms because it may induce additional artificialities and measurement errors of data manipulation in categorical data (Fearon and Laitin 2003b; Sambanis 2004a, b; Young 2012).

57 Underpinning causal mechanisms of these issues would deserve further investigation, while it is beyond the scope of this study. See Colgan (2012), Gandhi and Przeworski (2007), and Bueno de Mesquita and Smith (2009) for recent work.

58 See Harbst (2004) and Reno (2012) for an excellent discussion of the roles of the military in the cause and prevalence of civil wars in Sub-Saharan Africa.

59 An alternative approach is called a ‘random narrative’ method proposed by Fearon and Latin (2008). Random narrative approach is a method of case narrative analysis selecting a set of positive cases and negative cases based on a statistical analysis. A similar approach is called ‘analytic narratives’ discussed by Bates et al. (1998).
The following discussion for interpreting the ROC graph is drawn largely from Matt Golder’s (Penn State University) lecture notes on ‘Binary Response Models’ (24-25).

I computed ROC value using lroc utility in STATA. For a detailed discussion of an application of ROC curves to distinguish between models, see King and Zeng (2001, 2006) and Ward et al. (2010). For the technical notes for comparing three ROC curves in a single graph plot, see Cleves (2002).

To compute a set of predicted probabilities, I used the Clarify 2.1 program in STATA (King et al. 2000; Tomz et al. 2003) as well as prvalue utility in Spost in STATA (Long and Freese 2006).
“Before 1975, Lebanon had few of the attributes of a real nation, but at least its innumerable factions contrived a degree of mutual toleration. That comity has completely disintegrated. There is no Lebanon” (Brogan 1990: 306).

“. . .almost 20 years of terrorism have reinforced Protestant determination to have nothing to do with the Republic, and there can be no doubt at all that a British withdrawal would be followed by a civil war—which the Protestants would win” (Brogan 1990: 382).

5.1 Introduction

Chapter 4 has demonstrated that the two-sided uncertainty mechanism helps us to explain the dynamics of the escalation from lower-level militarized political confrontations to full-fledged civil war. The large-n research and empirical findings, however, give us very little about how uncertainty with regard to government repression and armed rebel resistance levels influences the escalation (no escalation) to civil war and how and which internal conflict dynamics brew full-scale civil war.

The goals of this chapter are twofold. First, this chapter looks below the surface of large-n statistical findings by exploring two contrasted outcomes using case narrative analysis. Cases selected for illustration should have a number of similar profiles while at the same time providing a range of values (e.g. yes or no, presence or absence) for the main explanatory variables of interest (e.g. Collier et al. 2012; George and Bennett 2005; Gerring 2007). In this
chapter, two contrasted outcomes are (1) conflict escalation to civil war and (2) no-conflict escalation while at the same time sustaining armed violent struggles through the conflict duration.

The second objective is to depict a number of critical interdependent phases in internal conflict process before a civil war erupts, which the large-n statistical analysis sidesteps due to lack of precise and appropriate actor-based-event-data on reciprocal interactions during the militarized conflict in state-year aggregated datasets (e.g. Gurr 2000; Mason 2004; Moore 1998; Shellman 2006; Walter 2009b). As discussed in chapters 3 and 4, the primary explanatory variables are (a) government repression and its attendant uncertainty levels and (b) armed rebel resistance and its attendant uncertainty levels. These levels will be determined through the accounts of multiple qualitative narratives for primary ‘armed’ actors during the conflict that accompany the Uppsala Conflict Data Program’s *Conflict Encyclopedia* (UCDP 2012), the *Non-State-Armed Actor (NSA) Data* (Gleditsch et al. 2012), *Terrorist Organizations Profile of the Global Terrorism Database* (GTD 2012), and various other conflict-case narratives and non-state armed actor archives.²

The case illustration below primarily examines the emergence or entry of armed actors “recognized” by their opponent(s) as a focal point of the analysis.³ This narrow attention directs analytical focus on specific critical phase(s) as the entry of new-armed agent(s) into strategic interactions during armed confrontations. This particularly helps to determine (1) the central authority’s willingness to resolve before and during fighting and (2) its levels of uncertainty over primary opponent’s military strength as well as willingness to resolve without looking into complexity and often unknown decision-making process in every primary ‘armed’ organization during each conflict (e.g. Krause 2010; Kydd and Walter 2002, 2006; Walter 2009a). The following analysis assumes that any emergence/involvement of new ‘recognized’ conflict
agent(s) influences government or group leaders’ decision-making framework and strategic-decision calculus as well as prior-information structure of bargaining-leverages and costs from fighting (e.g. Filson and Warner 2002; Mason 2004; Powell 2004; Slantchev 2003, 2005; Walter 2009a).

In the next section, I will elaborate case selection issues and set an analytical framework for a case comparison. Then, I will present narratives with a brief conflict phase analysis for a civil war case and a sub-civil war case, separately. In the end, I conclude this chapter with a brief comparison of the two cases. Exploring two contrasted cases comparatively can provide illustrative nuances to add the quantitative results of chapter 4 and to add better understanding distinctive phases of conflict escalation processes, which can then be followed up with revised theoretical prediction and hypothesis testing in future empirical analyses with new data collection.

5.2 Case Selection and Analytical Framework

As Gerring (2007) discusses in detail, case selection in small n-research is crucially important; however random and convenient case selection in small samples tends to produce descriptive inference bias for the causal relationship (King et al. 1994). This chapter utilizes a typological analysis in order to explore similarities and differences of the patterns of internal conflict dynamics, including the variables identified as important in chapter 4, from small-scale inter-communal violence to full-fledged militarized political confrontations breeding civil war. A typological analysis helps to “specify the pathways through which particular types relate to specific outcomes” of interest (George and Bennett 2005: 235). To facilitate my conflict narrative analysis below, I employ a deviant case analysis with two contested outcomes as the
primary dependent variable (Collier et al. 2012; George and Bennett 2005; Gerring 2007). The first case narrative analysis deals with the Lebanese civil war of 1975-76 (see comment on dating below) and the second case analysis looks into the Northern Ireland conflict, which remained below the generally established level of ‘civil war,’ between 1970 and 1998.

The second Lebanese civil war evolved in the mid-1975 (the first had been exploded in 1958) is considered as a matching case. Throughout early 1970s, street-level inter-communal violence in Beirut and elsewhere boiled over into the militarized collective violence among religiously/ethnically divided multiple political and armed factions (e.g. the Lebanese Front and the Lebanese National Movement) within Lebanese society, and then, those militarized political confrontations converged into a full-fledged civil war (Brogan 1990; Makdisi and Sadaka 2005; O’Balance 1998; UCDP 2012). Before and during this Lebanese civil war, issues related to the massive influx of Palestinian refugees largely from Israel and Jordan between the 1948 Arab-Israeli war and the 1970 ‘Black September’ hostilities in Jordan over several years and their radicalized paramilitaries bolstered inter-communal violence between Palestinian refugees (mainly Sunnis) and Lebanese’s Christians and Shiites across local communities. Indeed, by early 1974, “Lebanon increasingly developed into a battleground between foreigners, most notably the Palestinians and the Israelis” who interested attempting to control them (Brogan 1990: 308). Thus, the PLO during the Lebanese civil war has been explained as the roles of politicized refugees and their diaspora in the cause and duration of internal conflict in host countries (e.g. Salehyan and Gleditsch 2006). Yet, this chapter treats the Palestinian issues as a single domestic political agenda exacerbating the power struggles among political factions, which so deeply rooted in Lebanese politics since the end of the first Lebanese war of 1958, if
not indeed since the founding of the republic in the 1943 (Brogan 1990; Collelo 1987; Makdisi and Sadaka 2005; O’Balance 1998; UCDP 2012).

The Northern Ireland conflict reemerged in 1970 with the beginning of a new series of violence orchestrated by the Provisional Irish Republican Army (PIRA) after a period of domestic political turmoil and inter-communal violence in the region between 1963 and 1969, and is considered as a contrasted case which represented a long but for the most part not particularly intense conflict relative to most of the civil wars (e.g. Brogan 1990; English 2003; O’Leary 2007; UCDP 2012; Woodwell 2005). Nevertheless, “Even though the violence did not rise to the level of most civil wars, it still represents an anomaly in that it occurred” within an economically highly developed and politically highly institutionalized country (Woodwell 2005: 161). This chapter considers the Northern Ireland conflict as a multi-layered militarized political confrontation: (a) between the British-central and local authorities and the Provisional IRA and other republican paramilitary groups and (b) among religiously divided multiple political and armed factions including republican paramilitaries (e.g. Provisional IRA) as well as protestant or ‘unionist’ paramilitaries (e.g. the Ulster Volunteer Force) in the region. As the case narrative bellow will illuminate, despite the continuity of the IRA’s irredentist and nationalist desires (i.e. Irish reunion), the central command of the IRA largely failed to develop fully the two important features—universalality and militarism— for successful armed resistances (e.g. Krause 2010; Mason 2004). In particular, the PIRA leaders were unable to convince the vast majority of ordinary Irish Catholics who had refrained from the PIRA’s militarism after it failed to implement the 1973 Sunningdale Agreement including ceasefire and political power-sharing arrangements (English 2003; Kenny 2010; Woodwell 2005). Indeed, the Catholic voluntary membership of and its moral support to the PIRA dramatically declined in 1975 (English 2003;
Kenny 2010; Woodwell 2005). Looking into emergence of new armed agents as spoilers or veto players into different interdependent phases of the multilayered conflict, the following analysis uncovers a number of important lessons to understanding the persistent conflict dynamics despite a number of peace initiatives before a Good Friday/Belfast Agreement in 1998 (e.g. Coogan 2002 b; English 2003; Woodwell 2005).

Thus, the Lebanese civil war was largely a revolutionary conflict over control of the central government, albeit among rival religious- and clan-based militias. On the contrary, the Northern Ireland conflict represented the alternative form of domestic political struggles over an irredentist goal to establish a united nation in addition to political and economic status change by a marginalized ethno-religious group and inter-communal armed violence among rival paramilitaries. These two forms are typical of the internal armed conflicts and struggles witnessed most often in world politics and hence are useful modes for case comparison (see chapter 2).

More broadly, analyzing a deviant (e.g. no conflict escalation) case in addition to a matching (i.e. conflict escalation) case will be important for at least two additional reasons. First, the large-n statistical study in chapter 4 encompasses the 84 civil war onsets in over 100 independent states between 1976 and 2000 (Sarkess and Wayman 2012a) with a baseline probability of civil war onset of less than 1 percent (0.64 percent). Despite prevalence of internal armed conflicts between domestic armed actors since 1946, civil war onsets remain very rare events (see chapter 1). Thus, examining both the matching and deviant cases permits me to elaborate better explanations of why and how some militarized ‘political’ confrontations evolve into full-fledged civil war while other similar cases do not, albeit given somewhat artificial distinctions in the literature of whether and when it is a civil war or not (see chapter 2).
Second, using case narratives overcomes some impasses such as unobserved (latent) factors in the statistical analysis. In particular, this illuminates the extent of which unobserved (latent) factors influence the variance in the probability that a civil war erupts or constrains conflict escalation while at the same time sustaining the militarized political confrontations over many years. In line with the statistical analysis in chapter 4, the key measured (observed) variables being evaluated are government repression levels and armed rebel resistance levels. As noted in chapters 3 and 4, because of the use of annually aggregated event-based data, large-n analyses have been constrained to treat a central authority or an armed rebel group as unitary agents (i.e. single-decision-makers) who must always choose one of two options—action or inaction—in each conflict process. In many instances, however, these aggregations and unitary actor assumptions mask or understate a variety of important actors bolstering or transforming the internal dynamics in each conflict phase. In several cases discussed in section 3.1 of chapter 3, there were more than two active conflict parties who significantly shaped the diverse conflict outcomes—i.e. escalation, non-escalation with persistence, or termination. In the 2010 political turmoil in Thailand (see section 3.1), for example, both the central state agents—prime minister, cabinet members, political parties, and the army as well as police—and the semi-armed and non-armed demonstrators represented diverse interest groups and political elites affiliated (loosely and tightly) with various political factions in Thailand. Furthermore, recent empirical studies also have brought significant attention to fragmentation in armed rebel groups fostering prolonged and intensified armed conflicts (e.g. Cunningham 2006; Cunningham et al. 2009; Findley and Rudloff 2012). Others have pointed to the policy ineffectiveness and fragmentation within multiple government agents including pro-government militias (e.g. Baltman and Miguel 2010; Carey, Mitchell, and Lowe 2013; Herbst 2004; Michell 2009). As illustrated below, the
case of intensifying militarized political confrontations in Lebanon during the 1975-1976 period provides examples of the complexity of such effects of fragmentations because of a fragile coalition of Lebanese opposition forces aligned with the Palestinian Liberation Organization (PLO) as well as the central government allied with the Lebanese Front (O’Balance 1998; UCDP 2012). The case of the Northern Ireland conflict demonstrates a deviant case of the effects of the armed opposition’s fragmentations such as emerging the Provisional IRA and the Real IRA in maintaining its effective armed resistance (Kenny 2010; UCDP 2012).

All of these issues are below the surface of observed (measured) variables and reinforce the roles of different decision-makers or diverse inputs associated with government repression levels and armed rebel resistance levels, directly and indirectly (e.g. Gurr 2000; Mason 2004; Shellman 2006; Walter 2009b). Keep in mind that, as seen in chapter 4, the substantive effects of armed rebel resistance levels on government repression levels and on civil war onset are relatively weak. It might suggest that rebel armed resistance levels are largely constrained by not only rebels’ own organizational and networking capacity but also central authority’s repressive capacity and willingness to resolve peacefully (Cunningham et al. 2009; Krause 2010; Mason 2004; Salehyan et al. 2011; Staniland 2012; Weinstein 2007; Walter 2009b). Thus, the organizational and contextual constraints of armed rebel resistance may be obvious. However each conflict phase is delineated sharply by a number of distinctive intra-group dynamics such as factional emergence, splintering or veto players, and/or leadership change due to assassination or death within each primary conflict agent in the course of each conflict (Cunningham 2006; Gurr 2000; Krause 2010; Mason 2004; Walter 2009b). Given the nature of persisting or escalating government repression and lacking battlefield and decision process of each actor before and during civil war, the conflict narrative analysis below will focus predominantly on the entry or
reentry (e.g. splintering/allying) of armed rebels as an analytical focal point and factor in uncertainty for the progression (or not) to a next phase.

5.3 Positive Case Illustration

I turn to a case illustration of the second Lebanese war in 1975, which emerged through a series of inter-communal violence and militarized political confrontations among militias affiliated with political factions, including government factions, over the years (UCDP 2012). Before moving to the case illustration itself, it should be noted that my case analysis ended in October 1976 when the Riyadh Agreement — a ceasefire deal including the initiation of a comprehensive peace plan that legitimated Syria’s presence as the Arab Deterrent Force (ADF) in Lebanon — was signed in Saudi Arabia, with the Arab League’s mediation; others consider that the second Lebanese war continued until October 1990 due to continuity of issues at stake (e.g. Makdisi and Sadaka 2005; Sambanis 2004d; UCDP 2012). As a number of historical analysts have pointed out, the agreements of 1976 constituted a crucial turning point in Lebanese politics and in subsequent conflicts such as Israel’s 1982 invasion and the rise of Shiite militancy with the legitimatized Syrian Army’s presence and Palestinian organizations’ presence as primary political actors in Lebanon thereafter (e.g. Makdisi and Sadaka 2005; Nasr 2006; O’Balance1998).

The initial tit-for-tat violence before the eruption of a civil war was sparked through a number of inter-communal clashes between members of the Kataeb (known as a militia affiliated with the Phalange Party led by Pierre Gemayel’s Maronite Christian right-wing organization) and Palestinian refugee groups in the Beirut suburb of Ain al Rammaneh in April 1975. The communal violence linked to militarized political confrontations among paramilitaries affiliated
with various political factions in the Lebanese political arena. These skirmishes then evolved into a full-scale civil war in September 1975 when violent clashes broke out against the government forces in multiple cities such as Zghorta and Tripoli. The militarized conflict in September spread across the entire Lebanese territory and continued for a year and a half, wrecking devastation on Beirut and other parts of the country. The Riyadh Peace Conference in October 1976 produced a peace agreement, although it did not resolve any primary issues of political, economic, and societal disagreements among political factions and ethno-religious sects, which were to persist. During the 19 month-period, an unofficial estimate reports that the civil war caused over 44,000 deaths with 180,000 wounded, and 600,000-900,000 civilians fled from their homes (Makdisi and Sadaka 2005; UCDP 2012).

In order to understand the internal dynamics and conflict phases in the second Lebanese war, it should be noted that at least three layered violent conflicts were simultaneously underway: (1) a civil war over government control between a Maronite dominated pro-Western government on one side and loosely allied multiple armed militias affiliated with various political leftist (i.e. socialist and communist) groups, some financially and logistically supported by the Soviet Union under the Cold War, and the Arab-nationalist movement and the Palestinian Liberation Organization (PLO); (2) inter-communal violence between Christians and Sunni Muslims, as well as; (3) local political confrontations including Shi’a Muslims due to growing issues and societal concerns over the massive influx of Palestinian refugees in several Lebanese cities (e.g. Brogan 1990; Makdisi and Sadaka 2005; O’Balance 1998).

