POLITICS AMONG REBELS: THE CAUSES OF DIVISION BETWEEN DISSIDENTS

BY

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Abstract

What explains the variation in the number of rebel groups across civil conflicts? Prior research has established that conflicts with multiple rebels groups are among the most severe cases in terms of duration, fatalities, and possibilities for recurrence. Yet, we know little about why the structure of rebel movements varies. This dissertation seeks to resolve that gap. I argue that the organization of rebellion is contingent on the identities and ideologies that are most salient at a given moment. Organization around ethnic identity tends to produce fragmented movements with multiple rebel groups. I expect that ethnicity will tend to be salient when civilians are targeted with repression. Three empirical analyses provide support for this contention. I show that individuals who have been attacked are more willing to use violence and more likely to identify with their ethnic group. Next I show that repression significantly increases the probability that new rebel groups will enter a conflict, and that these new groups are likelier than others to emphasize a single ethnic identity. I also demonstrate that repression triggers a reorganization of existing rebel groups around ethnicity, with repression being associated with increased probabilities of rebel group splintering and the formation of ethnically-homogeneous alliances. I supplement these quantitative analyses with case studies of several secessionist movements in Burma. Ultimately, I find that repression substantially increases the probability that a conflict will have multiple rebel groups.

For my family

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Chapter 1

Introduction

Why do some civil wars have multiple rebel groups, while others have only one? Theories of civil war tend to focus on individual-level motives (e.g. Gurr 1970; Collier and Hoeffler 2004) or opportunities (e.g. Fearon and Laitin 2003) for rebellion, while giving little attention to the organization of dissent into rebel groups and coalitions. Even those studies which do explicitly consider rebel group formation tend to focus on group attributes such as their relationship with civilians (e.g. Weinstein 2007), and do not consider the structure of the rebel movement that emerges. Yet, the process of organizing rebel groups is not always straightforward. At least two rebel groups are simultaneously active at some point in 44% of civil conflicts.[1] In the Chadian Civil War, for instance, 25 distinct rebel groups appeared over the course of the conflict. Conflicts in Afghanistan in the 1980's, Somalia in the 1990's, and Sudan in the 2000's have been similarly complex. At its peak the recent civil war in Syria was contested by at least two dozen armed groups. Even movements with geographically-concentrated populations and common goals, such as the Arakanese secessionists in Burma, often fragment into multiple rebel groups. Furthermore, the number of groups operating in these conflicts often varies greatly over time. Returning to the Syrian example, the opposition was largely consolidated under the banner of the Free Syrian Army early in the

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[1]Source: Pettersson and Wallensteen (2015).

conflict, later splintered into dozens of factions largely on the basis of religion, and now appears to be consolidating again as groups are defeated or merge.

The importance of rebel movement[2] structure has been well established, with several studies examining the consequences of having multiple rebel groups. Generally, these works find that the presence of multiple rebel groups is associated with greater levels of conflict severity. Conflicts of this type last longer than dyadic competitions, as the increased number of veto players complicate the negotiation of peaceful settlements (Cunningham 2006; Cunningham, Gleditsch, and Salehyan 2009; Akcinaroglu 2012), and create the possibility of peace being spoiled by extreme factions (Stedman 1997). Relatedly, Cunningham, Gleditsch, and Salehyan (2009) find that the presence of multiple government-rebel dyads decreases the likelihood that a conflict will end with a peace agreement, while increasing the likelihood of rebel victory. Findley and Rudloff (2012) find this effect to be conditional, however, as the fragmentation of weak rebel movements can increase the probability of peaceful settlement. Perhaps related to the paucity of peaceful settlements, both Atlas and Licklider (1999) and Zeigler (2016) find that civil wars with multiple rebel groups are prone to recurrence, as new episodes of conflict frequently occur between rebel factions that were separate in the previous conflict. Finally, conflicts with multiple dyads feature over 20% more fatalities than dyadic ones.[3] In short, conflicts with multiple rebel groups are an unusually severe subset of civil wars.

While prior research has firmly established the importance of understanding why some conflicts have multiple rebel groups while others do not, few existing works have attempted to explain this phenomenon. The studies that do exist in this area tend to focus on a narrow subset of the processes affecting conflict complexity. For example, several recent works explore the splintering of existing rebel groups (e.g. McLauchlin and Pearlman 2012; Staniland 2014). These studies tend to focus on the internal characteristics of rebel

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[2]Throughout this dissertation, I use the term "rebel movement" to refer to the entire set of rebel groups.
[3]Source: my own analysis using data from Sundberg (2008).

groups however, and thus have little to say about why rebel groups might form alliances, nor why entirely new groups might enter a conflict. Christia (2012) adapts realism from international relations theory into a joint explanation of splintering and alliance formation, but she too ignores the mobilization of new groups. I connect all three phenomena in a single theoretical framework, providing a unified explanation for conflict complexity.

The goal of this project is to address a single broad research question: what explains the variation in the number of rebel groups in a civil war? I address several more specific questions in pursuit of this broader goal. How do individuals respond to violence? Under what conditions do new rebel groups join an ongoing civil war? Why do existing rebel groups splinter into multiple factions? Why do previously independent rebel groups form alliances?

In brief, I argue that the treatment of civilians during wartime is a crucial determinant of rebel movement cohesion. Violent repression should lead many civilians to calculate that joining a rebellion is not dramatically riskier than remaining non-violent, increasing the pool of individuals willing to fight. But as repression is often applied on the basis of ethnicity, and ethnic groups often offer a useful basis for organizing defensive measures and attracting external support, repression should also tend to induce greater levels of ethnic identification. Thus, repression should expand the pool of individuals willing to join the fighting, but also sow division among dissidents along ethnic lines. I expect that this dynamic will influence all three processes identified in the existing literature as determinants of conflict complexity — the formation of new rebel groups, the splintering of existing rebel groups, and the merger of previously independent groups into alliances. The results of my empirical chapters suggest that complex civil wars are often the result of a sectarian spiral — an initial wave of repression mobilizes violent dissent and induces greater levels of ethnic identification, and the rebel movement fragments along ethnic lines to reflect these individual-level preferences. Prior work suggests that a more fragmented

movement might lead to greater levels of conflict severity, potentially creating a vicious circle.

In the remainder of this chapter I review the existing literature on rebel movement structure, as well as prior work on repression and ethnic identification. Next, I summarize the broader theoretical and policy implications of the research. Finally, I provide a summary of the subsequent chapters.

1.1 Previous Work on the Organization of Rebellion

The existing literature and empirical record suggest that the number of rebel groups active in a conflict is shaped by three broad processes. New groups can emerge when previously non-violent individuals mobilize and join the conflict. Alternatively, previously cohesive rebel groups can splinter into multiple successor organizations. Finally, the number of rebel groups can decrease when previously independent factions form alliances. I summarize the literature on each process in turn, and relate my contributions to the existing work.

1.1.1 Group Formation

Around 30% of conflicts have at least one rebel group that was neither active from its beginning, nor did it split from an existing rebel group. Thus, the formation of new rebel groups during ongoing conflicts is an important determinant of rebel movement structure. Yet few studies directly consider this phenomenon. Even studies of civil war onset often leave the formation of rebel groups in a black box, instead making a leap from individual motives to war initiation. For instance, a large literature views rebellion as an essentially criminal activity, driven by greed (Mueller 2000; Collier and Hoeffler 2004; Lujala, Gleditsch, and Gilmore 2005). Yet these works generally have very little to say about the origins of rebel organizations. These groups could be pre-existing criminal

organizations that initiate more violent activity in hopes of securing greater profit, they could form for the purpose of a greed-driven rebellion after a sign of weakness from the government, or they could begin as rebel groups with sincere political goals, which are later seduced into less noble pursuits. The grievance school similarly tends to neglect group formation. For example, Cederman, Wimmer, and Min (2010) offer a nuanced explanation of the conditions under which ethnic minorities are likely to rebel. Yet, they say little about the logistics of organizing a rebellion, and seemingly assume that ethnic groups have an inherent ability to spawn rebel organizations.

Scholars working at lower levels of analysis have come closer to explaining group formation. Kalyvas (2006) suggests that individuals are often already mobilized for small-scale violence such as personal rivalry, criminal activity, or ethnic conflict. Building a rebel group is thus an exercise in building coalitions from small, pre-existing organizations, and re-orienting individuals from localized issues to national-level political cleavages. Kalyvas gives little attention to this process in his empirical analyses, however, instead recommending it as an area for future research. Staniland (2014) also argues that most rebel groups can trace their origins to pre-existing social organizations, though he sees larger, and often more political entities such as political parties or military units as the primary source of rebellion, rather than the localized and less formal groups emphasized by Kalyvas (2006). Staniland (2014) focuses primarily on linking the attributes of the originating organizations to rebel group outcomes such as durability, however, and does not give much consideration to the initial formation of these groups. Lewis (2016) provides one of the few studies that does explicitly consider rebel group formation, as she carefully documents the earliest activities of rebel groups in Uganda. She finds that rebel groups, including the Lord's Resistance Army, were typically founded by small number of entrepreneurial individuals, and initially tended to value stealth over broad mobilization. Only after the conflict began to escalate did groups seek to broaden their membership, in many cases by appealing to particular ethnic groups. Thus she sees scholars such as Cederman, Wimmer, and Min (2010) and Staniland (2014)

as beginning their analyses after rebellion had existed for some time.

Also of relevance to group formation is the substantial literature on the contagion of civil war. Gleditsch (2007) finds that transnational ethnic groups and political and economic linkages between states can provide channels for civil war to spread across international boundaries. Most of his cases, however, are pre-existing rebel groups moving into new geographic areas, rather than instances of *sui generis* group formation. Other scholars find that entirely new rebel organizations can emerge through the contagion of secessionist (Ayres and Saideman 2000) and ethnic (Lane 2016) conflict. Such transnational processes might shape opportunities for multiple rebellions to emerge by increasing the availability of weapons, spreading tactical knowledge, or diverting government attention to foreign conflicts. While contagion explains an important category of phenomena, these studies are primarily concerned with the spread of conflict to previously peaceful areas, and do not necessarily explain the phenomenon of new groups joining ongoing conflicts.

1.1.2   Splintering

Another process affecting rebel movement structure is the splintering of existing organizations. In 1968, for example, a faction led by Ahmed Jibril broke away from the Popular Front for the Liberation of Palestine (PFLP) to form a new group, the Popular Front for the Liberation of Palestine-General Command (PFLP-GC). While the two groups have often collaborated against Israel, they maintain distinct organizational structures and membership bases, and operate in different areas. The split was allegedly motivated by differing views of Marxist ideology and military doctrine, with the PFLP pursuing a more extreme strategy of attrition. Similar splits have occurred within dozens of rebel groups, including the Communist Party of Burma, the Free Syrian Army and the Sudan Liberation Army. In many cases the result is more than a nominal separation. In Sri Lanka, for example, the Tamil Peoples Liberation Tigers not only split from the Liberation Tigers of Tamil Eelam,

but also defected to the government's side in the conflict (Staniland 2012).

Compared to group formation, there is a relatively large literature on rebel group splintering. One subset of this research focuses on the role of external actors, and particularly the government. For instance, McLauchlin and Pearlman (2012) find that government repression provides occasion for groups to evaluate their current leadership structure. Pre-existing divisions within groups are likely to be exacerbated, leading the group to move toward more factionalized leadership structures. When group members are satisfied, however, conflict tends to lead to even greater unity and centralization of authority. Whereas the preceding studies essentially treat government repression as exogenous to the internal politics of dissident groups, Bhavnani, Miodownik, and Choi (2011) present evidence that governments deliberately stoke tensions among their opponents, as they find that the Israeli government increased conflict between Fatah and Hamas by undermining Hamas' control of the Gaza and by tolerating Fatah's relationship with the Jordanian military. Relatedly, Tamm (2016) finds that support from outside states can alter the balance of power within rebel groups, in some cases entrenching existing hierarchies, while in others creating possibilities for fragmentation or coups. Finally, Staniland (2012) finds that the government can sometimes attract rebel groups to their side by offering greater resources during periods of infighting among rebel groups.

Another group of scholars emphasizes concerns about post-conflict bargaining as the key determinant of dissident group cohesion. Christia (2012) assumes that the winning coalition in a civil war receives private benefits, which might include any rents available to the state, and having some portion of its interests represented in the new government. Thus, rebels have an incentive to form minimum winning coalitions, so as to limit the number of coalition partners with whom they must share benefits. Wolford, Cunningham, and Reed (2015) develop a similar logic, theorizing that political factions have an interest in joining conflicts in hopes of maximizing the likelihood that their preferences will be

represented in the post-war government. The value of fighting decreases, however, as the number of parties with whom they expect to share power increases. Yet, Christia (2012) suggests that this incentive to minimize coalition size is moderated by the risk of being outside the winning coalition, as there is a strong possibility of new waves of violence between victorious rebels and rival rebel factions. She thus expects coalitions to change frequently in response to battlefield events, with factions bandwagoning with battle winners and shifting away from losing coalitions. Findley and Rudloff (2012) similarly find fragmentation to be most common among groups that have recently lost battles. This implies that fragmentation is essentially a process of weak actors becoming weaker.

A final category of explanations places the source of rebel group cohesion in underlying social structure. Staniland (2014) argues that insurgent organizations will be most stable when their central leadership is able to exercise both vertical control over its rank-and-file members, and horizontal control over its constituent groups. This is most likely to occur when insurgencies draw from existing organizations with extant social ties of this sort, which might include former anti-colonial movements or ethnic political parties. Organizations are likely to fragment when constituent groups have a high degree of autonomy or control over individual members is limited (Staniland 2014, Ch. 2-3). Asal, Brown, and Dalton (2012) emphasize similar factors, arguing that organizations with factionalized leadership structures are at risk of fragmentation, while groups with more consolidated power structures will tend to remain cohesive. Finally, Warren and Troy (2015) suggest that group size plays an important role, as small groups are able to police themselves and resolve conflicts, whereas larger groups are more likely to experience infighting.

1.1.3   Alliance Formation

Whereas the formation of new groups and splintering can increase the complexity of a civil war, the number of rebel groups can also be reduced through the formation of

alliances. Many of the most successful rebel movements in history were coalitions of formerly independent organizations. For example, the Frente Farabundo Marti para la Liberacion Nacional (FMLN) was an umbrella organization uniting several left wing rebel groups in El Salvador, which eventually secured many concessions in the post-war peace process including a place as a major political party. Surprisingly, however, alliances among non-state actors have only recently begun to receive much scholarly attention.

Asal and Rethemeyer (2008) and Horowitz and Potter (2013) conduct network analyses of alliance formation among terrorist groups, arguing that such arrangement are used to aggregate capabilities and share tactics. Much of the other work in the field focuses on the downsides of alliance. Bapat and Bond (2012) assume that alliances carry two significant costs: the dilution of each constituent group's agenda, and the risk of having one's private information sold to the government by an ally. Consistent with this theory, they find alliances to be most common when an outside state can enforce agreements, and when all rebel groups involved are strong enough to avoid the temptation of defecting to the government side. Christia (2012) similarly emphasizes capability, arguing that neorealist balancing theory from international relations explains alignments in civil wars. When one coalition - a group of rebels or government-aligned forces - becomes too powerful, other groups will band together to prevent their own destruction. But similar to Bapat and Bond (2012), Christia (2012) argues that this mechanism is constrained by a desire to maximize one's share of the post-war spoils. Thus, rebels should realign frequently, seeking to form minimum winning coalitions. While shared identity appears on the surface to be an important determinant of rebel alignments, Christia views these narratives as post-hoc justifications aimed at legitimizing decisions that are really driven mostly by power.

1.1.4 Repression

As repression is central to the theoretical argument presented here, this dissertation is shaped by the literature on the topic. The focus in the existing work has been on explaining why repression occurs, and identifying factors that might prevent it. Davenport (2007b) finds that there is a "domestic democratic peace," meaning that democratic regimes tend to refrain from using the most violent forms of repression. However, he finds that even democracies often engage in repression during civil and international conflicts. Others find that international human rights treaties often have a meaningful restraining effect on governments, reducing their use of repression (Hathaway 2002; Simmons 2009). Not all international influences are positive, however, as economic sanctions (Wood 2008) are associated with increased repression. An important generalization in the context of this study is that human rights practices tend to be shaped by domestic and international political institutions that are likely to be largely exogenous to civil war dynamics.[4] Another strand of the repression literature focuses on the consequences of repression, and especially the potential of repression to provoke escalation. In this vein Lichbach (1987) argues that repression should lead dissidents to substitute increasingly violent tactics for more peaceful ones, as they will calculate that violence is more likely to achieve their goals. Moore (1998) finds empirical support for this model, suggesting that repression has significant potential to escalate political confrontations.

1.1.5 Ethnic Identification

Ethnic identity is central to the theoretical mechanism in this dissertation, and has long been an area of deep interest to scholars of comparative politics. This work is often predicated on the assumption that identity is dynamic. At a minimum, individuals can choose which

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[4]Long-running civil wars, however, might deter democratization and participation in human rights treaties.

of their several social roles to emphasize. For instance, individuals might orient primarily toward an ethnicity, a religion, an occupation, a region, or an ideology, and could potentially alter these choices over time. The majority of the work in this vein has focused on oscillations between ethnic and national identities. Early on this question was explored in the context of statebuilding. Scholars in this area suggest that external threats such as interstate wars (Herbst 1990; Tilly 1992) or territorial disputes (Gibler, Hutchison, and Miller 2012) can provide a unifying influence, leading individuals to orient toward national identities and away from subnational ones such as ethnicity. Most other work in the area examines the role of political institutions in incentivizing the use of particular identities (Posner 2005; Penn 2008). For example, Eifert, Miguel, and Posner (2010) find that ethnic identification tends to be strongest just prior to or just after competitive elections, suggesting that individuals interpret politics through an ethnic lens.

A striking feature of this literature is the degree of consensus that ethnic identity is malleable. This perspective is shared by a diverse range of scholars ranging from constructivists (e.g. Barnett 1995) to formal theorists (e.g. Penn 2008), and enjoys strong empirical support (e.g. Eifert, Miguel, and Posner 2010; Gibler, Hutchison, and Miller 2012). Notably, recent work has shown that repression is an important factor in shaping identity, with effects that persist not only over long periods of time, but across generations as well. Lupu and Peisakhin (2017) show that the descendants of Crimean Tatars who were deported by Soviet forces 1940's are more supportive of Tatar political leaders, have greater antipathy towards Russia, and are more likely to participate in politics as compared to Tatars with no such family history. Relatedly, Rozenas, Schutte, and Zhukov (2017) show that Ukrainian communities that were subjected to greater levels of deportation during this period are today less supportive of pro-Russian political parties than are comparable communities that experienced less deportation. In short, the malleability approach provides a strong foundation on which to build my theory.

1.1.6 Rebel Motives

An examination of the relationships between dissident groups is also likely to offer a new perspective on rebel motives. The literature on civil war has largely been dominated by debates over whether rebellion is fundamentally political, or done in pursuit of private benefits. The former views civil war as an effort to resolve economic or political inequality (Gurr 1970; Wood 2003; Cederman, Wimmer, and Min 2010), and has been labeled as the 'grievance' hypothesis (Collier and Hoeffler 2004). The latter is composed primarily of studies emphasizing the 'greed' hypothesis (Collier and Hoeffler 2004), which views rebellion as little more than large-scale criminal activity aimed at bringing profits to its members (Mueller 2000; Lujala, Gleditsch, and Gilmore 2005; Ross 2004). Others have emphasized non-material private benefits as motive for individual participation in rebellion, such as the ability to act on family disputes or romantic rivalries (Kalyvas 2006).

This political-private motive debate has yet to be definitively resolved. A number of scholars have found greater support for the greed hypothesis than for grievance, with the presence of natural resources being a stronger predictor of civil war than economic or political grievances (Collier and Hoeffler 2004). Yet, these findings are not robust across different types of resources or even different measures of the same resource (Dixon 2009). Furthermore, several scholars have found that political factors such as hierarchical relationships between ethnic groups (Cederman, Wimmer, and Min 2010) and poor economic performance (Miguel, Satyanath, and Sergenti 2004) exert a strong influence on civil war onset. Other scholars eschew the dichotomy altogether, suggesting that while private benefits are useful to rebel recruiting efforts, this does not preclude the possibility that rebel elites ultimately have political motives (Lichbach 1995; Weinstein 2007). Similarly, Lujala (2010) finds that natural resources are associated with longer conflicts, implying that at least a portion of resource revenues are devoted to fighting rather than private benefits.

One factor that has limited progress on these questions of motive is the fact that the

competing theories have been tested almost exclusively on a single outcome — a binary measure of the occurrence of civil war at the national level. Studying the relationships between dissident groups and how they vary is likely to provide insight to underlying rebel motives. For instance, if rebellion is fundamentally about maximizing the profits of its members, we might expect to see rebels form the smallest coalitions possible that still allow them to control resource flows. If rebellion is fundamentally political, however, we might expect rebels to pursue coalitions large enough to pursue victory. Additionally, if ideology and identity are not truly important to rebels, splintering and alliance formation should be driven primarily by power calculations (see Christia 2012). If these factors do matter, however, they should shape the choice of alliance partners and the cohesiveness of individual groups. Ethnically homogeneous rebel groups should be less prone to splintering in this case, and alliance should be more likely among groups with similar identities.

1.2   The Contribution of this Project

First and foremost, this project advances our understanding of a subset of civil wars that is crucially important for the reasons outlined above. This research explains three processes that account for most of the variation in the number of rebel groups in a conflict — the entry of new groups, and the splintering and mergers of existing ones. This dissertation is among the first projects to directly address the first phenomenon of new rebel groups joining ongoing conflicts. Existing work either considers the formation of new rebel groups (i.e. groups that were not previously contained within another violent organization) only in cases where it is coterminous with conflict initiation (e.g. Lewis 2016), or in the context of contagion into previously peaceful areas (e.g. Lane 2016). Yet, I find that 27.5% of rebel groups active since World War II were neither present from the beginning of the conflict, nor is there any evidence that they descended from existing rebel groups. An

important contribution of this dissertation, then, is explaining this common but mostly ignored phenomenon.

While splintering and alliance formation have been the subject of several prior studies, my findings largely contrast with existing work. Christia (2012) argues that realist power politics calculations drive both alliance formation and splintering. Asal, Brown, and Dalton (2012) and Staniland (2014) suggest that organizational structure is the key determinant of rebel cohesiveness. I find no evidence for this, however, as rebel group centralization is not related to splintering in my analyses. Furthermore, my argument offers much clearer predictions than existing work regarding the timing of splintering and alliance formation, and regarding the choice of alliance partners. Additionally, the existing research is largely based on a small number of case studies disproportionately drawn from the Middle East and South Asia. While these conflicts are undeniably complex, they are outliers in terms of both their long duration and high degree of international intervention. I test my theory on a sample of all civil wars since 1946, demonstrating that it is widely applicable.

I also build upon the existing literature by unifying explanations of group formation, splintering and alliances into a more comprehensive theory of rebel movement structure. I argue that all three processes reflect the level of ethnic identification by dissidents, with repression driving changes to this trait. Connecting these phenomenon under a single framework provides a clear delineation of the similarities and differences in the processes through which each type of group emerges. Either implicitly through its treatment of them as distinct phenomena, or explicitly through its theoretical arguments, previous work suggests that these phenomena are largely unrelated. Considering these processes jointly also allows me to make predictions regarding the overall number of rebel groups active in a conflict, as I do in Chapter 5.

My findings also suggest several important second-order implications. One is that rebellion seems to be more political and more responsive to the preferences of rank-and-file dissidents

than much of the existing literature would suggest. A substantial number of scholars view civil war as largely apolitical, instead being driven by material greed (Mueller 2000; Collier and Hoeffler 2004) or personal animosities (Kalyvas 2006). I argue that dissidents have strong preferences over the content of rebellion, and find that repression tends to induce stronger preferences for rebel groups that represent the interests of a particular ethnic group. While I cannot rule out the possibility that rebellions are initially driven by material considerations, as war initiation is beyond the scope of this study, my findings do suggest that civil war violence tends to have a politicizing effect over time. I discuss the literature on rebel motives in greater detail later in this chapter.

This work also suggests that governments can exert a powerful influence on the structure of dissident organizations, as repression can heighten the salience of identities that divide dissidents. This contrasts with the most existing accounts of rebel movement structure, which tend to focus on factors mostly internal to the rebel movement such as relative power among rebel factions (Christia 2012), or the strength of pre-war social ties among dissidents (Staniland 2014). It also raises several interesting questions about government strategy in the face of dissent. My findings suggest that repression expands the pool of individuals willing to fight, which in a vacuum makes government repression puzzling. It is also unclear whether the other key consequence of repression I identify — the increased salience of ethnic identity — is a desirable outcome for the government. On one hand it could form the basis of an effective divide-and-conquer strategy. On the other hand, fighting multiple opponents could complicate the logistics of counterinsurgency, threaten the credibility of negotiated settlements, and undermine the prospects of a stable resolution to the conflict. While this calculation merits greater consideration that I am able to give it in this dissertation, my findings in Chapter 3 suggest that repression may be aimed at deterring dissidents from political activities other than rebellion, such as voting.

To test my hypotheses, I collected data on the origins of rebel groups. This allows me to

distinguish between groups that splintered from existing rebel groups, groups engaging in violence for the first time, and coalitions of previously active groups. I suspect that the causal factors behind the emergence of each of these types are related, but as the processes are quite distinct they should be studied separately. Though I do not make much of the distinctions in this project, the data also distinguish between several categories of groups that were not previously engaged in rebellion, including political organizations, religious organizations, apolitical militias, and factions of the regime military. These categories should be useful for a variety of future studies on topics such as the durability of rebel groups, their probability of victory, and their treatment of civilians.

In addition to resolving a gap in the scholarly literature, a better understanding of rebel movement structure is of value to policymakers. As noted above, conflicts with multiple rebel groups are among the most severe. Simply being able to predict which conflicts are likely to become severe through this mechanism has several useful applications. Policymakers might be able to identify early on the conflicts that are most likely to benefit from peace operations. Humanitarian organizations could predict which conflicts are likely to produce large numbers of refugees, and distribute resources accordingly. This work also be the possibility of moving beyond prediction and solving the underlying problem. As the empirical analyses identify the repression of civilians as a key mechanism driving conflict complexity, it stands to reason that protecting civilians might be an especially valuable undertaking for non-governmental organizations or outside states.

In the next section I situate my dissertation in the literature to which it is most closely related. I explain in greater detail my contributions over the existing work on rebel structure, and also discuss the implications of this work for the literatures on repression and ethnic identification.

1.3   Project Summary

In Chapter 2 I articulate a theory of rebel movement structure. I begin with the assumption that rebel groups emerge from a broader pool of dissidents. While not all dissidents will be eager to participate in violence, each will prefer to be represented by a rebel group which advances their political interests and provides them with security. Thus, dissidents form a constituency that constantly evaluates the performance of rebel groups, and will consider switching their allegiance to new groups if the existing ones are lacking. In hopes of seizing on this dynamic, rebel entrepreneurs will look for opportunities to mobilize new groups by appealing to underrepresented identities and ideologies. These appeals should be especially effective in the wake of repression for two reasons. First, repression lowers the risk of fighting relative to remaining peaceful, leading new individuals to join the fighting. Second, as repression should induce greater levels of ethnic identification. Repression is often targeted on the basis of ethnicity, increasing its salience, and appeals for support from outside, co-ethnic states might be especially effective in the presence of human rights concerns. Thus repression not only creates a new pool of individuals willing to fight, it also stokes division among dissidents along ethnic lines. This should often lead individuals joining the fighting to form new groups rather than join existing ones, and individuals already in rebel groups to realign into more ethnically homogeneous configurations. This should manifest in the form of both the splintering of existing groups, particularly when existing groups are multi-ethnic, and the formation of ethnically-homogeneous alliances so as to replace the loss in capabilities due to fragmentation and streamline access to support from co-ethnic outside states.

Chapter 3 tests the individual-level assumptions of the theory. Using a sample of over 150,000 Afrobarometer Survey responses, I find support for both of my key predictions regarding the effects of repression. Individuals who have experienced an attack in the past

year are 30% more likely than others to express willingness to use violence themselves. Additionally, I find these individuals are 62% more likely to identify with their ethnic group than respondents who have not experienced an attack. While I am unable to completely rule out the possibility of reverse causality, the results hold after performing coarsened exact matching, showing that attacked individuals do not systematically differ from others on observable traits. These results suggest that my theory performs as expected at the individual level.

Chapter 4 contains tests of my predictions regarding the formation of new rebel groups during ongoing conflicts. I add my measure of rebel group origin to the Uppsala Armed Conflict Dataset, resulting in a sample of all civil wars, 1946–2015. I find that the probability of a new rebel group joining an ongoing conflict during a given year has a strong, negative relationship with changes in respect for human rights. The largest observed increases in repression are associated with more than a 60% chance of new rebel groups forming, while the probability is around 3% in years with no substantial change in human rights practices, and approaches zero in following improvements to human rights. Contrary to my expectations, I find no evidence that ethnic diversity places a scope condition on my theory; new rebel groups form in a variety of societies. I also do not find evidence that rebels groups which join ongoing conflicts are more likely than others to draw their support from a single ethnic group. However, this result seems to be driven by a large number of rebel groups with no discernible ties to an ethnic constituency, and I do find that these joining rebel are significantly less likely than others to be multi-ethnic coalitions. To supplement these quantitative analyses, I illustrate the causal logic of my theory in a qualitative case study of the emergence of the Shan State secessionist movement in Burma, and use the Arakan separatist movement in that country to identify nuances missing from my argument.

In Chapter 5 I explore two processes through which rebels reorganize — splintering from

existing groups, and the formation of alliances. I find that increases in repression are associated with an increased probability of rebel group splintering, though the result is not entirely robust. I do not find evidence to support my hypothesis that rebel groups which draw support from multiple ethnic groups are more prone to fragmentation. This seems to largely reflect the fact that ethnically-homogeneous groups are disproportionately likely to fight long-lasting, low-intensity separatist conflicts. Consistent with my expectations I find evidence that repression increases the probability that new ethnically-homogeneous alliances will form, while having no effect on the formation multi-ethnic alliances. Though less robust than the findings in previous chapters, these results suggest that repression can initiate a process of realignment whereby rebels tend to leave multi-ethnic coalitions and form new alliances centered around a particular ethnic identity. I close the chapter with an analysis of the total number of rebel groups in a conflict, and show that in the aggregate repression greatly increases the probability that a conflict-year will have multiple rebel groups.

Finally, I summarize the results in Chapter 6, discuss their theoretical and policy significance, and propose several avenues for future research on this topic.

Chapter 2

A Theory of Rebel Movement Structure

Why are civil conflicts sometimes contested by multiple rebel factions, while in other cases by a single, cohesive group? At a given point in time, I argue that it is the choice of ideologies and identities around which rebellions mobilize that determines whether they incorporate most of the dissidents in a society, or whether many dissidents are left to form their own groups. These arrangements are often fragile, however, as factors such as government repression can lead dissidents to become more receptive to new bases of organization. Drawing on the literature reviewed in Chapter 1, I identify three processes through which these individual dynamics shape the number of rebel groups in a civil war. First, entirely new groups can enter the conflict. Second, previously cohesive groups can splinter into multiple successor organizations. Finally, previously independent groups sometimes merge. In the remainder of this chapter I articulate a set of assumptions, a theory of the internal politics of dissident movements, and a set of hypotheses to be tested in subsequent chapters.

2.1   Theoretical Framework

I begin by laying out my assumptions about the relevant actors in a civil war, their interests, and the structure of their interactions.

2.1.1   The Dissident Pool

I start from the assumption that rebel groups are drawn from a broader pool of dissidents. By dissident, I simply mean an individual who opposes the government. Dissidents are grouped into a variety of potentially overlapping organizations. Some may belong to non-violent political organizations such as trade unions or political parties. Others may use violence as members of a rebel group. Hereafter I "rebel movement" as a term that encompasses all rebel groups, but excludes non-violent dissidents. In some cases this rebel movement will consist of a single group, if there is only one rebel organization associated with the dissident pool. In the American Civil War, for example, the dissidents were represented by a single Confederate Army, though even in this case there were several militias with only a loose attachment to the main rebel group. In other cases the rebel movement may contain several distinct rebel groups, such as the Shan State conflict in Burma, which has produced at least six rebel groups.

At the individual level, dissidents are likely to vary on several dimensions. First, individuals differ in their level of involvement in violence. Lichbach (1995, 17) identifies five gradations of participation which range from being constituents who may not even consent to being represented by the dissident movement, to activists who engage in political activity but not necessarily violence, to militants who participate in violence or work in close support of such efforts. For instance, civilian activists may provide crucial material and logistical support to rebels (see Weinstein 2007; Parkinson 2013). Relatedly, dissidents may utilize different "repertoires of contention" (Tilly 1986, 2006), perhaps reflecting the resources and

past behavior of the groups through which they are mobilized. For example, some elements of the dissident pool might specialize in non-violent actions such as boycott, others on conventional political channels such as elections, while others in engage in violence. In addition to varying across individuals, the willingness to use violence is often dynamic — previously violent individuals often desert their rebel group, and previously non-violent individuals can be moved to participate in the fighting.