Because of the complex features of the Lebanese conflict, multiple conflict actors took part at different times and in different places across the country between 1975 and 1976 (Brogan 1990; Makdisi and Sadaka 2005; UCDP 2012). Primary status quo groups were comprised of the
central government and the Lebanese Army led by President Suleiman Frangieh—one of the
Maronite clan leaders—and militias from other Maronite political and clan factions (Chamouns
and Gemayels) in addition to the Syrian Army in the later portion of the conflict, which initially
targeted the growing PLO movements. Later Chamille Chamoun’s National Liberal Party (NLP)
and Pierre Gemayel’s Kateb Party jointly founded the Lebanese Front (LF) with nearly 18,000
fighters in 1976; Suleiman Frangieh’s Zghorta Liberation Army later joined the LF alliance

Primary opposition groups that challenged the central government were the Lebanese
National Movement (LNM), representing diverse leftist political and religious factions (some
secular and some religiously based), and several Palestinian organizations such as the Popular
Front for the Liberation of Palestine (PFLP) and the Democratic Front for the Liberation of
Palestine (DFLP). Later the Lebanese Arab Army (LAA), comprised of Muslim members split
from the Lebanese Army joined the opposition camps in March 1976 (O’Balance 1998). The
LNM was the largest umbrella coalition and included parties such as the Druze-based
Progressive Socialist Party (PSP), the Independent Nasserite Organization, the Syrian Social
Nationalist Party (SSNP), and the Lebanese Communist Party (LCP).8 By the end of the conflict,
the active fighters for the LNM-PLO-LAA coalition force reached a total of 46,900 men and

In the following case illustration, I describe the second Lebanese civil war by looking
into emergence or entrance of ‘recognized’ conflict actors such as the Lebanese National
Movement (LNM) as an anti-government coalition force and the Lebanese Front (LF) as a pro-
government coalition force at the early stage, and the Lebanese Arab Army (ALA), the Syrian
force and the PLO at the later stage, after discussing three underpinning causal factors for this war explained by the existing civil war models.

**Background**

As noted earlier, the Lebanese civil war erupted in 1975 at the intersection of diverse factors rooted in Lebanese politics. As Makdisi and Sadaka (2005) note, while economic inequality within the Lebanese society is an important factor, three manifesting factors exacerbating the militarized political confrontations during the 1970s: (1) failing ethno-religious confessionalism as a political institutional setting (e.g. Bakke and Wibbels 2006); (2) sustained political instability among rival political factions accompanied with militias loyal to those factional leaders (e.g. Mansfield and Snyder 2005); and (3) growing Palestinian refugee influx from neighboring countries (e.g. Salehyan and Gleditsch 2006) after the 1967 Arab-Israeli war and the 1970 ‘Black September’ hostilities in Jordan over several years.9

The Lebanese population comprises Christians and Muslims of various stripes and ethnic derivations. More than half of the resident population is Muslim (Shiite, Sunni and Druze), although no official census has been permitted by agreement, and the rest is Christian (predominantly Maronite, Greek Orthodox, Greek Catholic, and Armenian) (Collelo 1987). The 1943 National Pact—the unwritten agreement dictated confessional power-sharing based on the census of 1932 (the last one undertaken), on which the 6:5 proportion of parliament in favor of the Christians hinged—established a dominant political role for the Christians (Phalange Party or Phalangists, a party patterned after rightist authoritarian European regimes of the 1930s).10 Especially three Maronite clans—Chamoun, Gemayel, and Frangieh— had dominated the presidency which was constitutionally reserved for the Maronites. In terms of the confessional
groups and their stake in power and the economy, the Maronites were on top of the pyramid, followed by the Sunnis, with the Shiite sects at the bottom (the Druze, a separate ethnic community of Muslims had a specified power share as well). The Shiite supposed minority but emerging probable majority in Lebanese society had felt disenfranchised politically and economically, and mainly inhabited the poor southern suburbs of Beirut and the marginalized eastern and southern parts of the country.

The second issue in 1975 concerned ideological political confrontations over government control and foreign policy, along with a controversial extended term of office for the Chamoun clan from the 1958 first civil war. Of Maronite leaders, Camille Chamoun and Pierre Gemayel as right-wing/pro-western political party leaders and rivals publicly castigated the Palestinian presence and fostered acts of inter-communal violence between Maronite militias and Palestinian youths and local organizations, whereas left-wing Muslim and Druze coalitions, whose primary goals were to inevitably diminish Maronite political power, denounced the government for hindering the Palestinian struggle. Moreover, claiming to be the majority sect in the country by the early 1970s, Shiite Muslims, marginalized at the bottom of the political, economic, and social order, demanded a more powerful Muslim voice in the government. This grievance led in 1974 to the Amal movement (Harakat Amal) by local Shiite Muslim communities, some with ties to Shiites living abroad in the United States and elsewhere (Nasr 2006). Launched by Imam Musa al Sadr, a religious leader of the Shiite community, Amal was originally a political and economic trust intended to enhance the position of the Shiite community in the country’s confessional power-sharing system and to act as a countervailing force to the growing influence of Palestinian organizations (Makdisi and Sadaka 2005; Nasr 2006). By 1975, the Lebanese Resistance Detachment was founded as a military wing of Amal. The militia was active largely in the south
to protect Shiite community interests, while at the same time reportedly refusing to take a side in the fighting that developed during the 1975-76 civil war.\textsuperscript{11}

The third causal factor related to the massive influx of Palestinian (Sunni Muslim) refugees into Lebanon following the Israeli-Arab wars of 1948-1967 and the Black September of 1970. By the early 1970s, Palestinian refugees across Lebanon numbered more than 300,000 and as non-Lebanese largely Sunni or secular Muslims and Christians generated resentments overflowing into street-level violence over resource allocations with Christian militias as well as local Shiite Muslims communities largely in Beirut and southern regions (Brogan 1990; Makdisi and Sadaka 2005). Because of demographic changes in the society and the weakened political system among religiously and ideologically divided political elites in Lebanon, Palestinian organizations easily exploited the situations in order to enhance their political and military positions (Makdisi and Sadaka 2005; O’Balance 1998; UCDP 2012).

As noted in chapter 4, political institutional design, economic issues, and demographic/population change would help us to understand a number of underpinning conditions that Lebanon experienced before engaging a new civil war; yet those factors explain little about why the Lebanese central authority with the Army loyal to the government was unable to contain the initial tit-for-tat inter-communal violence largely among paramilitaries targeting unarmed civilians, despite reaching a number of peace arrangements including political and economic reforms in April 1975 (Makdisi and Sadaka 2005; O’Balance 1998; UCDP 2012). A number of historical studies have confirmed that, before April 1975, tensions between communal groups had been intensifying with several protests and demonstrations by the various political factions accompanied by militant units. These multilayered demonstrations set Lebanon on a spiraling path of violence where force by one side was met by force by the other and where
the Lebanese Army and police forces that maintained the neutrality could not control the situation (e.g. Collelo 1987; Makdisi and Sadaka 2005; O’Balance 1998; UCDP 2012).

**Phase 1: Emergence of the LNM as a Primary Conflict Actor**

Analysts agree that the Second Lebanese civil war was sparked by a series of tit-for-tat inter-communal violent attacks in April 1975 between the Kataeb militants of the Maronite-Phalange Party as a largest paramilitary group and the Arab Liberation Front (ALF) comprised of Palestinian youths from refugee camps in south Beirut (O’Balance 1998; UCDP 2012). These inter-communal retaliations were triggered by an assassination attempt targeting Pierre Gemayel, the Maronite-Phalange Party right-wing leader, by unidentified gunmen at a morning church service on April 13, 1975 in east Beirut. The gun shots failed to murder Gemayel but killed four people including two Phalangists. On the same day, a group of the Kataeb militia led by the Gemayels attacked a bus carrying 44 Palestinian passengers in a Christian neighborhood and killed 30 Palestinians (e.g. Collelo 1987; Makdisi and Sadaka 2005; O’Balance 1998; UCDP 2012).

The assassination attempt was an uncoordinated and isolated incident led by youths, most likely Sunni-Palestinians, who were suffering daily mistreatments in the area where Gemayel’s Phalange Party, with the Kataeb dominant, controlled the local economy in the south of Beirut (Collelo 1987; O’Balance 1998). Within a few days, the initial tit-for-tat inter-communal armed clashes quickly diffused throughout Beirut between Phalangists and the Palestinian commandos joined by the left Sunni Muslim political parties calling for the dissolution of the Phalange and its expulsion from the government. The Lebanese central government and its Army and police mainly stayed out of the violence as a neutral player, whereas the National Liberal Party and its
‘Tigers’ militia, led by Camille Chamoun (former president), joined Gemayel against the leftist and Palestinian presence (Collelo 1987; O’Balance 1998).

These inter-communal clashes ceased with the political decisive intervention of President Frangieh’s government in the mid-April 1975. However, the ceasefire deal and political reforms proposed by Frangieh and agreed to by the leftist and Sunni Muslim political parties collapsed with the resignation of Prime Minister Rashid Solh appointed from the leftist-Sunni Muslim coalition because there was no deal over improving the political and economic status of the Palestinian refugees in Lebanon or the growing political influence of PLO’s Fatah (a.k.a. Palestinian National Liberation Movement, led by Yasser Arafat) which settled its headquarter in Beirut after 1970 (Collelo 1987; O’Balance 1998).

From a conflict analysis perspective, an important development in early 1975 was the emergence of the Lebanese National Movement (LNM) as a primary conflict actor, which was a loosely allied anti-government organization of 12 left-wing parties and movements under the political leadership of Kamal Jumblatt, a leader of the Druze-based Progressive Socialist Party (PSP), whose leadership was endorsed with the institutional recognition of the Soviet Union and other small leftist-progressive political factions in Lebanon (Collelo 1987; O’Balance 1998). At the same time, the People’s Liberation Army (PLA) as the PSP military-wing commanded by Bashir Jumblatt—a son of Druze leader Kamal Jumblatt—was raised with the military and financial support of Fatah and with the Soviets’ and Syrians’ support against Israel and the Western world; it initially comprised 3,000 lightly armed fighters from the Druze and some radical youths of Shiite Muslim communities of the Shouf in the central area between Northern and Southern Lebanon (Collelo 1987; O’Balance 1998). The Druze community tended to
maneuver for its own political survival in shifting coalitions with various Lebanese political factions.

Under Kamal Jumblatt’s political leadership and Bachir Jumblatt’s military command, more than twelve militia and private forces affiliated with different leftist/socialist and/or religious/political factions were grouped into the LNM-Joint Forces, a military wing of the Lebanese National Movement (LNM), numbering more than 18,700 militant-men (and women); eventually this number was increased with the inclusion of 23,900 Palestinian guerrilla fighters in 1976 (e.g. Becker and Reyelt 2002; Gleditsch et al. 2012; O’Balance 1998).

Various political factions agreed to join the LNM and its Joint-Forces (JFs); yet little coherent organizational structure with central military command of the LNM-JFs was established (Gleditsch et al. 2012; O’Balance 1998) because all paramilitary leaders, with different factional constituents, retained their own military commands and political and economic agendas (e.g. Collelo 1987; O’Balance 1998). Furthermore, the majority of the LNM-JFs militant fighters from each faction were paid-conflict agents rather than ideologically self-motivated voluntary fighters (e.g. Makdisi and Sadaka 2005; O’Balance 1998). The primary financial and logistic (i.e. arms and food) support to the LNM-JFs, and especially its central military unit, Jumblatt’s Progressive Socialist Party’s (PSP) People’s Liberation Army (PLA), was mainly provided by the PLO and the USSR (e.g. Becker and Reyelt 2002; O’Balance 1998).

During June-July 1975, uncoordinated anti-Maronite paramilitaries, while joining the LNM-JFs, fought across Lebanon, including in Zghorta and Tripoli, against not only uncoordinated pro-government Maronite militias but also the Lebanese Army loyal to the central government. The primary objective of the governent’s involvement and its army in the conflict at
this point was to prevent exacerbating inter-communal killings as the fatalities of inter-factional fighting mounted to over 2,000 deaths by the end of July 1975 (O’Balance 1998; UCDP 2012).

In August 1975, because of the involvement of the Lebanese central authority and its army, Kamal Jumblatt as the LNM political leader formally declared a program for further reform of the existing political system, and the LNM openly challenged the government’s political legitimacy. This declaration signaled not only to the Lebanese Maronite leadership, but also to the Syrian government supporting the Palestinians in Lebanon that the political situation in Beirut had deteriorated because the previously neutral national army and police forces had taken a side and become involved directly in the clashes in order to protect the Maronite political and economic interests (Collelo 1987; O’Balance 1998; UCDP 2012).

As seen in the next section, both the Maronite leadership and the LNM leadership hoped for compromise in their conflict with Syrian diplomatic intervention in September 1975, which had, along with Soviet and Arab League regional support, positively impacted the PLO leadership. Yet, such hopes by the main Lebanese adversaries were dashed by a series of armed clashes initiated by multiple veto players (see Becker and Reyelt 2002; Collelo 1987; O’Balance 1998).

**Phase 2: Syria as a new player?**

Because of the deadlock of the deeply divided political arena, and the complicating PLO role in Lebanese politics, all-parties except for the PLO agreed to accept the Syrian Foreign Minister Abdel Halim Khaddam’s peace initiative on September 1975 (Collelo 1987; O’Balance 1998; Weinberger 1986). Syria evidently wished to reestablish a semblance of political order favorable to its traditional interests as a power broker in Lebanon. A series of meetings included
President Frangieh, the Phalange leader Gemayel, and members of the LNM, and yielded a ceasefire. Under the deal, the leaders of the LNM and the Christian militias agreed to work together in a National Dialogue Committee (NDC), which was tasked with probing possible reforms in the social, economic, and political spheres so as to resolve the conflict (Becker and Reyelt 2002; Collelo 1987; O’Balance 1998; UCDP 2012). At this moment, Syria’s initial intention was its defensive concerns in order to prevent any refugee flows into the Syrian territory and to prevent Israel’s influence in Lebanese politics (e.g. Collelo 1987; Weinberger 1986).

The Syrian diplomatic initiative brought a short-lived peace between the warring parties; yet the Syrian-mediated peace deal signaled to the Maronites a possible threat to their continued political domination, while potentially increasing PLO political influence in Lebanese politics (Collelo 1987; O’Balance 1998). In October 1975, several frustrated Maronite militias, which were not invited to the peace negotiations, began a series of armed attacks targeting Palestinian refugee camps, and a series of tit-for-tat violence between the Christian right-wing paramilitaries and the Muslim left-wing and various Palestinian radicals again spread across Beirut, on to Tripoli and Zghorta and into the Beeka Valley (Collelo 1987; O’Balance 1998; UCDP 2012). Spoilers had prevailed reigniting violence and destabilizing the agreement at this point.

To contain the new violent clashes, the Lebanese Army became fully involved in combat against the leftist-LNM in Tripoli (Becker and Reyelt 2002; Collelo 1987; O’Balance 1998; UCDP 2012). Ultimately, despite the Syrian peace initiatives and various ceasefire deals in addition to inter-communal retaliatory massacres such as the Black Saturday of December 5 1975, armed clashes between the Lebanese Army and self-commanded groups from the LNM-JFs in Beirut escalated in an uncontrollable way (Colleton 1987; O’Balance 1998; UCDP 2012).
In December 1975, the Lebanese government and its army became a persistent conflict agent, although several analysts question what constituted the Lebanese government at that time (e.g. Brogan 1990; UCDP 2012). By December 1975, Beirut was completely divided and “comity [had] completely disintegrated. There [was] no Lebanon” (Brogan 1990: 306).

Analytically, the failure of the Syrian-mediated peace deal by the end of 1975 illuminates that (1) there was no resolute central authority to send a credible signal of resolve due to multiple veto players (the Phalangists under Gemayel and the National Liberal Party under Chamoun) within the pro-government coalition; (2) there was no single coherent rebel organization that could implement a peace arrangement credibly due to uncoordinated multiple interests and military commands and, specifically, the roles of various Palestinian groups as major financial and logistic donors to the anti-government opposition coalition (e.g. Becker and Reyelt 2002; Collelo 1987; O’Balance 1998; UCDP 2012).

**Phase 3: The Emergence of the Lebanese Front and the PLO as primary conflict actor**

By definition (see chapter 2), a civil war between a central government and the Lebanese National Movement-Joint Forces began in December 1975. However the war was exacerbated with the entry of two new primary armed agents, namely, the Lebanese Front (LF) and the Palestinian Liberation Organization (PLO) as a whole, which dominantly engaged in inter-communal fights and civilian killings (Becker and Reyelt 2002; Collelo 1987; O’Balance 1998; UCDP 2012).

In January 1976, the major Christian right-wing groups (the Phalangists under Gemayel and the National Liberal Party under Chamoun) denounced any abrogation of the 1943 National Pact and publicly denounced the 1969 Cairo agreement that guaranteed the Palestinians’ presence in Lebanon; they created an umbrella movement merging the Phalange (Kataeb party)
and the National Liberal Party (Tiger) into the Lebanese Front (LF) comprised of 30,000-40,000 armed fighters (Becker and Reyelt 2002; Collelo 1987; O’Balance 1998; UCDP 2012). Later President Frangieh’s Zghorta Liberation Army also joined the Lebanese Front alliance. All Christian clan-leaders formally allied in the Lebanese Front (LF), but their military commands and regions or areas of control were divided based on their own constituencies (Collelo 1987; O’Balance 1998; UCDP 2012).

To counterbalance the Christian right wing’s aggressive anti-Palestinian campaign, including brutal blockades of Palestinian refugee camps in and around Beirut, various Palestinian forces across Lebanon felt forced to side with the leftists in the Lebanese National Movement (LNM) (Becker and Reyelt 2002; Collelo 1987; O’Balance 1998; UCDP 2012). Palestinian paramilitary and guerrilla alliances with more than 20,000 armed fighters joined the armed resistance campaigns by the LNM with its 45,000 armed fighters (Gleditsch et al. 2012).

Hereafter, the endogenous retaliations between religiously divided armed groups began. Two major bloody incidents, which played a deterministic role further escalating conflict intensity, were the Karantina massacre carried out by Christian militias jointly with the Lebanese army against Palestinians (killed over 1,000 unarmed Palestinians), and the Damour massacre of Christian unarmed civilians by the Palestinian-LNM coalition (Collelo 1987; O’Balance 1998; UCDP 2012).