Social identities form a second dimension of variation among dissidents. A few dissident movements are exceptionally homogenous. For example, some separatist movements benefit from a coincidence of ethnicity, language, religion, and geographic location. In most cases, however, there is some amount of diversity along these attributes. For example, the Kurds share a common ethnicity and language, but practice a variety of faiths. Bids to overthrow the central government might be made by coalitions featuring representatives of multiple ethnic groups, religions, languages, and regions. Rebel leaders often emphasize broad, inclusive goals and identities, hoping to gain the support of a large portion of society. Such coalitions are often vulnerable to "outbidding appeals" (Rabushka and Shepsle 1972; Horowitz 1985), through which moderate, diverse groups lose support to competitors claiming to explicitly represent a particular identity group.

Finally, while dissidents share a common interest in removing the incumbent government, they do not necessarily agree on many other political questions. Rural dissidents might make land reform their top priority in a post-war government, whereas urban dissidents might care more about corruption or modernization programs. Some dissidents hope to take control of the central government, as the Houthi rebels have done in Yemen, while others hope to procure independence or greater regional autonomy as a consequence of the war, as the South Sudanese eventually did. Broader left-right ideological divisions are often present, and doctrinal differences often divide groups with relatively similar views. For example, Indian communists were long divided into Maoist and Marxist-Leninist

factions. Even when dissidents largely agree on goals, there are likely to be divisions between hardliners and moderates, who will be more willing to accept compromises and less willing to adopt extreme tactics. Finally, even dissidents who largely agree on questions of policy will still find themselves in competition over the power and private benefits of government (Christia 2012), which are subject to rival consumption. There are a limited number of government positions, and material benefits such as oil rents are finite.

Beyond these variations in preferences, I see three key categories of dissident.

Dissident Constituents

I label dissidents who do not participate in violence, but support violent efforts to some extent as "dissident constituents." These constituents may support rebels in a variety of ways, including the provision of food, shelter, and information. This constituency is also likely to be a vital source of recruits for rebel groups. In cases where rebel groups are associated with a political party, these constituents will be a critical source of electoral support. Constituents have limited agency with respect to the array of rebel groups they can choose to support. Yet while rebel groups are sometimes able to coerce support, constituents generally have some ability to withhold support. For example, constituents could turn on a rebel group by becoming government informants (Kalyvas and Kocher 2007). Alternatively, constituents could flee an area and become refugees or internally displaced persons. Thus, while they tend to have little-or-no direct influence over rebel groups, rebel leaders nonetheless have incentives to be responsive to the interests of constituents.

The most fundamental interest held by dissident constituents during civil war is likely to be security. These are individuals who have elected not to participate in violence themselves. Avoiding violence is thus likely to be a high priority for them, leading them to value rebel groups that can provide protection or steer the fighting away from civilian areas. Secondary to this, dissidents are likely to have political preferences they would prefer to

see represented by a rebel group. For example, in addition to opposing the incumbent regime constituents might like to see improved status for their ethnic group or land reform. If the rebel group a constituent currently supports does not have a platform that aligns closely to their interests and succeeds in providing protection, they should be receptive to appeals from other groups.

Rank-and-File Rebels

Rebel groups are generally hierarchical organizations, with the majority of members having little influence over their direction. I call the rebel group members who do not occupy leadership positions "rank-and-file rebels." Much like constituents, rank-and-file rebels have limited input in group decisions, but have what Hirschman (1970) calls the "exit" option. If members are sufficiently dissatisfied with the direction of a rebel group, they generally can leave to form a new splinter organization, or desert the conflict entirely. As losing a substantial number of members could devastate the fighting capacity of a group, rebel elites again have an incentive to be at least somewhat responsive to their members.

Individuals who join rebel groups often (though not always) do so out of deep commitment to a political cause (Humphreys and Weinstein 2008). Thus one dimension over which rank-and-file members is political action. If group leaders stray too far from their original platform, or are insufficiently forceful in advocating for it, they are likely to face internal dissent from rank-and-file. Rank-and-file members also tend to have connections to civilian family members and friends. Thus they are likely to support efforts to protect and oppose efforts to abuse civilians, at least from social groups with whom they share a connection. Failure to represent the interests of these rank-and-file members puts rebel leaders at significant risk of losing members through splintering or desertion.

Rebel Entrepreneurs

Finally, I call the dissident elites who lead existing rebel groups and form new ones "rebel entrepreneurs." I assume that rebel groups generally emerge through the efforts of these entrepreneurs, rather than, say, the spontaneous organization of protesters. Leading a rebel group is likely to be attractive for several reasons. First, leaders exercise significant, and sometimes total control over a rebel group's political platform. Even if a rebel group does not defeat the government, rebel entrepreneurs may be able to secure concessions on a few of their favored issues in post-war peace negotiations. Rebel elites also frequently receive significant private benefits. During conflicts, rebel groups sometimes acquire control of natural resource production, or illicit trades such as drugs. While some of these funds are used to attract and retain rank-and-file soldiers, rebel elites often reap a significant amount of profit.

Maintain political leverage and control of private resources requires a reasonably strong rebel group. As these political and material benefits are often even more plentiful for rebel leaders who defeat the government, they should generally prefer to build a rebel group strong enough to win. Thus in general, leaders of existing rebel groups should elect to be responsive enough to rank-and-file members and constituents to prevent significant losses in members. At the same time, as some portion of the private benefits are often distributed to rank-and-file members, rebel leaders should seek minimum winning coalitions, rather than endlessly pursuing more power (Christia 2012). Thus rebel leaders may be willing to tolerate some loss of support, placing on constraint on the extent to which they are accountable to members.

Rebel entrepreneurs who do not currently lead their own rebel group should look for opportunities to do so. This might entail forming a new rebel group, by appealing to dissident constituents with a different platform than existing rebel groups offer, or by leading a group of rank-and-file members in the creation of splinter organizations.

Changes to the Dissident Pool

I generally treat the dissident pool as a fixed set of government opponents. In reality, however, it will often change in size over the course of the conflict. Throughout history civilians have often fled conflict in large numbers to become refugees. While one might reason that dissidents are somewhat less likely to do this than neutral civilians, in many conflicts the dissident pool is undoubtedly depleted by fleeing members. Successful counterinsurgency operations by the government or third parties can also reduce the ranks of the dissidents. Both rebels and non-violent dissidents are often killed in great numbers, and even when they are not, they may be subjected to imprisonment or repression that makes mobilization difficult. Under certain conditions, dissidents may even defect to the government side (Staniland 2012). In Iraq, for example, a 2007 counterinsurgency campaign by the Iraqi government and U.S. forces persuaded many previously dissident Sunni militias to join the government's fight against al-Qaeda.

In other cases the dissident pool may grow. Government repression may induce previously neutral civilians to support the opposition. Dissidents may attract support by offering a morally or politically superior platform to the government's, or by obtaining legitimacy through their choice of tactics or international support (Chenoweth and Stephan 2011). Rebels may attract new supporters by demonstrating strength and by extension their prospects for success (Christia 2012), or by offering private benefits to recruits (Weinstein 2007). Rebel groups may also attract or coerce support from civilians by controlling territory (Mampilly 2011). Finally, dissidents may be bolstered by international support. The Islamic State has recruited young Muslims from around the world to join them in Syria. At a less violent level, the Liberation Tigers of Tamil Eelam enjoyed significant financial support from the Tamil diaspora, effectively giving them a larger civilian support network than they had locally.

While I am primarily interested in changes to the structure of the dissident movement

independent of its size, it is important to consider the possibility that the dissident pool may change in composition as well.

2.1.2 The Formation of Rebel Groups

One school of thought in the literature on the causes of civil war argues that rebellion is motivated primarily by the pursuit of private benefits such as oil rents or profits from illicit trades (Mueller 2000; Collier and Hoeffler 2004). This so-called "greed hypothesis" implies that rebels are not necessarily insistent upon defeating the government. While doing so may be desirable in some cases if control of the state brings significant revenue streams, often rebels aspire only to preserve their control of revenue from sources such as drug cultivation. For example, the RUF in Sierra Leone controlled several diamond mines through much of the civil war there, procuring significant wealth for themselves and their external sponsors. Kalyvas (2006) similarly believes that rebel violence is often motivated by private concerns, though he sees personal animosities such as the Hatfield-McCoy rivalry in the US as a more common priority than material wealth.

I depart from the greed school and follow Lichbach (1995) and Weinstein (2007) in viewing private benefits such as drug revenues as a recruiting tool and secondary benefit of rebellion, rather than as ends in themselves. The ultimate goal of rebel groups, then, are political outcomes such as the overthrow of the central government, or autonomy for a particular region. Thus, all else equal, rebel groups should prefer to defeat the government militarily. Short of that, they should prefer to use gains on the battlefield to secure at least a portion of their political goals in a postwar peace agreement. This creates an incentive for rebel leaders to amass as much military and political power as possible. Yet, even as a secondary motive, private benefits create a countervailing incentive to limit the size of one's group, so as to maximize the share of benefits distributed to each member. Ultimately, then, rebels should seek to build minimum winning coalitions just strong enough to win the war (Christia

2012).

I conceptualize rebellion as emerging from the efforts of rebel entrepreneurs, who seek to recruit fellow dissidents to participate in violence. There are several challenges inherent to such a task. First, persuading individuals to participate in collective action is generally difficult, and especially so in the high-risk context of rebellion. Second, rebellions generally need to build capacity quickly, to ensure that they can survive government repression. Indeed, Lewis (2016) finds that many rebel groups fail within a few months. Third, achieving political goals typically requires a cohesive rebel group that is able to avoid infighting and splintering (Staniland 2014). Finally, rebel entrepreneurs should prefer to organize groups on a basis that allows them to exclude some segments of the population from receiving private benefits (Christia 2012).

I expect that drawing on existing organizations such as political parties, religious organizations, student groups, or labor unions will solve many of these problems. Social networks with members who expect to interact in the future can often solve collective action problems by sanctioning individuals who decline to participate (Marwell, Oliver, and Prahl 1988). Many civil society organizations will produce such ties among members. For example, members of a teachers' union might expect to interact throughout their career, as would most members of a political organization representing the interest of a particular geographic area. Drawing from existing groups also offers the possibility of mobilizing a large number of people quickly, particularly if rebel entrepreneurs can gain the support of group leadership. Existing social organizations can also produce a cohesive rebel group, particularly if they have strong vertical ties between leadership and rank-and-file members, and strong horizontal ties between chapters or geographic areas, as this allows the central leadership to exert a high degree of command and control over members (Staniland 2014). Finally, building a movement by recruiting existing groups will often allow rebel entrepreneurs some control over group size, whereas recruiting individuals may not.
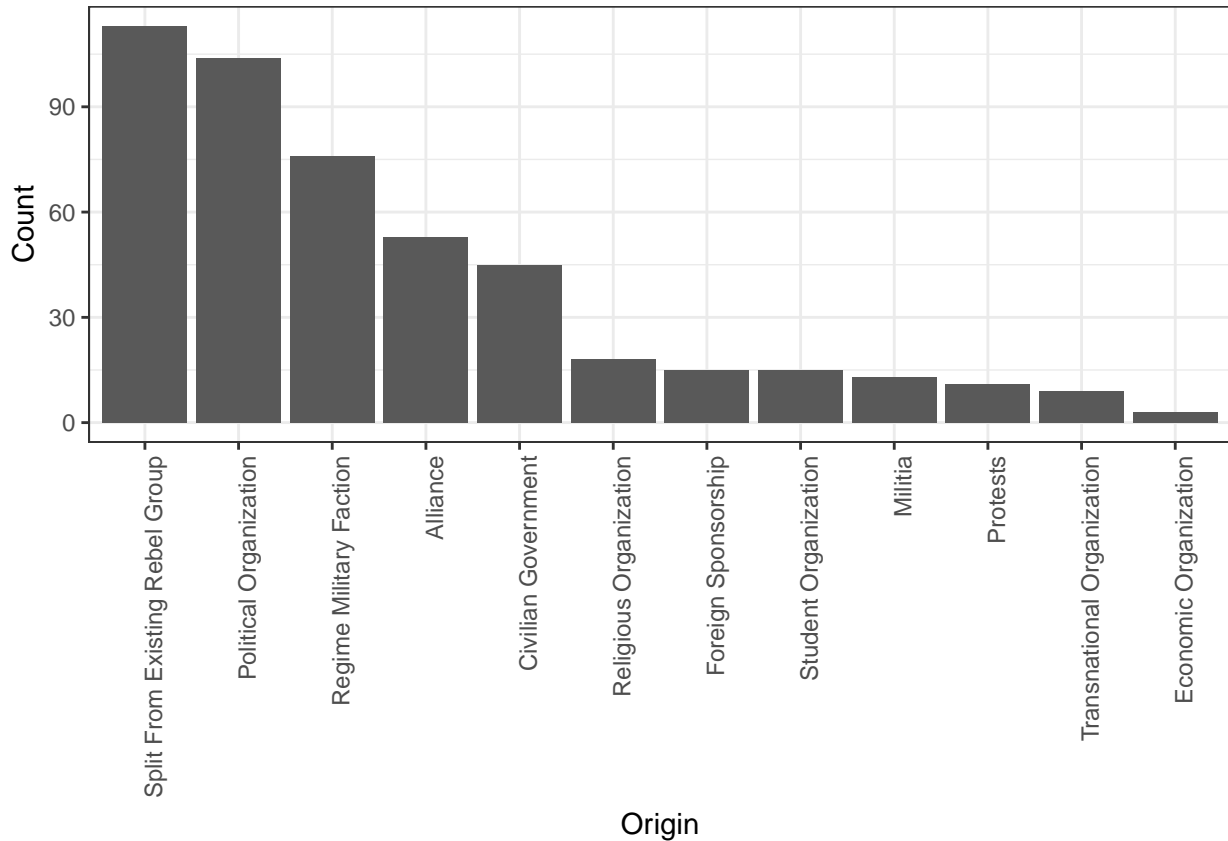
Figure 2.1: The Origins of Rebel Groups, 1946–2015

Consistent with these notions, my own data collection[1] shows that most rebel groups can trace their origins to a pre-existing organization such as a political party, militia, or student organization (see also Staniland 2014). Comparatively few have emerged through grassroots processes, such as protesters steadily becoming more violent and organized (see Figure 2.1).

The implication of this argument is that initially, at least, the structure of rebel movements will reflect the structure of pre-war civil society. If a single organization connects most or all dissidents in a country, it may be possible for dissidents to build a unified group on that basis. For instance in a two-party system most regime opponents might share common membership in the opposition party. When no such unifying organization exists,

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[1]I begin with the set of all rebel groups in the Uppsala Armed Conflict data, 1946–2015 (Melander, Pettersson, and Themnér 2016). I code the primary origin of each rebel group by examining the social roles its leaders had prior to forming the group. The coding rules for each category are described in the Appendix.

the probability that multiple rebel groups will emerge is much higher. This argument also implies that the choice of basis on which entrepreneurs attempt to organize rebellions will be endogenous to the degree of prior organization around said bases. For example, in much of the Middle East freedom of assembly is granted only to religious organizations, meaning that religious identity is likely to form the basis of rebellions there, while ideological or occupational identities are unlikely to do so.

Staniland (2014) shows that the structure of these pre-existing organizations is a powerful determinant of the subsequent cohesiveness of the rebel groups they produce. Groups that have both strong vertical ties between leaders and members, and strong horizontal ties across different units prove to be very cohesive. Many of the organizations that spawn rebellion lack this attribute, however, meaning that in many cases division among members can lead rebel groups to splinter. Staniland (2014) also suggests that these social ties can be dynamic. Thus while the attributes of the originating organization shape those of the rebel group initially, it is possible for the social ties to strengthen or weaken over time. For example, repeated interactions may facilitate the formation of alliances between previously independent factions. Alternatively, certain counterinsurgency strategies, such as targeting individuals who serve as key social "bridges," might sow division within previously cohesive groups.

2.1.3   The Role of Individual Preferences

I argue that rebel structure is shaped by a bottom-up process in which the preferences of rank-and-file members and civilian constituents play a crucial role. Translating individual-level preferences to group-level outcomes is not straightforward, however. Logically, the properties of one level of analysis cannot directly explain outcomes at a higher level (Singer 1961). It is thus necessary for a bottom-up theory to specify how lower-level preferences aggregate. I argue that rebel leaders have strong incentives to be responsive to their

members, though the mechanisms producing this incentive vary by group.

Some rebel organizations are integrated with political structures that provide some degree of democratic accountability. Hamas, Hezbollah, the Irish Republican Army, and the Karen National Union, to name but a few, have political wings that are often equal to or above the militant side of the group in the organizational hierarchy. In many cases these political wings compete in elections, creating a strong incentive to behave in a manner that is popular among a large portion of the population. The past behavior of the group's armed wing should often be an important consideration for voters, especially during periods of intense fighting. For example, Hamas' victory over Fatah in the 2006 Palestinian elections may be attributable in part to the latter's inability to end Israeli campaigns against Palestinian territories (Zweiri 2006). Rebel groups with this sort of connection to electoral politics should thus have an incentive to respond to the preferences of their constituents.

While rebel groups that lack a political wing may not be directly accountable to sympathetic civilians, they still have strong incentives to retain the favor of their members. Absent any connections to a civilian political structure, rebel groups are by definition fundamentally militarized organizations. As such, they tend to be very hierarchical in structure, and therefore undemocratic.[2] Yet, the ability to directly voice concerns to leadership is not the only way for rank-and-file rebels to exert influence in an organization. In general dissatisfied individuals also have the ability to exit an organization (Hirschman 1970). This is especially true in the context of rebel organization, as rebels frequently break away from their group to form new splinter organizations (see Pearlman and Cunningham 2011). While some rebel groups may be built upon sufficiently dense social networks to prevent such fragmentation (Staniland 2014), in many cases rebels should be able to demand accountability from their leaders by threatening to leave the group. This effect may be exacerbated by the presence of rival entrepreneurs promoting new groups built around

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[2]Some notable exceptions do exist. al-Qaeda, for example, lacks a political wing and yet has a deliberately decentralized, flat structure with local cells following only loose direction from the central leadership.

differing ideologies or identities. Civilian constituents may also have exit options. While I expect that rebel groups usually emerge from existing social organizations, individuals often have several overlapping affiliations. If, for example, they are dissatisfied with the performance of a rebel group associated with their religion, they may be another rebellion associated with their political party that they could support instead.

As these individual-level preferences are translated to rebel group leaders through an informal mechanism, I do not expect the decision rules that determine when leaders will respond to members, and which preferences are represented when members disagree, are especially complex. Rather, leaders will respond in a way that simply minimizes the loss of membership. If group members disagree on an issue, leaders will follow a plurality rule, representing the preference of the largest group subset. If group members are divided on the question of accepting support from an outside state, for example, leaders are likely to side with the largest constituency. Leaders can adjust their ideologies, and sometimes even their religions. For example, many former Ba'ath Party officials in Saddam Hussein's Iraq moved from the secular ideology of that movement to become pious devotees of Sunni Islam in order to assume leadership roles in the Islamic State (McCants 2015). There are limits to the extent to which leaders can accommodate their members, however. While ideologies can be adjusted, leaders likely cannot claim to represent an ethnic group of which they are not members. There may also be limits to how far a leader can move their ideology or identity without losing credibility. Finally, some member demands may be materially impossible to meet, such as a demand for payment in a group that lacks any revenue streams.

In short, I expect that rebel leaders have a strong incentive to be responsive to their members. When they fail to do so, or when members make demands that cannot be met, a reorganization of the rebel movement is likely.

2.2 Repression and the Dynamics of Individual Attitudes

While the availability of existing organizations plays a large role in determining which ideologies and identities rebel entrepreneurs initially employ in recruiting members, the appeal of these bases of mobilization can change over time. I am particularly interested in changes in the extent to which individual dissidents orient towards sub-national identities such as ethnicity or religion,[3] which often provide a basis for division within the dissident movement, and more inclusive priorities such as a non-sectarian ideology. I expect that government repression will be a crucial determinant of this orientation.

2.2.1 The Relative Cost of Fighting

One dissident attribute that can be altered by repression is the willingness to engage in violence. Participation in rebellion is largely a function of demographic traits, with impoverished young men accounting for a large portion of recruits (Humphreys and Weinstein 2008). The role of poverty is thought to be related to opportunity costs - individuals with comfortable lifestyles are unlikely to take on the risks of fighting, while impoverished individuals have little to lose (Collier and Hoeffler 2004). The cost of participating in rebellion relative to non-violence is not necessarily static, however. Indiscriminate violence against civilians can reduce the the risk of participation in violence relative to that of non-violence, by making non-violence more dangerous and thus less desirable (Kalyvas and Kocher 2007). If the physical risk of remaining peaceful is not dramatically lower than that of fighting, the cost of participating in rebellion is relatively low.

Thus, individuals who experience repression, either personally or in close enough proximity to influence their expectations of safety, should become more willing to engage in violence.

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[3]Subsequently, I focus primarily on ethnicity. I expect that ethnicity will be the most salient cleavage in a majority of societies, but in some cases religion or other identities may play this role.

Individual thresholds for violence will continue to vary, meaning that some will continue to remain peaceful. Yet in general, the number of dissidents who are willing to engage in violence should increase with the risk of physical harm from repression. Furthermore, repression should aid in rebel recruiting and mobilization efforts. For example, some individuals may find the initial set of grievances voiced by a rebel group to be unpersuasive, but are moved to join the cause after witnessing government brutality.

2.2.2 Ethnic Identity

Some theoretical perspectives view ethnic and other social identities as largely immutable, having been the basis for conflict across many generations (Horowitz 1985). Increasingly, however, scholars view identity as a product of individual or collective choice. Posner (2005) argues that individuals choose to prioritize one of several identities such as ethnicity, language, religion, or class, selecting that which is likely to bring them the greatest benefit. Focusing on the realm of electoral politics, he finds that this choice is shaped by an interaction between group size and electoral institutions. In subsequent work Eifert, Miguel, and Posner (2010) find that individuals are more likely to identify with their ethnic group when interviewed near a competitive election, suggesting that ethnicity is deployed instrumentally during elections. Penn (2008) models a similar calculation in which individuals choose to orient themselves toward a national or ethnic identity. She finds that ethnic identities become more prevalent as ethnic groups become homogenous, and as economic inequality between ethnic groups increases. Christia (2012) extends the argument to civil wars, arguing that ethnic identities are deployed instrumentally, with rebel elites emphasizing particular identities to justify alignments that are in fact driven by power politics. A key consequence of this malleability of identity is that ethnic outbidding is not inevitable - if political actors can appeal to multiple, overlapping identities, competition is no longer zero-sum (Chandra 2005). The opposite is also true, however - previously

cooperative relationships can be undermined by enhancing the salience of ethnic identities.

I argue that violent repression should tend to increase the extent to which individuals identify with their ethnic group.[4] A vast scholarly literature views ethnic identity as a cause of conflict (e.g. Horowitz 1985). Several scholars have also considered the possibility of a causal relationship running in the opposite direction, with conflict influencing individual identity. The bulk of this work argues that external threats such as interstate war can promote the creation of national identities, facilitating statebuilding (Herbst 1990; Tilly 1992; Gibler, Hutchison, and Miller 2012). Gibler, Hutchison, and Miller (2012) focus on territorial threat as the key driver of identity changes. As many territorial disputes are driven by irredentist logics (i.e. a state seeks to acquire territory that is home to ethnic groups prevalent within its own borders), citizens in the target state have a strong incentive to emphasize national identities to avoid the impression that they support the challenging state. Herbst (1990, 122) similarly sees interstate war as a crucial source of nationalism, arguing that "…people realize in a profound manner that they are under threat because of who they are as a nation; they are forced to recognize that it is only as a nation that they can successfully defeat the threat."

Others have speculated that an opposite process may occur in civil wars, whereby individuals become more oriented toward ethnic identities. Kaufmann (1996) argues that in conflicts where ethnicity is the primary dividing line, individuals will experience a security dilemma in which their survival is increasingly tied to the success of their group. However, this does not explain why ethnicity would become the basis for conflict in the first place. Kuran (1998) offers an explanation for this, arguing that "ethnic activists" can provoke a cascade of increased ethnic identification, particularly when they use violence on behalf of the ethnic group. He explains,

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[4]Hereafter I will refer mainly to ethnicity as the primary alternative to broad identities. In some societies other social markers such as religion are likely to be more salient, but I expect these to operate in a similar manner to ethnicity.

"Ethnic violence, along with the ensuing reactions, repression, and counter-violence, creates ethnic grievances, and it revives memories of past sufferings. Often, therefore, it makes people of all ethnic groups turn inward as a precaution against further violence," (Kuran 1998, 46).

Often repression is applied in a manner with the potential to highlight ethnic identities. Distinguishing dissidents from pro-government or neutral individuals is generally quite difficult (Kalyvas 2006). If detailed knowledge about particular individuals is unavailable, governments may adopt crude solutions to this problem, assuming that particular social groups or locales are generally sympathetic to the opposition. If individuals are targeted on the basis of their ethnicity, ethnic identities should become more salient. This in turn should trigger the linked fate mechanism described by Kuran (1998). Under these conditions, individuals should tend to see banding together with co-ethnics as their best chance of survival. By contrast, it may be difficult to trust members of other ethnic groups not to defect to the government side.

Ethnic groups may also have logistical tools that make ethnic identification instrumentally rational. Many ethnic groups, especially in the kinds of societies where significant ethnic discrimination occurs, have political parties or nationalist organizations that might be useful for launching a rebellion. In countries that have previously experienced ethnic conflict, there are sometimes ethnic militias[5] that can be converted into larger, more political rebel groups. Outside states also frequently contribute material support to co-ethnic rebel groups (Cederman, Girardin, and Gleditsch 2009). Compared to most bases on which rebellion could be built, ethnicity tends to offer a significant head start in terms of organizing members and acquiring resources. Thus, individuals facing repression should often turn to ethnicity as a means to organizing resistance.

Thus far, this discussion has focused on the responses of dissident civilians. Rank-and-file

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[5]I distinguish militias from rebel groups as the former tend to be small, localized, and have few political ambitions. Instead they generally exist to protect a specific group, locale, or economic activity.

rebels have a very different experience during conflict. These individuals are likely to be targeted by repression (or worse) regardless of whether it is applied on the basis of ethnicity. Yet, increased ethnic identification among constituents can extend to rebels through two mechanisms. First, these individuals can demand a rebel group that represents them on more explicitly ethnic terms. This might be especially likely if dissidents feel that existing rebel groups have failed to adequately protect them from the government. As I discuss in more detail in the section below on "Group Formation," repression can lead previously non-violent individuals to take up arms, in some cases leading to the direct creation of new rebel groups. Second, rebels themselves may begin to identify more strongly with their ethnic group through their connections with family and friends who experience repression. As members see their own communities come under threat, they are likely to become less supportive of broad or abstract goals, and more supportive of efforts to defend particular groups or locales. As discussed in the section on "Splintering" below, these members may break away to form a new rebel group that places greater emphasis on ethnicity. They may also use the threat of doing so to induce existing groups to embrace ethnic identities.

2.2.3   Government Agency

Thus far, I have treated repression as an exogenous influence on dissidents. In reality, the government is almost certainly a strategic actor, with its use of repression being endogenous to its expectation of how dissidents will respond. Governments might be more inclined to repress if they expect that doing so will sow division among their opponents. Alternatively, dissident pools that are already divided might make more attractive targets for repression than unified ones. It is important to account for such possibilities both theoretically and empirically. This is would be particularly true if my expectation that repression often produces fragmentation among dissidents is borne out, as it is not entirely clear whether this would be a desirable outcome for the government. Furthermore, if repression does

in fact increase the number dissidents willing to resort violence, its use by governments becomes downright puzzling.

One explanation is that influencing the size or structure of rebel groups is not the only, and perhaps not even the primary purpose of repression in most cases. First, the governmental institutions involved in fighting rebels may differ from those that conduct the bulk of repression. Whereas civil wars tend to be conducted by state militaries, repression is often conducted by police forces or outsourced to pro-government militias, with less-than-perfect coordination between the entities (Mitchell, Carey, and Butler 2014). Second, rebellion is not always a particularly grave threat to a government's survival. Indeed, only about 16% of rebel groups defeat the government (Cunningham, Gleditsch, and Salehyan 2009). By contrast, leaders routinely lose power through elections, and are sometimes forced to resign in the face of mass uprisings. If governments use repression to maximize their chances at political survival, deterring dissidents from voting or protesting may take priority over preventing or dividing rebel movements. In either case, the government's strategy of repression would not be (entirely) endogenous to its affect on rebel structure.

Another explanation is that repression may operate largely through a deterrent effect (Pierskalla 2010). The true target of repression, then, is not the individuals who experience violence, but rather those who observe such actions. Thus while the individuals who are actually repressed may become more likely to use violence, it is possible that many others will lower their willingness to use violence in order to avoid such a fate. In this case the government would essentially be accepting the presence of a small number of very committed dissidents in exchange for an aggregate reduction in the number of people willing to fight. Lichbach (1987) suggests such a possibility, as he argues that while repression tends to increase dissident violence, its affect on the total level of dissident activity is dependent on whether it mixes repression with policy concessions.

In some cases, however, repression is likely aimed at least partially at making rebellion more

difficult. If, as I predict, repression reduces the cost of fighting and increases the willingness of its targets to participate in violence, the government's use of this tactic remains a puzzle. One explanation is that repression is a sort of gamble. At its most successful, repression might induce dissidents to flee the country and become refugees, deter violent mobilization by signaling resolve (Pierskalla 2010), or physically prevent collective action from occurring. The possibility of such a desirable outcome might lead governments to repress, even if doing so brings some risk of an escalating cycle of repression and increasingly violent dissent. As governments likely have incomplete information about their own ability to identify and repress dissidents, and about dissident resolve, counterproductive uses of repression are conceivable. Another possibility is that at least to a certain point, the unity of the rebel movement matters more to governments than its size. Governments in this case would be accepting an increased number of rebels in exchange for the benefits of a divide-and-conquer strategy. Lastly, repression appears to be the default response to unrest across the spectrum of regime types. Indeed, Davenport (2007a) finds that states almost invariably meet challenges to the status with repression, describing the pattern as "the law of coercive responsiveness." Thus, it may be the case that states simply repress unless a significant feedback leads them to revise their strategy. In this case, governments likely would not consider the potential negative consequences until after a significant amount of repression had been applied.

A more complete consideration of the government's use of repression is beyond the scope of this project. As the preceding section demonstrates, there are a number of theoretical accounts in which the structure of the dissident movement is incidental to the decision to repress.

2.2.4 Non-Governmental Sources of Repression

To this point I have generally assumed that the government is the primary source of repression. In reality, this is not always true. Both rebels and their constituents may face violence from other rebel groups, outside states, or less political non-state actors such as militias or criminal organizations. In general I do not expect that the source of repression makes much difference for the process described above. If the risk of violence from any source increases, an individual's relative cost of participating in rebellion should decrease. As is the case with governments, some rebel groups and militias are clearly associated with particular ethnic groups and/or choose their targets for victimization on the basis of ethnicity. Repression in these cases should tend to increase ethnic identification, just as it would if it were applied by the government.

2.2.5 Testing the Microfoundations

The preceding account suggests two testable propositions about individual-level attitudes, which I evaluate in Chapter 3. First, I follow Kalyvas and Kocher (2007) in arguing that violent repression should reduce the relative cost of participation in violence. This implies that individuals who have personally been repressed[6] should on average exhibit a greater willingness to engage in violence than individuals who lack such experiences.

Hypothesis 1: Individuals who experience repression should be more willing to participate in political violence themselves

Additionally, I expect that repression will tend to induce its targets to identify more strongly with their ethnic group[7], as repression is often applied disproportionately to certain groups,

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[6]The survey data I use (the Afrobarometer survey) only asks individuals whether they have been attacked, without specifying the attacking party.

[7]In some cases a group type other than ethnicity, such as religion or clan might be more salient than ethnicity. However, my survey data asks only about ethnic identification.

increasing the salience of such identities. Furthermore, ethnic identification may have instrumental value as ethnicity is often a particularly useful basis on which to organize responses to repression.

Hypothesis 2: Repression should increase the extent to which an individual identifies with their ethnic group

2.3 Processes of Structural Change

These individual-level dynamics produce changes in the overarching structure of the rebel movement through three processes. First, they can drive the formation of entirely new rebel groups. Second, they can lead individuals who already belong to a rebel group to break away into splinter organizations. Finally, they can facilitate the creation of alliances among previously independent groups.

2.3.1 Group Formation

By "group formation" I mean the entry of entirely new groups to the conflict. I define a group as new if it did not originate as a faction of another rebel group. A rebel group that draws its leadership and members from a political party that did not previously engage in violence would constitute a new group if it were to take up arms. I would consider a faction of an existing rebel group that breaks away to form its own organization to be a splinter organization, discussed in the following section. At a minimum, group formation requires that two conditions be met. First, previously non-violent individuals must change their mobilizational calculus. This entails either participation in violence becoming more attractive, or remaining non-violent becoming less attractive.

Second, there must be a division among the dissident constituents. Newly mobilizing

individuals must have a reason for forming a new group rather than joining an existing one. At their most benign, these divisions might simply reflect the difficulty of coordinating actions across physical distance or linguistic barriers. For example, dissidents on opposite sides of a mountain range might choose to form independent organizations. In such cases the formation of multiple rebel groups might be a matter of convenience rather than an indicator of animosity or divergent objectives. In other cases, however, divisions may be deeper and more difficult to reconcile. For instance, if some rebels make improving the status of their ethnic group a primary concern, it is unlikely that members of other ethnic groups will join their organization, and any existing members with differing ethnic identities will be likely to leave.