By late March of 1976, the Maronite militias stated that they were setting up parallel administrative structures in the areas under their control so as to create their own Christian state within Lebanon (Collelo 1987; O’Balance 1998; UCDP 2012). Such Maronite decisions clearly undermined the credibility and legitimacy of their roles in the Lebanese central authority, while Frangieh, one of the Maronite clan leaders, maintained the presidency citing increased threats
from the radicalization of LNM-PLO violence targeting unarmed Christian civilians in Beirut and other areas (Collelo 1987; O’Balance 1998; UCDP 2012).

**Phase 4: Entry of the Lebanese Arab Army (LAA) as conflict actor**

The last conflict actor entering in the second Lebanese war was the Lebanese Arab Army (LAA) formed by Muslim members split from the Lebanese Army that traditionally had been controlled by the Christian Maronite establishment, especially, President Frangieh and Maronite leader Chamoun (Collelo 1987; O’Balance 1998; UCDP 2012).

A primary reason for the defection was the repercussion of President Frangieh’s support of the Karantina massacre, which killed over 1,000 unarmed Palestinians carried out by the Chamoun-led militia and some pro-Chamoun Lebanese Army loyalists (Collelo 1987; O’Balance 1998). In March 1976, under the leadership of Lieutenant Ahmed Khatib (a Sunni Muslim), the Muslim sections of the army revolted against their top leadership and created the LAA, declaring that they would overthrow the government. In the same month, the LAA joined the LNM-JFs and created a joint military command. The LNM-PLO-LAA coalition rapidly gained the upper hand, forcing President Frangieh to flee Beirut and enter the Christian heartlands north of the city (Collelo 1987; O’Balance 1998; UCDP 2012). The Frangieh government and its supporters within the Christian rightwing were severely outnumbered. The Palestinian forces (both the Rejectionist Front groups and Fatah of the PLO) had sided with the LNM, and large portions of the army had joined with the leftists (Collelo 1987; O’Balance 1998; UCDP 2012).

Under a joint military command, the LNM-PLO-LAA coalition seized control of almost half of the country, especially the southern region of Lebanon, which had been the stronghold of the LNM-PLO at the beginning of the war (O’Balance 1998; UCDP 2012).
By the end of March 1976, Syrian and other observers expected that the Lebanese Front coalition and President Frangieh would inevitably be destroyed and overthrown respectively. This fear led Syria to decide on a radical change of strategy (Collelo 1987; UCDP 2012; Weinberger 1987). Responding to a request for help from Frangieh, and despite ostensible ideological differences, Syrian troops entered Lebanon in April 1975 to stave off his impending defeat, with more than 12,000 Syrian troops present by June 1976. Syrian ambitions to control Lebanese politics were revealed in their tactical willingness to back Christian interests in order to offset Palestinian, Sunni, and other Islamic and secular factional advantages. Further, Syria opposed a takeover of the Lebanese state by the progressive and leftwing forces that made up the LNM-Palestinian alliance since this would strengthen the PLO’s hand in the Middle East and would increase the likelihood of a potential direct fight with Israel (Collelo 1987; UCDP 2012; Weinberger 1987).

The Syrian military presence joined with the LF coalition counterbalanced the LNM-PLO-LAA coalition politically and militarily. By May 1976, Syria had succeeded in getting Elias Sarkis elected as president; a seat he would take up as soon as Frangieh’s term ended in late September, and in July Syria invited the PLO leadership to Damascus and made the Damascus agreement for a ceasefire deal with an attached demand for round-table discussions between Lebanese leaders on the Syrian peace plan (Collelo 1987; UCDP 2012; Weinberger 1987). On September 23, 1976, Sarkis replaced President Frangieh. His ascension to the presidency coincided with a decline in conflict intensity, as Arab League mediation in September led to the declaration of a ceasefire and further negotiations on implementing July’s Damascus agreement (Collelo 1987; UCDP 2012).
On October 16-18, 1976, all sides agreed to ceasefire after diplomatic intervention by the Saudi Arabian government. Heads of state of, amongst others, Lebanon and Syria subsequently met in Riyadh for negotiations. Palestinian delegates were also invited to these talks, at which the attending parties discussed a cessation of hostilities and the possibilities of peace negotiations. On October 21, 1976, the warring parties accepted the terms of the ceasefire, the so-called Riyadh Agreement, which came into force (Collelo 1987; UCDP 2012).

Aftermath of the Second Lebanese War

As noted earlier, there are some disagreements about when the Second Lebanese war ended across the different sources (e.g. Brogan 1990; Makdisi and Sadaka 2005; Sambanis 2004d; UCDP 2012) because Lebanon turned again to being a battleground following a short-lived peace period under the Riyadh agreement and Syrian military presence (ultimately 40,000 troops as the Arab Deterrent Force: ADF). According to the CoW project, Lebanon experienced three additional military confrontations causing more than 1,000 deaths with different external actor interveners (e.g. Israel and Iran) and a number of new primary armed actors such as Hezbollah:12

- The Third Lebanese War of 1978
- The Fourth Lebanese War of 1983
- The Fifth Lebanese War of 1989-90

In addition, as UCDP (2012) records in detail, various amounts of infighting and inter-communal violence continued among new and old conflict agents including emerging alignment formations and new leadership between 1976 and 1990. The fifth Lebanese war ended with the Ta’if Agreement of 1989. Under the agreement, a new power-sharing arrangement was reached in
which the Lebanese parliament and the new President agreed on constitutional amendments in August 1990. The Chamber of Deputies expanded to 128 seats and was divided equally between Christians and Muslims (with Druze counted as Muslims) (e.g. Makdisi and Sadaka 2005; Sambanis 2004d; UCDP 2012).

5.4 Negative Case Illustration

The Northern Ireland conflict is one of the well studied and destructive conflict episodes that did not reach agreed civil war proportions, though assessments of when and how the so-called ‘Troubles’ began and ended tend to differ depending on the source (e.g. Jesse and Williams 2011; Sambanis 2004d; UCDP 2012; Woodwell 2005).¹³ The primary reasons for such diverse assessments are related to the origin of and various internal fragmentations within the Provisional Irish Republican Army as one of the primary warring parties (e.g. Coogan 2002a; Kenny 2010; White 1989, 1997) and the continuous primary issue incompatibilities between the British government and different representatives among various Nationalist-Catholic (political-wing and paramilitary) and Loyalist-Protestant (political-wing and paramilitary) groups in Northern Ireland throughout the conflict (e.g. Coogan 2002b; English 2003; UCDP 2012; Woodwell 2005).

From a conflict analysis perspective, many observers have focused on the Provisional IRA which fielded the most active and well known Irish republican paramilitary that employed terrorist tactics targeting the British government and somewhat not only British-Protestant but also Irish-Catholic civilians after 1970 (CAIN 2012; Coogan 2002a; Kenny 2010; White 1989). Yet as the 1977 Green Book of the IRA declared (O’Brien 1993), the Provisional IRA maintained itself as an organization that could mobilize at best between a minimum 250 and
maximum 300 active trained fighters during the entire conflict period due to its limited strategic interests and financial resources (Gleditsch et al. 2012: 405-407; GTD 2012). Libya’s anti-British policy moved Col. Muhamar Gaddafi to provide several tons of weaponry and training, and the Irish diaspora organizations in the United States provided financial support despite declining public attraction (e.g. Kenny 2010; UCDP 2012; Woodwell 2005). Later, an extremist/splinter group, which disagreed with the Provisional IRA’s peace negotiations under the Good Friday/Belfast Agreement in 1998, formed the Real IRA, which also had a limited mobilization capacity from a minimum of 100 to maximum 200 active fighters (Gleditsch et al. 2012: 405-407; GTD 2012; Kenny 2010). It also should be noted that several less visible groups as Irish paramilitaries were involved at various points, using multitude terrorist tactics: notably the Irish National Liberation Army (INLA) and the Irish People’s Liberation Organization (IPLO) (GTD 2012). Thus, various republican paramilitary organizations challenged the British government for a Northern Ireland free of British rule despite declining public support for militarism among Irish-Catholic population (except for the early and mid-1970s, see English 2003; Kenny 2010; O’Brien 1993; UCDP 2012; Woodwell 2005).

In addition to various Irish-Catholic republican paramilitaries, it should be equally emphasized that paramilitary organizations loyal to the British were also committed to protecting Protestant interests and countering republican terrorist activities after the mid-1960s. These loyalist paramilitaries were comprised of voluntary (i.e. unpaid) youths from various local Protestant communities, and most often targeted Irish republicans and other Catholic civilians (e.g. Alcock 1994; Bardon 2001; GTD 2012). The most active loyalist groups that relied on terrorist tactics were the Ulster Volunteer Force (UVF) and the Ulster Defense Association (UDA), which were created to combat the threat of republican paramilitary groups in 1966 and
1972, respectively. The UVF conducted a multitude of operations—bombings, assassinations, kidnappings, and hijackings—targeting Catholic civilians, republican paramilitaries, and rival loyalists in Northern Ireland. The UDA was founded later as a largest loyalist paramilitary and an umbrella organization for many of local loyalist groups.

During the entire conflict period, the British government as the primary conflict counterpart to the Provisional IRA was the superior party in terms of access to military resources and security personnel (Brogan 1990; Gleditsch et al. 2012; Newmann 2003; UCDP 2012; Woodwell 2005). At large, the British concentrated on the use of internment (imprisonment without trial), intelligence operations, and, later covert methods such as high value targeted assassinations by the British Special Air Service (SAS) in order to contain terror and violent activities by not only republican paramilitaries but also loyalist ones (e.g. LaFree et al. 2009; Newmann 2003). The primary role of the British security forces has been to keep peace for the majority of the Catholic and Protestant unarmed civilians in the region, and forestall the dismemberment of the United Kingdom. Concerning the British military involvement, a British historian notes that “The IRA’s original objective was to wear down British’s support for the Protestants in Northern Ireland…. a British withdrawal would be followed by a civil war—which the Protestants would win” (Brogan 1990: 382). During the period from 1969 to 1998, more than 3,600 people were killed and tens of thousands were injured as part of ‘the Troubles,’ though casualties never exceeded 1000 in a single year (GTD 2012; Woodwell 2005).

In the following case narrative illustration, I describe the Northern Ireland conflict in four distinct conflict phases by focusing on changes (emergence or entrance) of primary conflict actors and their armed resistance and counterterrorism strategy. Before doing so, I will briefly describe some background of the conflict relevant to my analysis.
Background

Analysts agree that why and how the Northern Ireland conflict emerged in 1970 are very difficult to assess by relying on the dominant civil war models (Collier and Hoeffler 2004; Fearon and Laitin 2003a) as be discussed in chapter 1. In his case study, Woodwell (2005: 161) notes that existing civil war models would “predict a low risk of civil war in Northern Ireland, because the region had relatively high per capita income and a growing economy, high secondary school enrollment, not particularly unfavorable geography and demographics, no relevant primary commodities, and a long history without political violence.”

One predominant factor frequently emphasized in the civil war literature is the role of ethnic dominance (Jesse and Williams 2011; Sorens 2012; Woodwell 2005). Fifty-three percent of Northern Ireland population of 1.5 million was Protestant, and most of the remaining population was Catholic at that time. Other explanatory factors reemphasized by Cederman et al. (2011) and Cederman et al. (2010) include the presence of horizontal income inequality and socio-economic discrimination in the region as the consequence of ethno-nationalist politics and ethno-religious marginalization (e.g. Wimmer 2012; Woodwell 2005).

Many other scholars have long linked the conflict with the historic Irish-Catholic irredentist (i.e. reunion) movement of the Republic of Ireland since 1920 (e.g. Coogan 2003 b; English 2003; Kerry 1988; Sorens 2012). Yet, the vast majority of ordinary Catholics and Protestants in Northern Ireland showed little enthusiasm for such a nationalistic and irredentist myth after the mid-1970s, according to a number of public opinion surveys (e.g. Kenny 2010; O’Brien 1993; Woodwell 2005). The irredentist myth accompanied by the IRA’s armed resistance evolved when the Ulster political entity came into existence with the Government of
Ireland Act of 1920, by which Great Britain granted Ireland independence as the Free State of Ireland, while at the same time retaining six counties in the North that were to compose the more closely politically and economically integrated territory of Northern Ireland (e.g. Coogan 2002b; English 2003; Woodwell 2005). Under the 1920 Government of Ireland Act, the Ulster Unionist political domination in the northern territory was constituted, while the sizable Catholic minority was politically marginalized. This situation was exacerbated largely by the drawing of local government electoral boundaries to favor unionist candidates, even in predominantly Catholic areas such as Derry. Additionally, the right to vote in local government elections was restricted to rate-payers with those holding or renting properties in more than one ward receiving more than one vote, up to a maximum of six. These institutionalized discriminations in the region were preserved by unequal allocation of council houses (public housing) to Protestant families. Catholic areas also received less government investment than their Protestant neighborhoods. Protestant interests in Northern Ireland were largely handled by the Royal Ulster Constabulary (RUC), and the British police force in the province (e.g. Alcock 1994; Bardon 2001; English 2003; Woodwell 2005).

To challenge the institutional marginalization of the Irish-Catholics in the north of Ireland, a number of active youths related to the classic IRA goals and carried out infrequent and sporadic armed resistance during the 1930s, 1940s, and early 1950s (Coogan 2002a; English 2003). The last IRA-led attacks known as the ‘Border Campaign’ were launched between 1956 and 1962 in the North (Coogan 2002a, b; English 2003; Kenny 2010). However, the central and local government crushed all of these armed campaigns through implementing imprisonment without trial policies and harsh repression. Especially in October 1961, the British government deployed its army in Northern Ireland to assist to implement the 1961 Special Powers Act passed
by the Northern Ireland Parliament, which allowed for arrests and searches without warrant, internment without trial, and bans on meetings and publications. Together with the auxiliary Ulster Special Constabulary (a.k.a. the B Specials), the RUC became the armed-wing of the Protestant political establishment and the major threat for Catholic communities (e.g. Coogan 2002a; Woodwell 2005). Thus, “By the early 1960s in Northern Ireland, severe state repression had dealt a major blow to the IRA’s continued existence as a military force” (Kenny 2010: 538). “Public protest against the harsh treatment of Irish Republicans at the hands of security forces in the North or South was muted, and there was no major public enthusiasm for the revival of the armed struggle” (Kenny 2010: 538). Even, the IRA leadership had decided to prohibit any violent actions against state forces in Ireland in 1954. According to Kenny’s face-to-face interview of a former IRA volunteer, “by the late 1960s, the IRA still had only about 50 or 60 members. Moreover, in the public eye, at least since its total defeat in the so-called Border Campaign of the 1950s, the IRA had begun to recede as a locus of Republican resistance” (Kenny 2010: 538). Because of the IRA’s declining active roles in and lower public support for armed resistance in the North, local Catholic citizens erected barricades in Belfast and created Citizens Defense Committees (CDCs) to protect their property and lives against radical Ulster’s violent activities (e.g. Coogan 2002a; Kenny 2010; Woodwell 2005).

The aforementioned situation dramatically changed when the so-called Northern Irish ‘Troubles’ gradually boiled over in political turmoil regarding political, economic, and social reforms within the North’s government and various forms of communal violent clashes between Catholic and Protestant communities after 1963 (Brogan 1990; Coogan 2002b; English 2003; UCDP 2012; Woodwell 2005).
To examine how and when the IRA re-emerged as a primary conflict actor and when and how the British central government became involved in the conflict as a primary armed counterpart during the 1970s, the case analysis below begins with a brief illustration of a number of political clashes and intensification of inter-communal violence between Protestant-loyalist paramilitary, namely the Ulster Volunteer Force (UVF), and members of the Catholic civil rights organizations who later formed the Northern Ireland Civil Rights Association (NICRA) during the mid-1960s (e.g. Alcock 1994; English 2003; UCDP 2012; Woodwell 2005).

Phase 1: Emerging and Intensifying Inter-Communal Violence in Northern Ireland

Analysts agree that the trigger of the so-called ‘Troubles’ came when Northern Irish prime minister Viscount Brookeborough stepped down and Terrence O’Neill became prime minister in 1963 (e.g. Coogan 2002a; English 2003; Geraghty 2000; UCDP 2012; Woodwell 2005), though, “There was little indication in 1963 of the turmoil that was about to engulf Northern Ireland” according to the BBC (2007).

New Prime Minister O’Neill proposed a series of political and economic reforms to alleviate Catholic alienation and soften sectarian cleavage through modernization of overall political and economic programs in the North. While the Irish-Catholic community welcomed his new approach, it broke up a fragile peace between the dominant Protestant and the marginalized Irish-Catholic communities held up by the British military presence (e.g. Coogan 2002b; English 2003; Woodwell 2005). The Protestants perceived that O’Neill’s reforms would radically alter their dominance and economic prosperity, whereas the Irish-Catholics viewed O’Neill’s softer stance as an awaited window of opportunity to demand further substantive changes in their political and economic status (e.g. English 2003; Woodwell 2005). Woodwell
succinctly summarized the emergence of a polarized political environment and intensifying frustration by both sides at that time as follows:

O’Neill’s new approach to politics in Northern Ireland, however, drew criticism from both sides…. sections of the Unionist community appeared to be “in open revolt” against O’Neill…. At the same time, many Catholics became disenchanted with what was perceived as a lack of serious political action. O’Neill’s economic modernization program yielded little for depressed Catholic areas, with new investment mainly ending up in Protestant areas with Protestant work forces (Woodwell 2005: 165).