As noted in the preceding discussion of individual-level dynamics, repression can satisfy both of these conditions. The application to the first condition requires little explanation. Repression should reduce the relative cost of fighting, as non-violence brings fewer assurances of safety. Thus, the pool of individuals willing to participate in violence should expand with the level of repression. The crucial question, then, is whether they join existing rebel groups, or form new ones. I argue that these new dissidents will often choose the latter. First, if significant numbers of civilians have been repressed, they may place some of the blame on existing rebel groups. If civilians provide material support to a rebel group, they may expect protection in return. Being repressed would be a strong indication that the rebel group is failing in this role. Alternatively, they may blame existing rebels for provoking the government into repressing. In either case, they are likely to hold negative affect toward existing groups.

I also expect that beyond changing the cost of fighting, repression should make individuals more inclined to emphasize sub-national identities such as ethnicity. Unless there are already rebel groups placing strong emphasis on ethnicity, a new group may be more able to appeal to these identities. A rebel group that previously emphasized a non-sectarian

ideological agenda, or drew support from a multi-ethnic coalition, will have difficulty credibly pivoting to an emphasis on a particular ethnic identity. Recall that I assume there is an ever-present set of rebel entrepreneurs seeking opportunities to build new groups of their own. These entrepreneurs should often be able to propose a new rebel group that makes ethnicity more central to its identity than previous organizations. The literature on ethnic outbidding suggests that these efforts should often be successful. Outbidding is a dynamic in which leaders make progressively more extreme proposals in hopes of winning the support of the group (Rabushka and Shepsle 1972; Horowitz 1985). Key to these models are the assumptions that individuals identify with a single ethnic group, that they care only about ethnic issues, and that ethnic politics is a zero-sum game. This produces a completely polarized bargaining space in which individuals choose ideal points at which their group's interests are represented fully (e.g. a preference for a legislature in which group members hold a majority). In a spatial model of voting with such parameters, the optimal strategy for politicians is to adopt the most extreme position possible (Rabushka and Shepsle 1972). In Sri Lanka, for example, parties representing the Sinhala majority proposed increasingly discriminatory policies against the Tamil minority (Horowitz 1985). Even if a multi-ethnic coalition forms initially by creating uncertainty as to which group will be advantaged, it will eventually be undercut by challengers making more extreme appeals to a single ethnic group. Other bases of mobilization, by contrast, tend to produce more heterogeneous preferences - some members will actually prefer moderate positions - and thus greater potential for compromise. While the original formulation of the outbidding model assumes competition in an electoral context, it has also been shown to more violent forms of competition such as terrorism (Kydd and Walter 2006; Chenoweth 2010; but see Findley and Young 2012). Thus as individual dissidents become more oriented toward ethnic identities, rebel groups making extreme bids should tend to attract more new members than moderate groups.

While this process should initially re-orient a subset of dissidents around the ethnic identi-

ties that are targeted with repression, the mobilization of one group can lead to similar behavior in others, even if the latter groups do not experience repression themselves. Kuran (1998) shows that ethnic identification is interdependent, meaning that if some members of society begin to emphasize ethnic identity more strongly, the probability that others will do so increases. Increased mobilization around one ethnicity can also pose a threat to members of other ethnic groups, leading them to mobilize for reasons of self-defense (Posen 1993). Perhaps for these reasons, several studies have found that contagion effects frequently cause a proliferation of both secessionist movements (Ayres and Saideman 2000) and ethnic conflict (Lane 2016).

I thus expect that repression will tend to ultimately lead to the formation of new rebel groups. A set of individuals who did not fight previously will be motivated to enter the conflict. Rather than joining existing rebel groups, however, these individuals will often look to form new ones. Repression should induce greater levels of ethnic identification, which will tend to make existing non-sectarian rebel groups unattractive relative to new, more explicitly ethnic groups.

From this argument I derive three testable hypotheses. First, the probability that a new rebel group will form should be highest when the level of repression in a country is highest.

Hypothesis 3: The probability that a new rebel group will form should increase with the level of repression in the country

Second, the ability of repression to create new rebel groups should be moderated by the number of ethnic identities available for mobilization. If a country has high levels of repression, but low ethnic diversity, we should not expect the mechanism elaborated above to produce new rebel groups. This effect should be captured by an interaction between repression and ethnic diversity. I expect that when ethnic diversity is low, the effect of repression on the probability of new rebel groups should be low, as there are few ethnic groups available for activation. When diversity is high, however, the effect of repression

should be large.

Hypothesis 4: There should be a positive interaction between repression and ethnic diversity

Finally, if the mechanism through which repression produces new rebels is in fact the activation of ethnic identities, we should expect to see this reflected in the characteristics of the new rebel groups. Specifically, the newly-formed groups should be especially likely to draw their support from a single ethnic group.

Hypothesis 5: Rebel groups that join ongoing conflicts should be more likely than others to draw their support from a single ethnic group

2.3.2 Splintering

I define a splinter organization as a new rebel group that was previously incorporated into a larger rebel group. Whereas group formation is a phenomenon driven by dissidents who did not previously engage in violence, splintering is driven by individuals who already belong to rebel groups. Often these splinter organizations are a relatively small subset of the original organization. For example, the Real Irish Republican Army was a subset of particularly hardline members of the Provisional Irish Republican Army, who left their parent organization in protest of its participation in a ceasefire preceding the Good Friday Agreement. In other cases splinter organizations may eventually surpass their parent organization. The Islamic State originated as a regional chapter of al-Qaeda, but eventually outgrew its parent organization by pursuing a more aggressive recruiting strategy.

While rebels are generally more likely than constituents to experience violence, they are likely to be targeted for being militants, rather than for belonging to particular ethnic group. Thus, violence will often not have a direct effect on the identity of rebel group members. Yet, rebels and especially rebel entrepreneurs should respond to changes in the preferences of dissident constituents. As discussed above, the leaders of a successful rebellion are likely

to accrue a variety of private benefits. They will typically exert substantial control over post-war political and policy outcomes, and may have opportunities to skim profits from the state. Even before the war ends, rebel leaders often enrich themselves through the control of natural resources or illicit trades (Collier and Hoeffler 2004). Thus, enterprising dissidents should look for opportunities to gain control of their own rebel group.

Shifts in the identities of dissident constituents might offer such an opportunity. Civilian support networks can be a key source of material resources and logistical support for rebel groups (Weinstein 2007; Parkinson 2013). If a new rebel faction could win over a substantial number of dissident constituents, their chances of building a competitive organization would be significantly greater than they would in the absence of such resources. A shift among dissidents toward greater ethnic identification creates the possibility that a new group could win their support through an outbidding appeal, as discussed above. Civilians who are facing violence are quite likely to prefer a rebel group that can offer protection. If these civilians increasingly see the conflict in ethnic terms, a rebel group making an explicit claim to represent their ethnic group is likely to be more credible than groups lacking such a connection. Thus, rebels who see members of their ethnic group being repressed should have an incentive to break away from their existing organization and create a more explicitly ethnic splinter organization.

Many rank-and-file rebels should be receptive to these new organizations as well. Although repression may not directly influence the identity of individuals who have already rebelled, these individuals may ultimately increase their orientation as well if they see their family members, friends, or home communities repressed on the basis of ethnicity. These rank-and-file members will likely wish to make protection of family members and constituents a greater priority in response to repression. An explicitly ethnic rebel group may be able to commit to this more forcefully than an organization with a diverse coalition, or a non-sectarian political agenda.

Similar to group formation, I expect that repression will induce greater ethnic identification among dissident constituents. Entrepreneurial rebel elites should respond to this change in attempt to attract the support of these constituents. For entrepreneurs who do not already lead a rebel groups, this is likely to entail forming a new splinter organization.

Hypothesis 6: The probability that rebels groups splinter should increase with the level of repression in a country

The mechanism proposed above assumes that pre-existing rebel groups are vulnerable to outbidding appeals because they are either multi-ethnic, or organized on a basis that does not emphasize ethnicity. If the original rebel group is strongly associated with a single ethnicity, however, it should be less likely to experience splintering.

Hypothesis 7: Multi-ethnic rebel groups should be at greater risk of splintering than mono-ethnic ones

Finally, this theory implies that splintering is done to create more explicitly ethnic rebel groups. Thus, I expect that splinter organizations should be more likely than groups that form though other means to be associated with a single ethnic group.

Hypothesis 8: Splinter organizations should be more likely than others to draw their support from a single ethnic group

2.3.3 Alliance Formation

Both group formation and splintering can increase the number of rebel groups active in a conflict. This number can decrease, however, when rebel groups form alliances. I define an alliance as substantial integration of capabilities and command by two or more previously active, independent rebel groups. Typically these alliances will result in the creation of a named umbrella organization to coordinate battlefield operations. For example, the Syrian Democratic Forces coordinates the actions of several Kurdish and Arabic forces in their

fight against the Islamic State. Note that this definition entails a deeper level of integration than most alliances between states. I choose to focus on this category for two reasons. First, named umbrella organizations are easily identifiable, whereas less comprehensive cooperative arrangements are often not well-publicized, as rebels lack formalized processes such as treaties for creating them, and may have incentives to hide such cooperation from the government. Second, mergers of this sort have a meaningful effect on the complexity of civil wars, as rebel groups often channel most or all of their activities through umbrella groups. Less formal alliances, by contrast, are often short-lived, and may entail a more circumscribed form of cooperation, such as a non-aggression pact.

I expect that alliance formation is driven by a similar underlying dynamic to splintering — as dissident constituents shift their identities and preferences, the rebel movement should change in structure to reflect these contours. While the increased levels of ethnic identification resulting from repression can lead existing rebel groups to splinter, they can also facilitate the formation of alliances among co-ethnic rebel groups. Ideological, religious, or other differences that might have previously inhibited collaboration between some rebel groups will become relatively less important as ethnicity increases in salience. Thus, repression can open new opportunities for ethnically-homogeneous alliances. These alliances could be valuable for several reasons.

First, one major drawback of splintering is that it tends to produce a new group that initially, at least, has less material capability than did the original organization. Alliances can offset these losses, as one of their primary effects is the aggregation and coordination of capabilities. This is perhaps the most common conception of alliances in international politics (see Bennett 1997), and it has been proposed as a motive for rebel alliances as well (Bapat and Bond 2012; Horowitz and Potter 2013). The logic of capability aggregation differs somewhat between international and civil conflicts, however. Whereas international alliances aggregate capabilities by bringing states into a conflict in which they might

not otherwise participate, rebel groups by definition are already participating in conflict. Nevertheless, these alliances can bring great value because rather than simply aggregating, they can concentrate capabilities in space and time. For example, two rebel groups might be unable to capture a government-held town on their own, but in a joint operation would be sufficiently powerful to do so.

Second, alliances can allow also for burden-sharing and specialization. Burden-sharing has been offered as an explanation for international alliances such as NATO (Sandler and Forbes 1980), though it may not occur under all circumstances (see Olson and Zeckhauser 1966). Alliances can ensure that a single rebel group is not responsible for defeating the government, and might serve as a mechanism for reigning in the temptation to free ride off of another group's efforts. Relatedly, alliances can facilitate specialization by rebel groups. For instance, one alliance partner might specialize in holding territory, while another specializes in launching offensives in new areas. Furthermore, they can share strategies and technical information. For example, Hamas is believed to have learned how to use suicide bombings through its alliance with Hezbollah (Horowitz and Potter 2013).

Third, alliances can manage conflict between members and ensure that their resources are directed toward common enemies. Weitsman (1997) argues that alliances often serve to tether powerful states to one another, so as to reduce the probability of conflict between them. Gibler (1996) finds that alliance treaties are often used to settle territorial disputes between the signatories. Similar alliances can be seen in civil wars, for example as a number of Syrian rebel groups agreed to focus their efforts in different regions of the country. This allows rebels to avoid conflict with each other. Compliance with such agreements is incentivized by the fact that reneging on the territorial arrangement would likely result in the loss of the other benefits of the alliance, such as capability aggregation.

Fourth, operating as an alliance bloc may be beneficial to the members groups in bargaining situations. An alliance with a set of coordinated demands might command greater

bargaining leverage than individual members, who collectively have similar power, but a more disparate set of demands. Perhaps more crucially, alliances might mitigate credible commitment problems. Peaceful settlements to conflicts can be derailed by concerns that the other side will not adhere to the agreement (Fearon 1995). In civil wars, this is often borne out by extreme "spoiler" factions. A rebel commitment to a peace agreement is more likely to be viewed as credible if it has formal control over other factions.

While the benefits are often many, most alliances between rebel groups are not without cost. The post-war political outcome, whether it comes in the form of a rebel victory or a compromise with the incumbent government, is likely to be shaped by all factions within the winning coalition. Thus, allying with another group holding differing ideologies and interests will tend to force a rebel faction to compromise on at least some issues, or to de-emphasize certain priorities. If, as I assume, rebels are motivated by political goals, the value of an alliance will decrease as its ideological similarity to its alliance partners decreases (Bapat and Bond 2012). Furthermore, any private benefits deriving from the conflict outcome (such as seats in a post-war legistlature) must be divided among the members of the winning alliance (Christia 2012). These concerns should tend to constrain the value of alliances in civil war. The existing literature finds that these concerns limit the size of rebel coalitions (Christia 2012). Logically, they should also shape the choice of partners with whom rebels ally.

I do not expect that repression will directly affect the willingness of rebel groups to form alliances. If alliances are intended to aggregate or coordinate capabilities, external factors such as rebel strength relative to the government, or battlefield events should be the primary influences on the attractiveness of alliances. The experience of civilians should affect these calculations only insofar as they alter the level of resources available to rebel groups. I do, however, expect that repression will influence the choice of alliance partners, as it leads the rebel movement to reorganize around ethnicity. Alliances with co-ethnic rebel have

the benefits of aggregating capabilities and managing conflict among members. As rebel interests increasingly become tied to ethnicity, partnerships between co-ethnic rebel groups should avoid the cost of agenda dilution (see Christia 2012; Bapat and Bond 2012). Relatedly, ideological and other differences that might normally inhibit cooperation will become less important following a wave of repression. Thus, I expect that repression should tend to increase the incidence of ethnically-homogeneous alliances.

Hypothesis 9: The probability that new mono-ethnic alliances will form should increase with the level of repression

Partnerships with rebel groups of differing ethnicities should become less attractive, however, as these could undermine a rebel group's claims to represent its ethnic group, and leave it vulnerable to outbidding appeals. At the same time, factors that might otherwise serve as a unifying force such as shared ideology should decline in relative importance, and ethnic differences should become harder to overcome when pursuing alliances. Repression should thus make rebel leaders disinclined to enter into multi-ethnic alliances.

Hypothesis 10: The probability that new multi-ethnic alliances will form should decrease with the level of repression

I provide comprehensive tests of these hypotheses in the following three chapters.

Chapter 3

Repression and Individual-Level Attitudes

In this chapter I test the theory articulated in Chapter 2 at the individual level, using data from the Afrobarometer survey. This analysis allows me to directly test whether the hypothesized mechanisms linking repression to rebel movement structure are in fact at work. Findings consistent with my expectations in this chapter would allow me to rule out many alternative explanations for the findings in the national-level analyses in subsequent chapters.

I argue that the size and structure of the rebel movement is shaped by two parameters - the number of dissidents willing to engage in violence, and the extent to which dissidents are oriented toward broadly inclusive ideologies or identities, rather than particularistic identities or causes. One process that should influence these attributes is the repression of dissident civilians. As the risk of violence to civilians increases, the relative cost of fighting decreases, increasing the number of individuals willing to participate in rebellion.

Hypothesis 1: Individuals who experience repression should be more willing to participate in political violence themselves

As repression is often targeted on the basis of sub-national identities such as ethnicity or religion, and as these groups often offer a basis for collective defense, repression should induce individuals to identify more strongly with sub-national groups.

Hypothesis 2: Repression should increase the extent to which an individual identifies with their ethnic group

I proceed with a discussion of the general attributes of the Afrobarometer survey, followed by descriptions of the variables of interest, and finally analyze multilevel models of individual attitudes toward political mobilization and ethnic identity.

3.1   Research Design

3.1.1   The Afrobarometer Survey

To examine the relationship between repression and individual attitudes toward political participation and ethnic identities, I use waves 3-6[1] of the Afrobarometer survey. The Afrobarometer is administered by researchers at Michigan State University, the Institute for Democracy in South Africa, and the Center for Democratic Development in Ghana. In each wave the survey attempts to obtain a nationally-representative sample of 20-25 African countries. This is accomplished by randomly sampling geographic areas (villages, neighborhoods, etc), with selection probabilities weighted by population. Within each geographic area a starting point is chosen at random, from which interviews begin randomly selecting households. Individuals are then randomly selected within households, alternating between men and women to ensure gender balance. The sample in each country usually numbers either 1,200 or 2,400, depending on the size and diversity of the country. Respondents are asked over 300 questions on their demographics and background, and

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[1]The ethnic vs. national identity question was not asked in waves 1 and 2.

their opinions on a wide range of political and cultural questions. One advantage of using such a general survey is the relatively low likelihood that individuals will be primed to answer questions about ethnicity in a way that is not representative of their normal opinions (Eifert, Miguel, and Posner 2010).

Attributes for each survey wave are summarized in Table 3.1. The four waves span the period 2005–2016, cover 38 countries, and collect a total of 158,362 individual responses. Response rates are generally quite high, averaging 76.5% in wave 6, and 77.7% in wave 5. A detailed summary of included countries is provided in Table A.1 of the Appendix.

Wave	Years	Total Responses	Countries
3	2005	25,397	18
4	2008	27,713	20
5	2011–2013	51,587	34
6	2016	53,935	36
Total	2005–2016	158,362	36

Table 3.1: The Afrobarometer Survey by Wave

The Afrobarometer is one of only a few surveys (the primary alternative being the World Values Survey) that provides a cross-national measure of ethnic identity. Given that the baseline salience of ethnicity varies greatly across countries, it is crucial that my theory be tested across a variety of contexts. But while the Afrobarometer facilitates such an analysis, it is not without its limitations. Cross-national comparability comes at the expense of studying country-specific nuances. Perhaps relatedly, the survey often does a poor job of defining abstract concepts, creating the possibility that respondents could interpret the same question in starkly different ways. The survey is conducted by a research assistant,

creating the possibility of social desirability bias, as well as potential response biases resulting from the interviewer's ethnicity, gender, or other attributes. Finally, the prevalence of undemocratic regimes and other potential sources of repression in Africa create the possibility that individuals will not feel free to answer the questions honestly.

One more specific concern relevant to the present application is that in rare cases the Afrobarometer excludes geographic areas experiencing significant violence or other factors that would pose a danger to interviewers. Additionally, questions about ethnic identity are not asked in some countries where doing so is deemed to be potentially harmful to the sampled communities. It is impossible to estimate the direction or magnitude of the bias introduced by these decisions. The external validity of this analysis is therefore limited; I am unable to infer whether the patterns identified in the sample are likely to hold in the most violent and ethnically-polarized societies.

Variable	Question Text	Responses
Attitude Toward Violence	"During the past year, have you or anyone in your family: Been physically attacked?"	1. "No" 2. "Once" 3. "Twice" 4. "Three or More Times" 5. "Don't Know."
Ethnic Identity	"Let us suppose that you had to choose between being a [ENTER NATIONALITY] and being a [Respondent's Ethnic Group]. Which of the following best expresses your feelings?"	1. "I feel only [ethnicity]" 2. "I feel more [ethnicity] than [nationality]" 3. "I feel equally [ethnicity] and [nationality]" 4. "I feel more [nationality] than [ethnicity]" 5. "I feel only [nationality]"

Table 3.2: Question Wording

Political Participation	"Here is a list of actions that people sometimes take as citizens when they are dissatisfied with government performance. For each of these, please tell me whether you, personally, have done any of these things during the past year. If not, would you do this if you had the chance: Participated in a demonstration or protest march / Attended a community meeting / Used force or violence for a political cause."	1. "No, would never do this" 2. "No, but would do if had the chance" 3. "Yes, once or twice" 4. "Yes, several times" 5. "Yes, often."
Voting	"Understanding that some people were unable to vote in the most recent national election in [20xx], which of the following statements is true for you?"	1. You were not registered to vote" 2. "You voted in the elections" 3. "You decided not to vote" 4. "You could not find the polling station" 5. "You were prevented from voting" 6. "You did not have time to vote" 7. "You did not vote because you could not find your name in the voters' register" 8. "Did not vote for some other reason" 9. "You were too young to vote" 10. "Don't Know/ Can't Remember"
Intimidation	"During election campaigns in this country, how much do you personally fear becoming a victim of political intimidation or violence?"	1. "A lot" 2. "Somewhat" 3. "A little bit" 4. "Not at all" 5. "Don't know"

Table 3.2: Question Wording

3.1.2 Dependent Variables

Attitude Toward Violence

The first dependent variable explored in this chapter is willingness to use violence. To distinguish factors that influence an individual's willingness to engage in violence from those that make them more active generally, I include several other forms of political behavior, including voting, attending community meetings, and protesting. The question wordings and possible responses are reported in Table 3.2. The violence, meeting, and protest questions share a common question stub. The voting question differs as individuals generally vote only once, and it solicits explanations for why individuals did not vote. I collapse each variable into binary categories with individuals who engaged in the activity at least once coded as one, and individuals who did not participate in the activity for any reason, including those who are willing but have not actually done the activity, coded as zero. Leaving the measure as a five-point scale and using does not substantially alter the results (see Table A.2 in the Chapter 3 Appendix).

Each of these measures is self-reported, and not subject to any independent verification. It is well established in the US context that self-reported surveys overestimate the prevalence of voting, introducing bias to models of political participation (Bernstein, Chadha, and Montjoy 2001). It is unclear whether such effects are similarly prevalent in Africa. 70.4% of respondents in the full sample reported voting, though the number varies wildly across countries in a manner that generally matches variation in actual voter turnout (see Kuenzi and Lambright 2007). Social desirability bias may lead not only the voting figure, but participation rates for the other forms of political activity to be inflated. Alternatively, it is possible that not participating is the more socially-desirable position in some cases, particularly with regards to participation in violence. I therefore cannot rule out the possibility that any relationships between being attacked and political participation are the

result of inaccurate self-reports on both measures.

Variable	Yes	No	Percentage Yes
Violence	1473	50077	2.9%
Protest	16492	142056	10.4%
Meeting	92849	65719	58.6%
Vote	111632	46952	70.4%

Table 3.3: Summary of Participation (waves 3-6)

The participation measures are summarized in Table 3.3. Participation in violence is rare, with only 2.9% of respondents reporting to have done it at least once in the past year. Participation rates increase as the degree of commitment required decreases - 10.4% participated in at least one protest, 58.6% participated in a community meeting, and 70.4% voted.

Ethnic Identity

The second dependent variable is ethnic identification. The Afrobarometer asks individuals about the extent to which they identify with their ethnic group, relative to their nation. Refer again to Table 3.2 for the question wording. I collapse the measure into a binary variable, with respondents who identify only with their ethnic group and more with their ethnic group than their nation coded as ethnic identifiers, and all others as non-ethnic identifiers. Using the raw five-point scale (ranging from ethnically-oriented to most nationalist) yields similar results when used in an ordered logit (see Table A.2 in the Chapter 3 Appendix).

Individuals self-report their ethnicity earlier in the survey. The question is open-ended, allowing for the possibility that respondents may conceive of ethnicity in ways that do not

comport with scholarly definitions. Indeed, around 1.5% of respondents provide answers such as "African" or the name of a sub-national region. The vast majority, however, choose ethnicities that appear in externally-imposed classifications, such as the Ethnic Power Relations data (Vogt et al. 2015).

	Count	Percentage
Missing	0	0.0
I feel only (ethnic group)	6397	4.3
I feel more (ethnic group) than (national identity)	11160	7.4
I feel equally (national identity) and (ethnic group)	53641	35.8
I feel more (national identity) than (ethnic group)	13448	9.0
I feel only (national identity)	51048	34.1
Not applicable	7961	5.3
Don't know	1382	0.9
Refused	0	0.0
Not asked in country	4798	3.2

Table 3.4: Summary of Ethnic Identification (waves 3-6)

Relatively few respondents identify with their ethnic group, with 4.3% answering that they feel only an ethnic identity, and 7.4% saying that their ethnic identity was more prevalent than their national identity (see Table 3.4). A plurality of respondents (35.8%) said that they felt equally attached to their national and ethnic identities, and a large percentage (34.1%) said that they feel only a national identity.

3.1.3   Independent Variables

H1 predicts that individuals who experience violent repression should be more likely to participate in violence than others, and *H2* predicts that repression should increase the extent that individuals identify with their ethnic group. I test these propositions using both individual-level and national-level measures of repression. At the individual level, I use an Afrobarometer question that asks respondents whether they or a family member has been attacked in the past year (see Table 3.2 for question text). I recode the variable into a binary

measure with individuals who experienced any attacks coded as 1, and individuals who experienced no attacks coded as 0. This question has two noteworthy limitations. First, it does not differentiate between individuals who were personally attacked from family members of people who were attacked. However, I expect that this feature is more likely to introduce bias against my hypotheses, than in their favor. The effect of violence on family members of people who are attacked should be less than or equal to that on people who personally experience violence. If this assumption holds, including family members should either have no effect or understate the effect of being attacked. Second, the question does not identify the source of the attack. While government repression may account for some attacks, the measure likely also includes violence from non-state actors including rebel groups, as well as common criminal activity. Again, however, I expect that any potential bias is more likely to work against my hypotheses than in the same direction. Attacks that clearly should not be characterized as repression, such as domestic violence, should be less likely to influence willingness to engage and violence or identify with an ethnic group. Thus, including these types of attacks in the measure is more likely to understate the effect of repression than overstate it. With these coding decisions, 10.4% of respondents report having experienced an attack.

I also include a measure of intimidation, as I expect that the *belief* that the risk of non-violence is approaching that of violence should be sufficient to alter an individual's attitudes. While the question is somewhat limited in scope (see Table 3.2), only asking about election-related violence, this does bring the advantage of shedding light on the reason why an individual might be targeted. 28.6% of respondents reported at least some fear of being attacked during an election.

An individual may not need to experience violence personally to update their calculations about their probability of experiencing it in the future. For example, if an ethnic minority in one part of a country is repressed, members of other minority groups may increase their

expectation of being repressed themselves. Thus, I include a national-level measure of repression, the Latent Human Protection Scores, version 2 (Fariss 2014; Schnakenberg and Fariss 2014). The project uses a Bayesian measurement model to estimate latent human rights scores using several data sources including US State Department and Amnesty International country reports, and several scholarly datasets on repression and mass killing. This data improves on previous approaches to measuring human rights by accounting for the fact that the standards by which government and NGO reports have judged countries have generally improved both over time and cross-nationally. The result is an aggregate measure that ranges from roughly -3 (most repressive) to 3 (most respectful of human rights). The score is calculated yearly, 1946–2015 for each country. I match the Latent Protection Human Protection Scores to each Afrobarometer respondent by the respondent's country and the year in which the survey was conducted. Within the sample, the measure ranges from -2.18 (Sudan in 2013) to 1.81 (Botswana in 2012), with mean of 0.26.[2] The sample thus lacks any cases with the exceptionally levels of respect for human rights, as would be seen in many European democracies. The average, however, is quite close to the full sample mean of 0.29.

3.1.4 Control Variables

I draw on previous studies of participation in rebellion (e.g. Humphreys and Weinstein 2008) and ethnic identity (e.g. Eifert, Miguel, and Posner 2010; Gibler, Hutchison, and Miller 2012; Masella 2013; Robinson 2014) to identify a set of relevant control variables. Each of these measures comes from the Afrobarometer, though some are not included in all waves. First, I include the respondent's gender, as men are substantially more likely to participate in violence than women. Next I include age and an ordinal measure of educational attainment as both have been shown to be negatively related to the probability of participation in

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[2]Calculated with all country-years included in the data weighted equally.

violence. Additionally, I include binary indicators of whether the respondent is employed at least part-time, as unemployed individuals are more likely to rebel, whether they reside in an urban area, as urban-dwellers have been shown to rebel at higher rates, and whether they support the ruling party, as these individuals would obviously be less likely to take political action against the government. I have examined several other controls, but exclude them from the models reported here as they are neither statistically significant nor do they alter the performance of my variables of interest. These include a binary indicator for individuals who work in agriculture (farming and fishing), an index of the level of economic development in the respondent's community, and the size of the respondent's ethnic group.

At the country level I control for a curvilinear effect for ethnolinguistic fractionalization, using data from Fearon and Laitin (2003). The intuition behind this choice is that at very low levels of fractionalization, meaning most individuals belong to the same ethnic group, ethnicity is not likely to be an important social cleavage. The same is likely to hold at the opposite extreme, where individuals might fragmented into a sufficiently large number of groups that ethnicity is unlikely to be a salient. A curvilinear effect should thus identify the cases in the middle of the spectrum where ethnicity is likely to matter. Additionally, I include the country's Polity IV regime score (Marshall, Gurr, and Jaggers 2016), as Eifert, Miguel, and Posner (2010) find that elections can induce greater levels of ethnic identification. Finally, as forms of violence besides repression might influence I include indicators of whether the country had a separatist war or civil war over the central government during the year the respondent was interviewed, constructed from the Uppsala Conflict Data (Melander, Pettersson, and Themnér 2016).

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ethnicity is not likely to be an important social cleavage. The same is likely to hold at the opposite extreme, where individuals might fragmented into a sufficiently large number of groups that ethnicity is unlikely to be a salient. A curvilinear effect should thus identify the cases in the middle of the spectrum where ethnicity is likely to matter. The fractionalization measure does have limitations. Notably, it assumes individuals have a single, stable ethnic identity, whereas recent research suggests identity can vary across contexts and time (Chandra 2009). Furthermore, the measure is extrapolated from a single underlying measurement from 1964, and may be subject to some measurement error, particularly in later years. The strength of the fractionalization measure relative to alternatives lies in its ability to capture to some extent the magnitude of differences between ethnic groups, as it is interpretable as the probability that two randomly selected individuals will be able to communicate. Thus, closely-related ethnic groups that are able to communicate do not contribute to fractionalization, whereas more stark differences do.

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3.1.5 The Model

As I am interested in the effects of variables measured at both the individual and country levels, and my dependent variables are all binary, a multilevel logistic regression model is the appropriate method of analysis. I begin with a relatively simple model with random intercepts for each country. The intuition behind this model is that the baseline values for each dependent variable vary by country, while the independent variables have a consistent

effect in each country. For example, the baseline probability of ethnic identification might vary from country to country, but the model assumes that the effect of repression will be the same across all countries. For robustness, I estimate more complex models with random intercepts for each ethnic group nested within each country, and with random intercepts for each survey wave. Additionally, I utilize the survey weights provided by Afrobarometer, meaning that individuals from under-sampled groups are weighted more heavily in the regressions.

Individual-level variables are interpreted normally, with coefficients representing the increase in the logged odds ratio of the dependent variable associated with a one-unit increase in the independent variable. The country-level variables are used in a separate model, estimated simultaneously, in which the dependent variable is the group-level intercept. Thus, country-level coefficients predict the change in baseline probability in a country associated with a one-unit increase in the independent variable.

3.2   Use of Violence Results

The results for the use of violence are reported in Table 3.6, Model 1. Consistent with *H1*, repression at the individual level is associated with an increased probability that a respondent has engaged in violence, or is willing to do so. The effect is substantively large, with the probability that an individual engaged in violence increasing by roughly 30%. As the baseline probability is quite low, the effect is small in absolute terms, moving from around 0.02 for individuals who have not been attacked, to 0.09 for individuals who have (see Figure 3.1). Furthermore, it is statistically significant at the 99.9% level. Neither the individual-level threat of violence, nor the country-level degree of respect for human rights significantly influences violent mobilization. Collectively these results suggest that the presence of violence does not generally make individuals more willing to engage in

violence themselves. Experiencing violence personally, however, produces such a drastic change in one's outlook that they are likely to increase their own willingness to engage in violence.

It is possible, however, that this result is endogenous. The Afrobarometer is not a panel survey, meaning that I am unable to track individuals over time. I therefore cannot determine whether attitudes toward the use of violence change in response to repression, or whether such attitudes might predate being attacked. It could be that individuals experience violence *because* they have engaged in violence themselves. Such individuals might be especially likely to be targeted with repression by the government. Furthermore, if individuals have engaged in violence, perhaps as members of a rebel group or in a riot, there is a strong possibility that their opponent will have fought back, leading the individual to report being attacked in the survey. I argue, however, that the potential for endogeneity should be substantially lower among individuals who are willing to, but have not yet engaged in violence. Identifying insurgents who intermix with the civilian population is immensely challenging for governments (Kalyvas 2006). Thus if the effect of repression on attitudes towards violence is endogenous, we might expect a weak or non-existent relationship between repression and the willingness to use violence, as it would be difficult for the government to target such individuals. As Model 2 shows, this is somewhat true. The effect of repression on willingness to use violence is weaker than the effect on the actual use of violence. Yet, the effect is still relatively large and statistically significant, suggesting that the relationship matches my causal story in at least a portion of cases.

	M1 Violence (Used)	M2 Violence (Willing)
(Intercept)	-3.70^{***}	-1.78^{***}
	(0.66)	(0.48)
Human Rights	0.05	-0.01
	(0.24)	(0.18)
Ethnolinguistic Fractionalization	-1.45	0.64
	(2.76)	(2.03)
Ethnolinguistic Fractionalization^2	2.30	-0.45
	(2.79)	(2.07)
Polity	-0.01	-0.04
	(0.04)	(0.03)
Civil War	-0.32	0.17
	(0.18)	(0.18)
Separatist War	-0.07	-0.45
	(0.69)	(0.45)
Attacked	1.13^{***}	0.45^{***}
	(0.07)	(0.06)
Intimidated	0.12	0.13^{**}
	(0.07)	(0.05)
Employed	-0.05	-0.03
	(0.07)	(0.05)
Primary Education	0.14^{*}	0.05
	(0.07)	(0.05)
Urban	-0.08	-0.14^{**}
	(0.08)	(0.05)
Ruling Party Supporter	-0.09	-0.04
	(0.06)	(0.04)
Age	-0.09	-0.26^{***}
	(0.06)	(0.05)
Female	-0.32^{***}	-0.21^{***}
	(0.06)	(0.04)
AIC	9447.37	17721.71
BIC	9592.99	17867.32
Log Likelihood	-4706.69	-8843.85
Num. obs.	38778	38778
Num. groups: Ethnic:Country	501	501
Num. groups: Country	26	26
Var: Ethnic:Country (Intercept)	0.56	0.18
Var: Country (Intercept)	0.35	0.22

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table 3.5: Multilevel Models of Attitudes Toward Violence

Perhaps due in part to its rarity, only a few control variables are significantly related to
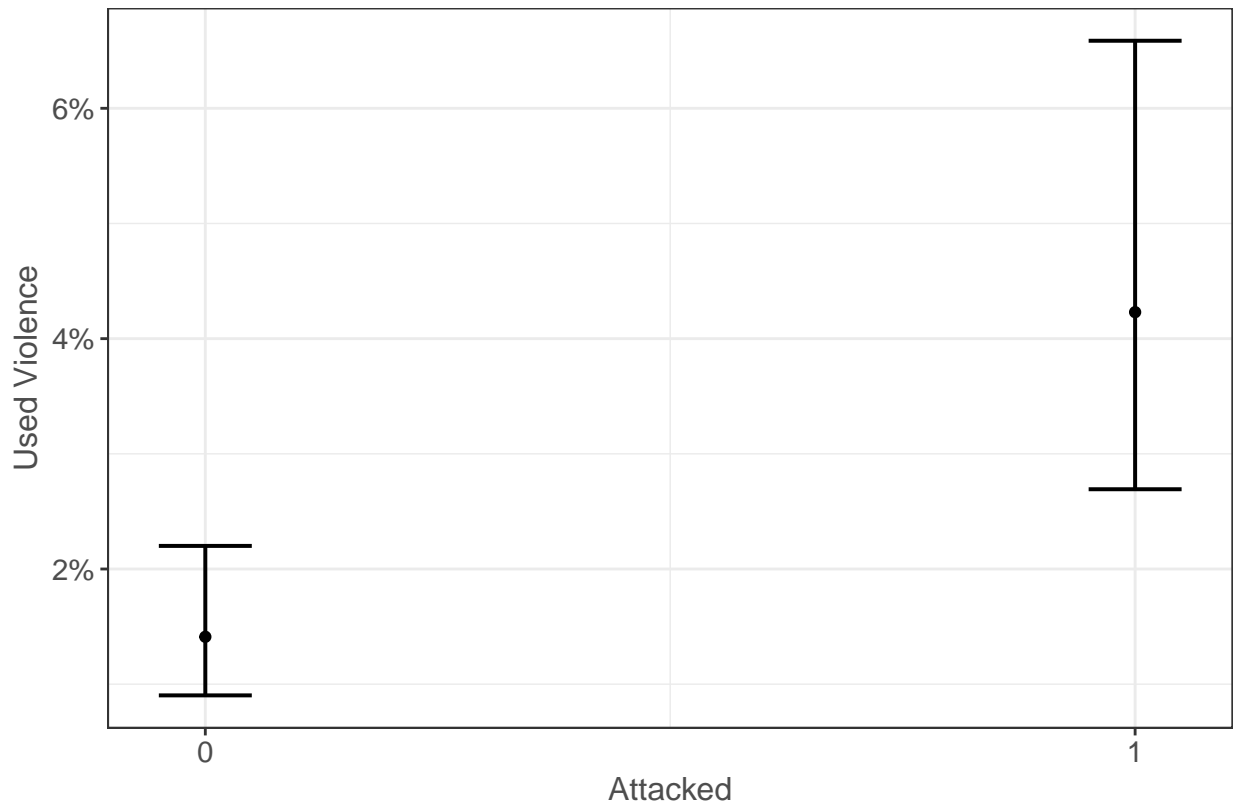
Figure 3.1: Predicted Probability of the Use of Violence (Model 1)

violence. Consistent with previous findings (e.g. Humphreys and Weinstein 2008), women are less likely than men to engage in violence, and are less likely to report a willingness to use violence. Individuals with at least a primary school education are slightly more likely than others to participate in violence, perhaps reflecting the fact that student organizations generally account for a substantial portion of political violence. This pattern does not hold for willingness to use violence, however. Urban individuals are less likely to be willing to use violence, while the measure is unrelated to the use of violence. Finally, willingness to use violence declines with age, while participation in violence is unrelated to age.

I also examine the effects of repression on three other forms of political participation to shed light on alternative explanations. For example, it may be the case that violent individuals are simply very active in general, and thus have more opportunities than others to be repressed. Comparative homebodies might see lower rates of repression simply because

they spend less time in public locations where repression tends to occur, and any apparent association with lower levels of political participation would likely be coincidental. In Model 3 I examine voting. Repression measured at the individual level has a negative relationship with voting. Individuals who reported an attack on themselves or a family member were 20.4% less likely than others to have voted. The threat of election-related violence has a smaller, but still statistically significant effect. At the national level better human rights practices are associated with higher baseline rates of voting, but the effect just misses the 90% level of statistical significance. These results suggest a potential explanation to the puzzle of why governments use repression despite the negative consequences I predict - it appears that repression is effective at deterring individuals from voting, or at convincing them that politics is unlikely to address their needs. For two more involved forms of political action, however, attacks are associated with increased levels of political participation. Experiencing an attack is associated with a statistically significant, though substantively modest increase in the probability than an individual has participated in community meetings, as is the country-level human rights situation. The country-level measure is not significantly related to protest activity, but being attacked once again is, with individuals who have experienced an attack being more than twice as likely to have participated in protest. It should be noted, however, that the same endogeneity concerns that exist for violence apply to these forms of participation as well, as these results are consistent

	M3 Voting	M4 Meeting	M5 Protest
(Intercept)	−5.60***	−2.29	−2.81***
	(0.43)	(1.44)	(0.51)
Human Rights	0.13	0.22*	−0.20
	(0.08)	(0.09)	(0.13)
Ethnolinguistic Fractionalization	−0.53	−5.02	2.12
	(1.65)	(7.26)	(1.89)
Ethnolinguistic Fractionalization^2	0.84	5.59	−0.85
	(1.61)	(7.04)	(1.84)
Polity	0.01	0.22***	0.05*
	(0.02)	(0.02)	(0.02)
Civil War	0.07	0.32***	−0.66***
	(0.05)	(0.05)	(0.07)
Separatist War	0.36	0.74*	−0.37
	(0.33)	(0.36)	(0.42)
Attacked	−0.15***	0.18***	0.82***
	(0.03)	(0.03)	(0.04)
Intimidated	−0.12***	0.03	0.09**
	(0.02)	(0.02)	(0.03)
Employed	0.36***	0.12***	0.22***
	(0.02)	(0.02)	(0.03)
Primary Education	0.10***	0.13***	−0.38***
	(0.02)	(0.02)	(0.03)
Urban	−0.06*	−0.06**	0.11**
	(0.03)	(0.02)	(0.04)
Ruling Party Supporter	0.24***	0.21***	−0.05
	(0.02)	(0.02)	(0.03)
Age	1.84***	0.67***	−0.16***
	(0.03)	(0.02)	(0.03)
Female	−0.14***	−0.44***	−0.32***
	(0.02)	(0.02)	(0.03)
AIC	62740.24	73422.70	37290.70
BIC	62894.17	73576.62	37444.62
Log Likelihood	-31353.12	-36694.35	-18628.35
Num. obs.	63222	63215	63195
Num. groups: Ethnic:Country	650	650	650
Num. groups: Country	27	27	27
Var: Ethnic:Country (Intercept)	0.07	0.16	0.12
Var: Country (Intercept)	0.25	1.03	0.35

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$

Table 3.6: Multilevel Models of Political Participation

These results are robust to a number of adjustments. Changing the cutpoints for the

variables that I collapse into binary measures does not substantially alter the results. Furthermore, leaving the violence measure as a five-point scale and using an ordinal rather than standard logit produces substantively similar results – individuals who experienced an attack are significantly more likely to report higher levels of participation in violence (see Table A.2 in the Chapter 3 Appendix). Adding the additional controls mentioned in the research design does not alter the performance of my variables of interest, nor does removing any control variables. As mentioned in the research design section, I also explore the effects of several additional control variables. The results are also robust to the inclusion of random effects for the year in which the survey was administered and the survey wave, and including these factors as fixed effects rather than random results in only slight changes to the magnitude of the relationships.

Collectively, these results allow me to reject the null hypothesis of no relationship between repression and willingness to engage in violence associated with *H1*. Individuals who have been attacked are more than three times more likely than others to engage in violence, and roughly 20% more likely to express a willingness to use violence. The country-level human rights measure is not significantly related to either outcome, however, suggesting that the effect of repression is specific to the individuals who are targeted, and does not produce a widespread spillover effect leading large swaths of society to change their behavior. Several caveats must be noted, however. First, the repression measure is imprecise, as individuals who experienced violence personally are grouped with individuals with family members who experienced violence, and the actor who perpetrated the attack is not specified. Second, these results could be endogenous, with individuals being attacked because they used or were known to be willing to use violence. I address this possibility in Section 3.4.

3.3 Ethnic Identification Results

The ethnic identification results are reported in Table 3.7. Model 5 includes a random intercept for each country, while Model 6 adds an intercept for each ethnic group nested within each country, and to that Model 7 adds a random intercept for year.[3] In all three models, individuals who have experienced an attack are more likely to identify with their ethnic group than their nation, relative to individuals who have not experienced an attack. This effect size is equivalent to a roughly 42% increase, a change in probability from 0.12 to 0.17 (see Figure 3.2), but is statistically significant at the 99.9% level. Political intimidation has a similar effect. The country-level human rights measure is statistically significant in Models 5 and 6, with a similar substantive effect. Among the most repressive cases in the sample, individuals have a roughly 0.15 probability of identifying with their ethnic group, with the probability decreasing to 0.10 among the cases with the greatest respect for human rights (see Figure 3.3). The human rights variable is not significant in Model 7, likely because as a relatively constant measure, it has little ability to predict intercepts that vary by year.

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[3]I use year instead of survey wave as the country-level variables are measured in yearly intervals.

	M5	M6	M7
(Intercept)	−4.43***	−4.34***	−3.44***
	(0.65)	(0.72)	(0.43)
Human Rights	−0.70***	−0.66***	0.12
	(0.12)	(0.13)	(0.11)
Ethnolinguistic Fractionalization	6.58*	6.38*	3.63*
	(2.78)	(3.18)	(1.63)
Ethnolinguistic Fractionalization^2	−5.89*	−5.77	−3.17*
	(2.74)	(3.11)	(1.58)
Polity	0.15***	0.15***	0.03
	(0.02)	(0.03)	(0.02)
Civil War	0.29***	0.33***	0.62***
	(0.06)	(0.06)	(0.07)
Separatist War	1.26**	1.61**	0.64
	(0.46)	(0.53)	(0.36)
Attacked	0.25***	0.27***	0.23***
	(0.04)	(0.04)	(0.04)
Intimidated	0.23***	0.22***	0.20***
	(0.03)	(0.03)	(0.03)
Employed	−0.08**	−0.09**	−0.08**
	(0.03)	(0.03)	(0.03)
Primary Education	0.42***	0.41***	0.40***
	(0.03)	(0.03)	(0.03)
Urban	−0.11***	−0.08*	−0.10**
	(0.03)	(0.03)	(0.03)
Ruling Party Supporter	−0.14***	−0.12***	−0.12***
	(0.03)	(0.03)	(0.03)
Age	0.01	−0.00	−0.00
	(0.02)	(0.02)	(0.02)
Female	0.10***	0.10***	0.10***
	(0.02)	(0.03)	(0.03)
AIC	45710.59	43941.95	43722.83
BIC	45855.99	44095.82	43885.75
Log Likelihood	-22839.29	-21953.97	-21843.41
Num. obs.	65384	63039	63039
Num. groups: Country	27	27	27
Var: Country (Intercept)	0.57	0.51	0.15
Num. groups: Ethnic:Country		650	650
Var: Ethnic:Country (Intercept)		0.27	0.25
Num. groups: Year			5
Var: Year (Intercept)			0.09

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$

Table 3.7: Multilevel Models of Ethnic Identification

These results are robust to alternative specifications of the dependent variable. Leaving the measure as a five-point scale in an ordinal logit produces comparable results – individuals who have been attacked have statistically-significant of being closer to the ethnically-oriented end of the scale (see Table A.2 in the Chapter 3 Appendix). The control variables provide a number of interesting results. As I expected, ethnolinguistic fractionalization has a substantively strong and statistically significant curvilinear relationship with ethnic identification in Models 5 and 7, and a linear one in Model 6 (indicated by the squared term not being statistically significant). The curvilinear pattern is consistent with my expectation that ethnic identification will be unlikely at extreme levels of diversity. Consistent with the findings of Eifert, Miguel, and Posner (2010), Models 5 and 6 show that the probability of ethnic identification increases as a country becomes more democratic. Countries experiencing civil war have a somewhat higher baseline level of ethnic identification, and the effect is considerable for separatist wars. At the individual level, urban-dwellers, ruling party supporters, and employed individuals are less likely to emphasize an ethnic identity. Having at least a primary education increases the probability that an individual with identify ethnically, and women are slightly more likely than men to adopt such an identity.

While further analysis is need to establish the direction of the causal relationship, these results do allow me to tentatively reject the null hypothesis of no relationship between repression and ethnic identification associated with *H2*. Individuals who have been attacked are more than 40% more likely than others to identify with their ethnic group. The country-level human rights measure tells a similar story, with the probability of ethnic identification being lower in countries with greater respect for human rights. As is the case with the violence results, I cannot here rule out the possibility of endogeneity. It is quite plausible that individuals who identify strongly with an ethnic group are most likely to be targeted with repression. Many governments repress ethnic minorities to prevent them from undermining national unity. For example, the Turkish government has denied
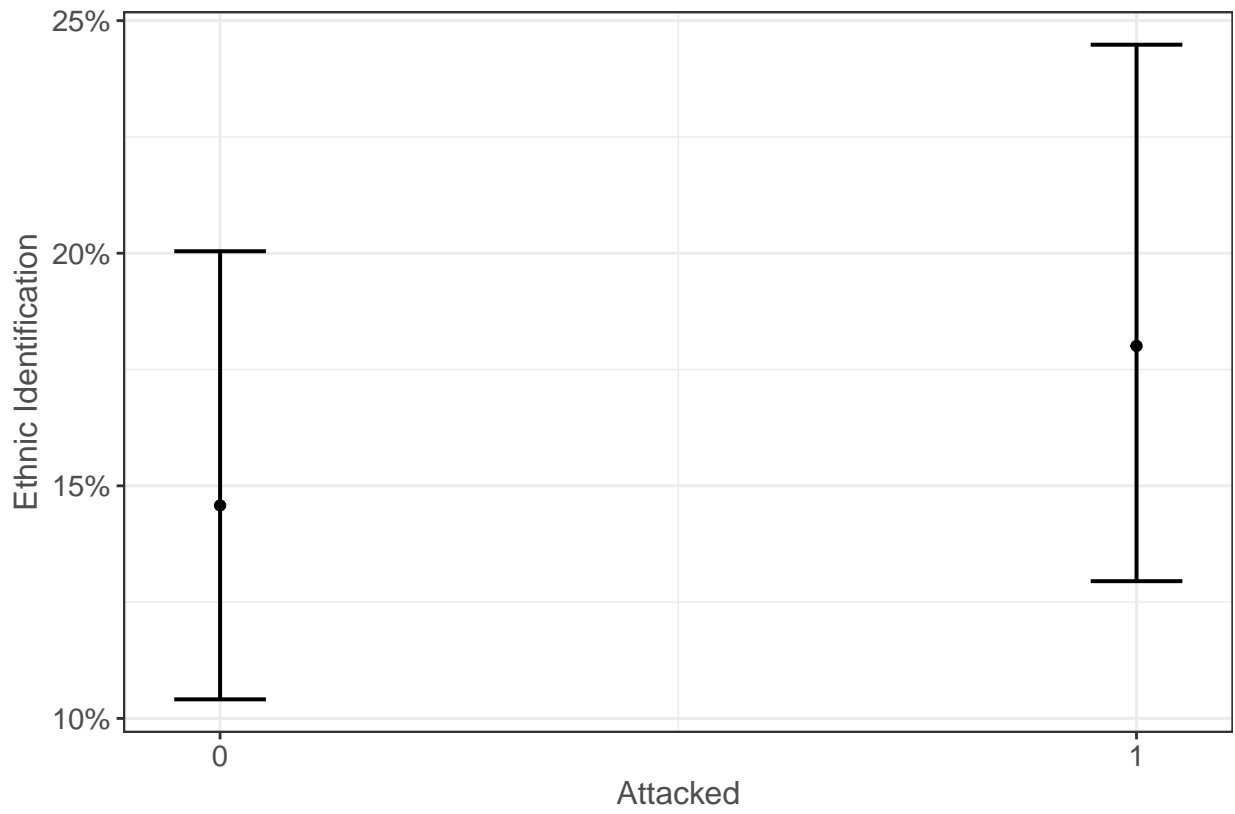
Figure 3.2: Predicted Probability of Ethnic Identification (Model 5)
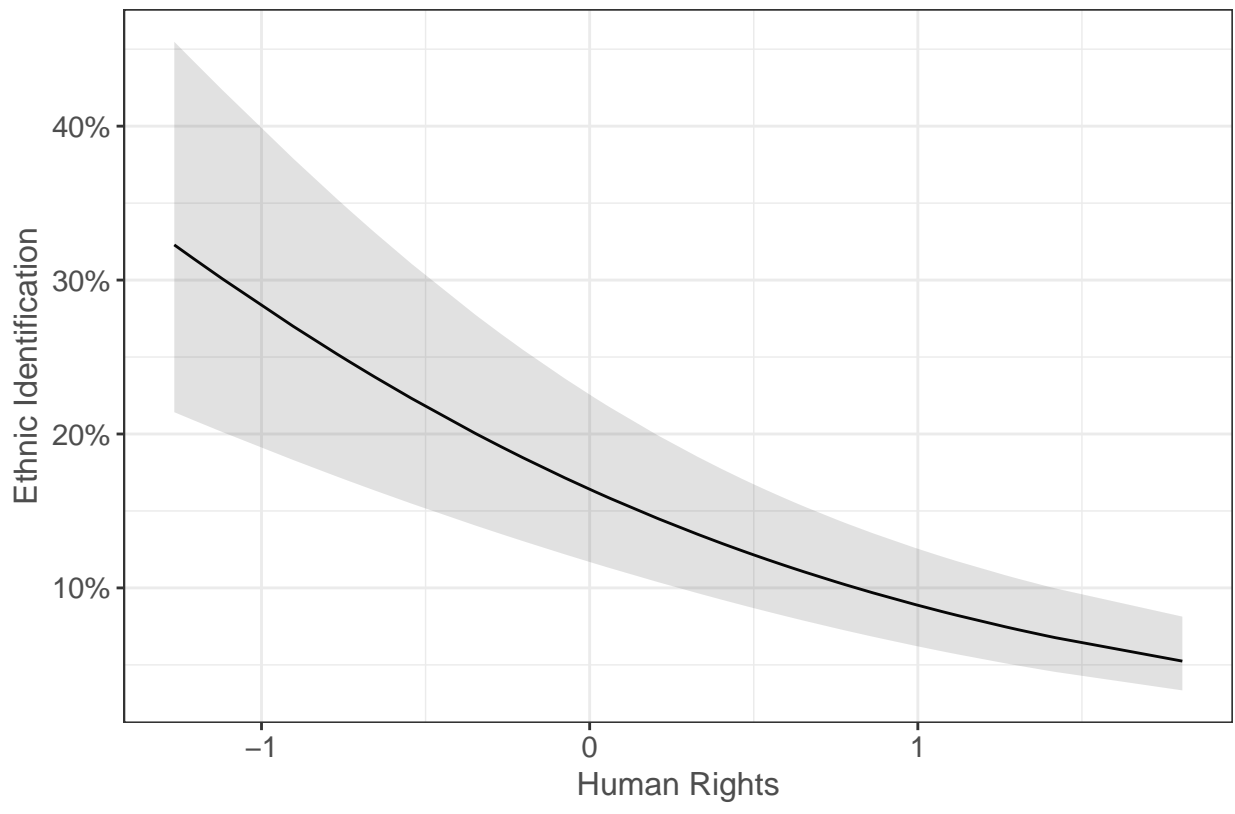
Figure 3.3: Predicted Probability of Ethnic Identification (Model 5)

the claim that the Kurds are a distinct ethnicity from Turks, and have repressed them to prevent a secessionist movement. I address the concern in the following section.

3.4   Causal Identification

As discussed above, the preceding results do not account for the possibility of endogeneity. The ideal solution would be an instrumental variable. However, a valid instrument would need to be a strong proxy for repression, but only effect political participation and ethnic identification through the effect of repression (this is known as the exclusion restriction). Unfortunately, few if any measures included in the Afrobarometer meet the requirements of a valid instrument. For instance, previous work has often used distance from the capital to instrument for an individual or location's probability of experiencing violence (e.g. Voors et al. 2012). While this measure may meet the exclusion restriction for some outcomes, there is reason to believe that it does not for ethnic identification. Robinson (2014) finds that orientation toward national identities is driven in part by modernization. Thus living in a remote location may affect ethnic identification directly, rather than only through the variable it is intended to instrument. At the country level democracy is strongly correlated with repression (Davenport 2007b), but also may have a direct effect on ethnic identification (Eifert, Miguel, and Posner 2010), and almost certainly has one with political participation.

As an alternative to an instrument, I use coarsened exact matching (Iacus, King, and Porro 2012). Matching seeks to create a subset of the data with a "treatment" (in this case the individual-level attack variable) and "control" group with similar values on a set of observable covariates. In this case I seek to balance the sample on individual-level measures of education, age, urban residence, support for the ruling party, and employment status, and country-level measures of ethnolinguistic fractionalization, Polity IV score, the Latent Human Protection Scores, and indicators for the presence of civil and separatist wars.

Coarsened exact matching achieves balance by collapsing each continuous and categorical variable into a smaller number of strata, and identifying pairs of treated and control units that fall into the same strata on each variable. While there was a statistically significant difference of means between the treated and control groups on each of the covariates prior to matching, there are no significant differences on any variable after matching, and the mean difference between the groups reduces to zero for each variable except age and the categorical education measure, which each differ by less than 0.1. The trade-off for pursuing such exact matches is a loss of observations, as cases with no close are match are discarded. The problem is not especially dire in this case, however, as the number of cases reduces from 38,681 (the number of cases with no missing values on any covariate) to 28,251. The limitation of matching is its inability to address unobservable sources of bias. Thus, if certain individuals are disproportionately likely to be attacked for reasons that are not entirely captured by the included covariates, this bias is likely to remain in the post-matching sample.

	M8 Violence (Willing)	M9 Violence (Used)	M10 Ethnic ID
Human Rights	0.05	0.08	−0.19
	(0.17)	(0.25)	(0.13)
Ethnolinguistic Fractionalization	1.33	−0.44	4.99**
	(2.04)	(3.04)	(1.63)
Ethnolinguistic Fractionalization^2	−1.01	1.60	−4.78**
	(2.06)	(3.04)	(1.62)
Polity	−0.04	−0.01	−0.03
	(0.03)	(0.04)	(0.02)
Civil War	0.21	−0.44*	0.13
	(0.20)	(0.20)	(0.19)
Separatist War	−0.17	−0.82	0.30
	(0.53)	(0.86)	(0.43)
Attacked	0.47***	1.09***	0.26***
	(0.07)	(0.08)	(0.06)
Intimidated	0.14*	0.11	0.29***
	(0.05)	(0.08)	(0.04)
Employed	−0.05	−0.06	−0.00
	(0.06)	(0.08)	(0.05)
Primary Education	0.01	0.16*	0.39***
	(0.05)	(0.08)	(0.05)
Urban	−0.17*	−0.19*	−0.06
	(0.07)	(0.09)	(0.06)
Ruling Party Supporter	−0.08	−0.14*	−0.16***
	(0.05)	(0.07)	(0.04)
Age	−0.22***	0.01	−0.07
	(0.06)	(0.08)	(0.05)
Female	−0.22***	−0.31***	0.04
	(0.05)	(0.07)	(0.04)
AIC	13661.19	7297.64	18584.48
BIC	13801.42	7437.88	18724.71
Log Likelihood	-6813.60	-3631.82	-9275.24
Num. obs.	28251	28251	28251
Num. groups: Ethnic:Country	497	497	497
Num. groups: Country	26	26	26
Var: Ethnic:Country (Intercept)	0.19	0.39	0.30
Var: Country (Intercept)	0.16	0.35	0.09

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$

Table 3.8: Models with Matched Data

The results using the matched data are reported in Table 3.8, and the estimates for the attack

variable are very similar to those seen in the raw data. Individuals who have experienced
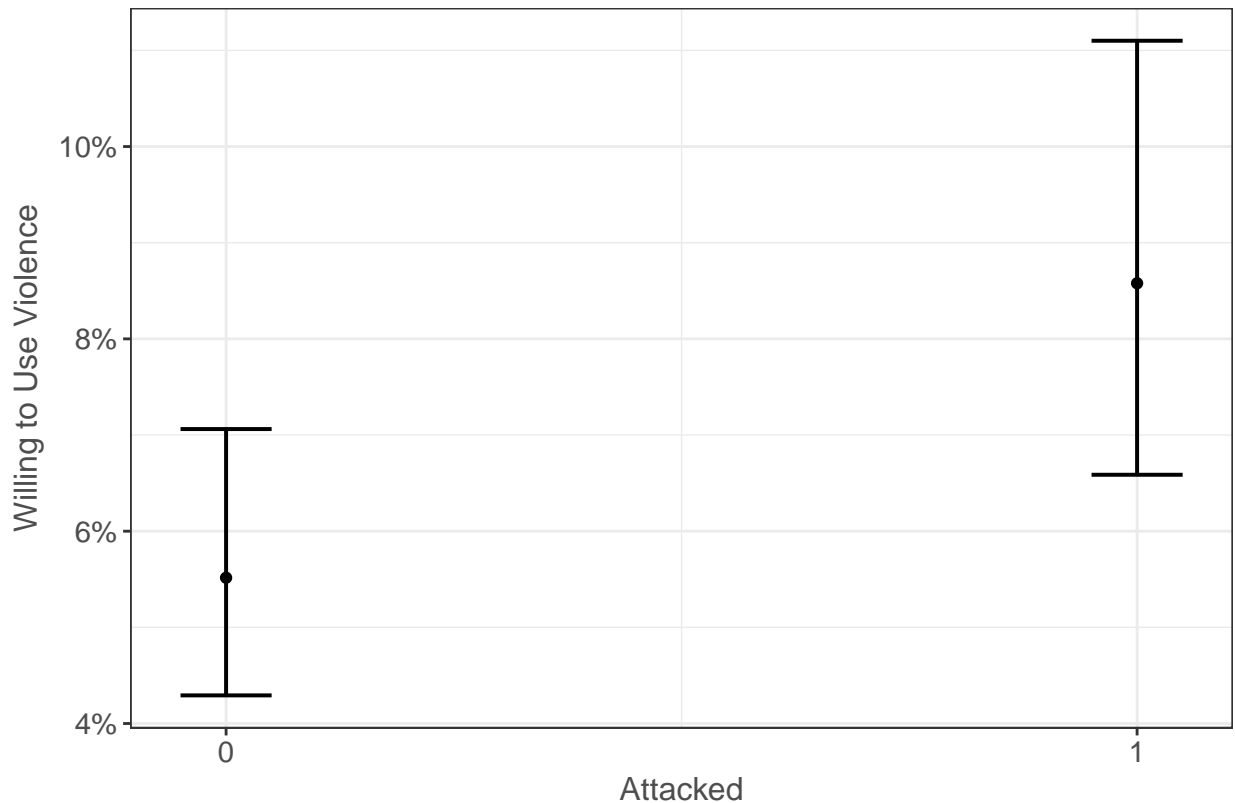
Figure 3.4: Predicted Probability of the Use of Violence (Model 8)

an attack are substantially more likely to express willingness to engage in violence, with the effect being statistically significant at the 99.9% level (Model 8). The substantive effect is modest, however, increasing the probability from 0.08 to 0.11 (see Figure 3.4). These individuals also report higher probabilities of having engaged in violence, and the effect is significant at the 99.9% level (Model 9). Individuals who have been attacked are three times more likely than others to have used violence themselves (0.09 vs. 0.03, see Figure 3.5). Additionally, being attacked is associated with a modest increase (0.14 vs. 0.11, see Figure 3.6) in the probability of ethnic identification, which is again significant at the 99.9% level. Many of the covariates are no longer significant after matching, as attack and non-attack subsets have identical means on these variables.

As noted above, matching cannot guard against all potential threats to causal inference. If some individuals are disproportionately likely both to be attacked and to engage in
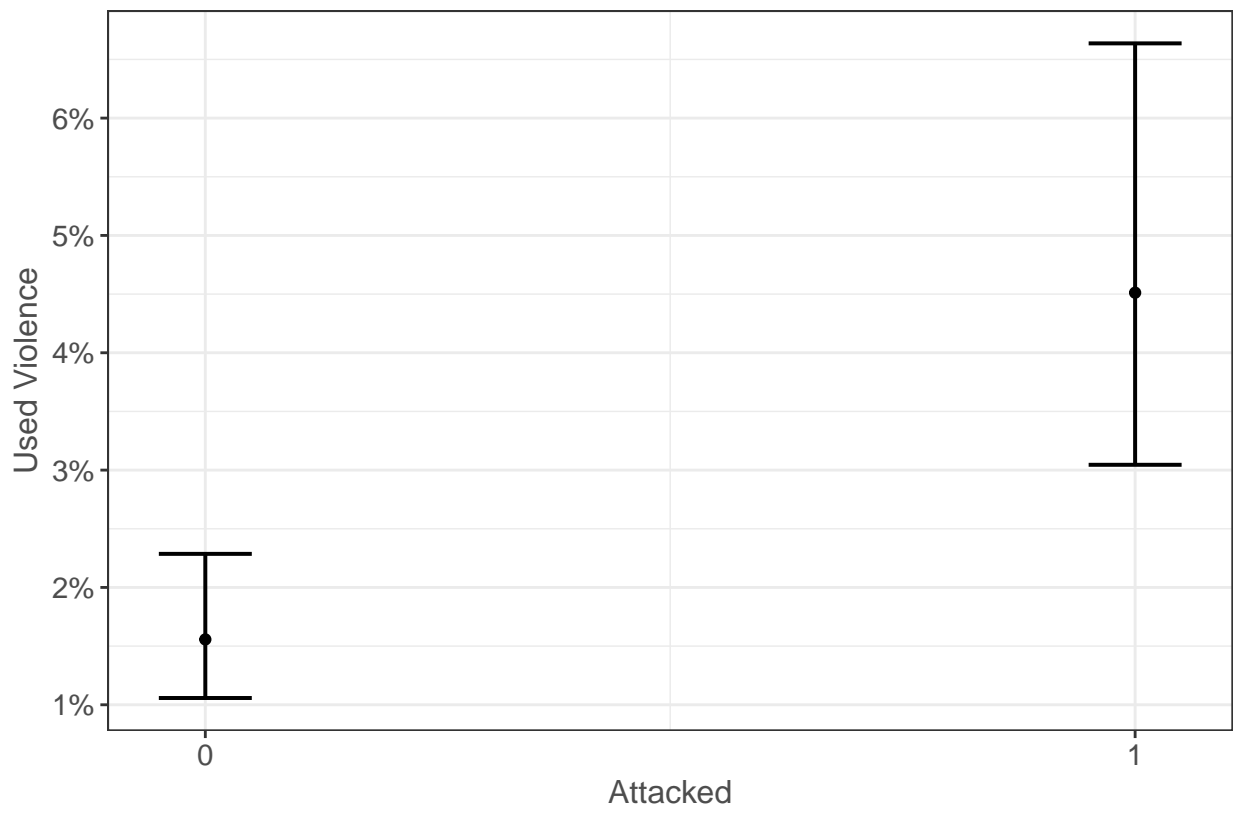
Figure 3.5: Predicted Probability of the Use of Violence (Model 8)
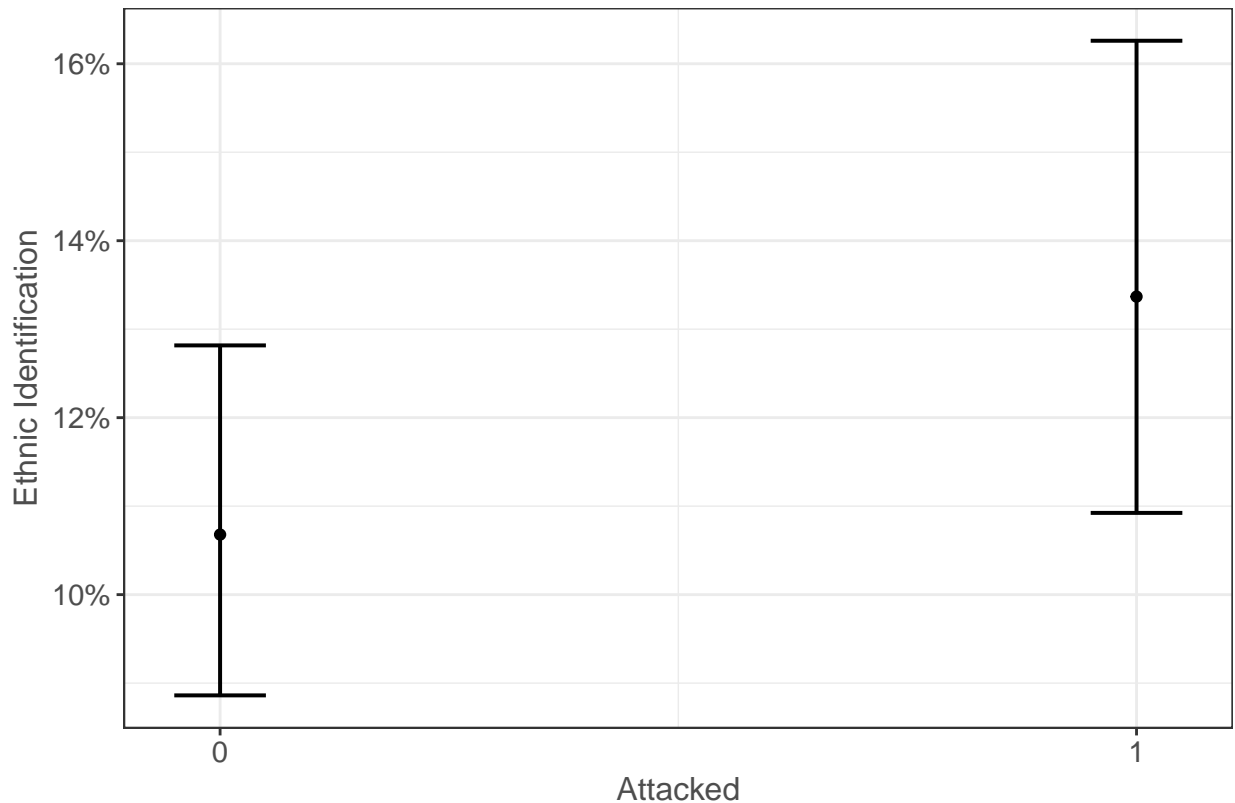
Figure 3.6: Predicted Probability of Ethnic Identification (Model 9)

violence or identify ethnically for reasons that are not captured by the covariates, this bias will remain. One might imagine, however, that governments (and other actors) often make decisions of who to repress based on the sort of observable characteristics such as age and sex that are included in the matching. The matching analysis ensures that these observable measures do not bias the results. Thus while there is still some possibility of endogeneity, these results should increase our confidence that individuals who are attacked are not systematically different from others.