As Gurr’s (1970) psychological relative deprivation explanation indicated, polarizing dissatisfaction and frustration with greater mistrust by both sides regarding the O’Neill government and its lack of resolute and credible commitment to any of the political and economic reforms fostered the emergence of a number of bloody sectarian incidents in the mid-1960s between Loyalist and Nationalist supporters. Especially, the violent incident in April 1966 following the twin 50th anniversaries of ‘the Battle of the Somme’ and the Easter Rising—historical touchstones for Protestant and Catholic communities, respectively, sparked a sectarian violence (English 2003; UCDP 2012; Woodwell 2005). Following rioting and disorder after the April 1966 incident, a number of Protestant-loyalist paramilitaries jointly created the Ulster Volunteer Force (UVF) as an umbrella organization, despite Prime Minster O’Neill’s immediate order to ban the UVF (Alcock 1994; Bardon 2001; UCDP 2012; Woodwell 2005). Thereafter, the UVF as the central force of Protestant-loyalist paramilitaries orchestrated a multitude of operations such as bombings, assassinations, kidnappings, and hijackings. These attacks usually targeted Catholic civilians, republican paramilitaries, and, even, rival loyalists in the province. The UVF expanded its terrorist bombing campaigns to include Catholic civilian targets in the Republic of Ireland, often in retaliation for attacks by the IRA or other republican paramilitary groups, and continued their violent activities until October 1994 when the UVF declared a
ceasefire in response to the IRA’s ceasefire (e.g. Alcock 1994; Bardon 2001; GTD 2012; UCDP 2012).

Contrary to the radicalization of Protestant-loyalist paramilitaries, Catholic civil rights activities, under the influence of the success in non-violent civil rights movements in the United States, formed the Northern Ireland Civil Rights Association (NICRA), which became the umbrella organization that coordinated the activities of civil rights groups across Northern Ireland (English 2003; UCDP 2012; Woodwell 2005). The earliest rallying point for the NICRA supporters had been ‘one-man-one-vote,’ indicating the importance placed on achieving a more equitable political system with fairer electoral districting and an end to the rate-payer voting qualification.

In October 1968, the Royal Ulster Constabulary (RUC) and B Special Forces broke up the NICRA’s civil rights demonstration in Derry with excessive violent attacks (e.g. English 2003; Woodwell 2005). Further, on February 1969, 12 hard-line Unionist members met to demand O’Neill’s resignation; on April 1969, Chichester Clark, one of the hard-liners toward Irish-Catholic matters, replaced Prime Minster O’Neill (e.g. English 2003; Woodwell 2005).

The annual march of Apprentice Boys on April 12, 1969, as a Protestant-loyalist association in Derry commemorating the triumph of Protestants over Catholic James II in 1690 met severe resistance by the predominantly Catholic majority who lived in the Bogside neighborhood. To end the Catholic-led rioting, the Royal Ulster Constabulary (RUC) with armored cars and water cannons entered the Bogside, followed by a Loyalist crowd. The RUC used CS gas to enter the area. The battle continued on August 13, 1969, and a number of violent sectarian clashes spilled over across Northern Ireland from Derry to other Catholic areas. These clashes are known as the ‘Battle of the Bogside,’ which ended with the arrival of British troops at
the request of Northern Irish Premier Chichester Clark. To protect themselves, the Catholic community set up ‘No Go’ areas in the Catholic districts of Bogside and of Belfast by building barricades and preventing the Protestant-loyalist police and the B-Specials, as well as the British army from entering (e.g. Brogan 1990; Coogan 2002b; English 2003; UCDP 2012; Woodwell 2005).

The ‘Battle of the Bogside’ between two deeply divided religious/nationalist communities and the British central government’s military involvement paved the way for the long-term armed struggles in Northern Ireland (e.g. Brogan 1990; English 2003; UCDP 2012; Woodwell 2005). It should be noted, however, that despite the emergence and persistence of severe sectarian violent clashes by the end of 1969, the IRA as a primary armed agent of the Northern Ireland conflict, remained largely inactive (e.g. English 2003; Kenny 2010; UCDP 2012; Woodwell 2005).

**Phase 2: Emerging the Provisional IRA and UDA as primary conflict actor**

*The IRA Comes Back?*

Coogan (2002a) and other analysts point out that “After the failure of the low-intensity Border Campaign of 1956-62, the IRA had increasingly shifted away from militarism in favor of a more gradualist approach to encouraging political change” (Woodwell 2005:167). This is the primary reason of why the IRA was inactive during the ‘Battle of the Bogside.’ Yet, ‘the IRA comes back’ on December 29, 1969, when it split into two organizations— the Official IRA and the Provisional IRA— due to disagreement over ideology and use of violence and terrorist tactics (e.g. Coogan 2002a; GTD 2012; Kenny 2010; White 1987; 1997). The Official IRA was a Marxist-oriented republican organization that fought for an independent, united Ireland until
1972, and desired to transform the fight into a class struggle and turn away from militant republicanism maintained by extremist IRA members who founded the Provisional IRA (Kenny 2010; GTD 2012). Official IRA members continued to engage in sporadic small-scale armed attacks and bombings against British security forces, while many of these attacks were in protest of repressive policies, such as internment, in Northern Ireland. In 1972, the Official IRA declared an indefinite ceasefire, while its dissatisfied members left to form the Irish National Liberation Army (INLA) in 1976 or to join the Provisional IRA (Coogan 2002a; GTD 2012; Kenny 2010; White 1987; 1997).

Unlike the traditional members who remained in the Official IRA, the leadership of the Provisional IRA wanted to pursue a hard-line armed resistance by orchestrating the rioting Catholic youths to protect Catholic communities from the Ulster extremists and achieve full independence from the British rule in Northern Ireland (Coogan 2002a; GTD 2012; Kenny 2010; White 1987; 1997). The Provisional IRA officially declared their position on April 5, 1970, by stating that ‘the British Army is a foreign army on Irish soil’ and that ‘Irishmen throw petrol bombs in their own defense against superior armed forces’ (Coogan 2002a; White 1987; Woodwell 2005). This declaration by the Provisional IRA leadership intended to take advantage of maintaining “romantic symbolism associated with militant republicanism in order to attract and organize the increasing population of radicalized Catholic youths in Northern Ireland” (Woodwell 2005: 167). The membership of the Provisional IRA mounted to nearly 1,000 between 1972 and 1974 when the British central and local governments reinforced a policy of internment in March 1971, and, especially, after the Bloody Sunday of January 30, 1972; yet the membership purportedly declined to nearly 250 by 1975 (Kenny 2010; Woodwell 2005).
Ulster’s reaction and creation of the UDA

The second important development in the Northern Ireland conflict in 1970 was the creation of the Ulster Defense Association (UDA) as the largest loyalist paramilitary organization with more than 40,000 members by 1972 in addition to active roles of the Ulster Voluntary Force (UVF) (Alcock 1994; Bardon 2001; GTD 2012). As a loyalist organization, the UDA was opposed to the unification of Northern Ireland to the Republic of Ireland and desired that the six counties of the North remain part of the United Kingdom. The affiliates of the UDA were neighborhood-based local voluntary groups whose intent was to protect Protestants from republican extremists, armed robberies, and physical and property attacks (Alcock 1994; Bardon 2001; GTD 2012).

The creation of these two (somewhat secret) paramilitary and grass-root community-based organizations sent a credible signal to the British central government for further political and military involvement in order to shut off a new cycle of sectarian violence in Northern Ireland (e.g. Coogan 2002a; Woodwell 2005).

Phase 3: The British Government Political and Military Involvement

The emergence of the Provisional IRA and the UDA as well as the ruthless implementation of the internment policy and an increase in the British army presence brought the worst year in terms of fatalities and fetal incidences in 1972 (Coogan 2002a; Woodwell 2005). Brogan (1990: 380) reports that the Provisional IRA and various republican- and loyalist-paramilitaries killed 474 people; the IRA and its associates killed 255; Protestant-loyalist paramilitaries killed 103; the central and local government security forces killed 74 while 42 were unclassified. According to the Global Terrorism Database (LaFree and Dugan 2007), the
years from 1971 to 1976 represent the most acute period, with an average of 246 deaths and 187 successful fatal attacks per year due to sectarian violence (see Figure 5.1).\textsuperscript{16}

**Figure 5.1 Trend of Fatal Attacks by Paramilitaries in Northern Ireland, 1970-2010**

Notes: Fatalities by the central and local government security forces are excluded. Source: Generated by the author based on the data from GTD (LaFree and Dugan 2007).

To quell the violence by the IRA and other paramilitary groups, the British government tried “almost every conceivable form of emergency power” between 1970 and 1976 (O’Connor and Rumman 2002-2003: 175). Below, I describe what the British central government did to decrease the degree of uncertainty and the sense of threat about military strength and willingness to resolve of the IRA and other paramilitary groups. The British government had implemented three major counterterrorist interventions, while at the same time offering a number of peace deals and political reform accommodations to the both sides of the conflict parties.

Three military interventions were as follows: \textsuperscript{17}

1. Falls Curfew was implemented between July 3 and 5, 1970. It was a 36-hour military curfew and search-operation targeting to local IRA members and weapons stockpiles.
During the operation, the British security forces killed four people and severely damaged several homes during the campaign.

(2) On January 30, 1972, the British army deployed the Parachute Regiment to suppress rioting at a civil rights march in Derry in Northern Ireland. Thirteen demonstrators were shot and killed by troops, with another dying later of wounds. The incident is known as ‘Bloody Sunday,’ which sparked unarmed-moderate Catholics’ emotion to join the Provisional IRA’s armed campaign (Kenny 2010). As a retaliation by the Provisional IRA, ‘Bloody Friday’ was the simultaneous detonation of more than 20 Provisional IRA bombs in Belfast on February 21, 1972; 9 people (7 civilians; 5 Protestants and 2 Catholics; and 2 members of the British Army) were killed (CAIN 2012).

(3) Operation Motormman was a massive British military deployment launched on July 31, 1972, aimed at eliminating ‘no go’ areas set by the Catholics and the Provisional IRA supporters in Derry and Belfast. Four thousand extra troops (mounting to 30,000 armed service personnel at the time, while the number was reduced to 25,000 by 1989. Brogan 1990) were brought into Northern Ireland to take part in the dismantling of barricades on the boundaries of ‘no go’ areas. Twelve thousand British troops supported by tanks and bulldozers smashed through the barricades. The British Army shot two people—a Catholic teenager, and a member of the Provisional IRA—during the operation in Derry.

These military involvements were inevitable because of the increasing distrust and dissatisfaction with the local government and political representatives by multiple paramilitaries as well as local Catholic and Protestant communities divided in Northern Ireland (Coogan 2002a;
One such reaction was triggered in August 1971 after William Faulkner, new Northern Irish prime minister, replaced Prime Minister Chichester Clark in March and reintroduced internment as a program of detaining any suspects without trial targeting the Provisional IRA members and their supporters. With the re-introduction of internment, 1,981 suspected terrorists (1,874 were Catholic/Republican and 107 were Protestant/Loyalists) were detained between August 9, 1971 and December 5, 1975 (CAIN 2012). The internment bolstered emotional fears and angers among unarmed Catholic youths who joined with the Provisional IRA and other republicans’ armed campaigns against the British government and Ulster paramilitaries (Brogan 1990; English 2003; Woodwell 2005).

The second and most significant or fateful measure taken by the British central government in February 1972, was to suspend the Northern Irish constitution and parliament, and set a United Kingdom cabinet official, the minister for Northern Ireland, who became responsible for the province affairs (lasting until December 1999). The British government’s decision led to political instability in the Northern Ireland parliament and the lack of any Catholic representation in the parliament after withdrawal of the Social Democratic and Labor Party (SDLP) established in August 1970—the main voice for the moderate nationalists (English 2003; Woodwell 2005). The British army remained a major presence (a regular garrison of 5,000 British troops would remain through July 2007), and elements of martial law permeated civil and judicial processes in an effort to contain violence by any paramilitary groups.

While imposing severe repressive policies against terrorist violence in Northern Ireland, the British central government initiated a number of political solutions including the creation of a new regional governing body to resolve Irish predicament and political instability after 1972 (e.g. Brogan 1990; Woodwell 2005). The British and the moderate IRA arranged for a ceasefire and
secret talks and the Official IRA declared an indefinite ceasefire in 1972. However, the arrangement was destroyed by the ‘Bloody Friday’ incident on February 21, 1972 when members of the Provisional IRA acting as a spoiler killed 9 people (five Protestants, two Catholic civilians, and two British soldiers) in two separate explosions in Belfast (CAIN 2012).

On December 9, 1973, under British Prime Minister Edward Heath, the Sunningdale Agreement (named after the town in Berkshire where the negotiations took place) was reached between Northern Irish Protestants and Catholics. Under the agreement, which improved Irish Catholics’ political representation, an assembly was elected and the 11 ministry power-sharing executive was set to begin in January 1974. The Provisional IRA leadership declared a ceasefire in 1974 and the new assembly under the Sunningdale power-sharing arrangement began in January 1974. However, the agreement faced serious challenges by general strikes led by the Ulster Workers’ Council, a coalition of Protestant trade unionists, on May 15, 1974, and a series of bomb explosions in Dublin and Monaghan was attributed to the UDA on May 17, 1974; again acts of a spoiler.

Following the UDA’s May 1974 incident, the reciprocal violence by both the Provisional IRA and other republican paramilitaries and the Protestant UDA and UVF paramilitaries was resumed, despite a number of meaningful political accommodations including concessions made by the British central government (e.g. English 2003; UCDP 2012; Woodwell 2005).

Phase 4: Persistent Armed Resistance under the British Military Presence

The failure of the ceasefire in 1974 as well the 1974 Sunningdale Agreement sent a clear signal to the British government regarding internal fragmentation within the Provisional IRA as a primary opponent and Protestant public’s dissatisfaction with the political solutions under
Sunningdale (e.g. English 2003; Woodwell 2005). Thus, the London needed to change strategy by searching for a resolute counterpart such as Sinn Féin that might be able to commit credibly to political solutions and a peace process, while at the same time containing any major inter-communal violence by sustaining the military presence in Northern Ireland (e.g. English 2003; Newmann 2003; O’Brien 1993). During this period, there were three major features: (1) sustained presence of the British army in Northern Ireland; (2) substantial organizational and strategic changes in the Provisional IRA as a primary warring party as well as Ulster-loyalists by the time of the 1985 Anglo-Irish Agreement (AIA); and (3) success in several joint peace initiatives by the British and Irish governments, especially the 1998 Good Friday/Belfast Agreement with support of the United States and the European Union. In order to illustrate a series of reciprocal and strategic interactions between the Provisional IRA and the British government and the various roles of their veto/splinter groups, the following case illustration is set in chronological order.

- In December 1974, due to dissatisfaction with the 1974 Sunningdale Agreement, a splinter group (about 50 members) from the Official IRA created the Irish National Liberation Army (INLA) as the armed wing of the Irish Republican Socialist Party (IRSP). The goal of the INLA with the IRSP was to unite all 32 counties of Ireland under an independent ‘communist’ Irish state. Members of the INLA conducted attacks against British security forces, Northern Ireland’s police forces, Protestants (civilians and paramilitaries), and rival republicans through the use of bombings, assassinations, and armed attacks (English 2003; GTD 2012; Woodwell 2005).
• In February 1975, the Provisional IRA declared a ceasefire after secret meetings between Ruairí Ó Brádaigh and Billy McKee, Provisional IRA leaders with Merlyn Rees, British Secretary of State for Northern Ireland (English 2003; Woodwell 2005).

• On January 5 and 13, 1976, ten Protestant civilians were killed by the Republican Action Force (RAF), an extremist/splinter group of republican militants (GTD 2012) and, as a retaliation, Ulster’ loyalist extremists killed two Catholic civilians and two members of the PIRA when a bomb exploded prematurely at a shopping arcade in North Street Belfast.

• Following the retaliatory violence, on January 23, 1976, the Provisional IRA leadership declared the end of the truce/ceasefire due to growing IRA members’ distrust of the British government’s credible commitment to any deals. At that time, the PIRA leadership was allegedly at the brink of calling off the armed campaign due to shortage of money, weapons, and recruitment after the failure of the 1974 Sunningdale peace process (English 2003; Kenny 2010; O’Brien 1993; Woodwell 2005).

• To compromise both the IRA’s and the Ulster unionist demands, in March 1976, the British government implemented criminalization and Ulsterization policies. Under the new criminalization, which removed the ‘special category’ status of paramilitary prisoners, the detained terrorist suspects such as individual members of the IRA or other paramilitaries were treated as criminals rather than as political prisoners. Under Ulsterization, the primary responsibility of providing security in Northern Ireland was shifted from the British army to first the Ulster Defense Regiment (UDR) and later, the Royal Irish Regiment (RIR).
In 1976, under the new leadership of Gerry Adams and Martin McGuinness, the Provisional IRA adopted a new strategy, namely ‘long war’— which underpinned the IRA strategy for many years and reorganized the IRA paramilitary into a number of small groups comprised of 5-6 trained fighters. In the 1977 edition of the Green Book—an IRA induction and training manual—, the new IRA leadership emphasized a war of attrition against the British army for growing a public demand for their withdrawal and maintaining the propaganda war by Sinn Féin to gain the public and political voice of the movement (O’Brien 1993; Woodwell 2005).

In 1978, Gerry Adams’s election as vice-president of Sinn Féin grew frictions over the PIRA’s political and military strategy between its old and new generations. In 1978, one of Sinn Féin leaders who involved the 1974-76 seaweed talks with the British government, signaled a casefire with peace talk to the Britsh government and the Irish government (according to Ruairí O’Brádaigh, the president of the Sinn Féin between 1970 and 1983, Sinn Féin did not propose any peace deals at that time). Both the governments rejected such a proposal.

Between 1980 and 81, ten prisoners (seven from the Provisional IRA and three from the INLA) starved themselves to death in pursuit of political status. The hunger strike in prison led by Bobby Sands mobilized public support with sympathy for IRA prisoners and led them to win seats in the British and local parliaments. “The nonviolent hunger strikes had propelled Sinn Féin onto the political scene in a manner that armed militancy never had” (Woodwell 2005: 177).

In late 1981, Sinn Féin formally adopted a policy of contesting elections while at the same time supporting the continued use of violence to achieve its ends. On June 1983,
Sinn Féin won the by-election following Sands’ death, and Sinn Féin leader Gerry Adams defeated Gerry Fitt, former leader of the centre-ground nationalist SDLP (and now an Independent Socialist) to win the Westminster seat for West Belfast.