3.5   Conclusion

The results in this chapter provide strong support for the microfoundations of my theory. I expected that repression would make individuals more willing to engage in violence.

Consistent with this hypothesis, I find that while such sentiments are generally rare, individuals who have experienced a violent attacked are roughly 30% more likely than others to report a willingness to use violence, and are nearly three times more likely to report having used violence. I also predicted that repression should induce greater levels of ethnic identification among its targets. Indeed, I find that individuals who have experienced an attack are 42% more likely than others to identify more with their ethnic group than with their nation. The results hold after conducting coarsened exact matching, meaning that the results are not driven by any observable differences between the individuals who have been attacked and those who have not.

This analysis has several important practical and theoretical implications. First, it suggests that repression is often counterproductive. Presumably, governments use repression to mitigate and deter threats to their rule. Yet, my findings suggest that repression could *increase* the number of individuals using violence, and entrench identities that could form the basis of an opposition to the government. As discussed in Chapter @ref(#theory), this makes the government's use of repression puzzling. My other findings on political participation hint at an answer, however. Repression does seem to reduce the probability than individual will vote, suggesting that governments may be accepting increased numbers of violent individuals in exchange for the opportunity to shape the electorate. Second, the results suggest that repression can trigger a vicious cycle, in which the government responds to an initial threat in a way that further entrenches the opposition, leading to ever-greater levels of violence.

In the remaining chapters, I build on the foundations established here to explain variations at the level of the rebel movement. I find evidence that the dynamics discussed here shape the formation of new rebel groups, the fragmentation of existing ones, and the formation of alliances between previously independent groups.

Chapter 4

The Formation of New Rebel Groups

This chapter builds on the individual-level findings from Chapter 3 to explain one aggregate manifestation of repression — the formation of entirely new rebel groups. Specifically, I am interested in cases where entirely new rebel groups join ongoing civil wars. By new I simply mean a group that has not previously participated in violence. Pre-existing non-violent organizations such as religious organizations or political parties could constitute a new rebel group so long as they have not used violence previously, as would entirely new organizations that form during a conflict. I distinguish this sort of group formation from the splintering of existing organizations, as I expect the causal processes to be somewhat different. While splintering is driven by individuals who have already resorted to violence deciding to reorganize, group formation has the additional requirement of mobilizing previously non-violent individuals. To the best of my knowledge, no existing study directly addresses this question.

I expect that repression should increase the probability that a new rebel group will enter an ongoing conflict. As previously peaceful individuals experience violence, the relative cost for them to join a rebellion decreases. These individuals will not necessarily be inclined to join an existing rebel group, however. If an individual has been repressed, existing groups

have in some sense failed to protect them. Furthermore, repression should tend to induce greater levels of ethnic identification. Repression is often targeting on the basis of ethnicity, increasing the salience of such identities. Ethnic identification may also have instrumental value in attracting support from outside co-ethnic states, and repression may give these outside states both motive and political cover for supporting new rebel groups. Thus, there should be a relationship between repression and the emergence of new rebel groups.

Hypothesis 3: The probability that a new rebel group will form should increase with the level of repression in the country

If ethnic polarization is the mechanism behind rebel group formation, the ethnic diversity of a country should provide an important scope condition. It would be unlikely for repression to induce ethnic identification in a very homogeneous society, for instance. In such cases a different social cleavage might be activated, or repression might not sow division among dissidents at all. I thus expect a positive interaction between repression and ethnic diversity, with repression increasing the probability of new rebel groups at higher levels of diversity, while being less effective at low levels of diversity.

Hypothesis 4: There should be a positive interaction between repression and ethnic diversity

My theory suggests that individuals form new rebel groups largely because repression begins to polarize society on the dimension of ethnic identity. This argument has a testable implication regarding the new rebel groups that emerge — they should be likelier than pre-existing groups to draw their support from a single ethnic group.

Hypothesis 5: Rebel groups that join ongoing conflicts should be more likely than others to draw their support from a single ethnic group

4.1 Research Design

To test the preceding hypotheses I use a dataset of conflict-years derived from the Uppsala Conflict Data Program and Peace Research Institute Oslo's Dyadic Dataset, version 4-2016 (Harbom, Melander, and Wallensteen 2008; Melander, Pettersson, and Themnér 2016). This dataset includes one observation for every government-rebel group dyad for each year in which it produced at least 25 fatalities. I exclude all interstate conflicts from the data, and include all civil wars, anti-colonial wars, and internationalized civil wars. The remaining rebel dyads are grouped into conflicts, with all rebels seeking to overthrown the central government considered to be part of the same conflict, and separatist movements grouped together if they are pursuing independence for the same territory. Thus conflicts can contain multiple rebel groups, and countries can contain multiple conflicts. I then aggregate this data to the conflict-year, as my outcome of interest is whether a new rebel group joined the fighting in a given year. This results in a dataset of 2,048 observations, covering the period 1946–2015.

The advantage of using conflict-years rather than aggregating to country-years is that I am able to examine the effects of several covariates measured at the conflict level, including conflict intensity and the type of issue at stake. Disaggregating to the conflict level, rather than the country also avoids conflating situations in which multiple rebel groups compete for similar objectives from those in which multiple rebel groups form for completely different purposes. Using yearly observations rather than a single count for each conflict is useful because the number of rebel groups tends to vary over time, and thus a yearly count allows me to identify factors that can account for the timing of new group formation, rather than only cross-sectional correlates. The use of conflict-years does create a methodological challenge, however, as many of my covariates are measured at the country level. To combat this I cluster the standard errors by country. Additionally, aggregating the data to the

country-year does not substantially change the results.

4.1.1 Dependent Variables

Entry of New Rebel Groups

My primary dependent variable in this study is the entry of new rebel groups to an ongoing conflict. To qualify, a rebel group must meet two criteria. First, it cannot have previously participated in political violence. To determine this I use rebel origins data I collected (described in the Chapter 2 Appendix), and exclude groups that originated as portions of different rebel groups — splinter organizations and alliances. This leaves rebel groups that emerged out of non-violent organizations such as political organizations, as well as militarized, but not political organizations such as local defense militias. Second, the group must join an ongoing conflict. I define a conflict as ongoing if it has produced at least 25 fatalities in at least one of the past three years. If three consecutive years of peace occur, I consider the next round of fighting to be a new conflict episode, and any new rebel groups that appear in the first year of an episode are considered to have initiated that conflict rather than joined it.

Of the 503 rebel groups that appear in my data, 83 fit the definition. As some of these entered the same conflict in the same year, 73 of 2045[1] (5.6%) of conflict-years are coded as having a new rebel group.

Rebel Group Ethnicity

H5 predicts that because the formation of new rebel groups is driven by a broader reorganization of society along ethnic lines, these newly-formed rebel groups should be likelier than

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[1]Some observations are left-censored, meaning I am unable to determine whether there was conflict during the previous three years as it would predate the beginning of the dataset.

others to draw their support from a single ethnic group. To test this I use the ACD2EPR 2014 dataset (Wucherpfennig et al. 2011; Vogt et al. 2015), which links rebel groups from the Uppsala Armed Conflict Data v.4-2014 (Melander, Pettersson, and Themnér 2016) to ethnic groups from the Ethnic Power Relations (EPR-Core 2014) (Cederman, Wimmer, and Min 2010; Vogt et al. 2015). This dataset identifies three forms of linkages between ethnic groups and rebel groups. First, a rebel group can claim to operate exclusively on behalf of a particular ethnic group. The dataset does allow for the possibility that a group could make such claims for multiple ethnic groups, as was the case for several of the South Sudanese separatist groups. Second, the data records all of the ethnic groups from which a rebel group recruits a significant number of soldiers. Finally, the data codes whether at least 50% of the members of an ethnic group support a rebel group. I collapse these measures into a single count of the number of ethnic groups to which a rebel group is tied. I then categorize rebel groups as "mono-ethnic," "multi-ethnic," or "non-ethnic," if they have no such ties. The distribution of cases across these categories is reported in Table 4.1.

Non-Ethnic	Mono-Ethnic	Multi-Ethnic
97	309	47

Table 4.1: Rebel Groups by Ethnic Affiliation

4.1.2 Independent Variables

Human Rights

To measure repression I use the same country-level measure employed in Chapter 3, the Latent Human Protection scores, version 2 (Fariss 2014; Schnakenberg and Fariss 2014). The

motivation for this data project is the fact that human rights measures are typically based on media reports, creating the possibility that both the depth of coverage and standards against which human rights practices are evaluated might vary across space and time. To solve this, the dataset uses thirteen data sources including U.S. State Department and Human Rights Watch reports and most major scholarly datasets in a Bayesian measurement model. This produces an estimate for each country-year based on a mix of the data for that particular year and the average score for that country and year. While this creates a human rights measure that is comparable across contexts, one disadvantage is that the units are not inherently meaningful, only providing a basis for comparison across observations.

The measure ranges from roughly -3.1 (most repressive) to 4.7 (most respectful of human rights). The average score across the full sample of post-World War II country-years is 0.29, while in my sample of countries experiencing civil war the mean is -1.24, with a range from -3.11 to 1.51. Thus, the sample includes the full range of repressive states, while unsurprisingly lacking any states with especially strong human rights practices. For reference, recent country-years with scores around 1.5 including Hungary in 2011, and France in 2007. In other words, these are typically cases in which citizens are generally safe from physical harm, but some minorities such as Muslims in France experience political and economic discrimination. Russia in recent years falls in the middle of the spectrum, with scores around 1.0. Examples of cases towards the more repressive end of the spectrum include Saddam Hussein's Iraq, which had a score averaging around -2.5, and Sudan, which had scores around -3.0 during the genocide in Darfur.

The raw Latent Human Protection Scores tend to be relatively static over time. Yet, my theory suggests that it is changes in human rights practices, in the direction of being more repressive, that should change dissident behavior. To ensure that I am capturing these phenomena, I use the year-over-year change in human protection score. While the average conflict-year sees very little change from the preceding year (the mean change is -0.01), 110

cases experience a negative change of at least 0.25, and in one case the score decreased by 2.52 in a single year. I lag the measure by one year, meaning that I am ultimately using the change in human rights practices at time *t* to predict the formation of new rebel groups at time *t+1*.

Ethnic Diversity

H4 suggests that ethnic diversity should place a scope condition on my theory, with the formation of new groups being less likely at very high and low levels of ethnic diversity. I first test for the effect of ethnic diversity individually by including the raw and squared ethnolinguistic fractionalization as predictors. This tests for a curvilinear relationship, allowing for the effect of the variable to differ at moderate and extreme values. The data come from Fearon and Laitin (2003), and can be interpreted as the probability that two individuals drawn at random will be able to communicate. In addition to testing whether ethnic diversity affects the probability of new group formation on its own, I also test whether it alters the performance of the human rights measure, by interacting the latter with both the raw and squared ethnolinguistic fractionalization measures.

New Rebel Group Entry

H5 predicts that the rebel groups that form during ongoing conflicts should be more likely than others to be tied to a single ethnic group. Thus the new rebel group entry variable becomes an independent variable in this analysis, predicting the ethnic composition of rebel groups.

4.1.3 Control Variables

I control for several factors that might confound my results. To account for the possibility that human rights scores are simply a function of conflict intensity, rather than discriminatory intent, I include the maximum conflict intensity value from the UCDP Dyadic data. The measure is binary, with a value of 1 indicating that the dyad produced between 25 and 999 fatalities in a given year, and a value of 2 indicating that the dyad produced 1,000 or more fatalities. This measure is moderately correlated with the human rights score (Pearson's r = -0.30). The exact measure of fatalities available for the post-1989 period is even less correlated (Pearson's r = -0.25). Thus, human rights practices are for the most part measuring something distinct from conflict intensity.

Conflicts that already have multiple rebel groups may have some unobserved quality that makes them more likely to have fragmented rebel movements. For example, there might be a history of personal animosity between rebel elites (see Christia 2012). To capture such effects, I include a binary indicator of whether a conflict had multiple rebel groups in the previous year.

Two standard controls from past conflict studies are also likely to be relevant. One potential mechanism that might produce increased numbers of rebel groups in a conflict is the movement of groups from a neighboring civil war into a new conflict. To control for this possibility I construct an indicator for the presence of a civil war in a state that is contiguous by land using the UCDP Dyadic data and the Correlates of War Direct Contiguity data, version 3.2 (Stinnett et al. 2002). As secessionist movements are often (though not always) tied to a specific ethnic group, my hypothesized theoretical mechanism should be less likely to apply in such conflicts. Thus, I include a binary indicator of whether a conflict is secessionist as opposed to being fought over control of the central government.

I also control for several country-level factors. Conceivably, the number of rebel groups in

a country might simply be a function of the country's size. I thus include a measure of the countries area in logged square kilometers from the World Bank (The World Bank 2015), and logged population and logged GDP per capita from Gleditsch (2002). The characteristics of a country's terrain might also matter, with mountainous areas both creating more opportunities for rebellion, and more challenges in coordinating rebel activities across space. To control for this affect I include Fearon and Laitin's (2003) measure of the percentage of a country's terrain that is mountainous. As democratic competition might provide another incentive for ethnic identification (Eifert, Miguel, and Posner 2010), I include the country's Polity IV regime score (Marshall, Gurr, and Jaggers 2016). The international context could conceivably play an important role in rebel group formation, for instance by shaping the availability of external support. I thus include a binary indicator of whether a country-year occurred during or after the Cold War.

Finally, the presence of natural resources may influence the functioning of my theoretical mechanism. My theory assumes that rebel elites desire the support of dissident constituents. If rebel groups are able to procure sufficient funds and war materiel through the sale of natural resources, however, they might care little about civilians (see Weinstein 2007). I thus include a count of the number of locations in a country containing 'lootable' natural resources, meaning those which can be extracted with relatively unsophisticated operations. The resources included in the measure are oil (Lujala, Rød, and Thieme 2007), diamonds (Gilmore et al. 2005; Lujala, Gleditsch, and Gilmore 2005), gold (Balestri 2012), gems (Lujala 2008), and drugs (Buhaug and Lujala 2005).

4.1.4 Statistical Model

As the dependent variable in this study is a binary measure of whether a new rebel group entered a conflict in a given year, I use a logistic regression model. While I examine the influence of each of the control variables listed above, I also fit models with only the

controls that are statistically-significant or that substantially alter the performance of my independent variables. This practice is consistent with the advice of Achen (2002) and Ray (2003), who caution that including too many covariates can obscure meaningful patterns and inhibit thorough vetting of model assumptions. For robustness, I examine several variants of the model. These include a model with fixed effects for country and year, and a rare-events correction to account for the fact that group formation occurs in only a small portion of my cases. I also cluster the standard errors by country, as many of my variables are measured at the country-level, creating the possibility that errors could be correlated across different conflicts in the same country. I also estimate models (not reported) with the country-year as the unit of analysis. None of these changes substantially alters the results for my variables of interest.

4.2 Results

4.2.1 Group Formation Results

The logistic regression results are reported in Table 4.2. Model 1 includes only the change in human rights measure, Model 2 adds a battery of controls, Model 3 includes an interaction effect between human rights and ethnolinguistic fractionalization, and Model 4 replaces the (mostly) static country-level variables with fixed effects for conflict and year.

In the three models without interaction terms the Change in Human Rights variable performs as I expect. It has a consistent, negative relationship with the probability of new rebel group formation. As human rights improve, the probability that new rebel groups will form decreases, while increases in repression increase the probability of new groups forming. The relationship is statistically significant at the 99% level in all three models. The substantive effect is large, with a one-unit (which equates to roughly 1.5

standard deviations) decrease in human rights practices being associated with a roughly 400% increase in the odds of new rebel group formation. While the predicted probability of a new rebel group emerging is quite low when the change in human rights practices is zero (around 0.03, see Figure 4.1), at the largest decreases (a change of -2.5 in one year) the probability of a new rebel group emerging is 0.72. The effect size is similar across models. With these results I am able to reject the null hypothesis of no relationship between repression and the formation of new rebel groups, consistent with my expectation in *Hypothesis 4*.

	Model 1	Model 2	Model 3	Model 4
(Intercept)	−3.27***	5.79*	5.59	15.71
	(0.13)	(2.91)	(2.96)	(14503.27)
Change in Human Rights	−1.37***	−1.39**	−3.31*	−1.79**
	(0.33)	(0.43)	(1.29)	(0.59)
Ethnolinguistic Fractionalization		0.23	0.61	
		(0.86)	(0.91)	
Human Rights X Fractionalization			3.32	
			(2.09)	
Intensity Level		−0.23	−0.25	−0.23
		(0.39)	(0.40)	(0.44)
Prev. Multi-rebel		0.23	0.25	−0.95**
		(0.38)	(0.38)	(0.36)
Contiguous Civil War		−0.07	−0.08	0.29*
		(0.10)	(0.11)	(0.14)
Secessionist		−1.21**	−1.13*	
		(0.44)	(0.45)	
Logged Area		−0.25	−0.23	
		(0.19)	(0.19)	
Mountainous Terrain		−0.00	0.00	
		(0.01)	(0.01)	
Logged GDP per capita		−0.38	−0.39	
		(0.24)	(0.24)	
Logged Population		−0.22	−0.24	
		(0.24)	(0.24)	
Polity		0.01	0.01	
		(0.03)	(0.03)	
Post Cold War		−0.21	−0.18	
		(0.38)	(0.38)	
Lootable Resource Sites		−0.01	−0.01	
		(0.01)	(0.01)	
AIC	521.11	319.37	318.68	585.79
BIC	531.86	389.01	393.30	1263.99
Log Likelihood	-258.55	-145.69	-144.34	-164.90
Deviance	517.11	291.37	288.68	329.79
Num. obs.	1597	1069	1069	1478

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table 4.2: Logit Models of Rebel Group Formation

Model 3 provides a test of the interaction proposed in *H5*. Whereas I expect an interaction effect between the human rights measure and ethnolinguistic fractionalization, the interaction is not statistically significant. Ethnic diversity does not seem to matter on its own,
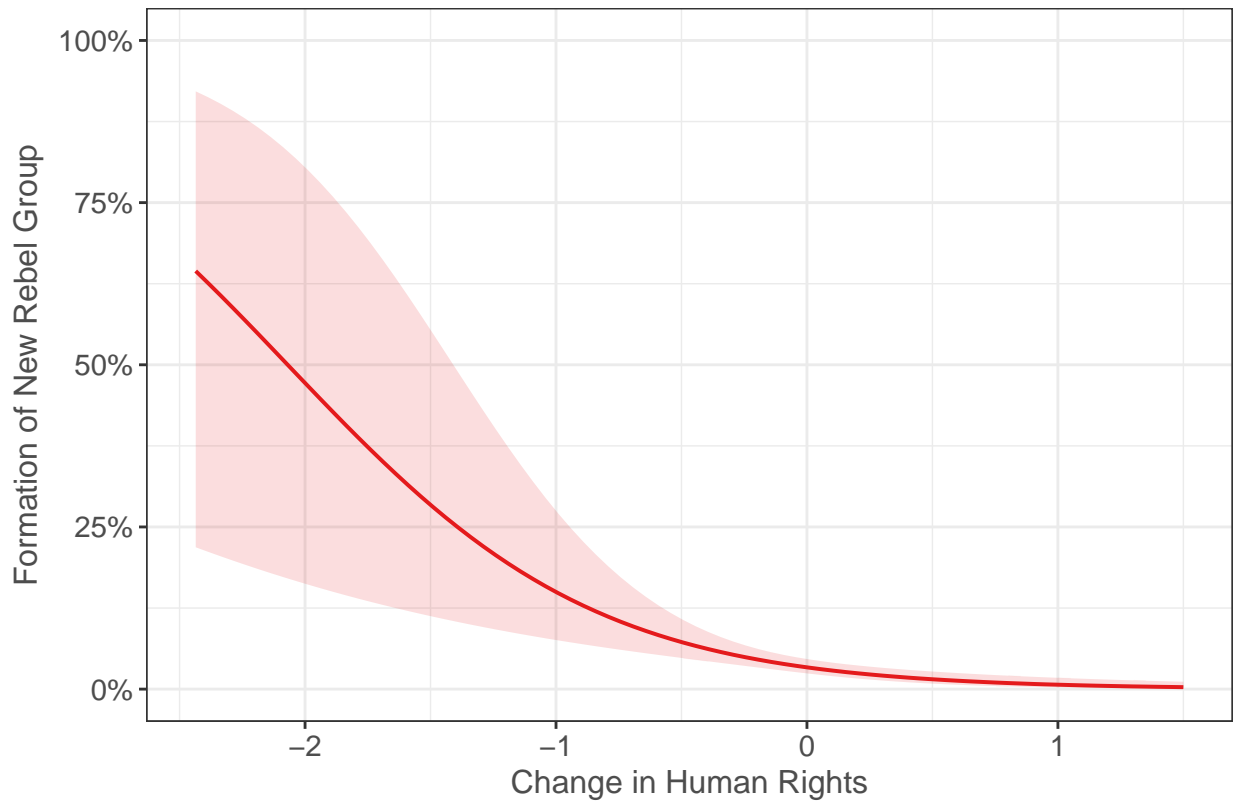
Figure 4.1: Predicted Probability of New Rebel Group Formation (Based on Model 2)

either, as there is no evidence of a curvilinear effect, nor of a linear effect (not reported). I am thus unable to reject the null hypothesis of no relationship between ethnic diversity and the probability of new rebel groups forming. I also test for a curvilinear relationship between ethnolinguistic fractionalization and rebel group formation, and an interaction between human rights and the curvilinear measure. Neither is statistically significant. It is unclear whether this means my hypothesized mechanism of increased ethnic salience operates even at extreme levels of diversity, or if other mechanisms might operate in those cases. The analysis later in this chapter sheds light on that question.

Only a few control variables are significant, likely reflecting the fact that rebel group formation is a rare and time-varying outcome, while many of the predictors are largely static. New rebel groups are less likely in secessionist conflicts. As these conflicts are often fought by an ethnically homogeneous movement, this result is consistent with my

overarching belief that the formation of new groups is about fighting on behalf of previously underrepresented ethnic groups. The 'Previously Multi-Rebel' measure is negatively related the probability of further groups joining, though only in the fixed effects model. This result perhaps suggests that rather than portending further fragmentation of the rebel movement, the presence of multiple rebel groups might signal that a conflict has become saturated with factions, and further additions are unlikely. Contiguous civil wars have a significant positive relationship, suggesting that some new rebel groups might be transnational in character. Again, however, the result is only significant in the fixed effects model.

These results are robust to a number of manipulations. The raw Latent Human Protection Score also consistently predicts the formation of new groups, though the substantive effect is slightly smaller than that of the differenced measure I employ. As mentioned, the results are similar when the data are aggregated into conflict years rather than treating separatist movements as distinct conflicts. I also include attributes of the largest rebel group active in the previous year, such as its size, degree of centralization, and whether it received foreign support. None change the performance of my human rights measure.

The core results also hold when disaggregating observations by severity (see the Chapter 4 Appendix). Among conflict-years with at least 25 but fewer than 1,000 battle-related fatalities, the results are substantively identical to those drawing on the full sample (Table A.3). The lagged, differenced human rights measure has a statistically-significant, negative relationship with the formation of new groups across a variety of model specifications. Within the category of wars (years with 1,000 or more fatalities), the results are similar, with the exceptions that the relationship is not statistically-significant in a model with fixed effects for conflict and year (Table A.4), and the interaction between repression and ethnolinguistic fractionalization is statistically significant.

The results do substantially differ, however, between different types of rebellions. Conflicts

over control of the central government exhibit similar patterns to the full sample of conflicts, with the change in human rights measure having a consistent negative relationship with the probability of new group formation (Table A.5). Among secessionist conflicts, however, the relationship is not statistically-significant in any specification (Table A.6). In light of my theory, however, this discrepancy is not entirely surprising. My framework suggests that repression should induce individuals to identify more strongly with their ethnic group. Whereas campaigns to overthrow the central government are often diverse and therefore might produce multiple ethnically-focused rebel groups, secessionist movements are often organized around ethnic identity, and thus we should not expect to see many new rebel groups form through this mechanism.

I do not perform any sort of causal identification in this analysis. I have examined several measures of oil production as potential instruments for repression, but none came close to the conventional standard for a strong instrument.[2] Matching is not an ideal choice here, as it requires a binary treatment, and my human rights measure is continuous. I cannot rule out the possibility that my results actually reflect the government's ability to anticipate new rebellions. Given that a rebel group must produce 25 fatalities in a calendar year before it enters the data, it is possible for an organization to exist, and for the government to be aware of it, in the years prior to it being coded as a new group in my data. However, I am skeptical that the temporal structure of such a process would be consistent enough to produce the results I report here — it is unlikely that the increase in repression would consistent occur one year before the rebel group produces 25 fatalities, rather two or three years prior.

Ultimately, these results provide strong support for *H4*, as changes in human rights are robustly related to the formation of new rebel groups. I do not find support that ethnic diversity is related to this outcome, as I predicted in *H5*. Yet, this hypothesis is intended to

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[2]An instrument is considered strong if the first-stage F-statistic is at least 10 (Angrist and Pischke 2009). The scores for the oil measures were generally around 4.5.

establish scope conditions. The lack of support could then be an indication that my theory applies more broadly than I expected.

4.2.2 Group Composition Results

H6 predicts that the groups which join ongoing conflicts should be more likely than others to draw their support from a single ethnic group. This proposition is tested in Table 4.3. These analyses use the rebel group as the unit of analysis, with the ethnic composition of the group being the dependent variable. In Model 5 the dependent variable is mono-ethnic composition, in Model 6 it is multi-ethnic composition, and in Model 7 it is non-ethnic composition, meaning the group has no discernible ties to a politically-relevant ethnic group. I include two group-level covariates from the Non-State Actor Dataset (Cunningham, Gleditsch, and Salehyan 2009): binary indicators of whether the group was active in a previous conflict, and whether it is a transnational organization.

	M5 Monoethnic	M6 Multiethnic	M7 Nonethnic
(Intercept)	0.22	−3.67***	−0.11
	(0.29)	(0.63)	(0.30)
Joiner	0.69*	−1.13	−0.37
	(0.34)	(0.65)	(0.37)
Secessionist	1.10***	−1.10*	−0.82*
	(0.30)	(0.49)	(0.36)
Previously Active	0.10	0.34	−0.37
	(0.36)	(0.49)	(0.46)
Ethnlinguistic Fractionalization	0.20	2.10*	−1.18*
	(0.45)	(0.85)	(0.51)
Transnational	0.08	1.06*	−0.71*
	(0.26)	(0.41)	(0.31)
AIC	393.55	193.44	323.48
BIC	416.22	216.11	346.14
Log Likelihood	-190.78	-90.72	-155.74
Deviance	381.55	181.44	311.48
Num. obs.	323	323	323

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$

Table 4.3: Logit Models of Rebel Group Ethnic Composition

Consistent with *H6*, I find that rebel groups that join ongoing conflicts are nearly twice as likely as others to be mono-ethnic. This relationship is represented by the "Joiner" coefficient in Model 5. Relative to all other rebel groups (splinter organizations, alliances, and groups that initiate conflicts), groups that join ongoing conflicts are substantially more likely to draw their support from a single ethnic group. The relationship is statistically significant at the 95% level. Joining status is not related to multi-ethnic or non-ethnic composition. Secessionist groups are also more likely than others to be mono-ethnic, while being significantly less likely to be multi-ethnic or non-ethnic. Unsurprisingly, the level of ethnolinguistic fractionalization in a country is positively related to the probability that rebel groups there will be multi-ethnic, and negatively related to their likelihood of being non-ethnic. Finally transnational groups are more likely than others to be multi-ethnic, and less likely to lack an ethnic affiliation.

These results are not entirely robust, however, to disaggregation by conflict severity or type (see Chapter 4 Appendix). Being a "joiner" group is not a statistically significant predictor of being mono-ethnic among rebel groups which were never involved in a conflict producing at least 1,000 fatalities (Table A.7). Among groups that were involved in full-fledged wars with at least 1,000 fatalities in a calendar year, the result is also not statistically-significant, but this appears to be the result of small sample sizes as being a "joiner" group is nearly a perfect predictor of being mono-ethnic (Table A.8). The results hold among conflicts over control of the central government, as "joiner" groups are significantly more likely than others to be mono-ethnic. Among secessionist conflicts, however, the relationship is not statistically-significant. Again, this discrepancy is not entirely surprising in the context of my theoretical argument. Whereas in central government conflicts there are potentially several ethnic groups that have not yet been fully mobilized into the conflict, in secessionist conflicts this is typically not the case. Thus, my theory seems to be more applicable in government conflicts than in separatist conflicts.

This analysis provides support both for *Hypothesis 6*, and for my broader theoretical framework. I expect that the entry of new rebel groups to ongoing conflicts is the manifestation of increased mobilization around ethnic identity. The fact that rebel groups of this kind are significantly more likely than others to draw their support from a single ethnic group provides strong evidence for this argument. Future work should delve deeper into group attributes, looking not only at recruitment and claims of representation, but also the platform that rebel groups adopt. I would expect that joining groups would tend to place greater emphasis on ethnic grievances than others.

4.3   Burma Case Study

To provide a more detailed examination of the processes leading to the formation of new rebel groups, I conduct a qualitative case study of Burma.[3] Burma is in many respects among the most ethnically-polarized societies in the world, as it has 11 separatist movements. I argue that some of these movements have followed a pattern of rebel organization that tracks closely with my theory. One advantage of choosing this case is that potentially confounding factors such as the presence of natural resources and support from outside states varies substantially across separatist movements, while holding many other factors constant including government attributes and colonial history. Burma is also home to several rebel groups that do not conform perfectly to my theoretical framework, providing an opportunity to refine my explanation and identify scope conditions.

As a whole, Burma is an ethnically diverse society, though ethnic minorities tend to be concentrated on the largely mountainous periphery of the country, while ethnic Burmans predominate in the central lowlands (Steinberg 2010). In the pre-colonial era these ethnic identities were relatively fluid, both in terms of their content and their membership (South

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[3]The country's military regime began using the name "Myanmar" in 1989, but most dissidents and the U.S. government continue to use "Burma."

Figure 4.2: Administrative Districts of Burma. Source: Aotearoa.

2008). British colonial rule from 1885–1948 led ethnic categories to become both more calcified and more salient, as they practiced direct rule over the ethnic Burmans in the lowlands, while delegating significant autonomy to the ethnic minorities of the mountainous regions (South 2008). Furthermore, administrative practices such as frequent censuses required individuals to declare their ethnicity (Charney 2009), and most positions in the colonial bureaucracy and security forces were given to minorities, as the majority Burmans were viewed as a greater threat to colonial rule (Steinberg 2010). Japan occupied Burma through much of World War II, further entrenching ethnic divisions as the Burman majority collaborated with the Japanese, while many ethnic minorities including the Karen and Kachin supported the Allies (Steinberg 2010).