- In October 1984, IRA extremists set off a bomb attack at the Conservative party conference in Brighton in order to undermine the political effectiveness of Sinn Féin and derail the Anglo-Irish Agreement.

- In November 1985, Loyalists began a campaign to establish Ulster Clubs in each District Council area in Northern Ireland. To begin the campaign there was a march through Belfast by an estimated 5,000 members of the United Ulster Loyalist Front (UULF) to oppose any forthcoming Anglo-Irish agreement.

- Despite various public challenges and military challenges throughout November 1985, Prime Minister Margaret Thatcher and her Irish counterpart Taoiseach Garrett Fitzgerald signed the Anglo-Irish Agreement (AIA), which confirmed that Northern Ireland would remain independent of the Republic as long as that was the will of the majority in the north.

- Responding to the Anglo-Irish Agreement, in September 1986, the General Army Convention (GAC) of the Provincial IRA passed resolutions allowing members of Sinn Féin to contest elections in the partition parliaments (Coogan 2002a; English 2003; Woodwell 2005). During the meeting, a number of members of the Army Executive, who contested the legitimacy of the GAC resolutions, split off, and formed the Continuity Irish Republican Army (CIRA). In addition, a factional split from Sinn Féin set up as the Republican Sinn Féin under O’Brádaigh leadership (Kenny 2010).
As Ulster’s response to the 1985 Anglo-Irish Agreement (AIA), the Ulster Resistance was created to take direct action to end the 1985 AIA and Unionists and Loyalists held a large demonstration in front of Belfast City Hall to protest against the AIA on the first anniversary of the signing of the Agreement (Woodwell 2005). In January 1987, the Democratic Unionist Party (DUP) and the Ulster Unionist Party (UUP) organized a petition with 400,000 signatures against the AIA (Woodwell 2005).

In May 1987, the Laughgall incident took place where 8 members of the Provisional IRA and one Catholic civilian were killed by the British Special Air Service (SAS) as the IRA attempted to carry out a gun and bomb attack on Loughgall Royal Ulster Constabulary (RUC) base in County. In November 1987, the Enniskillen bombing by the Provisional IRA killed 10 Protestant civilians and one member of the Royal Ulster Constabulary (RUC) during the Remembrance Day Ceremony. The bombing of a parade for war veterans intensified the negative view of the IRA (CAIN 2012; English 2003; GTD 2012; LaFree et al. 2009; Woodwell 2005). Further, in March 1988, the Gibraltar incident occurred where the British SAS shot and killed three IRA members as part of a planned military operation (CAIN 2012; LaFree et al. 2009; GTD 2012).

Beginning in the early 1990s, and with evident urgency from the United States, the British government began to offer a compromise through secret approaches which led Republican leaders, especially Sinn Féin, increasingly to look for a political agreement to end the conflict. In 1993, Gerry Adams, a Sinn Féin leader, entered formal talks with the moderate nationalist Social Democratic and Labor Party (SDLP) following a number of secret talks since 1991 between Martin McGuinness of Sinn Féin and the British government.
• On December 15 1993, the Joint Declaration for Peace (a.k.a the Downing Street Declaration) was announced. In the agreement, the British and Irish governments agreed to begin peace talks that were to include unarmed and nonviolent groups only in order to contain violent activities by both the Republican/nationalist extremists and the Loyalist/unionist extremists.

• In September 1994, as the reciprocity to the Downing Street Declaration, the Provisional IRA announced the cessation of violence in response to the understanding that Sinn Féin would be included in political talks for a settlement, and then, in October 1994, Loyalist paramilitaries joined the ceasefire deal.

• Following the ceasefire deal, committed by both sides political factions accompanied with paramilitaries in February 1995, the Irish and British governments jointly published a series of proposals known as the Framework Documents, which addressed crucial political issues, including Ireland’s claims on Ulster and the right of Ulster’s people to determine their own future.

• In February 1996, the Provisional IRA called off its ceasefire when the British government demanded the disarmament of the IRA before it allowed Sinn Féin into multiparty talks. By July 1997, Sinn Féin was admitted into multiparty talks after the ceasefire was reinstated.

• In order to derail the peace process, in November 1997, a splinter group from the Provisional IRA formed the Real Irish Republican Army (RIRA) which advocated that armed struggle as the best method; it was dissatisfied with the 1994 and 1997 ceasefires declared by the Provisional IRA and Sinn Féin and the multiparty peace talks (GTD 2005; Woodwell 2005).
On April 10, 1998, the British and Irish government as well as all political parties in Northern Ireland jointly announced the Good Friday/Belfast Agreement, which contained provisions on disarmament, policy, human rights, the central government’s security normalization, and the status of prisoners (Archick 2011).

Aftermath of the Good Friday/Belfast Agreement of 1998

The 1998 Good Friday Agreement paved the way to search for peace and reconciliation between two mistrustful communities in Northern Ireland. Despite progress in political and economic reforms under the power-sharing arrangement and following negotiations, low-level violence by a number of spoiler groups affiliated with Catholics’ and Protestants’ communities remained (CAIN 2012). For instance, on August 15, 1998, the Real IRA carried out the single largest terrorist attack in Northern Ireland’s history by using a car bomb, which killed 29 people in the town of Omagh, Northern Ireland (CAIN 2012; Frenntt and Smith 2012).

In July 2007, the British army ended its 38-year long military operation in Northern Ireland and passed all policing responsibilities to the Policing Service of Northern Ireland (PSNI). The PSNI is comprised of 50 percent of Catholic and 50 percent of Protestant members and administrated by the Policing Board instead of the British government, after passing the Police Act of 2004 which was joined by Sinn Féin in May 2007 (Archick 2011). Nonetheless, many observers have foreseen that any implementation of a comprehensive peace process and full reconciliation in Northern Ireland remains a long way off (e.g. Archick 2011; Coogan 2002a, b; English 2003; Frenntt and Smith 2012).

5.5 A Comparison and Summary
The two case illustrations in this chapter have illuminated a number of important internal dynamics fostering the escalation and persistence of the armed conflict. In particular, disaggregating a conflict process into several different but interdependent phases helps to unpack how small-scale and lower hostile communal violence evolves into the militarized political confrontations, and then either does or does not breed full-scale civil war between the central government and at least one armed challenger within the sovereign boundary.

Both the conflicts analyzed have been characterized as militarized political confrontations over the demands of status changes by ethno-religious or nationalist groups, which had been excluded from or disintegrated in national-political power (e.g. Cederman et al. 2010; Gurr 2000; PITF 2010). This chapter’s case analysis also demonstrated that the failure of adjusting a (written or unwritten) political power-sharing arrangement became one of the manifesting factors linking inter-communal grievances to militarized political confrontations by ethno/nationalistically divided armed groups affiliated with political factions which at least in Lebanon boiled over into a full-scale civil war between the central authority and armed oppositions. These contrasting outcomes occurred largely because the stability of a political power-sharing arrangement ultimately constituted the political domination of one confessional group over others and, then, institutionalized de facto political, economic, and social discrimination (e.g. Cederman et al. 2011; Gurr 2000; Regan and Norton 2006; Soren 2010). In each case, the central government’s inflexibility or delay in alleviating societal political and economic grievances in religiously or ethnically divided areas tended to boost street-level communal violence and widen deep societal cleavages over potential political solutions among factions that partially represented various sides of communities (e.g. Cederman et al. 2011; Gurr 2000).
As I demonstrated in chapter 4, these institutional and demographic factors help us to understand why, at least in the early phases leading to civil war, some groups arm and stand militarily against their central authority and why and how the central authority likely imposes severe government repression while at the same time offering a number of political reform proposals to alleviate societal grievances (e.g. Gurr 2000; Mason 2004; Walter 2009b). However, as in many case studies and conflict narrative analyses (e.g. Collier and Sambanis 2005a, b; Fearon and Laitin 2008), these structural and demographic factors alone do not permit us to elucidate whether, how and why politicization of societal grievances boils over into escalating militarized political confrontations among armed groups or militias affiliated or not with political factions in political arenas (e.g. Cederman et al. 2011; Krause 2010; Mason 2004), often replacing non-violent resistance campaigns featuring lower opportunity cost for mass civilian mobilization (e.g. Chenoweth and Stephan 2011; Lichbach 1987; Mason 2004).

Applying a conflict narrative analysis, this chapter has looked primarily into emergences of and alignments or realignments among primary and secondary conflict actors, including external actors, during each conflict. Because of the nature of the persistence of government repressive policy over the years, analyzing each phase, which is largely identified by the formation or involvement of new primary actor(s) in conflict, unpacks reciprocal interactions between the central/local authority and armed rebel resistance. The formation of new armed factions via splitting off or unifying existing groups to from new groups due to dissatisfaction or distrust for conventional political solutions or against the leadership of armed groups, likely dictated various changes in conflict dynamics connecting distinct conflict phases (e.g. Krause 2010; Mason 2004).
In the case of the Northern Ireland conflict, the creation of the Provisional IRA in 1970 as a primary, though rather small (250-300 fighters), agent for Catholic-republican armed resistance split from the traditional IRA dominated by old members of Marxist-socialist leanings determined the new direction of militarization of political confrontation (e.g. Coogan 2002a; English 2003; Kenny 2010). On other hand, as the case narrative pointed out, various local Protestant-loyalists who felt threats from extreme Cathorics created the Ulster Defense Association (UDA) in response as the largest loyalist paramilitary organization with more than 40,000 members in 1972 in addition to the active violent roles of the Ulster Voluntary Force (UVF) (e.g. Alcock 1994; Bardon 2001). Not surprisingly, the formation of these two paramilitary organizations further exacerbated inter-communal violence and widened the societal cleavages divided into two religious communities and ultimately challenging the government to become more directly involved militarily.

As the phase analysis also illuminated, the formation of the UDA was a reaction to the growing terrorist activities by the Provisional IRA between 1970 and 1972 despite the presence of the British army, whereas the radicalization of the Provisional IRA’s terrorist violence was triggered by a series of severe government repressions (e.g. internment and other military operations) implemented by the central-local governments and the Catholic community’s growing fear of terrorist activities by various Ulster paramilitary groups between 1970 and 1972.

Similarly, in the case of the Lebanese war, the emergence of the Lebanon National Movement (LNM) in 1975 led by Druze socialist leader Kamal Jumblatt as a large loosely aligned umbrella political coalition among political-socialist factions and generally supported by Muslim communities and the PLO against the Christian Maronite establishment and their paramilitary-wings sharply dictated the transformation from inter-communal violence to
militarized political confrontation over government control, which boiled over into full-scale civil war, ending Lebanese Army (LA) “neutrality,” and invited the Syrian military intervention in 1976 (e.g. Brogan 1990; Makdisi and Sadaka 2005; O’Balance 1998). In the case of Lebanese war, the creation of the Lebanese Arab Army (LAA) in 1976 by Muslim dissidents from the LA (which remained loyal to the president) further exacerbated the intensity of armed conflicts. The joint armed opposition combined the LNM with the LAA and mobilized more than 40,000 fully equipped-trained troops in addition to more than 20,000 Palestinian armed fighters. In March 1976, these groups, evidently feeling both empowerment and uncertainty over the government’s resolve, carried out offensive military operations against the central authority and the Christian right-wing militia coalition, namely the Lebanese Front (LF) with an estimated 30,000-40,000 armed fighters, formed in January 1976 (e.g. Gleditsch et al. 2012; O’Balance 1998; UCDP 2012). Legitimatized inter-ethnic killings by religiously and politically divided militias intensified violence and mounted armed fatalities up to 44,000 deaths with 180,000 wounded by the end of the conflict.

The phase analysis in this chapter has also unpacked how and when the central governments in Lebanon and the United Kingdom became involved into inter-communal violence and were forced to impose severe repression and deploy armed troops to quell the radicalization of communal violence by paramilitaries or militias that represented two or more divided communities in attempts to retain power, keep peace, and normalize societal interactions. In the case of the Northern Ireland conflict, the British central government ultimately sent a robust and credible signal by paying significant costs in suspending the Northern Irish constitution and parliament which had been destabilized since the mid-1960s and sending 30,000 armed service personnel into Belfast in 1972 in addition to implementing various criminal justice
measures to contain terrorist violence by multiple paramilitary agents who intended to derail or spoil possible negotiations and potential peace process.

In the case of the Lebanese war, although the Lebanese central government security forces maintained distant from inter-communal violence by factional militants in early 1975, the politicization and radicalization of inter-communal violence linking to multiple political factions in the government forced the central government’s hand as it took a side supporting the Christian Maronite establishment and its militias. After mid-1975, the Lebanese Army became a primary conflict actor joined with the Christian Maronite militias in order to prevent radicalization of multi-layered inter-communal violence and loss of national control including the rise of independent Palestinian militias. Uncertainty was rampant given the proliferation of militia and dissident groups and organizations. Unfortunately, however, due to its previous heavy handed attempts to retain and expand power, the Lebanese central authority failed to send any timely credible signal of willingness to resolve inter-communal disagreement peacefully and through reforms, thus perpetuating militia determination to resolve uncertainty by fighting on, until Syria intervened representing, against all odds, a dominant rebalancing on the governmental side.

In sum, two primary factors significantly differentiate the conflict dynamics (escalation to civil war) in Lebanon from those (persistent relative low-hostile violence such as terrorism) in Northern Ireland: (a) the size of rebel groups and their fighting capacity relative to government security forces (considerably larger rebel mobilization in Lebanon with an ultimate need for Syrian intervention to restore the balance with the Christian dominated government); and (b) government’s willingness to resolve conflict or political disagreement peacefully emerging sporadically but more visibly in Northern Ireland, through a series of relatively credible signals and negotiations. These two factors directly influenced paths in conflict dynamics, while at the
same time latent factors (e.g. splinters from or political alignments among existing political and armed factions) indirectly boosted the roles of the manifesting policy factors to facilitate or constrain the escalation of the militarized political confrontation to full-fledged war.

The conflict narrative analysis presented in this chapter is exploratory rather than conclusive; it relies on careful reading of secondary source material and for the most part does not include direct interviews of conflict participants as to their “uncertainty” levels. It does, nevertheless, assure that future research needs to disaggregate multiple steps and interactions within internal conflict dynamics as well as primary and secondary armed group perceptions involved in various phases of conflict and fighting at different times and places. As the conflict phase analysis above demonstrated, there are many variations and timing in the types of concessions or repressive measures made by central authorities as well as their success in resolving the underlying conditions that spark the armed resistance in each conflict phase due to uncertainty about government’s willingness to resolve, and significant factional changes that marked the periods of escalation due to uncertainty about rebels military strength and credible commitment (e.g. Mason 2004).22 Governments appeared to grow very alarmed in both cases when communal violence spread, threatening the state’s control and order. These moments of interest reflect uncertainty as to both violence and repressive measures on the one hand, rebel staying power and potential for concessions on the other. Eventually, these uncertainties or greater certainty either reciprocally escalated or led to the periods of peace feelers as by Syria and the Arab League in Lebanon and the British central government, Republic of Ireland, the European Union, and the United States to restore a measure of certainty for all sides. As the previous literature on civil war settlement has emphasized (e.g. Pearson et al. 2011; Walter 2002), de-escalation of conflict, including the two cases in this chapter, seem to depend on the extent of
certainty about governments’ willingness to commit to any peace proposals and uncertainty about ‘principal’ political agents’ and opposition groups’ willingness to make a viable agreement; external interveners, peace keepers and mediators might make a substantial contribution to peace by working to increase positive certainty (e.g. Gartner and Bercovich 2005; Greg and Diehl 2012; Walter 2002).

Finally, it should be noted that future case studies also should isolate interactions among the parties and the role of both structural and perceptual factors that lead to earlier or later de-escalation of violence and conflict. The two cases here both escalated from initial protests and skirmishes through communal violence to the brink of or to actual civil war. It would be instructive to know as well what measures taken earlier avert the second step of escalation toward and through communal violence, which avert attacks on or by government forces, and ultimately which negate the prospect of war.
Notes:

1 On applying case study research to refining and adjusting a number of causal inferences drawn from the large-n statistical findings such as Collier and Hoeffler (2004) and Fearon and Laitin (2003a), see Collier and Sambanis (2005a, b), Fearon and Laitin (2008), and Sambanis (2004c). On recent development of theory development and hypothesis testing using a case study researches, see Brady and Collier (2004; 2010), George and Bennett (2005), and Gerring (2007).

2 The primary conflict narrative resources in this chapter are based on the UCDP Conflict Encyclopedia (http://www.ucdp.uu.se/gpdatabase/) (UCDP 2012) and Brogan (1990) as well as other publicly available conflict narrative archives from http://www.onwar.com/aced/data/lima/lebanon1975.htm [hereafter ACED] and http://www.globalsecurity.org/military/world/war/lebanon.htm [hereafter Global Security]. The information from these archives is supplemented with materials based on recent fieldwork and historical archive researches on each conflict. For a full list of the work that I have consulted, see in Section VII of the bibliography.

3 Because of the lack of information, conducting in-depth decision analysis of cost-benefit calculus from losses/damages based on success or failure in every battlefield is beyond the scope of the case illustration in this chapter.

4 Some observers consider the Northern Ireland conflict continued by the Provisional IRA and other republican paramilitaries as a terrorist violence because those have never established a full or partial territorial control or sovereignty over the land that they demanded (e.g. Sanchez-Cuenca and de la Calle 2009). On the other hand, others have viewed the same episodes as an anti-colonialist conflict seeking free from the British occupation (e.g. Coogan 2002a; English 2003).
5 On recent theoretical and empirical research on secessionism and its armed struggles, see Sorens (2012). In Northern Ireland’s case, some Catholic nationalist/republican groups have declared to seek irredentist (i.e. reunion) goals across an international boundary with the Republic of Ireland, while the vast majority of ordinal Irish-Catholics and British-Protestants in Northern Ireland has shown no enthusiasm toward such a nationalistic myth since the mid-1970s (e.g. Kenny 2010; Woodwell 2005).


8 See Brogan (1990) and Makdisi and Sadaka (2005) for a list of armed insurgent groups and political organizations involved in violent conflicts between 1975 and 1990. A list of the active terrorist organizations such as the Arab Communist Organization, the Armenian Secret Army for the Liberation, as well as various Palestinian unknown groups in Lebanon during the same period are available through GTD (2012).
For a brief overview on these events in neighboring countries, see Brogan (1990) and Makdisi and Sadaka (2005). After the 1970 ‘Black September’ hostilities in Jordan, the PLO commandos and headquarters moved to Beirut and armed Palestinian units took over the refugee camps in Lebanon, especially in southern Lebanon in order to attack against Israel consistently.

On fragile peace in ethno/religious-federal states, see Bakke and Wibbels (2006) and Hale (2004). Note that Bakke and Wibbles do not consider Lebanon’s political setting before 1975 as an ethno-federal state. On theoretical and empirical aspects of consociational system, see Lijphart (1967), and, on Lebanon’s consociational system, see Schwerna (2010). On counter-argument of ethno-religious based consociational system, see Horowitz (2000).

It is unclear to what extent the Amal movement was active during the 1975-76 Civil War. Makdisi and Sadaka (2005) note that the Amal movement could mobilize between 3,000 and 4,000 active fighters during the 1970s, while Brogan (1990) reports that Amal had nearly 10,000 active fighters. According to Byman (2011), the movement was a purely self-defense forces for Shiite community before 1978 when the Amal leader Sadr was assassinated. Amal’s goal was to empower fully the Shiite community within Lebanon, but not to foment an Islamic revolution. The Amal Movement and Shiite community have welcomed the Syrian military presence since 1976 and for a time collaborated with President Amin Gemayel, a pro-Israel Maronite Christian, against the Sunni establishment and Palestinian refugees (Sunni) in Beirut and southern Lebanon. After Sadr’s assassination in Libya in 1978 and the success of the Islamist revolution in Iran in 1981, several Shiite factions became disenchanted with the Amal movement, and especially, many young Shiites joined Hezbollah when Israel began bombing and killing Shiite unarmed citizens during military operations against the PLO based in southern Lebanon after 1982 (e.g. Byman 2011; Nasr 2006).
12 On emerging Hezbollah as a terrorist, social, and political organization in Lebanon through a number of civil wars from 1977 to 1991, see Byman (2011) and Nasr (2006).


14 The protestant majority (53 percent) in Northern Ireland defines itself as British and largely supports constituted incorporation in the United Kingdom (unionists), whereas the Catholic minority (44 percent) considers itself Irish and many Catholics desire a united Ireland (nationalists). Loyalists are more militant unionists, while republicans are more militant nationalists.
According to Kenny (2010: 544), the Provisional IRA membership reached as many as 3,000 members by 1973 and those new members were largely not traditional Republicans, rather they were motivated by their everyday experience of British tanks and soldiers on the streets, and attacks by Loyalist militias. Indeed, many Catholic youths joined the IRA as their emotional solidarity to school friendship and family relationship rather they shared the republican goals (e.g. Coogan 2002a; Kenny 2010; Woodwell 2005).

Note that my analysis begins after 1970 because of limited information over fatalities and terrorist incidences before 1970 (see Sutton 1994; LaFree and Dugan 2007).


For detail of the process and the growing roles of Sinn Féin as a political-wing of the IRA, see O’Brien (1993).

O’Brádaigh’s comment can be found at http://www.irishsun.com/index.php/sid/20807847/scat/aba4168066a10b8d.

The unionist/Protestant community tends to refer the ‘Belfast Agreement,’ whereas the nationalist/Catholic community calls it as the ‘Good Friday Agreement.’ See Archick (2011) for an updated summary of recurrent crises in the peace process between 1998 and 2011 after the 1998 Good Friday/Belfast Agreement.

On weakness and limits of power-sharing political arrangement to resolve ethnic conflicts and recurrence of violent conflicts, see Lake and Rothschild (2001, 2008) and Hartzell and Hoddie (2007). For a discussion of practical problems of implementing the partition to resolve ethnic
conflicts and recurrence of violent conflicts, see Chapman and Roeder (2006), Johnson (2008), Sambanis (2001), and Sambanis and Schulhofer-Wohl (2009).

22 For examples, see Bell and Witter (2011 a-c) for the Libyan Revolution of 2011 and Holliday (2011, 2012, 2013) for insurgency and armed groups in the civil war in Syria since 2011.
CHAPTER 6

CONCLUSIONS

SUMMARY AND FUTURE RESEARCH

“Nothing can be explained by one variable alone” (Singer 2000:15)

“The biggest hurdles are those that must be solved with creative thinking and theorizing first, not by methodological adaptation” (Diehl 2006: 208)

6.1 Summary

In this volume, I proposed and examined an alternative theoretical explanation to understand the dynamic and strategic process in interdependent pathway toward civil war. Following Pierson’s (2004) historical institutional analysis, I defined a ‘dynamic pathway’ as a process involving positive feedbacks, “which generate multiple possible outcomes depending on the particular sequence in which events unfold” (Pierson 2004: 20). Conceptually, my approach was framed by a dynamic process model of conflict escalation to war (e.g. Bremer 1995; Diehl 2006; Huth and Alee 2002) (chapter 1) and examined the critical differences between civil war and other forms of collective violence (chapter 2). Theoretically, after examining the four extant explanations of civil conflict escalation using four cases of recent political armed confrontations, I developed a two-sided uncertainty explanation of conflict escalation built upon an informational theory of war (e.g. Fearon 1995; Powell 2002; Reiter 2003) and, especially, an asymmetric information explanation of war (e.g. Gertzke 1999; Slantchev 2005; Walter 2009a) (chapter 3). Empirically, I tested my theoretical argument of path causative factors and a two-sided uncertainty mechanism of conflict escalation employing complex non-recursive two-stage statistical modeling (chapter 4) and conducted a brief comparative conflict narrative analysis for
a positive (i.e. conflict escalation) and a deviant (i.e. no conflict escalation but persistence) case (chapter 5).

My statistical analysis with data generation and my conflict narrative analyses were by no means comprehensive (in future one would want to see an additional case of immediate de-escalation for further case comparison, for example). However, my study demonstrated the importance of understanding the dynamic and strategic process generating multi-interdependent phases in pathway to civil war as one of multiple outcomes among primary conflict actors. Specifically, this study provided initial empirical evidence that a two-sided uncertainty mechanism, which means that there would be cognitive variances by each principal armed actor in a conflict game over the probability that a future action is taken by its opponents under different conditions, expands our understanding of dynamic paths toward civil war (or not to civil war). This finding of conflict escalation complements the previous understandings of the causes of ‘initial’ communal violence, armed rebellion, and government repression explained by structural, institutional, and demographic factors (e.g. Collier and Hoeffler 2004; Fearon and Laitin 2003a; Gurr 2000; Regan and Norton 2006; Sambanis and Zinn 2004).

Moreover, the case illustration of the second Lebanese civil war that emerged in 1975 (chapter 5) further indicates that the entry or exit of multiple conflict agents joined in either a pro-government or an anti-government coalition forces as primary conflict parties substantively affect and even dictate the dynamic conflict escalatory path. On the contrary, the case illustration of the Northern Ireland conflict that erupted in 1970 reveals another path to conflict persistence short of war because of the continuous credible signaling of central government and the fragmentations of primary conflict parties especially on the opposition side.
While both cases have been previously studied, my study has posed new perspectives to reinvestigate the multiple-interdependent processes of each conflict in order to indicate points of decisive military, political, or economic intervention by third parties and discover the primary conflict agents’ decisive credible commitments to a viable peace agreement (see Regan 2010; Walter 2002). As Zartman (1990; 2005) has insightfully pointed out, future conflict scholarship needs to reevaluate the concept ‘mutually hurting statement’ as a single or multiple-interdependent analytical unit for conflict resolution and conflict settlement, perhaps measuring more precisely which key variables relating to uncertainty lead parties to conclude that an agreement is called for (e.g. Findley 2012; Pearson and Olson Lounsbery 2009; Pearson et al. 2011).

What we know about the multi-interdependent processes toward civil war from my study substantiates what might be termed J. David Singer’s first law, that “nothing can be explained by one variable alone” (Singer 2000: 15). In other words, every observable event may have multiple causes. Consistent with Singer’s first law, Jack S. Levy notes that “[a] given outcome can occur through several alternative causal paths, and variables important or even necessary in one sequence may have no impact in another” (Levy 2000a: 325). As Levy suggests, the future generation of researchers must examine various alternative causal paths by considering necessary and sufficient conditions for each phenomenon.

Still certain alternative causal paths, including third party intervention, regional political environment change, and domestic political factors were not fully examined in this theoretical and empirical investigation due to causal complexity and empirical variances of civil wars (e.g. Braumoeller 2003; 2006). For instances, as Regan (2010) and Suzuki (2010) as well as Öberg et al. (2009) and Melander et al. (2009) have explored, third-party intervention into low-scale
violent political confrontations would shape substantively initial conditions (or first or second stages if any) which may or may not boost conflict intensity because of constraining the emergence of multiple armed actors who tend to dictate or differentiate every conflict path and, thus, its consequence. As seen in the Lebanese civil war (chapter 5), a regional politically relevant environment including regime change or political turmoil in neighboring states such as Jordan (Maoz 1996) as well as regional rivalries such as Israel (Salehyan et al. 2011) would influence the civil war state’s domestic politics as well as its conflict processes and outcomes. All of the above needs to be incorporated into a theoretical framework of a dynamic multi-interdependent processes model to understand conflict conditions over time (Diehl 2006).

In addition, David A. Lake (2010/11) and Frederic S. Pearson (n.d) have commented briefly on political leaders’ multiple cognitive realities, which likely affect the prospects for conflict dynamics, in different times and places. In this regard, a new generation of conflict research needs to advance agent-based cognitive modeling with substantive narrative analysis of each case and new data generation to explain the causes and dynamic processes of interstate as well as intrastate conflicts. Lake (2010/11) calls for a new ‘cognitive’ behavioral revolution in the research on international relations and conflict research. Because of the cognitive nature—including actor’s incentives, risk propensity, prior-beliefs, learning, and updated-beliefs—of information theory, agent-based modeling of interstate and civil war will be a useful avenue for future research especially to capture the various uncertainties hinted in my study. The development of agent-based modeling and its empirical applications incorporating Bayesian statistical modeling (e.g. Gelman, Carlin, Stern, and Rubin 2003; Gill 2007) will be one of basis for the future research enterprise.
6.2 Are My Findings Useful? Is there Policy-Relevant Knowledge?

Social science research, except for purely theoretical work, is normally expected to suggest policy implications from empirical findings, whether they are from statistical analysis or case research. However, there is neither robust nor standard interpretation of what policy relevant knowledge or lessons are (e.g. George 1993; George and Bennett 2005; Walt 2012). For instance, before and during armed struggles in Syria since 2011, a number of civil war and conflict resolution scholars have hinted at a series of policy recommendations including (1) military commitment to unknown rebels’ risks exacerbating the conditions of civil war and (2) military intervention into domestic power struggles will likely prolong and intensify armed conflict.¹ Some of these observations and incidents such as the post-Gaddafi Bengazi attacks in Libya evidently conditioned the reluctance of some outside parties to make timely responses in Syria (e.g. Pape 2012). Yet some external parties did provide arms to Syria’s rebels and condemned the central government. For the international community, military intervention in Libya might have ended with desirable outcomes including the death of al-Gaddafi; yet those struggles apparently spilled over through destabilization and arms acquisitions to extremist militias in Algeria, Chad, Mali, Morocco, Niger, Nigeria, and Tunisia, as well as Lebanon, Palestinian territories, Syria, and Turkey.² As such, my question here is what constitutes policy relevant lessons and how we as scholars can “develop the knowledge that practitioners need in order to deal with different problems that arise in the implementation of foreign policy” (George and Bennett 2005: 275).

According to George and Bennett (2005: 284), three types of policy-relevant knowledge are: (1) conceptual models, (2) generic knowledge, and (3) behavioral models, which can indeed help bridge the gap between theory and practice. More importantly, George and Bennett
acknowledge that “we should give more emphasis to its contribution of the diagnosis of problem situations than focusing on its ability to prescribe sound choices of policy” (285).

Applying George and Bennett’s framework of policy-relevant knowledge, I can draw a handful of tentative policy-relevant conclusions from my study presented in this volume.

1- There would be multi-interdependent pathways toward civil war with different outcomes perceived and desired by different armed players in every conflict.

2- Because of such multiple outcomes with different equilibria (i.e. payoff for each player may not equal), the policy community should not rely on one single policy option, e.g. whether or not to arm rebels and whether or not to intervene. Multiple, hopefully non-contradictory strategies and cautious fallback options would appear to be necessary.

3- In order to open up multiple policy options, the policy community should not rely on a single theory based on the particular (bounded) rationality of unitary actor’s values, beliefs, perceptions, and judgments. Again, there are multiple ‘cognitive’ realities by each decision-maker in progressive course of actions. A strategic decision by player A at time t may be different from a strategic decision by the same player at time t + k (k denotes infinite numbers) even under the same or similar conditions.

4- The rationality of actor A regarding acceptable risk may differ from those of other sides, say actor Z, that attempts to influence A’s behavior. Actor A may have different risk tolerance at different times and in different contexts, say as actors enter or exit the conflict process.

5- Simple assumptions that one is dealing with a unitary or responsible actor may be particularly dangerous when one is trying to relate to non-state actors, such as warlords, “terrorists,” or multiple rebels in civil wars (see chapter 5 for examples). In this regard,
the international community has repeatedly made serious mistakes by selecting its policy counterpart (e.g. largely English-speaking and less politically relevant leaders) without searching better alternatives in post-civil war society in places such as Afghanistan and Iraq during state- and “nation”-building efforts.³

6- An early policy response to identify the cause of intercommunal disagreements should always be a first-step. The failure of dealing with early warning effectively through political channels would exacerbate conflict situations.

6.3 Where should we go from here? Future in Civil War Research

The Correlates of War Project’s newly released data on non-state war including inter-communal war (Sarkees and Wayman 2010) as well as the Uppsala Armed Conflict Program’s newly compiled data on non-state actor armed conflicts (Sundberg et al. 2012) will be a new starting point toward a comprehensive understanding of the dynamics of armed conflict escalation. In order to expand our analysis, however, as I pointed out in chapter 2 and Bremer (2000) has argued, scholars must pay more serious attention to conceptualization and operationalization of who fights whom, why and how (‘non-state actor’, ‘armed’, and ‘violent’ or ‘no-violent conflicts’) respectively (e.g. Krause 2010; Shellman 2006; Staniland 2012).⁴

In addition, as I discussed in chapter 1, the structural explanations of civil war onset (Fearon and Laitin 2003a; Collier and Hoeffler 2004) have largely dismissed the explanatory power of Gurr’s psychological-relative deprivation explanation (Gurr 1970, 2000). However, recent scholarship by compiling new data for both dependent (i.e. low threshold of civil war in general and ethnic civil war in particular) and core-independent variables (i.e. ethnic-political and economic horizontal grievances) has revealed the positive validity of Gurr’s relative
deprivation argument to explain dynamic process in the origin of contentious politics and escalation to civil war (e.g. Benson and Saxton 2010; Cederman et al. 2009, 2011). Benson and Saxton (2010; Saxton and Benson 2009) who employed a continuous (categorical) dependent variable of ethnonationalist contention in post-Franco Spain demonstrate that Gurr’s model indeed has explanatory power concerning the strategic choices of non-violent and violent tactics in ethno-political contention, especially for disadvantaged ‘regions’ such as Catalonia and groups such as the Basques.

Cederman et al. (2011), developing their new ethno-political and ethno-economic horizontal inequality data, reinforce Gurr’s relative deprivation explanation of ethnic-based civil conflict onset (see chapter 1 and 2) and suggest that

Rejecting ‘messy’ factors, such as grievances and inequalities, may lead to more elegant models that can be easily tested, but the fact remains that some of the most intractable and damaging conflict processes in the contemporary world, such as the conflicts afflicting the Sudan or the former Yugoslavia, are to a large extent about political and economic injustice. It is very unlikely that such conflicts can ever be understood, let alone durably solved, without taking seriously the claims of marginalized populations (Cederman et al. 2011: 492).

I must endorse what Cederman et al. suggested. Perhaps, the most important first-step in future research on civil war and various forms of political and societal violence would sort out what we know from what we do not know and why. In so doing, we must acknowledge that civil war research is a conceptually complex field where reliable data are hard to come by (e.g. Olson Lounsbery and Pearson 2009; Findley and Young 2012). The nature of civil war research would require researchers to rely more heavily on theory than their counterparts do in other areas of social sciences. It follows that the field should privilege theory, as it once did. Civil war scholars should test hypotheses, of course, but in ways that are guided by a well-specified theory. They should also focus considerable attention on refining existing theories building cumulative theory and developing new theories as I have tried to do in deconstructing civil war explanations into
distinct phases and paths. In particular, greater attention should be paid to the varied causal mechanisms implied by different theories (e.g. Bates et al. 1998; Davenport et al. 2008; Kalyvas 2008). Moreover, as Paul Diehl has suggested in his presidential address to the Peace Science Society (International), “the biggest hurdles are those that must be solved with creative thinking and theorizing first, not by methodological adaptation” (Diehl 2006: 208).