Late in the war the most prominent faction of pro-Japanese Burmans, led by Aung San, switched sides to support Allied efforts to liberate the country. Most of the politically-active population of Burma, including most ethnic minorities, joined together to form the Anti-Fascist People's Freedom League (AFPFL). The organization remained mostly cohesive for several years after the war in pursuit of independence (Charney 2009). As soon as Aung San succeeded in negotiating a peaceful conferral of independence from the British in January 1947, however, ethnic tensions re-emerged. The Panglong Agreement the following month established the boundaries of the new Burmese state, placing the minority-dominated Frontier Areas under Burman control. As several of the minority groups, including the Karen, had received tacit promises from the British that they would receive independence as separate states, turmoil ensued (Steinberg 2010). Almost immediately upon gaining independence in 1948, Burma faced two civil wars — a secessionist campaign led by the Karen National Union, and a bid to overthrow the central government by the Red Flag faction of the Communist Party of Burma.

4.3.1 The Shan Secessionist Movement

Shan State is a large, mountainous area in eastern Burma, bordering Thailand on the south, Laos on the east, and China on the north. The Shan people and language are both closely related to the Thai, and in pursuit of its historical rivalry with Burma the Thai government has frequently supported Shan rebellions to form a sort of buffer zone between the two countries (Steinberg 2010). Adding to the international character of the region are the facts that it has long been one of the world's most productive areas for opium cultivation, and that it was used as refuge by Kuomintang (KMT) forces fleeing China in the 1950's and 1960's (Cowell 2005). Shan State initially faced less repression than most other areas of the country, as it had been granted the right to secede in the Burmese Constitution (Silverstein 1958).

The initial formation of rebellion in Shan State is consistent with the process of group formation proposed in my theory.[4] Following their defeat in the Chinese Civil War in 1950, a contingent of KMT soldiers fled into Shan in search of refuge. During the same period, the Communist Party of Burma and separatists from the Kachin region frequently used the area as a base of operations (Smith 1999). In hopes of defeating the Communists and Kachin, and expelling the KMT, the Burmese army sent a large troop deployment to the region in the late 1950's. These forces were undisciplined, however, and frequently committed abuses against the local population (Fredholm 1993, 156).

Meanwhile, student groups began developing and promoting Shan nationalism, including through the dissemination of magazines. The abuses by the Burmese Army allowed this nationalist movement to gain traction among the broader population as it became the basis for opposing the military occupation (Fredholm 1993, Ch. 8). The process of increased ethnic identification in this case is largely consistent with my theoretical argument. Shan

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[4]According to the coding rules used in the quantitative analysis, the first Shan rebel group initiated the conflict there, rather than joining it. However, as there was significant fighting in the area between the Burmese government and other non-state actors, I would argue that it is consistent with my theory.

elites, especially the leaders of student organizations, began developing and advocating for a distinctly Shan identity in the mid-1950's. Repression by the Burmese army significantly enhanced the efficacy of these appeals, leading large portions of the Shan to embrace ethnic nationalism (Fredholm 1993, 156–57). In 1958 this nationalism culminated in the formation of the first Shan rebel group, the Young Brave Warriors (Lintner 1999). In theory, Shan dissidents could have joined the Communist Party of Burma, partnered with the Kachin Independence Army that often operated in Shan, or perhaps even partnered with the KMT. Yet as my theory predicts, the chose to form an explicitly Shan organization.

4.3.2   The Arakanese Buddhist Rebels

The Arakan state is located in Western Burma, along its border with Bangladesh. Today the district is more commonly known as Rakhine state (or Rakhaing in Figure 4.2), and is notable for being the location of the humanitarian crisis centering around the forced migration of the Rohingya people. In this case study I will relax the assumption that different issues of contention constitute entirely separate conflicts. While the country ultimately saw separatist movements associated with 11 different territories, the dissident elites who led these movements were mostly united within the AFPFL prior to independence. In some cases rebels from different separatist regions collaborated, even while pursuing different goals (Smith 1999). Furthermore, in some cases smaller ethnic groups initially participated in the movements of larger ethnicities, before launching their own rebellion. For example the Karenni originally participated in the separatist movement of their relatives the Karen, before later launching their own rebellion (Uppsala Conflict Data Program 2016). In some cases, then, it might be more accurate to view the new separatist movements in Burma as having joined a larger ongoing conflict, rather than initiating an entirely new one. Under this conception, even the first Arakan separatist groups, the Arakan People's Liberation Party (APLP) and the Mujahid Party, would be considered as joining an ongoing conflict

in 1948. Even when applying the coding rules of the quantitative analysis and treating these groups as initiating a new conflict, two other Buddhist groups clearly qualifier as new groups — the Arakan National Liberation Party (ANLP) in 1964, and the Arakan Liberation Party in 1977.

While Arakan is considered an ethnicity largely because it has a long history as a unified polity, its residents are divided along religious lines. Indeed, even in its earliest days (beginning in 1948) the secessionist movement there was divided into a Muslim faction (the Mujahid Party) and a Buddhist one (the APLP) (Fredholm 1993). This illustrates an important limitation of my theoretical and empirical approach. I focus on ethnicity as I expect that it will be the most salient social cleavage in most countries, because its importance in the context of civil war has been well-established (see Cederman, Wimmer, and Min 2010), and because ethnicity is more easily measured than most other dimensions of identity. Clearly, however, other cleavages can take priority in some cases, and can sub-divide ethnicity as is the case in Arakan. Thus, even though both factions of Arakan residents share a common purpose of securing independence from Burma, they adopt the potentially counterproductive arrangement of being organized into separate rebel groups on the basis of religion.

Ultimately, however, I view the Arakan separatist movement as largely consistent with my theory. While I expect that repression will ultimately lead ethnic groups to produce cohesive rebel groups organized around their identity, and this stops short of occurring in Arakan due to religious divisions, the reasons why Arakanese organize as they do are largely consistent with my theory. I expect that individuals will turn to ethnicity in the face of repression because 1) repression is often targeted on the basis of ethnicity, increasing the salience of such groupings, and 2) ethnicity often provides a useful basis for defense from repression, as ethnic groups often have militias, and may be able to attract support from co-ethnic outside states.

While Burma was nominally democratic from independence in 1948 until a military coup in 1962, the quality of human rights in the country was low. The Latent Human Protection Score for the country was around -1.47 during this period, making it a relatively repressive regime as the global average over the period was 0.03. For comparison, the score changed little after what is generally considered to be a very repressive military regime took power. Thus, at the dawn of the Arakan independence movement the Burmese government employed a level of repression that I would expect to provoke increases in the number of individuals resorting to violence, and to levels of ethnic identification. But whereas I suspect that repression is generally targeted disproportionately at certain ethnic groups, in Arakan the targeting was more specific, with Muslims being disproportionately targeted relative to Buddhists. In fact, the government renamed the state "Rakhine," a name that previously referred only to the Buddhist subset, to emphasize their stance against the Muslim minority known as the Rohingyas (Fredholm 1993). The Burmese government has maintained a military deployment to the region through much of the conflict, and while it has applied significant repression to both religions, it has been especially brutal toward the Rohingya, ultimately seeking to force the minority to migrate into Bangladesh (Steinberg 2010). Thus, the underlying logic of my theory would imply that as repression is applied with respect to both ethnicity and religion, both dimensions of identity should be salient.

Once deciding to rebel, it would not be a foregone conclusion that an Arakanese dissident would choose to form a new rebel group. The Communist Party of Burma had a strong following in Arakan; joining the Red Flag faction, or later the Communist Party of Arakan, might have been a viable option for many. The Karen National Union was also active prior to any significant military mobilization in Arakan. It is not obvious, *a priori*, why the various separatists would not band together, as individually none could pose a serious threat to the Burmese government. Indeed, most of the separatist movements agreed to ceasefires in the 1990's and 2000's without winning any concessions, or coming at all close to military victory. Later in the conflict there were in fact attempts to build multi-ethnic

alliances (Smith 1999). Initially, however, dissidents generally choose to organize on the basis of ethnicity, in some cases further subdivided by religion. Geographic isolation surely played some role in the lack of coordination across regions, but in several cases separatists operated outside of their own secessionist territory, and Communist forces frequently traveled between different separatist regions (Smith 1999). Furthermore, the Arakanese and Karen separatists had been unified under the banner of the AFLFP just a few months prior, meaning that at least at the elite level, they had communication channels and a history of interaction. As Staniland (2014) notes, social groups with these sorts of ties are often able to build national rebel groups. The fact that this did not occur suggests that ethnicity was an important factor in preventing the consolidation of dissent.

After accounting for the religious cleavage, the organization of Arakanese rebels is consistent with my expectations. Buddhists and Muslims generally consolidated into a single rebel group each. Interestingly, the specific organizations changed over time, with one group being defeated and another taking its place. For example, when the Arakan conflict began in 1948, Buddhists were represented by the Arakan People's Liberation Party. The APLP was defeated in the late 1950's. Surviving members joined with new recruits to form the Arakan National Liberation Party a few years later. The ANLP too was defeated, only to be later replaced by the Arakan Liberation Party. Thus while three new Buddhist organizations joined the ongoing conflict in Arakan, they seemingly replaced one another, and represented the same underlying constituency. This suggests that dissidents only form new organizations if there is not already a group representing their particular set of identities. Furthermore, it suggests that there is a persistent demand for rebel groups to provide representation. If an existing rebel group is defeated, the potential support of dissident constituents provides an incentive for entrepreneurs to create a replacement.

Other elements of the Arakan case are broadly consistent with my theory, while also suggesting nuance. Most of the ethnic minorities faced significant repression starting

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almost immediately after World War II, as the central government sought to create a unified Burmese state. The Arakanese groups that joined later in the conflict seem to fit my prediction that repression reduces the disincentive to participate in violence, though accounts from individual rebels are virtually non-existent. It should be noted, however, that the initial Arakanese rebellion, the APLP, was comprised largely of individuals who had fought the Japanese in World War II (Charney 2009). While the core logic of the theory likely applies to these individuals — the brutal Japanese occupation reduced the relative cost of fighting — I fail to account for the fact that conflicts often cluster in space and time, meaning that the most recent wave of repression will not always be the only violent experience shaping dissident preferences. The Arakanese also ultimately formed new rebel groups around the identities that formed the basis for repression, as I expect. Yet the logic of forming a new group does not seem to follow the logic I propose. Whereas I expect that new groups to constitute a rejection of existing rebel groups in response to their lack of representation for some ethnic groups and inability to protect civilians, in Arakan the decision was mutual and collaborative. The Karen National Union was uninterested in recruiting Arakanese dissidents, but did support the movement and aided in the establishment of several of the rebel groups there (Smith 1999).

4.3.3 Discussion

The onset of conflict in Shan State provides an excellent illustration of my theory. Shan civilians were caught in the crossfire of conflicts between the Burmese government and two non-state actors, the KMT and the Kachin Independence Army. The abuses perpetrated against civilians during this time made them receptive to the nationalist movement being propagated by Shan elite, facilitating the creation of a distinctly Shan rebel group. I return to this case in Chapter 5, as it provides mixed evidence for my predictions regarding splintering and alliances.

The Arakan case suggests some refinements for my theory, but in most ways is consistent with its logic. As I predict, the emergence of rebellion in Arakan followed a period of political and physical repression, though the residual effects of World War II likely played a role in producing a pool of individuals wiling to fight. I also expect that repression will lead individuals to identify more strongly with their ethnic group. In Arakan state this prediction is not inaccurate, but is underspecified. The fundamental groups to which Arakanese turned was a subdivision of their ethnicity that combines ethnic identity with religion. While I focus on ethnicity for reasons of clarity and data availability, Arakan shows that a full understanding of any particular case requires knowledge of the social cleavages there. Identities such as religion can crosscut ethnicity, and in some cases might even take priority over it. Indeed a split between Muslims and Christians led to conflict in the ethnically-homogeneous South Sudan almost immediately upon its independence. A question raised by this analysis is how rebel elites are sometimes able to overcome such divisions and produce a movement that coheres around a broader identity. The Iraqi Kurdish population, for example, contains Muslims, Christians, and adherents to a number of smaller religions such as Zoroastrianism. While at times the Kurds have divided along these lines, they've tended to come together in the face of conflict (McLauchlin and Pearlman 2012). Future work should explore why the Kurds have been able to accomplish this, while the Arakanese have not.

4.4 Conclusion

I have argued that repression should increase the probability that new rebel groups will join ongoing civil wars. This is so because repression reduces the relative risk of fighting for previously non-violent individuals, creating a pool of individuals willing to join the conflict. Yet because repression also tends to enhance the salience of ethnic identities, due to the fact such identities often form the basis for targeting and emphasizing such identities

is often a good strategy for procuring foreign support, these new fighters are not always interested in joining existing groups. Rather, they should form new rebel groups that provide explicit representation to their ethnic group.

Consistent with my expectations in *H4*, I find that decreases in human rights practices are associated with a substantial increase in the probability that a new rebel group will join the conflict in the following year. A change of -1 in the Latent Human Protection Score for a country, roughly the difference between France and Russia in recent years, triples the probability that a new group will emerge. I do not find support for *H5*, which predicted that ethnic diversity would limit the scope in which the repression mechanism should apply. I do find support for *H6*, which tests the implication that new rebel groups emerging through this process should be more likely than others to draw support from a single ethnic group. Rebel groups that join ongoing conflicts are nearly twice as likely as others to have ties to only a single ethnic group.

These results suggest that the government plays a surprisingly large role in shaping rebel movement structure. Existing work on rebel structure tends to focus on the social (Staniland 2014) or economic (Weinstein 2007) context from which rebels emerge, and studies that do consider the role of the government have often found that repression increases cohesion among target groups (Simmel 1955), though the effect may be contingent on internal group dynamics (McLauchlin and Pearlman 2012). The findings also contribute to the school of thought which suggests that ethnic diversity is not inherently dangerous (Fearon and Laitin 1996), with ethnic conflict instead being contingent on the treatment of ethnic groups (Cederman, Wimmer, and Min 2010). Similarly, these results suggest that policymakers could limit the emergence of ethnic polarization during conflicts by ensuring the protection of civilian populations.

Chapter 5

The Realignment of Rebel Groups

Having explored the formation of new rebel groups in the previous chapter, I turn now to the other major process affecting the number of rebel groups in a conflict — the realignment of existing rebel factions. There are two ways in which rebels can realign. First, subsets of existing groups can break away to form splinter organizations. For example, Hezbollah split from the Amal movement during the Lebanese Civil War to form a more radical organization. I define a splinter organization as an independent rebel group, signified by having an identifiable name and leadership that are not shared with any other rebel group, that was previously subsumed within another rebel organization. Thus, entirely new rebel groups are excluded, even if they constitute a subset of a larger non-violent organization. Splinter organizations generally emerge during ongoing conflicts, though sometimes they are formed during periods of peace to initiate a new wave of fighting, as the Real Irish Republican Army did (Stedman 1997).

Second, previously independent rebel organizations can form alliances. Here I focus on alliances with meaningful integration of command structures, defining an alliance as an organization with a distinct name that merges a substantial amount of the decision-making for two or more previously independent rebel groups. This might occur if one group

absorbs another, or two groups create a formal umbrella organization to coordinate their activities. An example of the latter case is the Syrian Defense Forces, under which the Kurdish People's Protection Units (YPG) have joined with several Arab rebel groups to coordinate their campaign against the Islamic State. Note that this definition excludes cooperation that falls short of formal integration. Such behavior is difficult to measure systematically in any case, though multiple forthcoming data collections should facilitate research on the topic in the future.

I expect these process to be closely related as part of a broader process of realignment around ethnic identity. Repression should make civilians more likely to identify with their ethnic group. While I do not necessarily expect this effect to extend directly to rebels — almost by definition, they experience violence — I do expect that there will generally be a strong connection between rebels and civilians dissidents. Except for a few cases with exceptionally large endowments of natural resources or foreign support, rebels depend on dissident civilians for recruits, shelter, and material resources. As civilians often have the ability to defect to the side of a rival rebel group or the government, rebels have an incentive to represent the interests and identities of these constituents. Furthermore, ethnic identification can be an effective means of securing support from foreign co-ethnic states, and such appeals might be especially likely to succeed during periods of repression. Thus, rebels should tend to identify more strongly with their ethnic group following episodes of repression.

This dynamic should lead rebels to reorganize on the basis of ethnicity. In some cases rebel leaders may be able to reorient their group to emphasize ethnicity more strongly (see Christia 2012). Often, however, it will be difficult for them to do so credibly. For example, if a rebel had previously maintained a multi-ethnic coalition of support, it would be difficult for them to emphasize a particular ethnic identity. In such cases, entrepreneurial members of the group may see opportunities to form a new splinter organization that "outbids" the

original rebel group with a more credible, extreme appeal to ethnic identity (see Horowitz 1985). As doing so could potentially win the support of a large number of dissident civilians, and leading a rebel group is likely to bring private benefits such as resource revenues, this should often be an enticing opportunity. As I expect this cycle of ethnic outbidding to be especially likely in the wake of repression, I expect that the level of repression should predict the likelihood that new splinter organizations will form.

Hypothesis 6: The probability that rebels groups splinter should increase with the level of repression in a country

I argue that splintering often reflects a process of reorganization around ethnic identity. The ability of this process to produce new rebel groups should depend, however, on the pre-existing configuration. A rebel group that is already composed primarily of members of a single ethnicity may be able to adapt to increased ethnic identification, though they may still fragment as a result of outbidding appeals. Nevertheless, groups that draw their support from multiple ethnic groups should be much more vulnerable to fragmentation as the result of increased ethnic identification.

Hypothesis 7: Multi-ethnic rebel groups should be at greater risk of splintering than mono-ethnic ones

My theory also suggests a testable implication regarding the characteristics of the splinters groups that emerge. If splintering is motivated by a desire to form rebel groups that more clearly represent a particular ethnic group, the rebel groups that emerge from this process should be likelier than others to draw their support from a single ethnic group.

Hypothesis 8: Splinter organizations should be more likely than others to draw their support from a single ethnic group

While this process of realignment around ethnic identities should lead to the fragmentation of some groups, in other cases it might create opportunities for aggregation. One disadvan-

tage of splintering is that it will generally result in a weaker organization than members had previously, as it will have only a subset of the parent group's members at its disposal. As a crucial function of alliances is the aggregation of capabilities, forming new alliances is a potential solution to this problem. Alliances may also have the benefit of managing potential conflict between their members (Gibler 1996), ensuring that resources are directed toward fighting the government rather than other rebel groups. Finally, outside states often attempt to maximize the impact of their support by channeling it to a coalition of rebels, rather than a series of smaller, independent groups. Interventions of this sort might be especially likely in the wake of a humanitarian crisis.

As is the case with splintering, my theory offers predictions regarding not only when new alliances should emerge, but also what their ethnic composition should be. I expect that the ethnic polarization sparked by repression should lead rebels to leave multi-ethnic coalitions, but also to form new alliances with co-ethnic factions.

Hypothesis 9: The probability that new mono-ethnic alliances will form should increase with the level of repression

Conversely, the emergence of multi-ethnic alliances should be less likely when this dynamic is at work.

Hypothesis 10: The probability that new multi-ethnic alliances will form should decrease with the level of repression

I proceed with an explanation for a research design for these four hypotheses. After presenting the findings, I assess the effect of repression on the total number of rebel groups.

5.1 Research Design

While I believe them to be the result of closely related theoretical processes, the splintering of individual rebel organizations and the formation of alliances between separate organizations require distinct research designs. This is so because the unit of analysis in the splintering study is the rebel group-year, whereas alliance formation is a decision by multiple rebel groups, and thus the unit of analysis is the conflict-year. I first explain the research design for splintering in greater detail, before explaining the differences in the alliance formation design.

5.1.1 Splintering

The first phenomenon I explain in this chapter is splintering. As the explanatory factors in *H7* and *H8* are group attributes, the unit of analysis in this portion of the study is the rebel group-year. I seek to explain not simply which conflict years produce splinter organizations, but also which rebel groups within those conflict years. I draw my sample of cases from the UCDP Dyadic Dataset, version 4-2016 (Melander, Pettersson, and Themnér 2016), which includes an observation for every non-state actor in every year in which it was involved in conflict with the government producing at least 25 fatalities. After collapsing observations for rebel groups that appear in multiple conflicts in a single year, I am left with a dataset of 2,656 rebel group years covering the period 1946–2015.

Dependent Variables

Splintering

The first dependent variable in this portion of the analysis is the splintering of existing

rebel groups. I use my own data on rebel group origins to identify splinter groups.[1] A group is coded as a splinter organization if most of its leadership were previously members of another rebel group. I follow the UCDP coding decisions for distinguishing cases where a new group has emerged from simple name changes. Essentially, a group is considered new if its leadership, organizational structure, or membership differs substantially from previous existing organizations. When two groups disagree about which is the original organization and which is the splinter, the larger group is considered the original.

113 of the 506 rebel groups in my data are splinter organizations. As there are four cases in which a rebel group produced two splinter organizations in the same year, the number of years in which a new splinter organization emerged is 109. However, a large portion of these are coterminous with dissolution of the original organization. Typically in these cases the main organization will agree to a peace deal, and a radical faction will form a splinter organization to continue fighting. While this is an interesting and consequential phenomenon, it has already received a substantial amount of attention from scholars (e.g. Stedman 1997). Though empirically they may overlap in some cases, the division between hardliners and moderates is analytically distinct from ethnic divisions, suggesting it is a separate process from what I theorize. Furthermore, I am interested in processes that increase or decrease the number of rebel groups in a conflict. Replacing a large, moderate organization with a more radical splinter has important implications for the probability of peace and the tactics likely to be deployed. Ultimately, however, it does not alter the number of rebel groups competing simultaneously. I thus consider these cases to be beyond the scope of this dissertation, and exclude them from my analyses. This leaves a total of 25 cases in which a splinter and parent organization were active simultaneously. This variable is coded as 1 in the group-year in which a parent organization loses a splinter faction (i.e. I examine the groups that splinter).

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[1]The UCDP Actor data (Uppsala Conflict Data Program 2015) does identify splinter groups, but uses very conservative coding rules that exclude many clear examples of splinter.

Rebel Group Ethnicity

H8 predicts that splinter organizations should be more likely than others to draw support from a single ethnic group. As I did for the similar hypothesis in Chapter 4, I use the the ACD2EPR 2014 dataset (Wucherpfennig et al. 2011; Vogt et al. 2015) to determine this. The data measures three categories of ties between rebel and ethnic groups — explicit claims of representation, recruiting, and support from at least half the ethnic group. I collapse these forms to code a trichotomous measure indicating whether a rebel group is multi-ethnic, mono-ethnic, or non-ethnic, meaning it has no observable links to any ethnic group.

Independent Variables

Human Rights

I again use the Latent Human Protection scores, version 2 (Fariss 2014; Schnakenberg and Fariss 2014) to measure repression. As I do in Chapter 4, I combat the fact that the measure is mostly static with a slight positive trend over time by using the change over the previous. In this measure, a negative score indicates that a country has become more repressive, while a positive score means that human rights have improved. In this sample the mean change is just 0.01, but there are numerous large change in both directions.

Multi-ethnic Group

To test *H7* I use the measure of rebel group ethnicity that serves as a dependent variable later in the chapter. In this case I collapse the measure into a dichotomous indicator with rebel groups that draw support from multiple ethnic groups coded as 1, and all others coded as zero. There are relatively few multi-ethnic groups in the data, with the attribute occurring in 334 of 2393 valid group-year observations.

Splinter Organization

The test of *H8* uses the splinter variable from my rebel origins data as an explanatory

factor. The coding rules are described above. 113 out of 503 rebel groups are splinter organizations.

Control Variables

I include many of the country-level covariates from Chapter 4 in the splintering analyses as controls. These include ethnolinguistic fractionalization (Fearon and Laitin 2003), Polity IV score (Marshall, Gurr, and Jaggers 2016), land area (The World Bank 2015), population (Gleditsch 2002), GDP per capita (Gleditsch 2002), and a count of lootable resource sites (Lujala, Rød, and Thieme 2007; Gilmore et al. 2005; Lujala, Gleditsch, and Gilmore 2005; Balestri 2012; Lujala 2008; Buhaug and Lujala 2005). Refer to the previous chapter for detailed descriptions.

Additionally I include several rebel group-level controls from Cunningham, Gleditsch, and Salehyan (2009). These include a binary indicators of whether the rebel group is stronger than the government, whether the group has a presence in multiple states, whether the group has a political wing, whether the group controls territory, whether the group has centralized control, and whether it receives external support. Each of these measures is a snapshot, measured for each group at only one point in time.

Modeling Strategies

To test *H6* and *H7* I use a Cox proportional hazard survival model. This is a useful modeling framework in this case because the probability that a rebel group will splinter is in part a function of time. In a standard logistic regression analysis with the rebel group as the unit of analysis, the duration of time the group was active is such a strong predictor of splintering that it typically nullifies the significance of all other variables. Survival models address this by treating splintering as a function of time, expressed as the probability that a rebel group will survive a given number of years without splintering. Independent

variables explain deviations from this baseline survival curve. The Cox model is likely to be the proper choice of survival models in this case, as survival times for rebel groups are heavily right-skewed, and the Cox model does not assume survival times form any particular distribution (i.e. it is non-parametric).

The exact specification of the dependent variable in this analysis is the number of years between a rebel group's first appearance in the data and the first time it generates a splinter organization. I remove a rebel group from the study once it has splintered for the first time. This results in the exclusion of three instances of splintering from rebel groups that had splintered previously. As many of my covariates are measured at the country level and there are often multiple rebel groups per country, I cluster the standard errors by country.

To test *H8* I use a simple logistic regression with the rebel group as the unit of analysis. The mono-ethnic indicator is the dependent variable, and the indicator of whether the group is a splinter organization is the main predictor.

5.1.2   Alliance Formation

The research design for the two alliance formation hypotheses (*H9* and *H10*) closely resembles the group formation analysis from Chapter 4. The unit of analysis is the conflict-year. While I control for the number of rebel groups, I do not exclude observations that have only one rebel group. There are several cases where a new rebel group enters a conflict and joins an alliance in the same calendar year.

Dependent Variable

The dependent variables for the two hypotheses are the formation of two different types of alliances — mono-ethnic and multi-ethnic. I use my data on rebel origins to determine when a new alliance has formed. I code an alliance as any group whose members are

drawn from at least two distinct previously active rebel groups. These alliances constitute a substantial enough integration of command that they replace their constituent groups in the data. In many cases, however, the alliance splinters and the members groups re-enter the data. I combine the alliance measure with the ethnic composition variable to code two dependent variables — the formation of new multi-ethnic alliances, and of new mono-ethnic ones. Alliances involving this degree of integration are rare. New mono-ethnic alliances form in 29 of 2014 conflict-years, while there are only 13 years in which a new multi-ethnic alliance emerged.

Independent Variable

I use same measure of human rights as in the preceding analyses. I again use the lagged change in the Latent Human Protection Score (Fariss 2014; Schnakenberg and Fariss 2014). The mean change in this data is -0.01, with a range from -2.51 to 1.50.

Control Variables

I include two conflict-level controls: a binary indicator of whether the conflict produced 1,000 or more fatalities in a year, and a binary indicator of whether multiple rebel groups participated in the conflict in a year. Both measures come from the UCDP Dyadic Data (Melander, Pettersson, and Themnér 2016). Additionally I control for several country-level factors, including ethnolinguistic fractionalization and the percentage of terrain that is mountainous (Fearon and Laitin 2003), population and GDP per capita (Gleditsch 2002), the Polity IV score (Marshall, Gurr, and Jaggers 2016), and an indicator of whether there was a civil war in a neighboring country.

Modeling Strategy

As both dependent variables are binary but rare, I use a logistic regression with a rare events correction (King and Zeng 2001). As there are sometimes multiple conflicts in a country-year, I cluster the standard errors by country.

5.2   Splintering Results

Results of the splintering analysis are reported in Table 5.1. I fit five Cox proportional hazard models with different batteries of covariates. Model 1 includes only the two independent variables used to test my hypotheses — the lagged change in human rights, and an indicator of whether the rebel group is multi-ethnic. In Model 2 I add several country-level control variables. Model 3 combines the change in human rights with a set of rebel group-level controls.

	Model 1	Model 2	Model 3
Change in Human Rights	$-1.23^{\dagger}$	-1.34	$-1.35^{\dagger}$
	(0.74)	(0.94)	(0.81)
Multi-ethnic Group	0.54	-0.14	0.55
	(0.65)	(1.01)	(0.54)
Polity		-0.02	
		(0.05)	
Logged GDPpc		0.17	
		(0.36)	
Logged Population		-0.44	
		(0.30)	
Logged Area		0.08	
		(0.40)	
Ethnolinguistic Fractionalization		0.85	
		(1.16)	
Lootable Resource Sites		0.01	
		(0.01)	
Intensity Level		-1.34	
		(1.06)	
Transnational Group			0.39
			(0.87)
Political Wing			-0.56
			(0.46)
Stronger than Gov.			2.05^{*}
			(0.92)
AIC	171.59	101.72	145.35
R^2	0.00	0.00	0.00
Max. R^2	0.09	0.06	0.08
Num. events	20	12	17
Num. obs.	1908	1499	1740
Missings	749	1158	917
PH test	0.06	0.59	0.74

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$, $^{\dagger}p < 0.1$

Table 5.1: Cox Proportional Hazard Models of Rebel Group Splintering

The coefficients of a Cox model represent the effect of a variable on the hazard of failure (splintering in this case). A positive coefficient indicates that the risk of splintering increases with the level of that variable, while a negative coefficients signifies a reduced risk. Consistent with *H6* I find that the change in human rights is negatively related to the hazard of splintering. As human rights improve the risk that a rebel group will splinter decreases;

as a country becomes more repressive, the risk of splintering increases. However, the effect is only statistically significant in Models 1 and 4, and even then only at the 90% level. The effect size is large, with a one-unit increase in human rights being associated with a 70% reduction in the likelihood of splintering in Model 1, and a 74% reduction in Model 4. The relationship is not significant in Model 2, though it is not clear whether the relationship is confounded by the country-level covariates, or the change is the result of missing data on those variables.

The findings are thus mostly consistent with *H6*, though not as robust as most of the analyses in the preceding chapters. Several cases from the data clearly fit my theoretical framework. The Karenni ethnic group of Burma are close relatives of the Karen, and fought as members of the Karen National Union (KNU) for the first several years of Burmese independence. In 1957, however, the Karenni left the KNU to form their own rebel group, the Karenni National Progressive Party (KNPP). This case illustrates that splintering does not always lead to hostile relations between the formerly united groups, however, as the KNU strongly supported the KNPP's desire to pursue a separate Karenni state (Fredholm 1993). The Free Aceh Movement splintered from Darul Islam in Indonesia to pursue independence for the Acehnese people, rather than the Darul Islam's goals of an Islamic State in Indonesia. A review of the cases also suggests a possible explanation for the lack of robustness — communist rebel groups are highly prone to fragmentation, and account for a large portion of the splinter organizations.

I find no support for *H7*, as the multi-ethnic variable never approaches statistical significance. As I discuss in the study of the Shan State independence movement later in this chapter, it is seemingly common for ethnically homogeneous groups to splinter. Only one control variable is significant — the indicator of whether a rebel group is stronger than the government in Model 3. Being stronger than the government increases the risk of splintering by a factor of seven. This suggests that splintering has a strong strategic

element. When rebels are weak and cannot afford any loss in capability, they hang together. When victory appears likely, however, they act on their internal differences, perhaps with an eye toward post-war bargaining.

Disaggregating the sample by conflict type reveals that the findings are driven largely by secessionist conflicts (see Tables A.11 and A.12 in the Chapter 5 Appendix). As is the case in the full sample, worse human rights practices are associated with an enhanced probability of splintering among secessionist conflicts in Models 1 and 3. Among conflicts for control of the central government, the relationship is not significant except in Model 2. This result should be interpreted with caution, however, as missing data leaves only four instances of splintering in this model. These results are perhaps not entirely consistent with my theory. Whereas I expect that splintering to be driven by a process of realignment around ethnic identity. While splintering is slightly more common among rebellions against the central government, the phenomenon is more closely related to repression among secessionist rebellions. It may be the case that these secessionist movements are realigning around an identity more specific than ethnicity, such as a particular combination of religion and ethnicity. Indeed, this pattern can be observed in several of the secessionist movements in Burma. It is also possible, however, that the activation of sub-national identities by repression is not a common pathway to splintering.

In summary the results of this analysis are largely consistent with my broader theory, though not robust to the inclusion of country-level controls. I interpret the results as suggesting that ethnic polarization is a common pathway to splintering. It is not, however, the only pathway. Communist rebellions are prone to splintering along doctrinal lines, and splinter organizations often emerge late in conflicts to continue the fighting after the original organization ceases its activities.

5.2.1 Splinter Group Ethnicity

H8 predicts that splinter organizations should be more likely than others to draw their support from a single ethnic group. If splintering is fundamentally about reorganization along ethnic lines, it stands to reason that the leaders of splinter organizations should take only co-ethnics with them. I test this proposition in Table 5.2. I do not find support for *H8*, as splinter organizations are not likely than others (alliances and originating rebel groups constitute the baseline) to be ethnically-homogeneous. Splinter organizations also do not significantly differ in their probability of being multi-ethnic. I do find that splinter organizations are less likely less likely than others to have no ties to any ethnic group, with the effect being significant at the 95% level. This suggests that support from ethnic constituents might be an important factor in facilitating splintering. Factions that lack such support may be more likely to remain in the original rebel group, as they have less assurance of being able to acquire enough resources to be a viable independent group. The results are not significant when looking at secessionist and government conflicts in isolation, though this may be a reflection of the reduced sample size (see Tables A.13 and A.14 in the Chapter 5 Appendix).