As of this writing, there are more than a handful of civil war-states and more than a handful of states that have been classified as at a higher risk for state-failure or civil war, according to Hewitt, Wilkenfeld, and Gurr (2012) based on Goldstone et al.’s (2010) forecasting model on state failure. Yet, what matters most is whether we as researchers create more powerful and precise theories to explain conflict and war onset, escalation and de-escalation for policy practitioners. Without good and robust theories, we cannot substantiate our empirical findings, whether quantitative or qualitative in nature (see chapter 3). Unless we have robust theories to make sense of interesting phenomena, we will not be able even to track all the contradictory hypotheses that scholars keep piling up (see chapters 1 and 2 of this volume). Without good theories for diagnosing various problems, there are no good policy solutions (e.g. George and Bennett 2005).^5

My study suggests that civil war scholars make greater efforts to do four basic things: (1) provide clear operational definitions of key concepts and variables; (2) develop rigorous new theory that elaborates on prior precepts; (3) engage in systematic and rigorous empirical analysis of generally accepted and newly developed propositions; and (4) seek to provide solutions to the many policy problems that civil war scholarship have identified to date. These interdependent steps would enhance the degree of theoretical cumulation within the field, which scholars such as Dina Zinnes (e.g. Zinnes 1980) have long championed, provide the principal theoretical
propositions with a firmer empirical foundation, and make civil war theory more useful for policymakers (e.g. Collier et al. 2003; Olson Lounsbery and Pearson 2009; Regan 2009).

Throughout this volume, I have tried to deal with such steps, although my contributions are by no mean comprehensive. I think however that the present study has paved at least one of many roads to understanding multi-interdependent and dynamic pathways toward civil war conceptually, theoretically, and empirically. In the end, I should note the following statement to keep reminding myself and keep informing my colleagues and future students:

Better theory is not a panacea. Better theory does not change the fact…..better theory does not automatically translate into better policy. Better theory is a prerequisite for better policy (Jakobsen, 2011: 167).
Notes:

1 For policy debates over military intervention into Sirya among foreign policy analysts and practioniers, see the Economist debate site (http://www.economist.com/debate/days/view/810) and the US News Debate Club site (http://www.usnews.com/debate-club/should-the-us-intervene-in-syria-with-military-action).

2 For example, see Mel Frykberg (2012) “Libyan Weapons Arming Regional Conflicts,” Inter Press Service (IPS) on 2 September 2012 (http://www.ipsnews.net/2012/09/libyan-weapons-arming-regional-conflicts/).

3 This observation is not my personal statement. See Giustozzi (2009) on Afghanistan and my book review on Giustozzi (2009) on ‘state’-building and transformation from armed groups to political parties, and Mann (2005) on ethnic cleansing and proper transitional justice approach. My thanks are due to several anonymous country experts and diplomats who have shared their experience and views from frontlines with me.

4 For example, see Krause (2010) and a series of ongoing research projects on armed actors under the Small Armes Survey, available at http://www.smallarmssurvey.org/armed-actors.html.

5 This section is a modified version of Mearsheimer and Walt (2013) and Jakobsen (2011). On what constitutes a ‘good’ social science research, see Brady and Collier (2004, 2010) and King et al. (1994) as well as Gerring (2012).

6 This is a modified version of Jakobsen’s (2011) recommendation.
APPENDIX A:

BARGAINING THEORY AND CIVIL WAR

(A BRIEF INTRODUCTION TO THE READERS)

My theoretical argument on uncertainty and multiple pathways toward civil war in chapter 3 adopts a bargaining explanation of interstate war to characterize the nature of sequential but dynamic moves toward civil war. Because of its complexity and somewhat different means of terminology and the bargaining theory, I provide a brief discussion of lexicon and logic behind frequently used terms below.¹

What does Bargaining mean?

In theory, a bargaining model assumes that bargaining entails situations in which two or more actors try to divide something that both want through a series of interactions in which actors must choose strategies (i.e. action or inaction) that make one better off at the expense of another.

What is a strategic perspective?

A strategic perspective here means a theoretical approach that views individuals as choosing their actions by taking into account the anticipated actions and responses of other with the intention of maximizing their own welfare.

What is a bargaining theory?

Bargaining theory (a.k.a. information theory) assumes that when actors have incomplete (relative to complete) information about the capabilities and/or resolve of their opponents, bargaining over goods that two players desire may fail to achieve peaceful settlements. A central dynamic of bargaining under this sort of uncertainty is referred to as the ‘risk-return tradeoff’
which means that there is a trade-off between (a) trying to get a good deal and (b) trying to minimize the probability that an undesired deal (i.e. war) will result (see Powell 1999, 2002).

James D. Morrow (1989) presented one of the first ‘incomplete’ information bargaining models of conflict with sequential moves in the international relations literature. Since Morrow’s work was published, bargaining models have become ubiquitous in international conflict research, and have produced a large number of important insights regarding uncertainties, and signaling, and war. Those insights address the outbreak of war (Morrow 1989; Fearon 1995; Gartzke 1999), mechanisms for signaling (Fearon 1994, 1997; Slantchev 2003, 2005), alliance behavior (Morrow 1991, 1994; Smith 1995, 1996, 1998), war termination and continuation (e.g. Filson and Werner 2002, 2004; Wagner 2000), domestic politics and war (Bueno de Mesquita and Lalman 1992, Bueno de Mesquita, Morrow, Siverson and Smith 1999, Powell 1999), and implications regarding the distribution of power, conflict and endogeneity of demands (Powell 1999, 2002; Slantchev 2005).

What is signaling and when will the signal be credible?

Signals are sent by any players to convey information about their resolve to their opponent. Signals can be sent either through words or deeds. For signals to be informative, they have to be costly in a way that distinguishes between actors with different values for the war outcome. Signals conceived intentional, but also can be interpreted by an adversary, covertly or mistakeny from actions.

Player A’s resolve affects what it will have to accept if push came to shove and there was a war over the issue at stake. Therefore each player will have an incentive to exaggerate its willingness and capabilities to the opponent, trying to look as resolute as possible. Since the opponent might know that the other player might be trying to bluff, he will not be convinced
unless the signal is costly in a way that makes it relatively less likely that a player with low resolve would send it. Thus, for a signal to change the opponent’s prior beliefs it needs somehow to distinguish between bluffing and resolved players, and thus such signals may be discounted as bluffs or misinterpreted as leveling credibility.

As Fearon (1997) and Morrow (1999) argued, sending signals to other player becomes more credible when the sender suffers some cost for it. Such a credible signal with high cost for senders is called a \textit{costly signal}. Fearon (1997) further distinguishes between two ideal types of costly signals: \textit{tying hands} and \textit{sunk costs}. According to Fearon, the tying-hands typically work by creating audience costs that the sender would suffer if it backs down on a challenge. In other words, the cost of tying hands materializes only if the sender decides to backing down from its hard-line policy. U.S. President John F. Kennedy’s TV address to the certain about his resolve and intentions in the 1962 Cuban missile crises was an apt example. Furthermore, if the leader’s hard-line policy such as severe repression is successfully quells or precludes any resistance, the cost of this tying-hand signal to be paid to followers or constituents is zero.

On the other hand, \textit{sunk-cost} signals are actions that incur costs that the sender must pay when imposing severe repressive actions to the challengers. Sunk costs increase when the central authority mobilizes regular armed troops or increase defense spending against its contenders.

\textit{Why do bargaining problems emerge?}

According to Fearon (1997), bargaining problems or obstacles are more likely when each player has incomplete information about its counterpart’s behavior, capabilities, and preferences to resolve the disagreement over the disputed issue. In order to gain further information about opposition’s intents (i.e. private information), the leaders might communicate with opponents directly or more likely by using signals.
What is uncertainty and why does it cause war?

Uncertainty can be defined as the condition under which the probability of an event or condition is unknown. Because government leaders want to know their opponent’s or rival’s true value for the issues at stake, they may send a costly signal (i.e. use of force) to their potential rivals to determine relative strength, and the rival may do as the same in return. This strategic interaction may generate war (see below).

How does a conflict or crisis spiral to war?

Any conflicts would have a chance to spiral to deadly war levels when either leader is unlikely to back down because they have to deal with the greater sunk cost or hand-tying cost, or both, simultaneously. The theoretical literature of the spiral model in interstate conflict provides some useful insights in this regard (Morgan 1984; Morrow 1989). According to the classical deterrence theory, credible and capable threats can prevent the initiation, and contain the escalation, of any conflict. By contrast, the conflict spiral model suggests that the prescriptions associated with deterrence theory frequently lead to vicious cycles of reciprocated conflict. According to the conflict spiral model, escalation results from a vicious circle of action and reaction between actors. Because, arguably each reaction is more severe and intense than the action that precedes it, each retaliation or defensive action in the spiral provides a new issue or grievance (Morgan 1984; Morrow 1989).

These dynamics explain the movement from lighter tactics to heavier tactics in conflict. As Morrow (1989) agued, because neither actor knows for the certain outcome of a war during a crisis—each side has the different expectation for inherent resolve, and neither side knows the other’s preference and capabilities to resolve the disagreement. These circumstances generate the greater uncertainty for both actors at different levels. Because of the greater unknown private
information for other’s behavior, either party has an incentive to bluff. Sometimes bluffs work if another side backs down for some reasons, but sometimes they do not work due to domestic audience costs (i.e. punishment after back-down leaders after the crisis, see Bueno de Mesquita et al. 1999, 2003; Chiozza and Goemans 2011). These mutual bluffs lead both sides to discount each other’s honest signals of resolve. As a costly signal argument suggests, bluffs turn to be credible only if sender of signals suffers some cost for it. Such costly bluff strategies by both sides (with tying-hand cost and sunk-cost) run the risk of escalation of conflict.
## APPENDIX B:
### A LIST OF CIVIL (INTRA-STATE) CIVIL WARS, 1976-2000

<table>
<thead>
<tr>
<th>ID</th>
<th>Year</th>
<th>CoW State ID</th>
<th>Name of Civil War</th>
<th>CoW Intrastate War ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1976</td>
<td>910</td>
<td>Second West Papua War of 1976-1978</td>
<td>802</td>
</tr>
<tr>
<td>2</td>
<td>1976</td>
<td>812</td>
<td>Third Laotian War of 1976-1979</td>
<td>803</td>
</tr>
<tr>
<td>4</td>
<td>1976</td>
<td>530</td>
<td>Second Ogaden War Phase 1 of 1976-1977</td>
<td>805</td>
</tr>
<tr>
<td>5</td>
<td>1976</td>
<td>850</td>
<td>East Timorese War Phase 3 of 1976-1979</td>
<td>806</td>
</tr>
<tr>
<td>6</td>
<td>1978</td>
<td>663</td>
<td>Third Lebanese War of 1978</td>
<td>807</td>
</tr>
<tr>
<td>7</td>
<td>1978</td>
<td>530</td>
<td>Second Ogaden War Phase 3 of 1978-1980</td>
<td>808</td>
</tr>
<tr>
<td>8</td>
<td>1978</td>
<td>90</td>
<td>Third Guatemala War of 1978-1984</td>
<td>809</td>
</tr>
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<td>9</td>
<td>1978</td>
<td>700</td>
<td>Saur Revolution of 1978</td>
<td>810</td>
</tr>
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<td>1978</td>
<td>490</td>
<td>Fourth DRC (Shaba) War of 1978</td>
<td>811</td>
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<tr>
<td>12</td>
<td>1978</td>
<td>630</td>
<td>Overthrow of the Shah of 1978-1979</td>
<td>813</td>
</tr>
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<td>13</td>
<td>1978</td>
<td>93</td>
<td>Sandinista Rebellion of 1978-1979</td>
<td>815</td>
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<td>14</td>
<td>1979</td>
<td>630</td>
<td>Anti-Khomeini Coalition War of 1979-1984</td>
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<td>15</td>
<td>1979</td>
<td>92</td>
<td>El Salvador War of 1979-1992</td>
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<td>1979</td>
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<td>Mozambique War of 1979-1992</td>
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<td>1980</td>
<td>483</td>
<td>Second Chad (Habre Revolt) War of 1980-1984</td>
<td>820</td>
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<td>1982</td>
<td>530</td>
<td>Tigrean and Eritrean War of 1982-1991</td>
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<td>135</td>
<td>Shining Path War of 1982-1992</td>
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<td>Contra War of 1982-1990</td>
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<td>1985</td>
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<td>Fifth Iraqi Kurds War of 1985-1988</td>
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<td>1988</td>
<td>775</td>
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<td>660</td>
<td>Fifth Lebanese War of 1989-1990</td>
<td>850</td>
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<td>1989</td>
<td>483</td>
<td>Third Chad (Deby Coup) War of 1989-1990</td>
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<td>1989</td>
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<td>1989</td>
<td>360</td>
<td>Romania War of 1989</td>
<td>858</td>
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<td>1989</td>
<td>450</td>
<td>The First Liberia War of 1989-1990</td>
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<td>1990</td>
<td>750</td>
<td>Kashmir Insurgents War of 1990-2005</td>
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<td>1991</td>
<td>645</td>
<td>Shiite and Kurdish War of 1991</td>
<td>862</td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>451</td>
<td>First Sierra Leone War of 1991-1996</td>
<td>863</td>
<td></td>
</tr>
<tr>
<td>1991</td>
<td>640</td>
<td>Second Turkish Kurds War of 1991-1999</td>
<td>865</td>
<td></td>
</tr>
<tr>
<td>1992</td>
<td>811</td>
<td>Second Cambodia Civil War of 1993-1997</td>
<td>881</td>
<td></td>
</tr>
<tr>
<td>1993</td>
<td>372</td>
<td>Abkhazia Revolt of 1993-1994</td>
<td>882</td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>679</td>
<td>South Yemeni Secessionist War of 1994</td>
<td>885</td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>517</td>
<td>Second Rwanda War of 1994</td>
<td>886</td>
<td></td>
</tr>
<tr>
<td>1994</td>
<td>365</td>
<td>First Chechnya War of 1994-1996</td>
<td>888</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>344</td>
<td>Croatia-Krajina War of 1995</td>
<td>891</td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>450</td>
<td>Third Liberia War of 1996</td>
<td>893</td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>645</td>
<td>Sixth Iraqi Kurds War of 1996</td>
<td>895</td>
<td></td>
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<tr>
<td>1996</td>
<td>490</td>
<td>Fifth DRC War of 1996-1997</td>
<td>896</td>
<td></td>
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<tr>
<td>1997</td>
<td>517</td>
<td>Third Rwanda War of 1997-1998</td>
<td>896</td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>484</td>
<td>First Congo Brazzaville War of 1997</td>
<td>897</td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>483</td>
<td>Fourth Chad (Togoimi Revolt) War of 1998-2000</td>
<td>906</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>850</td>
<td>Second Aceh War of 1999-2002</td>
<td>912</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>530</td>
<td>Oromo Liberation War of 1999</td>
<td>913</td>
<td></td>
</tr>
<tr>
<td>1999</td>
<td>365</td>
<td>Second Chechnya War of 1999-2003</td>
<td>915</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>438</td>
<td>Guinean War of 2000-2001</td>
<td>917</td>
<td></td>
</tr>
</tbody>
</table>

Source: Compiled by the author based on Sarkess and Wayman (2012a), *Intra-State War Dataset v.4.1*.

Notes: there are a few discrepancies between the original CoW list (v.4.1) and my list because the CoW includes a few episodes without CoW state ID.
APPENDIX C:

TECHNICAL NOTES TO STATISTICAL ESTIMATION

To understand the procedures of how I estimate a 2SCML and interpret the results, a number of additional technical notes are in order. Below I summarize a number of procedures in six sequential steps:

Step 1: I estimate a probit equation predicting civil war onset (Table 4.6, Model 7, Base Model) by replicating Fearon and Laitin’s (2003a) civil war onset model.\(^2\)

Step 2: I estimate two equations for the continuous endogenous variables (government repression uncertainty and armed rebel resistance uncertainty) using the OLS estimation, separately, and save this information from the OLS. The information will be used in the second-stage probit equation are obtained from residuals which are the information of the differences between an observed value of government repression and of armed rebel challenge and the predicted (i.e. fitted) value of those from the first-stage OLS equations.\(^3\) Small residuals indicate the prediction of the OLS model is reliable. The predicted value of the government repression OLS model and the armed rebel resistance OLS model can be expected to be uncorrelated with the error term in each equation (Allison 1999; Berry and Feldman 1985).\(^4\)

Step 3: I estimate a probit equation predicting civil war onset (Table 4.6, Model 8, restricted model) with the government repression level variable (simple ordered values) and the armed rebel resistance level variable (simple ordered values) and re-estimate the same probit model (Model 8) predicting civil war onset with government repression residuals and armed rebel resistance residuals obtained from the OLS regression in step 2 (i.e. the unrestricted model, Table 4.6, Model 9).

Step 4: I conduct a likelihood ratio (LR) test between Model 8 (the restricted model without residuals) and Model 9 (the unrestricted model with two residuals).\(^5\) As Alvarez and
Glasgow (1999: 151) emphasized, the utility of the LR test for exogeneity (i.e. two models are independent) are (a) “it is simple to estimate; only the log-likelihoods from two probit models are necessary” (b) “this test is not available for the other estimators which have been suggested for these models, including 2SPLS” and (c) “remember that models with binary dependent variables do not have ‘residuals’ like models with continuous dependent variables. Without residuals, diagnosing violations of assumptions such as autocorrelation, heteroskedasticity, and endogeneity is extremely difficult.” Using the LR test, I expect to see that the LR test rejects the null hypothesis (i.e. no difference between two models). If the LR test shows that $X^2$ (log-likelihood chi$^2$) of the difference is statistically significant, I can confidently claim that endogeneity between two interested variables are evident, and needs to be accounted for my study.

Step 5: after conducting the LR test, I also compare Model 9 (the unrestricted model) with Model 7 (base model) and Model 8 (the restricted model) in order to determine the overall predictive performance of Model 9. To do so, I execute a Receiver-Operator Characteristic (ROC) test (e.g. Beck, King, and Zeng 2004; King and Zeng, 2001a, 2006; Ward et al. 2010) which is a systematic approach to evaluating relative costs of Type I error (false negatives, missed cases of support) and Type II error (false positives, meaning that incorrectly predicted instances of support). In my study, a Type I error is predicting civil war when one did not occur, whereas a Type II error is predicting no civil war when one actually happened. Graphing three ROC curves generated from the three civil war onset models in Table 4.6, I visually demonstrate the tradeoff between Type I and Type II errors from each model and discuss why my estimator performs better than other alternatives. The area under the ROC curves displayed in Figure 4.1 gives the percentage of cases correctly predicted and provides an estimate of model fit.
Step 6: interpreting odds or odd ratios is the most straightforward way to convey the relationship between the explanatory variables and the dependent variable from logit/probit estimation. Instead of interpreting odds, I examine the extent to how a change in five ordered values of the two main explanatory variables influence the probability that a state experience a new civil war when other variables set at medians. Unlike odds ratio for every variable, the predicted probabilities are very useful to interpret my findings because my primary interest here is to predict the likelihood (from 0 to 100 percent) that a state experiences a new civil war in any given state-years and, more specifically, because the two main explanatory (government repression levels and armed rebel resistance levels) variables are measured in a ordered value. Hence, I calculate a set of the predicted probabilities of civil war onset in the context of different combinations—five government repression levels x five armed rebel resistance levels— set all other variables at their medians. The results are summarized visually in Figure 4.2. Overall, the baseline predicted probability of a new civil war onset based on Model 9 probit estimation is 0.64 percent when all variables are set at medians. Therefore, one might be concerned that the predicted probability of civil war onset is extremely low and there are some problems in estimators. Yet, as I will discuss shortly below, new civil war onsets are very rare events (84 new onsets between 1976 and 2000). Even considering all other variables at means, the probability of civil war onset based on Fearon and Laitin (2003a) model is 1.03 percent on average (the 95 percent confidence interval is between 0.64 and 1.42 percent).
APPENDIX D:
RESULTS OF RUBSTNESS TESTS

This appendix includes Table 4.7, replicating Table 4.6 (Models 7-9) with the ACD/UCDP Civil War data and Table 4.8 which reports the results of four sensitivity/robustness tests of Table 4.6 (Model 9) using four different statistical models, namely a generalized equation estimation (GEE) model with first-order autoregressive error process (AR1), a fixed effects (FE) logit model, a random effects (RE) logit model, and a rare events (RareEvent) logit model (see section 4.5 for a brief discussion of each approach).

Table 4.7 displays the results of three logit models replicating Models 7-9 with data on major civil war onset (1,000 BDT+ in a given year) obtained from the original onset data from the ACD/UCDP. As expected, despite the different coding threshold from the CoW data (see Sarkees and Wayman 2010), all three models with the ACD/UCDP reproduce the main findings reported in Table 4.6, while there are some discrepancies in the coefficients. Especially, Model 12 indicates that the autocracy variable and the oil exporter variable which are some robust control variables across Models 7-9 with the CoW data are no longer statistically significant (e.g. Dixon 2009; Hegre and Sambanis 2006; Sambanis 2004a). As noted in the main text, this would suggest that various demographic and institutional factors which are largely time-invariant variables in state-year aggregated data may be better to consider as latent factors influencing the information problems rather than necessary and sufficient conditions producing civil war onset (Walter 2009a). With respect to model-fitness information, overall Model 12 (full model) performed better in terms of the AIC and has a better predicting power of actual events relative to two alternatives in terms of the ROC in the bottom of Table 4.7.
### Table 4.7 Replication for Models 7-9 with ACD/UCDP Civil War Data

<table>
<thead>
<tr>
<th></th>
<th>Model 10 Base model</th>
<th>Model 11 Restricted model</th>
<th>Model 12 Unrestricted model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Repression t-1</td>
<td>0.574** (0.229)</td>
<td>0.715** (0.189)</td>
<td></td>
</tr>
<tr>
<td>Armed Rebel Resistance t-1</td>
<td>0.233** (0.116)</td>
<td>0.276** (0.122)</td>
<td></td>
</tr>
<tr>
<td>Government Repression residuals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Armed Rebel Resistance residuals</td>
<td></td>
<td></td>
<td>0.931** (0.307)</td>
</tr>
<tr>
<td>Economic Development (Log)</td>
<td>-0.817*** (0.191)</td>
<td>-0.738*** (0.192)</td>
<td>-0.818*** (0.214)</td>
</tr>
<tr>
<td>Population Size (Log)</td>
<td>0.266** (0.128)</td>
<td>0.172(0.131)</td>
<td>0.0495(0.135)</td>
</tr>
<tr>
<td>Democracy</td>
<td>-1.176** (0.531)</td>
<td>-0.927(0.583)</td>
<td>-0.642(0.598)</td>
</tr>
<tr>
<td>Autocracy</td>
<td>-0.983*** (0.374)</td>
<td>-0.828*** (0.391)</td>
<td>-0.723(0.484)</td>
</tr>
<tr>
<td>Ethnic Fractionalization (Log)</td>
<td>1.227 (0.651)</td>
<td>0.648(0.592)</td>
<td>0.637(0.541)</td>
</tr>
<tr>
<td>religious fractionalization (Log)</td>
<td>-0.631(0.809)</td>
<td>-0.807(0.747)</td>
<td>-1.020(0.751)</td>
</tr>
<tr>
<td>Oil Exporter</td>
<td>0.430(0.405)</td>
<td>0.275(0.395)</td>
<td>0.408(0.448)</td>
</tr>
<tr>
<td>Mountainous Terrain (Log)</td>
<td>0.393*** (0.130)</td>
<td>0.220 (0.127)</td>
<td>0.227(0.140)</td>
</tr>
<tr>
<td>Noncontiguous state</td>
<td>0.523(0.508)</td>
<td>0.731(0.545)</td>
<td>0.885(0.572)</td>
</tr>
<tr>
<td>Political Instability</td>
<td>0.635 (0.327)</td>
<td>0.155(0.438)</td>
<td>0.156(0.430)</td>
</tr>
<tr>
<td>Interstate War Involvement</td>
<td>1.259(0.875)</td>
<td>1.294 (0.685)</td>
<td>1.713*** (0.681)</td>
</tr>
<tr>
<td>Constant</td>
<td>-1.280(2.246)</td>
<td>-1.299(2.632)</td>
<td>0.352(2.762)</td>
</tr>
<tr>
<td>Observations</td>
<td>2580</td>
<td>2365</td>
<td>2352</td>
</tr>
<tr>
<td>LR Test (df=15)</td>
<td>145.8***</td>
<td>160.1***</td>
<td>196.9***</td>
</tr>
<tr>
<td>AIC</td>
<td>0.162</td>
<td>0.149</td>
<td>0.133</td>
</tr>
<tr>
<td>BIC</td>
<td>-19755.3</td>
<td>-17915.9</td>
<td>-17831.7</td>
</tr>
<tr>
<td>ROC</td>
<td>0.89</td>
<td>0.90</td>
<td>0.94</td>
</tr>
</tbody>
</table>

Notes: Models were estimated with Stata 10.01. Robust standard errors in parentheses. All significance levels (P-values) are based on two-tailed tests: * p<0.10, ** p<0.05, *** p<0.01.

Figure 4.5 depicts a comparative plot of three ROC curves based on Models 10-12. The ROC curve based on Model 12(sold line) shows a substantively better predicting performance by correctly predicting the larger area (0.94) relative to other alternatives (Model 10 (dot line) has 0.89 and Model 11(dash line) has 0.90).
Lastly, Table 4.8 reports the results from a number of different sensitivity/robustness tests replicating Model 9. All four different model specifications indeed perform better than the original Model 9 and improve significantly covariates and standard errors through systematically drawn different samples than those in reported in Table 4.6. Yet, interpreting the findings is required some cautions in order to draw specific statistical and causal inferences from these findings because each modeling approach is not originally designed for testing a non-recursive causal modeling or simultaneous equation modeling (SEM). Hence, I will leave out my concluding remarks on my findings from these while attaining the substantial benefits with statistically significant support to my argument.
Table 4.8 Results of Sensitivity Analyses with Different Estimators based on Model 9 (Table 4.6)

<table>
<thead>
<tr>
<th>Model</th>
<th>Generalized Equation Model</th>
<th>Fixed Effects Model</th>
<th>Random Effects Model</th>
<th>Rare Events Logit Model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 13</td>
<td></td>
<td>Model 14</td>
<td>Model 15</td>
</tr>
<tr>
<td></td>
<td>Government Repression</td>
<td>0.885*** (0.188)</td>
<td>0.833*** (0.167)</td>
<td>0.825*** (0.164)</td>
</tr>
<tr>
<td></td>
<td>t-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Armed Rebel Resistance</td>
<td>0.290*** (0.104)</td>
<td>0.259** (0.107)</td>
<td>0.261** (0.103)</td>
</tr>
<tr>
<td></td>
<td>t-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Government Repression</td>
<td>0.608*** (0.174)</td>
<td>0.748*** (0.219)</td>
<td>0.662*** (0.214)</td>
</tr>
<tr>
<td></td>
<td>residuals</td>
<td>0.743*** (0.222)</td>
<td>0.827*** (0.177)</td>
<td>0.793*** (0.171)</td>
</tr>
<tr>
<td></td>
<td>Economic Development (Log)</td>
<td>-0.626*** (0.182)</td>
<td>-0.656*** (0.194)</td>
<td>-0.639*** (0.189)</td>
</tr>
<tr>
<td></td>
<td>Population Size (Log)</td>
<td>-0.134 (0.099)</td>
<td>-0.111 (0.125)</td>
<td>-0.108 (0.124)</td>
</tr>
<tr>
<td></td>
<td>Democracy</td>
<td>-0.503 (0.445)</td>
<td>-0.428 (0.452)</td>
<td>-0.408 (0.447)</td>
</tr>
<tr>
<td></td>
<td>Autocracy</td>
<td>-0.619** (0.274)</td>
<td>-0.819** (0.367)</td>
<td>-0.782** (0.358)</td>
</tr>
<tr>
<td></td>
<td>Ethnic Fractionalization</td>
<td>-0.245 (0.482)</td>
<td>-0.305 (0.535)</td>
<td>-0.324 (0.531)</td>
</tr>
<tr>
<td></td>
<td>religious fractionalization</td>
<td>0.588 (0.605)</td>
<td>0.690 (0.790)</td>
<td>0.670 (0.777)</td>
</tr>
<tr>
<td></td>
<td>Oil Exporter</td>
<td>0.632 (0.425)</td>
<td>0.687 (0.397)</td>
<td>0.651 (0.386)</td>
</tr>
<tr>
<td></td>
<td>Mountainous Terrain (Log)</td>
<td>-0.009 (0.102)</td>
<td>-0.026 (0.121)</td>
<td>-0.031 (0.119)</td>
</tr>
<tr>
<td></td>
<td>Noncontiguous state</td>
<td>0.896* (0.481)</td>
<td>0.638 (0.476)</td>
<td>0.618 (0.478)</td>
</tr>
<tr>
<td></td>
<td>Political Instability</td>
<td>0.216 (0.359)</td>
<td>0.222 (0.357)</td>
<td>0.186 (0.353)</td>
</tr>
<tr>
<td></td>
<td>Interstate War Involvement</td>
<td>-0.439 (0.764)</td>
<td>-0.615 (0.907)</td>
<td>-0.426 (0.892)</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>0.310 (2.096)</td>
<td>0.870 (2.642)</td>
<td>0.640 (2.187)</td>
</tr>
<tr>
<td></td>
<td>Observations</td>
<td>2807</td>
<td>2697</td>
<td>2807</td>
</tr>
</tbody>
</table>

Notes: All models were estimated with STATA 10.01 (SE). All significance levels (p-values) are based on two-tailed tests: * p<0.10, ** p<0.05, *** p<0.01
Model 13 is a GEE model with logit link and first-order autoregressive error process (i.e. AR1).
Model 14 is a logit model with fixed effects grouped by state.
Model 15 is a logit model with random effects model grouped by state and year.
Model 16 is a rare events logit model clustered on state with four splines based on those variables to control for time dependence, using the Beck et al. (1998), omitted.
Notes:

1 This appendix is largely drawn from the following work (Fearon 1995; Gertke 1999; Morrow 1989, 1998; Powell 1999, 2002, 2006; Reiter 2003; Lake 2003, 2010/11; Wagner 2000, 2007) and especially, the discussion on a costly signal explanation of the cause and escalation of ethnic conflict by Öberg (2002). All errors and mistakes are my own.

2 In my model in chapter 3, I replaced Fearon and Laitin’s the anocracy variable for the democracy (coded 1 if polity score is greater than +7) and the autocracy (coded 1 if Polity score is smaller than -7) because the concept of anocracy (coded 1 if polity score is smaller than +6 and greater than -6) has been considered as a problematic conceptualized category using Polity IV Data (see Cheibub et al. 2010; Plümper and Neumayer. 2010; Vereeland 2008).

3 In STATA, 2SLS (instrumental variable regression or probit/logit) estimation automatically computes residuals after predicting predicted (fitted) value of the first stage equation with exogenous variables, and estimates the second stage equation with residuals attained from the first stage equation. In practice after estimating an OLS regression in STATA, I calculate the predicted value and residuals (different between the predicted value and the observed value).

4 As Allison (1999) notes, the most important of assumptions for multiple regression analysis is that the error term, \( e \), is unrelated to the explanatory variables \( x \). If they are correlated, the estimates of the coefficients are likely to be biased.

5 In general a LR \( \chi^2 \) for each model can be obtained by calculating the formula \([-2(\text{final log-likelihood} - \text{initial log-likelihood})]\) after estimating every logit/probit model.
BIBLIOGRAPHY

Notes: the bibliography is organized in seven sections as follows:

I. Interstate Conflict Literature (chapters 1, 3, and 6)

II. Civil War and Collective Violence Literature (chapters 1, 2, 3, and 6)

III. Statistical Modeling (chapters 2 and 4)

IV. Concept Formation and Case Study Research Methods (chapters 2, 3, and 5)

V. Theory and Policy Relevant Knowledge (chapter 6)

VI. Data and Online Data Sources (chapters 1, 2, 4, and 5)

VII. Case Narratives and Case Materials (chapters 1, 3, and 5)

I. INTERSTATE CONFLICT LITERATURE


II. **CIVIL WAR AND COLLECTIVE VIOLENCE LITERATURE**


**III. STATISTICAL MODELING**


Cleves, Mario A. 2002. “From the helpdesk: Comparing areas under receiver operating characteristics curves from two or more probit or logit models.” *The Stata Journal* 2(3): 301-313.


King, Gary, and Langche Zeng. 2001b. “Explaining Rare Events in International Relations.”


**IV. CONCEPT FORMATION AND CASE STUDY RESEARCH METHODS**


Skocpol, Theda. 1979. *States and Social Revolutions*. Cambridge: Cambridge University Press.


V. THEORY AND POLICY-RELEVANT KNOWLEDGE


VI. DATA CODEBOOK, HANDBOOK, AND ONLINE SOURCES


Cederman, Lars-Erik, Brian Min, and Andreas Wimmer. “Ethnic Armed Conflict dataset” [http://hdl.handle.net/1902.1/11797](http://hdl.handle.net/1902.1/11797), v.1.


Sarkess, Meredith Reid, and Frank Wayman. 2012b. Inter-State War Dataset v.4.1 (accessed on December 12, 2012).

Sarkess, Meredith Reid, and Frank Wayman. 2012c. Extra-State War Dataset v.4.1 (accessed on December 12, 2012).


VII. CASE NARRATIVES AND CASE MATERIALS

(1) General Reference:


(2) the Lebanese Civil War of 1975-1976:


(3) the Northern Ireland Conflict of 1968-1998:


(4) The Libyan Revolution and Civil War of 2011:


(5) The Syrian Civil War of 2011–:


(6) Other Case Narratives and Eyewitness’ Reports:


Gourevitch, Philip. 1998. *We wish to inform you that tomorrow we will be killed with our families*. New York: Picador.


ABSTRACT

PATHWAYS TO CIVIL WAR:
A STUDY OF MULTIPLE PATHS TOWARD CIVIL WAR

by

SUSUMU SUZUKI

August 2013

Advisor: Dr. Frederic S. Pearson

Major: Political Science

Degree: Doctor of Philosophy

This dissertation is about conflict escalation to civil war, and examines why some political confrontations escalate and why principal conflict actors continue fighting rather than reaching a number of political arrangements at various points of the course of conflict. Unlike previous studies, this study treats the progression to civil war as one of complex alternate paths. In so doing, building on the perspective of asymmetric information (i.e. uncertainty) problems as a cause of war, this study claims that involving each conflict actor’s cognitive variances about its opponent’s willingness to resolve and military strength would bolster either side’s costly military mobilization and boil over into civil war. Four extant hypotheses on conflict escalation and two specific propositions from a two-sided uncertainty perspective are tested with ordered and binary multiple logistic regression analyses against state-year aggregated data on government repression and armed resistance levels as well as civil war onset from 1976 to 2000. A comparative case illustration of the Lebanese civil war of 1975-1976 and the Northern Ireland conflict of 1970-1998 further illuminates the internal conflict dynamics toward or away from civil war, examining the emergence of principal and secondary armed actors in the course of conflict. Both the quantitative and qualitative studies provide evidence for the roles of uncertainty in either
government leaders’ or armed rebel leaders’ decisions to fight or make certain concessions, while demonstrating that structural, institutional, demographic, and insurgent-favorable factors help explain the causes and persistence of ‘initial’ communal violence, armed resistance, and government repression. The study concludes with substantive policy implications for preventing conflict escalation and calls for stepping up efforts at establishing actor-based theoretical underpinnings to understand civil war as multi-interdependent reciprocal processes.
Susumu Suzuki obtained his B.A. in Political Science from Northern Arizona University, Flagstaff, AZ, and his Ph.D. from Wayne State University, Detroit, Michigan. His primary research focuses on the dynamic processes of ethnic and non-ethnic armed conflicts in the context of international interventions and arms transfers, as well as conflict settlement process and post-conflict reconstruction.