	M4 Monoethnic	M5 Multiethnic	M6 Nonethnic
(Intercept)	0.20	−3.70***	−0.04
	(0.29)	(0.63)	(0.31)
Splinter	0.39	0.54	−1.14*
	(0.41)	(0.54)	(0.57)
Joiner	0.75*	−1.08	−0.47
	(0.34)	(0.66)	(0.37)
Secessionist	1.07***	−1.18*	−0.76*
	(0.31)	(0.50)	(0.36)
Previously Active	−0.08	0.04	0.17
	(0.42)	(0.58)	(0.52)
Ethnlinguistic Fractionalization	0.16	2.09*	−1.15*
	(0.45)	(0.85)	(0.52)
Transnational	0.06	1.06*	−0.69*
	(0.26)	(0.42)	(0.31)
AIC	393.19	193.69	320.15
BIC	419.59	220.09	346.55
Log Likelihood	-189.60	-89.85	-153.07
Deviance	379.19	179.69	306.15
Num. obs.	321	321	321

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$

Table 5.2: Logit Models of Rebel Group Ethnic Composition

5.3 Alliance Formation Results

The alliance formation results are reported in Table 5.3. Model 4 uses mono-ethnic alliances as the dependent variable, while Model 5 focuses on multi-ethnic alliances and Model 6 combines all alliances. In *H9* I predict that the probability of new ethnically homogeneous alliance will be greater following increases in repression. Consistent with this prediction, the "Change in Human Rights" variable has a strong negative relationship with the probability of new rebel group formation. A one-unit decrease in human rights (again, roughly the difference between France and Russia in recent years) more than triples the odds of a new rebel group forming. In the years following the largest declines in human rights practices (-2.5), the probability of a new mono-ethnic alliance is 0.21 (see Figure 5.1). When the change is zero or positive, the probability of such an alliance is around 0.01. This

relationship is statistically significant at the 90% level. Given that the sample size is not especially small (n=1209), an α of 0.1 might be considered overly permissive. However, no other variable is significant at even the 90% level, suggesting that even after applying the rare events correction the model has limited statistical power. Thus, I contend that it is reasonable to interpret relationships at this significance level, and reject the null hypothesis of no relationship between repression and the emergence of mono-ethnic rebel groups.

	M4 Mono-ethnic	M5 Multi-ethnic	M6 All
(Intercept)	1.56	-1.25	1.71
	(3.82)	(12.46)	(2.84)
Change in Human Rights	$-1.20^\dagger$	-1.15	$-0.99^\dagger$
	(0.70)	(1.26)	(0.55)
Ethnolinguistic Fractionalization	0.79	11.27	1.12
	(1.21)	(10.54)	(0.95)
Intensity Level	0.09	0.54	0.03
	(0.58)	(0.89)	(0.45)
Prev. Multi-rebel	-0.42	0.35	0.31
	(0.78)	(0.88)	(0.47)
Contiguous Civil War	0.01	0.08	-0.06
	(0.15)	(0.28)	(0.13)
Logged GDP per capita	-0.39	-0.78	$-0.43^\dagger$
	(0.35)	(1.01)	(0.26)
Logged Population	-0.33	-0.75	-0.29
	(0.26)	(0.70)	(0.20)
Polity	-0.04	0.00	-0.01
	(0.05)	(0.11)	(0.04)
AIC	163.10	71.96	241.14
BIC	214.07	122.94	292.12
Log Likelihood	-71.55	-25.98	-110.57
Deviance	143.10	51.96	221.14
Num. obs.	1209	1210	1210

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$, $^\dagger p < 0.1$

Table 5.3: Rare Events Logit Models of Alliance Formation

In Model 5 I do not find support for *H10*, as the relationship between "Change in Human Rights" and the probability of new multi-ethnic alliances does not approach statistical significance. While repression does not seem to deter this type of alliance as I expected,

neither does it make them more likely. Thus while I find that repression is associated with a general increase in the probability of new alliances, the relationship seems to be driven by ethnically-homogeneous coalitions. The effect of repression seems to be specific to this type of alliance, rather than producing a general increase in the propensity to form coalitions. Disaggregating the results by conflict intensity reveals that the findings are primarily driven by less severe conflicts, as the results hold for conflict-years with fewer than 1,000 fatalities, but not for those with greater than 1,000 (see Tables A.15 and A.16 in the Chapter 5 Appendix). The result for mono-ethnic alliances holds among conflicts over the central government, but not among secessionist conflicts. The combined alliance formation result holds in neither subsample (see Tables A.17 and A.18). As is the case in previous analyses, my hypotheses perform best in lower-intensity government conflicts. One explanation for the intensity result is that forming alliances requires an opportunity for rebel elites to meet and negotiate a merger, which is unlikely to occur during periods of intense fighting. The conflict type results again suggests that secessionist movements tend to be unified around ethnic identity from the outset, and thus have less need to engage in realignment.

The only statistically significant control variable in any of the three models is logged GDP per capita in Model 3. The relationship is negative, indicating that alliances are less common in wealthier countries. One possible explanation is that the variable is acting as a proxy for the intensity or spread of the conflict, capturing an attribute distinct from the binary measure of whether the conflict produced 1,000 fatalities. In cases such as Afghanistan where most of the country is consumed by war, the economy is likely to suffer. In cases where the fighting is more localized, such as Ukraine in recent years, there will not necessarily be a significant economic decline at the country level. The former situation might be more likely to have a plethora of rebel groups available to form alliances.

The findings in this section are broadly consistent with my theoretical framework. In-
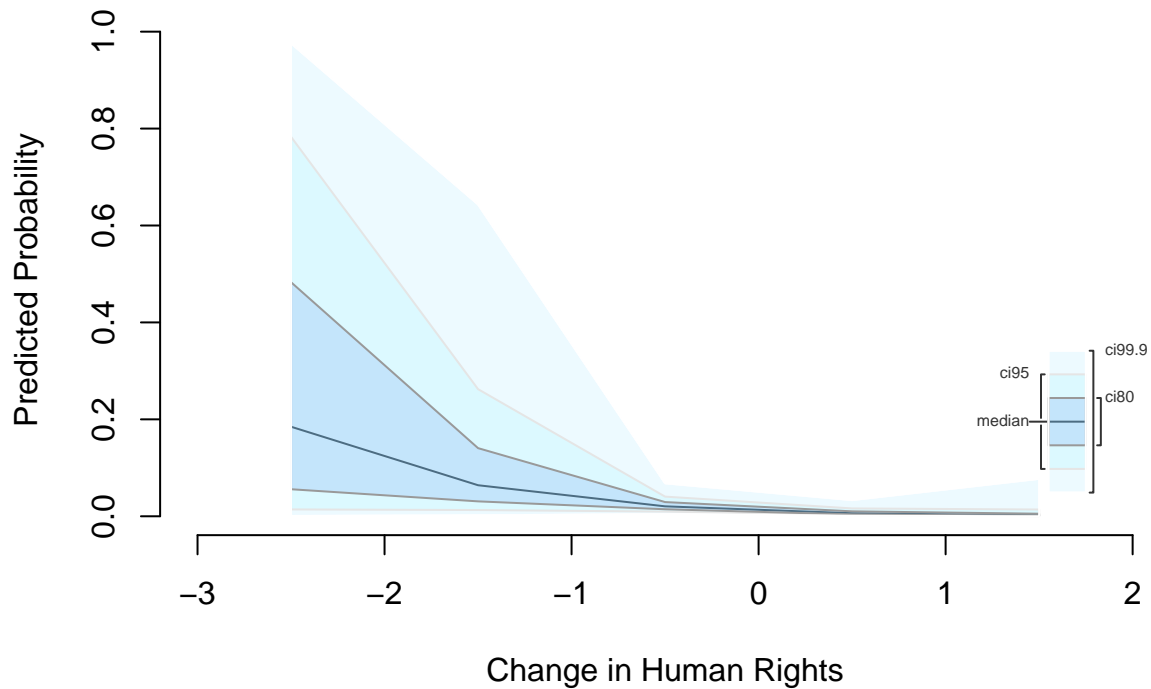
Figure 5.1: Predicted Probability of Mono-ethnic Alliance (Model 1)

creased repression is associated with higher probabilities of the formation of ethnically homogeneous alliances, which supports my expectation that repression triggers a cycle of realignment around ethnic identity. One case that is consistent with this story is the Uganda National Liberation Front. Uganda is among the most ethnically diverse societies on earth, with an ethnolinguistic fractionalization score indicating that there is nearly a 90% chance that two randomly selected individuals will be from different ethnic groups. A number of small rebel groups formed there in 1978 with the goal of overthrowing Idi Amin, to which the government responded with a substantial increase in repression (a change of -0.5 in the Latent Human Protection Scores). In early 1979, with help from the Tanzanian government, several ethnically Lango rebel groups responded by a forming an alliance, the Uganda National Liberation Front. A month later they successfully overthrew Amin. While numerous small rebel groups were active during this time (Lewis 2016), only the bloc of Lango groups was able to successfully form an alliance.

5.4 Combining the Processes

This project is motivated by a desire to explain variation in the number of rebel groups across and within conflicts. To this point, I have examined individually three processes that increase or decrease the number of rebel groups. Doing this has allowed me to discuss very specific causal processes. Yet examining each process separately does not allow me to speak to the total number of rebel groups we should expect at various levels of repression. It is not clear, for example, to what extent alliances offset the increases to the number of rebel groups brought by splintering. As a final quantitative analysis, I combine group formation, splintering, and alliance formation and model the probability that there will be multiple rebel groups active in a conflict-year. To do this I fit a logistic regression model with a binary indicator of whether there were at least two rebel groups present in a conflict year.[2] The unit of analysis is again the conflict-year, and the controls are each described in the research design for the alliance analysis.

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[2]A count model such as Poisson regression would not be appropriate here, as rebel groups can persist across time periods, violating the assumption of independent counts in each period.

	M7	M8	M9
(Intercept)	−2.25	−1.93	−2.05
	(1.48)	(1.50)	(1.44)
Change in Human Rights	−1.04**	−1.06**	
	(0.39)	(0.39)	
Human Rights			−0.77***
			(0.19)
Ethnolinguistic Fractionalization	−0.52	−5.17***	−4.37**
	(0.47)	(1.50)	(1.48)
Ethnolinguistic Fractionalization^2		5.02**	4.16**
		(1.54)	(1.52)
Intensity Level	0.11	0.12	−0.04
	(0.24)	(0.24)	(0.24)
Prev. Multi-rebel	3.45***	3.39***	3.25***
	(0.20)	(0.21)	(0.20)
Contiguous Civil War	−0.17*	−0.14*	−0.11
	(0.07)	(0.07)	(0.06)
Logged GDP per capita	−0.05	−0.02	−0.00
	(0.12)	(0.13)	(0.12)
Logged Population	−0.07	−0.16	−0.20
	(0.13)	(0.13)	(0.13)
Logged Area	0.06	0.12	0.09
	(0.10)	(0.11)	(0.10)
Post Cold War	0.32	0.26	0.37
	(0.22)	(0.22)	(0.21)
AIC	718.02	709.42	754.03
BIC	778.50	774.95	820.67
Log Likelihood	-347.01	-341.71	-364.01
Deviance	694.02	683.42	728.03
Num. obs.	1142	1142	1244

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table 5.4: Logit Models of Multi-Rebel Conflict-Years

The combined results are reported in Table 5.4. The "Change in Human Rights" measure has a strong negative relationship with the probability of multiple rebel groups (Models 7 and 8). As human rights improve, the probability that a conflict-year will have multiple rebel groups decreases. As a country becomes more repressive, the probability of multiple rebel groups increases. The relationship is statistically significant in both models, and the effect size is large. A two standard deviation change in human rights (-0.486) changes the
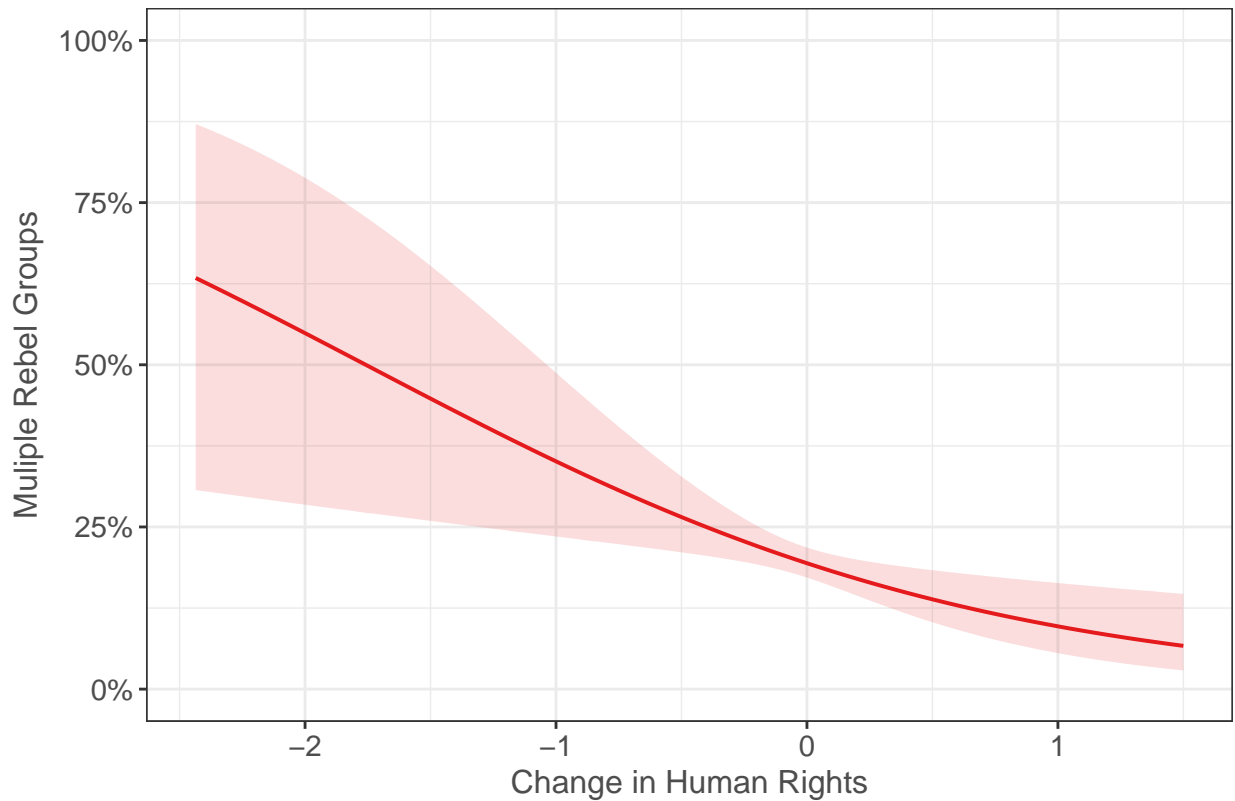
Figure 5.2: Predicted Probability of Multiple Rebel Groups

probability from roughly 0.19 to 0.26, a 37% increase (see Figure 5.2). Model 9 includes the absolute value of the human rights measure, rather than the change. It too is statistically significant. At the highest observed levels of repression the probability of multiple rebel groups is roughly 0.46. At the mean value for the sample (-1.24) the probability is 0.14 (see Figure 5.3). Both the absolute value and change in repression are thus strong predictors of whether a conflict will have multiple rebel groups.

As is the case in previous analyses, the results hold among conflict-years with less than 1,000 battle-related deaths, but not among those with greater than 1,000 (see Tables A.19 and A.20 in the Chapter 5 Appendix). This may be the result of the relatively small number of war-years in the latter category (n=280). Indeed, only the "Previously Multi-Rebel" measure is statistically-significant in the war subsample. Also consistent with previous analyses is the fact that the results appear to be primarily driven by conflicts over the central

government, as the findings in that subsample match closely with the aggregate patterns. Among secessionist conflicts the "Change in Human Rights" measure is not statistically significant, though the absolute level of human rights (used in Model 9) is. Thus repression is associated with greater numbers of rebel groups in both secessionist and non-secessionist conflicts, but only explains the timing of new rebel group formation in the non-secessionist sample (see Tables A.21 and A.22). As was the case for the individual processes, the aggregate results suggest that the relationship between repression and the number of rebel groups is strongest among less intense conflicts over the central government.

Only a few control variables are statistically significant. The strongest predictor in each model, however, is the lagged dependent variable ("Previously Multi-Rebel"). Once a conflict has multiple rebel groups that arrangement is likely to persist for at least one year. This suggest that the presence of multiple rebel groups is not simply a case of two groups briefly overlapping, before one replaces the other. Interestingly, the contiguous civil war measure is statistically significant, but negative in models 7 and 8. One possible explanation is that rebel groups often seek refuge across international borders, especially when neighboring states are weak, as they would be during a civil war (Salehyan 2007). Ethnolinguistic fractionalization is not statistically significant as a linear effect, but a curvilinear effect is significant (Model 8). In this case it is a U-shaped relationship, with the probability of multiple rebel groups being highest and high and low values of ethnic diversity.

In short, repression is a strong predictor for the presence of multiple rebel groups. This is perhaps unsurprising given that while all three outcomes are rare, new group formation and splintering combined are more common than alliance formation. My theory has the ability not only to explain each of these processes individually, but provides a strong explanation for the overall structure of the rebel movement.
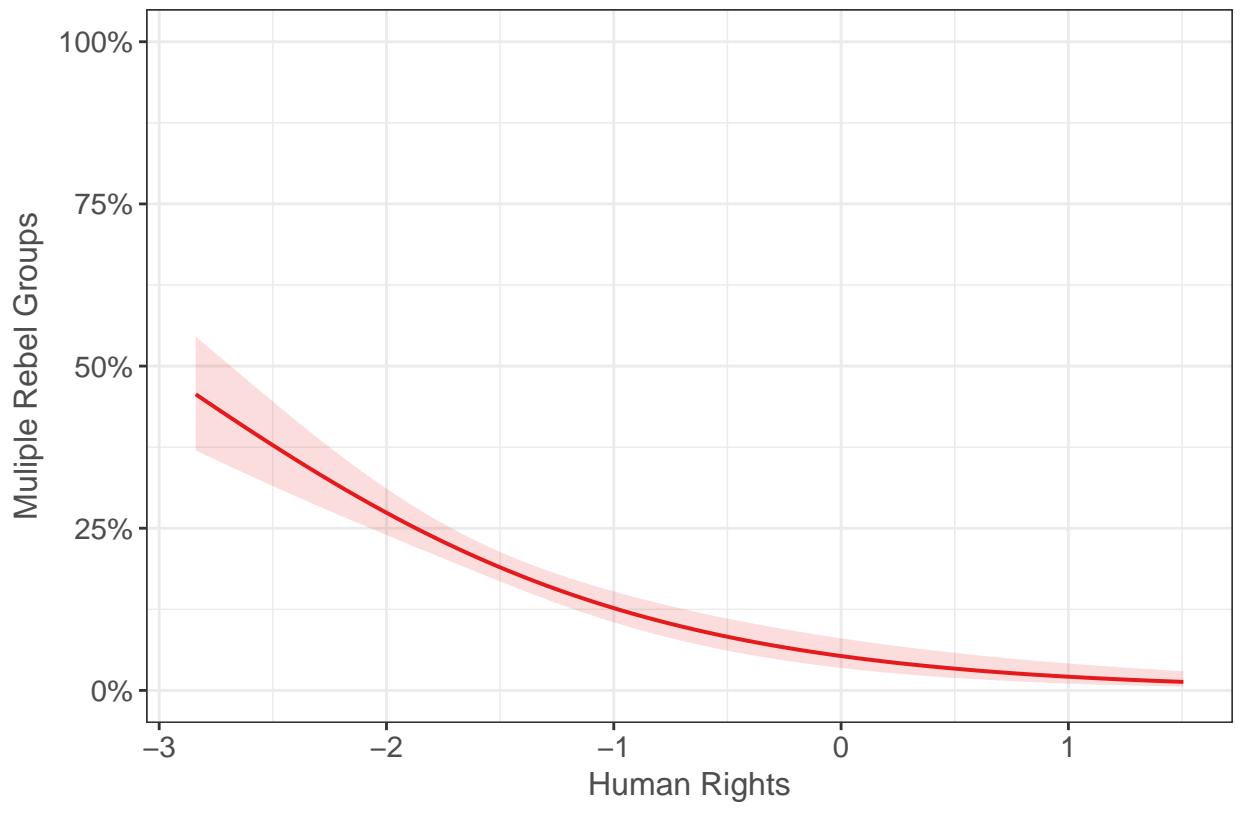
Figure 5.3: Predicted Probability of Multiple Rebel Groups

5.4.1   Splintering and Alliances in Shan State

To explore the processes of splintering and alliance formation in more detail, I return to the Shan case from the previous chapter. There are instances of splintering in Shan that fit my theory, but also some that suggest other factors are at work.

The first rebel group in Shan State, the Young Brave Warriors, splintered shortly after the fighting began in 1959. A large portion of the group's membership joined the new Shan State Independence Army (SSIA). One factor in this move appears to be the fact that the SSIA was more explicitly nationalist than its predecessor (Brown 1988; Fredholm 1993, 156). While I expect ethnically-homogeneous groups such as the Young Brave Warriors to be more cohesive than multi-ethnic coalitions, these groups are still vulnerable to outbidding appeals. The Young Brave Warriors-SSIA split is consistent with my general argument that repression induces greater levels of ethnic identification, which in turn leads rebels to reorganize. The Young Brave Warriors did not represent Shan identity as forcefully as some members preferred, and ultimately they left. This case also suggests an explanation for my finding of no relationship between the ethnic composition of a rebel group and its risk of splintering — even ethnically-homogeneous groups are at risk of splintering through an outbidding dynamic. Thus it may be the case that the null finding is the result not of multi-ethnic groups being cohesive, but rather of mono-ethnic groups being similarly fragile.

The Shan secessionist movement has also seen the creation of several alliances. Almost immediately upon splitting from the Young Brave Warriors, the students who from the SSIA welcomed a group of defectors from the Burmese Army (Fredholm 1993, 156). In 1964, the SSIA participated in a much larger merger with the Kokang Force and the Shan National United Front, forming the Shan State Army (SSA) (Lintner 1984). While the Kokang are often considered a separate ethnic group from the Shan, in my data they are coded as having no ties to an ethnic group. With the other two members being Shan, the

SSA is coded as an instance of a new mono-ethnic alliance. Collectively, the various Shan organizations totaled no more than 8,000 members (Fredholm 1993, 158). Thus aggregating and coordinating capabilities was likely an important motive for the group leaders. The timing of the merger is also consistent with my theory. Burma's democratic regime fell to a military coup in 1962, two years prior to the formation of the SSA. While the Latent Human Protection Scores do not detect a sharp change perhaps due to a dearth of data sources in that period, the tactics used by the new military regime toward the various separatists were generally harsher than those of the previous regime (Charney 2009).

While the early years of the Shan independence movement provide strong support for my theory, the amount of subsequent splintering observed there surpasses what I would expect in an ethnically-homogeneous movement. My data show that four distinct splinter organizations have appeared in the Shan conflict, and there were a number of other splinter organizations that did not produce enough fatalities to be included in the data (see Fredholm 1993). This contrasts with the Arakanese Buddhist movement discussed in Chapter 4, which never produced a splinter organization. Shan and Arakan are similar on many dimensions. Each is a mountainous region on the country's border, each is pursuing independence for a defined territory that largely maps to historical boundaries, and each is fighting the same Burmese government. That leaves two key differences. First, the Arakan separatist movement had its roots in the efforts to defeat the Japanese occupation during World War II, meaning that most of the dissident elites in the region were at one time members of the same political organization (the Anti-Fascist People's Freedom League [AFPFL]). These dissidents then launched a secessionist campaign almost simultaneously with Burmese independence. By contrast, elites in Shan state had been negotiating a peaceful path to independence during British rule, and were granted the right to pursue autonomy in the Burmese constitution (Charney 2009). Only after it became clear that the Burmese government would not allow a peaceful move toward independence in a timely fashion did the Shan rebel. As this occurred more than ten years after Burmese independence, the Shan

dissident elite mostly lacked an existing social network. Staniland (2014) views pre-war social networks as the key to subsequent cohesion. Organizations that have strong ties both between elites and rank-and-file, and between different horizontally equal units should tend to avoid splintering, while others should be plagued by it. It is not clear, however, that the AFPFL meets this criteria. Steinberg (2010) describes it as a loose collection of political organizations and strong men unified only by their opposition to foreign occupation and left-of-center political views.

The second key difference between Shan and Arakan is the robust drug trade in the former. A major reason why the KMT selected Shan State as a base of operations was the opportunity to reap profits from the opium trade (Cowell 2005). After the KMT was forced out of the region, Shan rebels largely filled this role. The emergence of at least one of the splinter organizations in the conflict is clearly related to the drug trade. The Shan United Revolutionary Army split from the SSA to focus on controlling drug production, rather than political goals. While I include a measure of lootable resources in my quantitative analyses which is not significant, the Shan case suggests that under certain conditions resources can provoke splintering.

5.5 Conclusion

In this chapter I test whether my theory extends to the realignment of existing rebels. As they often depend heavily on them for material, rebels should respond to the increased ethnic identification of dissident civilians in the wake of repression. Repression should be associated with increased instances of both splintering and alliance formations, as rebels reorganize around ethnic identity.

Due in part to the rarity of both categories of events, the statistical results in this chapter are not as robust as in previous chapters. Still, the findings are consistent with the theory

that repression triggers a cycle of reorganization around ethnic identity among rebels. I find that repression substantially increases the probability that existing rebel groups will splinter, as I predict in *H6*. Contrary to my expectation in *H7*, however, multi-ethnic groups are not more prone to this phenomenon than others. I also do not find support for *H8*, which predicts that splinter organizations should be likelier than others to draw support from a single ethnic group. A qualitative analysis of the Shan separatist movement in Burma suggests that my proposed mechanism does occur. However, it appears that there are other pathways to splintering that my current set of control variables do not capture. The results in my analysis of alliance formation are somewhat more favorable to my theory. Consistent with *H9*, I find that repression is associated with an increased probability of new mono-ethnic alliances. While I do not find the hypothesized negative relationship between repression and multi-ethnic alliances (*H10*), the relationship is null, suggesting that the two categories of alliances do emerge from different processes.

These results suggest that repression can trigger a realignment of existing rebel organizations around ethnic identity, though the robustness of the results is limited by the fact that both splintering and alliance formation are rare outcomes, and several other pathways to these outcomes appear to exist. Still, my proposed causal chain in this portion of the theory is rather long, with rebels responding to the way in which civilians respond to repression. To find significant results at all is perhaps surprising. Especially counterintuitive is the fact that both splintering and certain types of alliance formation are both related to repression. This suggests that repression does not necessarily alter the aggregate number of rebel groups in a conflict, but does reconfigure them. This contrasts with existing conceptions of rebel movement structure, which tend to view conflicts as trending consistently toward greater fragmentation or greater integration of rebels, but not both simultaneously (e.g. Kalyvas 2006; McLauchlin and Pearlman 2012).

Chapter 6

Conclusion

Why do some conflicts have multiple rebel groups, while in other cases dissidents form a single, cohesive group? As I discuss in Chapter 1, the importance of this question has been well established. Civil wars with multiple rebel groups last longer than others (Cunningham 2006; Akcinaroglu 2012), are less likely to end in a peace agreement (Cunningham, Gleditsch, and Salehyan 2009), have more bases on which conflict could recur (Atlas and Licklider 1999), and produce more fatalities. In short, civil wars with multiple rebel groups tend to be among the most severe conflicts. Yet we know little about the causes of such structures. No existing work addresses the formation of new rebel groups during conflicts, and existing work on the splintering and merging of existing rebel groups produces somewhat contradictory findings (see for example Christia's (2012) focus on power versus Staniland's (2014) emphasis on social structure). My dissertation seeks to fill this gap in the literature.

In Chapter 2 I articulate a theoretical framework of rebel movement politics from which I derive predictions about rebel movement structure. I start from the assumption that rebel groups are drawn from a broader pool of dissidents, which includes peaceful activists in addition to combatants. The loyalty of this dissident pool should be crucially important to

most rebel groups as a source of material support, recruits, and political leverage. Rebel groups thus have an incentive to be responsive to these individuals. Failure to represent the interests of these non-violent dissidents will leave a rebel group vulnerable to competition. New recruits may look to form a new rebel group rather than joining an existing one, and entrepreneurial members of existing rebel groups may form splinter organizations in hopes of capturing the supporters of their previous organization. Thus it is the interaction of the preferences of ordinary dissidents and the decisions of rebel elites that determines rebel movement structure.

One circumstance in which rebel elites may fail to adequately adapt to constituent preferences is the onset of repression. The threat of physical violence should increase the risk of being a non-violent dissident, and in turn decrease the *relative* risk of fighting. This should lead some individuals who previously declined to participate in rebellion to take up arms. This influx of new recruits will not always be a boon to existing rebel groups, however. Repression should also tend to induce greater levels of ethnic identification, as repression is often targeted disproportionately at certain ethnic groups, ethnic groups often have militias and political organizations that make them a useful basis for organizing defense against repression, and appeals to co-ethnic states is often an effective means of securing external support. Thus existing rebel groups may struggle to win over these new recruits or even maintain their existing support, unless they happen to already place strong emphasis on ethnic identity. Otherwise, new organizations making more credible ethnicity-based appeals are likely to attract the new recruits and steal civilian support from existing rebel groups. Repression should therefore be associated with both the formation of entirely new rebel groups, and of organizations that splinter from existing rebel groups. To offset the loss of capability that results from splintering, rebels should be open to alliances and mergers with co-ethnic groups. In short, repression should lead rebel movements to both grow and reorganize around ethnic identity.

I test the micro-level foundations of this theory in Chapter 3 using data from the Afrobarometer survey. Consistent with my expectations, I find that *individuals who have experienced an attack are more likely than others to express willingness to participate in violence, and to have participated in violence*, and are also *more likely to identify with their ethnic group* rather than their nation. Greater levels of repression at the national level are also associated with higher probabilities of ethnic identification. The results hold after performing coarsened exact matching, suggesting that there are not systematic observable differences between individuals who have been attacked and individuals who have not.

In Chapter 4 I examine the formation of new rebel groups during ongoing conflicts. As I predict, *the probability that new groups will enter a conflict increases in response to increases in repression*. Adding support for my theory is the finding that the *rebel groups which join ongoing conflicts are more likely than others to draw their support from a single ethnic group*. This suggests that the link between repression and the formation of new groups is in fact related to ethnic identity, rather than some alternative process. Contrary to my expectations, the ethnic diversity of a country does not limit the scope of my theory — new rebel groups form even at relatively high and low levels of ethnic diversity. I supplement these quantitative findings with a qualitative case study of the separatist movements in Burma. The initiation of the separatist movement in Shan State strongly supports my theory, as the rebellion emerged after a wave of abuses by government forces, and placed a strong emphasis on Shan identity. The Arakan case suggests several nuances, most notably the ability of religion to create divisions within ethnic groups.

I test my predictions regarding splintering and alliance formation among existing rebel groups in Chapter 5. Consistent with my hypotheses, I find that *increases in repression are associated with an increased risk of splintering* for existing rebel groups, though the relationship is not completely robust. I also find that *repression increases the probability of ethnically-homogeneous alliances* forming, while it does not have the hypothesized negative relationship

with the formation of multi-ethnic alliances. To assess the relative importance of splintering and alliance formation, I combine the processes in a single model, finding that *repression substantially increases the probability that multiple rebel groups will be present*. I do not find evidence for my prediction that splinter organizations should be more likely than others to draw their support from a single ethnic group. Burma again provides qualitative evidence in support of my theory, as the formation of the Shan State Independence Army appears to have been driven by a desire to provide stronger representation for the Shan ethnic group. The formation of alliances among the Shan rebels in response to a counterinsurgency campaign provides further support for my framework.

Generally the results are strongest among low-intensity conflicts over the central government, and in many cases are not statistically significant among conflict-years with greater than 1,000 fatalities nor among secessionist conflicts. The latter result is not entirely surprising in light of my theory. As I expect the presence of multiple rebel groups to generally be the product of combatants organizing around ethnicity or other highly-salient sub-national identities, it makes sense that such processes would be uncommon among secessionist movements as they tend to be homogenous on such dimensions. I thus view the null findings for secessionist movements as an indiction that the scope of my theory is limited to conflicts in which there is diversity within the rebel movement, and not as evidence that the theory is altogether false. It is less obvious why the finings would not hold among wars. One possibility is that there is an omitted variable related to opportunity. During periods of intense fighting, it may be difficult for non-violent dissidents to mobilize new rebel groups, and doing so is likely less attractive during such phases of the conflict. Similarly, splintering and realigning may be especially risky during heavy fighting, and more likely during less intense periods of fighting when the survival of individual rebels is less in question.

6.1 Implications

6.1.1 Theory

The central implication of this research is that repression can trigger a sectarian spiral, whereby previously non-violent individuals join the fighting, and existing rebels reorganize around ethnic identity. I find that repression increases the number of new rebel groups, splinter organizations, and ethnically-homogeneous alliances. Given the rarity of the latter, it is safe to assume that in most conflicts, repression increases the total number of rebel groups.[1] The level of repression against civilians explains a substantial portion of the variation in the number of rebel groups in a conflict, and I find multiple forms of evidence suggesting that the mechanism is related to increased ethnic identification.

This conclusion contrasts with some prominent existing works. Christia (2012) argues that rebel realignments are a function of the distribution of power between rebel coalitions and the government. When rebels are weaker than the government they will seek alliances. When rebels are stronger, coalitions tend to fragment so as to minimize the members of people with whom they must share private benefits. Her theory does not predict that splintering and certain types of alliance formation would be closely related, as I find them to be. This also contrasts with Kalyvas and Kocher (2007), who expects that rebel movements will generally become more cohesive over time. I show that the trend is contingent on repression. While Christia (2012) does expect that ethnicity should form an important component of the identity of new alliances, she believes such identities are deployed instrumentally. My individual-level findings suggest that the members and supporters of rebel groups may sincerely adopt such identities, however, suggesting that rebel elites cannot switch identities at will as Christia expects. My findings are consistent with the

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[1]A logit model (not reported) predicting which conflict years have multiple rebel groups without distinguishing between joiners, splinters, and alliances confirms this, as the level of repression is a strong predictor of multiple groups.

work of Lewis (2016), who argues that ethnicity is not important to the initial organization of rebellion, but ethnic rebellions are disproportionately likely to thrive. The findings here suggest that rebellions without a clear ethnic identity should be vulnerable to splintering and losing recruits to new, more explicitly ethnic rival organizations.

My findings also contrast those of Staniland (2014), who views internal social structure as the key determinant of rebel group cohesion. I find instead that an external factor, government repression, plays a surprisingly large role in shaping rebel movement structure. To some extent, however, this is a disagreement over the relative importance of the two factors. Staniland (2014) essentially assumes that repression will occur, and seeks to explain variation in resilience to it. Still, I find that repression is generally a strong predictor of splintering, while organizational characteristics are not.

This research also suggests a strong connection between the preferences of rank-and-file dissidents and the broader patterns of rebel organization. Existing work tends to conceptualize rebel groups as the private armies of warlords (Christia 2012), who maintain control either through personal loyalty or the provision of private benefits (Lichbach 1995; Weinstein 2007). This viewpoint suggests that rebel elites have little need to be responsive to their members. My findings that both individual preferences and rebel movement structure respond to repression suggests that ordinary rebels do in fact have a consequential amount of agency. When leaders fail to accommodate their preferences, rebel group members have exit options in the form of splinter organizations and entirely new rebel groups. This implies that there should be a surprising amount of accountability within rebel organizations. At the same time, the formation of new rebel groups is not uncommon, suggesting that rebel elites often fail to respond to their members.

6.1.2 Policy

This research also has several implications for policymakers. First, my findings should aid the policy community in forecasting the structure of rebel movements, and by extension the severity of civil wars. If civilians face significant violent threats such as repression, the efforts of entrepreneurial actors to promote ethnic or other sectarian identities are likely to succeed. Repressed ethnic groups that are not already represented by existing rebel groups will be likely to spawn new ones, existing rebel groups will be vulnerable to splintering, and any alliances that form are likely to be among co-ethnic rebel groups. Generally, the number of rebel groups should increase, and with it the severity of the conflict.

The understanding that rebel movement fragmentation is often driven by ethnic identity also suggests predictions regarding the patterns of violence and challenges in peace negotiations. If civil wars take on many actors because rebels mobilize around a variety of ethnicities, we might expect that there is some possibility for conflict between these rebel groups. While existing work has established that conflicts with multiple rebel groups are more severe than others, it has not explained why this is the case. Fighting between rebel groups could account for the pattern. If ethnicity is central to rebel mobilization, it may also become an important component of post-war negotiations. For example, rebel groups might demand a certain number of legislative seats, or legal protections for their ethnic group. The former creates the possibility of zero-sum bargaining between ethnic groups over a finite amount of government power.

This work also suggests that governments facing rebellion might be well-served to refrain from widespread repression, and instead target their counterinsurgency operations against individuals who have already joined a rebel group to the greatest extent possible. This is so because I show that repression increases individual willingness to participate in violence, potentially expanding the recruiting pool for rebel groups. On the other hand, these new recruits often form new rebel groups rather than joining existing ones, and repression

can also provoke splintering in existing rebel groups. Thus while it enlarges the dissident movement, repression also divides it. It is unclear whether this is a worthwhile trade-off for governments. I propose further research on this question in the following section.

For outside states and the broader international community, the implications are clearer — the increased severity associated with multiple rebel groups make them something to be avoided. International actors should thus endeavor to protect civilians during civil wars. While doing so has long been understood to be valuable from a humanitarian standpoint, my work suggests that the potential for such policies to limit conflict severity should place them in the self-interest neighboring states and any others likely to be affected by the fighting. It should be noted, however, that interventions of this sort are not foolproof. Notably, a UN effort to create a humanitarian zone in Srebrenica, Bosnia in 1995 actually facilitated the massacre of the civilians gathered there. These sorts of humanitarian efforts should thus only be undertaken with a sufficiently large deployment to ensure the security of the civilians under protection.

6.2   Future Research

While this project makes significant progress toward explaining rebel movement structure, numerous avenues for future research remain. These include both refinements to the analyses I present here, as well as new analyses suggested by my results.

The group formation chapter raises important questions about government strategy. My finding that repression tends to increase the number of rebel groups makes its use by governments a puzzle. Future work should address the question of why, given that repression increases the number of people willing to use violence, do governments elect to use it? It is possible that repression has some hidden benefit that outweighs the cost of additional rebel groups. My findings in Chapter 3 that repression is negatively related to voting suggests

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one possible answers — governments are essentially accepting an increase in the level of violence by dissidents in exchange for a reduction in the overall size of the dissident movement. Relatedly, while repression increases the number of individuals willing to use violence, it also provokes division among dissidents along ethnic lines. The latter consequence might be sufficiently desirable as part of a divide-and-conquer strategy to justify the former. Finally, the repression puzzle may be a result of incomplete information. It could be the case the repression offers some possibility of total defeat of the dissident movement, and governments accept the risk of inspiring new rebel groups in pursuit of this outcome. In the Arab Spring, for example, Bahrain used repression to quickly put down the opposition movement there. While the tactic backfired in Syria, the possibility of an outcome similar to Bahrain may have made it a worthwhile gamble.

Additionally, other processes affecting rebel movement structure should be explored. I do not claim to provide a complete account of rebel movement structure, but rather a probabilistic theory of what I believe to be one of the most common pathways to multiple rebel groups. Other factors undoubtedly operate in some cases. For example, many instances of splintering occur not over ethnic lines, but over a divide between moderates who wish to participate in a peace process, and hardliners who wish to continue fighting. While this phenomenon has received some attention in the context of negotiating peace agreements (Stedman 1997), there is little work that addresses the question of why and under what conditions it occurs, nor the question of what implications this form of splintering has for the type of violence that ensues. For example, are splinter groups more willing to target civilians than others? I argue that attracting external support may be one reason for increased ethnic identification following repression, but do not explore external sponsorship in detail. In some cases external states may have a substantial amount of agency, however, which merits greater attention. For example, the Gulf Cooperation Council has repeatedly sought to establish an alliance of relatively moderate Sunni rebel groups in Syria. Future research could ask: under what conditions do external actors aid co-ethnic rebel groups?

Finally, future work should explore factors that run in the opposite direction, asking how rebel groups attain cohesion. The Latin American rebellions are generally much more cohesive than those in other regions. The explanation could relate to my theory, perhaps being the result of more fluid ethnic identities than are seen in most parts of the world. Alternatively, the explanation might involve the extreme levels of external sponsorship seen during the Cold War, or some as-yet-undiscovered factor.

There are also several ways in which the research presented here could be improved. The individual-level analysis could be refined on several dimensions in future work. One limitation of the existing results is their inability to identify the source of repression. It would be possible to make inferences about the likely perpetrator by matching the survey results, which include the respondent's city, to a geocoded dataset of battles, such as ACLED (Raleigh 2012). If most of the violent events in a particular locale are perpetrated by the government, it might be reasonable to assume that it is the source of most attacks on individuals in that area. By contrast, this would not be a safe assumption in territory that is clearly controlled by a rebel group. The use of an external conflict data source could also address the issue of temporal ordering. The Afrobarometer data does not specify whether individuals were attacked before or after they engaged in violence themselves. With geocoded conflict data one could examine whether the average probability of participation in violence or of ethnic identification in a geographic area changes after violent events there. Finally, a more robust method of causal inference that can account for unobservable sources of bias would enhance the validity of the results. While finding a valid instrument at the individual level may be difficult, it should be possible to instrument for the country-level human rights measure.

While general surveys such as the Afrobarometer provide useful data on individual attitudes toward violence and ethnicity, they do not provide tests of every element of my theory. Original survey or experimental work exploring individual attitudes towards rebel

groups would potentially strengthen my arguments regarding the connection between individual attitudes and rebel movement structure. For instance, a finding that individuals who experience repression from the government become less supportive of existing rebel groups would provide strong support for my claim that dissident civilians are key drivers of change to the configuration of the rebel movement.

The analysis of new rebel group formation could also benefit from several improvements. Adding a causal inference technique to the analysis would greatly enhance the validity of the results. While I did not find oil revenue to be a viable instrumental variable, it is possible that a suitable proxy for repression exists, such as colonial history. An alternative option could be panel data techniques that facilitate causal inference without the need for exogenous instruments (Kim and Frees 2007). A more detailed analysis of the attributes of the rebel groups that join ongoing conflicts could also lend further support to my theoretical framework. While the finding that joining groups are more likely than others to draw support from a single ethnic group lends credibility to my argument, an examination of the platform and recruiting appeals of these groups could strengthen the argument that group formation is motivated by a desire to place greater emphasis on ethnic identity. Relatedly, the relationships between newly formed rebel groups and others should be explored. Enhanced ethnic identification might lead to conflict between rebel groups of differing ethnicities. Alternatively, competition for civilian support might produce conflict between co-ethnic rebel groups.

The analysis of rebel group realignment also has room for improvement. While the findings for both splintering and alliance formation are mostly consistent with my predictions, the results are less robust than would be ideal. This is likely due in part to the rarity of both outcomes. This could likely be remedied, however, as the current analysis only looks at the most extreme instances of splintering and merging — those which result in the formation of new rebel organizations with distinct names. A less extreme, and likely more prevalent

form of splintering is the loss of membership, either to rival rebel groups, or to desertion. While this phenomenon would be quite difficult to measure for the entire post-World War II sample, it may be possible to track changes in rebel group membership for a smaller sample of conflicts. With respect to alliances, I consider only cases where formerly independent rebel groups merge to a significant degree. There are undoubtedly many instances of meaningful cooperation between rebel groups that fall short of formal integration. Indeed, a forthcoming data project (Asal and Rethemeyer 2015) should facilitate analysis of such behavior. Including these less extreme examples of splintering and alliance formation should mitigate concerns about the rarity of these outcomes. The concerns from the group formation chapter also apply, as this analysis would benefit from a causal inference strategy and closer inspection of the rationale that rebel elites use to justify the creation of their new groups.

Finally, the severity of conflicts that experience this cycle of increased ethnic identification suggests a need for research on ways to reverse the process. Increased sectarianism can increase conflict severity, and as we have seen in places such as Afghanistan and the Democratic Republic of the Congo, can hinder the prospects for lasting peace. Preventing repression is an obvious policy recommendation of this research. Yet, that is more easily said than done, and is of little use in cases where it has already occurred. The most commonly cited factor that can increase national unity is external conflict (Tilly 1992; Gibler, Hutchison, and Miller 2012). Obviously, however, this is not a tenable solution. A few studies have suggested that economic development might promote national identities at the expense of ethnic ones (Miguel 2004), but much more research is needed in this area.

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Appendix A Supplementary Materials

A.1 Supplementary Materials for Chapter 2

Coding Rules for Rebel Origin Data

I collect data on the origins of rebel groups. The information is drawn from a variety of sources including news articles, secondary sources such as conflict histories, and the Uppsala Conflict Data Program Encyclopedia. As it is often difficult to discern the origins of rank-and-file members, I code group origins on the basis of their leadership. Whatever social role the leaders of a rebel group had prior to their participation in the group constitutes its origin. If rebel leaders came from multiple backgrounds, I attempt to discern the largest source. However, if any rebel leaders came from another rebel organization, the group is coded as a splinter or alliance.

The categories of origin groups were derived inductively, so as to exhaustively capture all real world possibilities. The categories are meant to be descriptive, and allow for maximum flexibility rather than imposing a particular theoretical framework on the data. The categories are described below:

- **Splinter** These organizations emerge from pre-existing rebel groups, and differ from their predecessor in structure (i.e. a group that simply changes its name or objectives would not be coded as a new group). All groups coded as splinter organizations by UCDP are included here, as well as several others I identify. Most splinter organizations are factions of existing rebel groups that deliberately choose to break away and form a separate group (e.g. Red Flag faction of the Communist Party of Burma), though a few were expelled by the parent organization. Also included are groups that form from the remnants of rebel groups who were recently inactive due to defeat or demobilization, yet do not replicate the parent organization to such an extent as to be a direct continuation.

- **Alliance** These organizations are coalitions of two or more pre-existing violent groups. All groups coded by UCDP as alliances are placed in this category, as well as many other not identified by UCDP. Groups that were inactive for a period before the current round of fighting are considered alliances.

- **Militia** Militias are groups that are armed but have few or no political aims. In

practice, this means groups that were previously violent, but do not appear in a UCDP conflict against the government. Most often these groups form to defend an ethnic group or community, but previously had no aims beyond that.

- **Regime Military Faction** Military factions are a portion of the state's armed forces acting against their own government without authorization. The vast majority of coup attempts derive from military factions, but a substantial number of sustained rebellions do as well. Military commanders who leave the government and recruit soldiers from outside the military are also included here. I consider cases where a government official uses government forces to challenge for control of the regime a coup, while a government official using non-governmental forces is a rebellion.

- **Civilian Government** These organizations have leadership who previously served in the government. In some cases the rank-and-file of these groups may come from the government as well, for instance if the police turn against the government. In other cases government leaders mobilize their party or other social connections to build a rebel group. Regional governments that initiate secessionist movements are also included here.

- **Political Party** Political parties are defined broadly here. Any organization that has clear political aims but is not initially violent is included. Organizations that produce programmatic platforms and contest elections are unsurprisingly included. However, as many civil wars occur under regimes that are not particularly democratic, participation in elections is not a requisite for this category. Some groups attempt to run in elections and resort to arms after being barred from doing so. Others, including many Communist parties, have most of the attributes of a political party but turn violent without first attempting to work through non-violent channels. Neither is a broad platform required; special interest/advocacy groups focusing on a narrow set of issues are also included. However, single-issue organizations advocating secession are placed in a separate category.

- **Religious Organization** Organizations that primarily exist to promote a certain religion are coded as religious organizations. These differ from political parties with religious platforms in that they generally include clergy or individuals claiming religious authority in a less formal capacity, and running candidates in elections is at most a secondary consideration. The Muslim Brotherhood is an exemplar of this category.

- **Foreign Sponsorship** In a few cases rebel groups emerged through the actions of an outside state, rather than from an organization within a country. This category includes cases in which rebel elites received training in a foreign country, and cases where an outside government played the predominant role in organizing individuals into a rebel group.

- **Student Organization** Student organizations are relatively self-explanatory. They generally originate on university campuses, and draw a majority of their members from the student population.

- **Transnational Organization** Transnational organizations are non-state actors that originated in a different state, and played a crucial role in establishing the rebel group. In some cases this entails directly establishing a chapter of the organization in a new country, as is the case for al-Qaeda cells. This category also includes cases where fighters from one conflict move into a neighboring country and continue fighting there.

- **Economic Organization** These organizations originally existed for economic purposes, broadly defined. This primarily includes criminal organizations and labor unions.

- **Protests** A small number of rebel groups are not traceable to any pre-existing organization. Instead, they seem to be the result of protesters or rioters banding together to form a rebellion through a very organic process.

A.2   Supplementary Materials for Chapter 3

Responses by Country

Country	Wave 6	Wave 5	Wave 4	Wave 3
Algeria	1200	1204	0	0
Benin	1200	1200	1200	1198
Botswana	1200	1200	1200	1200
Burkina Faso	1200	1200	1200	0
Burundi	1200	1200	0	0
Cameroon	1182	1200	0	0
Cape Verde	1200	1208	1264	1256
Cote d'Ivoire	1199	1200	0	0
Egypt	1198	1190	0	0
Gabon	1198	0	0	0
Ghana	2400	2400	1200	1197
Guinea	1200	1200	0	0
Kenya	2397	2399	1104	1278
Lesotho	1200	1197	1200	1161
Liberia	1199	1199	1200	0
Madagascar	1200	1200	1350	1350
Malawi	2400	2407	1200	1200
Mali	1200	1200	1232	1244
Mauritius	1200	1200	0	0
Morocco	1200	1196	0	0
Mozambique	2400	2400	1200	1198
Namibia	1200	1200	1200	1200
Niger	1200	1199	0	0
Nigeria	2400	2400	2324	2363
São Tomé and Príncipe	1196	0	0	0
Senegal	1200	1200	1200	1200
Sierra Leone	1191	1190	0	0
South Africa	2390	2399	2400	2400
Sudan	1200	1199	0	0
Swaziland	1200	1200	0	0
Tanzania	2386	2400	1208	1304
Togo	1200	1200	0	0
Tunisia	1200	1200	0	0
Uganda	2400	2400	2431	2400
Zambia	1199	1200	1200	1200
Zimbabwe	2400	2400	1200	1048

Table A.1: Survey Responses by Country and Wave

Ordinal Models

	M1 Violence (Used)	M2 Ethnic ID
Human Rights	0.06	−0.31***
	(0.22)	(0.07)
Ethnolinguistic Fractionalization	−0.11	5.23**
	(2.53)	(1.95)
Ethnolinguistic Fractionalization^2	0.59	−4.42*
	(2.58)	(1.89)
Polity	−0.04	0.06***
	(0.04)	(0.01)
Civil War	−0.19	0.25***
	(0.14)	(0.04)
Separatist War	−0.30	0.59
	(0.48)	(0.30)
Attacked	0.82***	0.07**
	(0.05)	(0.03)
Intimidated	0.13***	0.10***
	(0.04)	(0.02)
Employed	−0.03	−0.04*
	(0.04)	(0.02)
Primary Education	0.09*	0.15***
	(0.04)	(0.02)
Urban	−0.14**	−0.10***
	(0.05)	(0.02)
Ruling Party Supporter	−0.09*	−0.02
	(0.04)	(0.02)
Age	−0.19***	−0.02
	(0.04)	(0.02)
Female	−0.25***	0.08***
	(0.04)	(0.02)
Log Likelihood	-15231.43	-78284.32
AIC	30502.85	156608.63
BIC	30673.86	156789.50
Num. obs.	38191	62522
Groups (Ethnic)	452	595
Groups (Country)	26	27
Variance: Ethnic: (Intercept)	0.30	0.19
Variance: Country: (Intercept)	0.32	0.33

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$

Table A.2: Multilevel Ordinal Models of Attitudes Toward Violence and Ethnic Identity

A.3 Supplementary Materials for Chapter 4

Group Formation by Conflict Severity

	Model 1	Model 2	Model 3	Model 4
(Intercept)	−3.34***	6.87	6.90	5.12
	(0.16)	(3.52)	(3.53)	(20303.10)
Change in Human Rights	−1.44***	−1.61**	−2.23	−2.12**
	(0.40)	(0.56)	(1.48)	(0.77)
Ethnolinguistic Fractionalization		0.06	0.20	
		(0.99)	(1.05)	
Human Rights X Fractionalization			1.08	
			(2.42)	
Prev. Multi-rebel		0.19	0.20	−1.08*
		(0.47)	(0.47)	(0.46)
Contiguous Civil War		−0.07	−0.07	0.33
		(0.16)	(0.16)	(0.18)
Secessionist		−1.20*	−1.19*	
		(0.51)	(0.51)	
Logged Area		−0.23	−0.23	
		(0.22)	(0.22)	
Mountainous Terrain		−0.01	−0.01	
		(0.01)	(0.01)	
Logged GDP per capita		−0.27	−0.27	
		(0.27)	(0.27)	
Logged Population		−0.47	−0.46	
		(0.30)	(0.30)	
Polity		−0.01	−0.01	
		(0.04)	(0.04)	
Post Cold War		−0.39	−0.39	
		(0.46)	(0.46)	
Lootable Resource Sites		0.00	0.00	
		(0.01)	(0.01)	
AIC	371.11	226.33	228.13	469.30
BIC	381.29	287.29	293.78	1071.29
Log Likelihood	-183.55	-100.16	-100.06	-114.65
Deviance	367.11	200.33	200.13	229.30
Num. obs.	1202	804	804	1115

$^{***}p < 0.001, ^{**}p < 0.01, ^{*}p < 0.05$

Table A.3: Logit Models of Rebel Group Formation (Conflict-Years with < 1000 Fatalities)

	Model 5	Model 6	Model 7	Model 8
(Intercept)	−3.07***	3.78	0.63	50.69
	(0.25)	(5.74)	(6.49)	(20670.34)
Change in Human Rights	−1.20*	−1.25	−14.67*	−1.16
	(0.60)	(0.74)	(5.80)	(1.08)
Ethnolinguistic Fractionalization		0.35	2.45	
		(2.10)	(2.52)	
Human Rights X Fractionalization			21.39*	
			(8.86)	
Prev. Multi-rebel		0.13	0.13	−0.74
		(0.75)	(0.77)	(0.66)
Contiguous Civil War		−0.03	−0.05	0.31
		(0.19)	(0.19)	(0.34)
Secessionist		−2.00	−1.36	
		(1.24)	(1.19)	
Logged Area		−0.50	−0.18	
		(0.38)	(0.43)	
Mountainous Terrain		0.01	0.01	
		(0.01)	(0.01)	
Logged GDP per capita		−0.79	−0.95	
		(0.55)	(0.59)	
Logged Population		0.60	0.36	
		(0.59)	(0.64)	
Polity		0.08	0.08	
		(0.08)	(0.08)	
Post Cold War		0.08	0.52	
		(0.71)	(0.77)	
Lootable Resource Sites		−0.01	−0.00	
		(0.02)	(0.02)	
AIC	153.22	107.02	101.09	208.64
BIC	161.18	153.55	151.21	453.99
Log Likelihood	-74.61	-40.51	-36.54	-41.32
Deviance	149.22	81.02	73.09	82.64
Num. obs.	395	265	265	363

$^{***}p < 0.001, ^{**}p < 0.01, ^{*}p < 0.05$

Table A.4: Logit Models of Rebel Group Formation (Conflict-Years with > 1000 Fatalities)

Group Formation by Conflict Type

	Model 9	Model 10	Model 11	Model 12
(Intercept)	−2.78***	4.87	4.56	67.43
	(0.16)	(3.59)	(3.68)	(8748.94)
Change in Human Rights	−1.37***	−1.81**	−4.04*	−1.98**
	(0.37)	(0.57)	(1.57)	(0.69)
Ethnolinguistic Fractionalization		0.27	0.93	
		(1.03)	(1.15)	
Human Rights X Fractionalization			4.13	
			(2.57)	
Intensity Level		−0.28	−0.32	−0.48
		(0.43)	(0.44)	(0.47)
Prev. Multi-rebel		0.19	0.20	−0.82*
		(0.43)	(0.43)	(0.40)
Contiguous Civil War		−0.13	−0.13	0.39*
		(0.12)	(0.13)	(0.18)
Logged Area		0.00	0.01	
		(0.21)	(0.21)	
Mountainous Terrain		0.01	0.01	
		(0.01)	(0.01)	
Logged GDP per capita		−0.70*	−0.69*	
		(0.31)	(0.31)	
Logged Population		−0.18	−0.22	
		(0.29)	(0.29)	
Polity		0.03	0.03	
		(0.04)	(0.04)	
Post Cold War		−0.40	−0.36	
		(0.43)	(0.44)	
Lootable Resource Sites		−0.02	−0.01	
		(0.01)	(0.01)	
AIC	354.98	231.21	230.42	358.27
BIC	364.25	285.50	288.88	631.67
Log Likelihood	-175.49	-102.61	-101.21	-119.13
Deviance	350.98	205.21	202.42	238.27
Num. obs.	760	481	481	704

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$

Table A.5: Logit Models of Rebel Group Formation (Central Govt Conflicts Only)

	Model 13	Model 14	Model 15	Model 16
(Intercept)	−4.08***	165.86	225.28	−113.00
	(0.27)	(126.59)	(2935.87)	(9945.68)
Change in Human Rights	0.36	−2.16	−2.48	0.29
	(1.48)	(2.78)	(6.04)	(1.79)
Ethnolinguistic Fractionalization			−49.52	
			(1369.31)	
Human Rights X Fractionalization			1.39	
			(21.37)	
Intensity Level		0.02	−0.05	1.80
		(1.23)	(1.26)	(1.31)
Prev. Multi-rebel		−0.67	−0.52	−2.10*
		(1.20)	(1.18)	(0.98)
Contiguous Civil War		−0.21	−0.26	−0.04
		(0.41)	(0.40)	(0.25)
Logged Area		−13.94	−18.96	
		(10.30)	(280.41)	
Mountainous Terrain		−0.05	0.39	
		(0.13)	(14.02)	
Logged GDP per capita		−2.26	−0.59	
		(2.19)	(2.81)	
Logged Population		−0.16	−2.29	
		(2.47)	(3.81)	
Polity		−1.05	−0.93	
		(0.73)	(0.73)	
Post Cold War		1.05	1.16	
		(1.54)	(1.53)	
Lootable Resource Sites		0.38	0.75	
		(0.31)	(10.96)	
AIC	146.24	86.28	89.43	227.51
BIC	155.70	138.80	150.70	567.07
Log Likelihood	-71.12	-31.14	-30.72	-40.75
Deviance	142.24	62.28	61.43	81.51
Num. obs.	837	588	588	774

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$

Table A.6: Logit Models of Rebel Group Formation (Secessionist Conflicts Only)

Group Composition by Conflict Severity

	M17 Monoethnic	M19 Multiethnic	M19 Nonethnic
(Intercept)	0.18	−4.57***	0.05
	(0.32)	(0.91)	(0.34)
Joiner	0.61	−0.87	−0.41
	(0.35)	(0.69)	(0.39)
Secessionist	1.24***	−1.15	−1.00*
	(0.34)	(0.60)	(0.39)
Previously Active	0.25	0.37	−0.60
	(0.39)	(0.56)	(0.49)
Ethnlinguistic Fractionalization	0.02	3.36**	−1.12*
	(0.50)	(1.20)	(0.55)
Transnational	0.22	0.82	−0.67*
	(0.28)	(0.48)	(0.33)
AIC	323.06	143.25	274.83
BIC	344.54	164.73	296.31
Log Likelihood	-155.53	-65.62	-131.41
Deviance	311.06	131.25	262.83
Num. obs.	265	265	265

$^{***}p < 0.001, ^{**}p < 0.01, ^{*}p < 0.05$

Table A.7: Logit Models of Rebel Group Ethnic Composition (Conflict-Years with < 1000 Fatalities)

	M20 Monoethnic	M21 Multiethnic	M22 Nonethnic
(Intercept)	0.23	-2.37^*	-0.45
	(0.64)	(1.02)	(0.72)
Joiner	16.75	-16.91	-16.64
	(1551.69)	(2460.43)	(2537.11)
Secessionist	0.61	-0.98	0.14
	(0.73)	(0.97)	(0.97)
Previously Active	-1.38	1.35	1.28
	(1.14)	(1.39)	(1.36)
Ethnlinguistic Fractionalization	1.77	-0.64	-2.57
	(1.25)	(1.59)	(1.68)
Transnational	-0.88	2.11^*	-0.79
	(0.69)	(1.00)	(0.94)
AIC	73.63	53.60	52.14
BIC	86.00	65.97	64.50
Log Likelihood	-30.82	-20.80	-20.07
Deviance	61.63	41.60	40.14
Num. obs.	58	58	58

$^{***}p < 0.001, ^{**}p < 0.01, ^*p < 0.05$

Table A.8: Logit Models of Rebel Group Ethnic Composition (Conflict-Years with > 1000 Fatalities)

Group Composition by Conflict Type

	M23 Monoethnic	M24 Multiethnic	M25 Nonethnic
(Intercept)	0.22	-3.62^{***}	-0.13
	(0.30)	(0.67)	(0.32)
Joiner	0.79^*	-1.06	-0.51
	(0.36)	(0.66)	(0.40)
Previously Active	-0.16	0.42	-0.06
	(0.42)	(0.56)	(0.49)
Ethnlinguistic Fractionalization	0.23	2.06^*	-1.16^*
	(0.50)	(0.94)	(0.55)
Transnational	0.10	0.98^*	-0.71^*
	(0.30)	(0.45)	(0.35)
AIC	295.09	149.52	249.65
BIC	312.08	166.51	266.64
Log Likelihood	-142.54	-69.76	-119.82
Deviance	285.09	139.52	239.65
Num. obs.	221	221	221

$^{***}p < 0.001$, $^{**}p < 0.01$, $^*p < 0.05$

Table A.9: Logit Models of Rebel Group Ethnic Composition (Central Govt Conflicts Only)

	M26 Monoethnic	M27 Multiethnic	M28 Nonethnic
(Intercept)	1.27	-5.03^{**}	-0.68
	(0.85)	(1.79)	(0.95)
Joiner	-0.27	-15.54	0.63
	(0.90)	(2225.88)	(0.92)
Previously Active	1.31	-0.04	-16.66
	(1.08)	(1.17)	(1605.88)
Ethnlinguistic Fractionalization	0.30	2.06	-1.59
	(1.22)	(2.15)	(1.46)
Transnational	-0.04	1.55	-0.70
	(0.53)	(1.13)	(0.65)
AIC	102.78	51.33	76.66
BIC	115.90	64.46	89.78
Log Likelihood	-46.39	-20.67	-33.33
Deviance	92.78	41.33	66.66
Num. obs.	102	102	102

$^{***}p < 0.001, ^{**}p < 0.01, ^{*}p < 0.05$

Table A.10: Logit Models of Rebel Group Ethnic Composition (Secessionist Conflicts Only)

A.4 Supplementary Material for Chapter 5

Splintering by Conflict Type

	Model 1	Model 2	Model 3
Change in Human Rights	−2.79	−5.17*	−3.44
	(1.82)	(2.30)	(2.11)
Multi-ethnic Group	0.64	0.33	0.82
	(0.86)	(1.16)	(0.61)
Polity		$0.14^\dagger$	
		(0.08)	
Logged GDPpc		−0.73	
		(0.83)	
Logged Population		−0.02	
		(0.37)	
Logged Area		0.05	
		(0.50)	
Ethnolinguistic Fractionalization		1.99	
		(2.54)	
Lootable Resource Sites		$-0.02^\dagger$	
		(0.01)	
Intensity Level		−18.28***	
		(0.73)	
Transnational Group			1.58
			(1.02)
Political Wing			−0.32
			(0.71)
Stronger than Gov.			0.97
			(1.32)
AIC	98.68	37.12	78.12
R^2	0.00	0.02	0.01
Max. R^2	0.10	0.05	0.09
Num. events	12	4	9
Num. obs.	968	683	900
Missings	393	678	461
PH test	0.00	0.00	0.61

$***p < 0.001, **p < 0.01, *p < 0.05, ^\dagger p < 0.1$

Table A.11: Cox Proportional Hazard Models of Rebel Group Splintering (Central Govt Conflicts Only)

	Model 4	Model 5	Model 6
Change in Human Rights	$-3.00^{\dagger}$	-3.30	-3.28^{*}
	(1.63)	(2.56)	(1.62)
Multi-ethnic Group	-16.88^{***}	-15.98^{***}	-20.33^{***}
	(0.75)	(1.68)	(1.00)
Polity		-0.04	
		(0.05)	
Logged GDPpc		0.29	
		(0.32)	
Logged Population		-0.31	
		(0.39)	
Logged Area		0.25	
		(0.60)	
Ethnolinguistic Fractionalization		-1.99	
		(1.53)	
Lootable Resource Sites		0.01	
		(0.02)	
Intensity Level		-0.62	
		(1.77)	
Transnational Group			-1.34
			(1.49)
Political Wing			-20.90^{***}
			(0.43)
Stronger than Gov.			
AIC	47.13	56.15	41.44
R^2	0.00	0.01	0.01
Max. R^2	0.05	0.05	0.05
Num. events	8	8	8
Num. obs.	940	816	840
Missings	356	480	456
PH test	1.00	1.00	1.00

$^{***}p < 0.001, ^{**}p < 0.01, ^{*}p < 0.05, ^{\dagger}p < 0.1$

Table A.12: Cox Proportional Hazard Models of Rebel Group Splintering (Secessionist Conflicts Only)

Splinter Group Ethnicity by Conflict Type

	M7 Monoethnic	M8 Multiethnic	M9 Nonethnic
(Intercept)	0.18	-3.65^{***}	-0.05
	(0.30)	(0.67)	(0.32)
Splinter	0.68	0.27	-1.25
	(0.51)	(0.66)	(0.65)
Joiner	0.87^*	-1.05	-0.61
	(0.37)	(0.67)	(0.41)
Previously Active	-0.49	0.25	0.51
	(0.50)	(0.66)	(0.57)
Ethnlinguistic Fractionalization	0.18	2.08^*	-1.14^*
	(0.51)	(0.94)	(0.56)
Transnational	0.07	1.00^*	-0.70^*
	(0.30)	(0.45)	(0.36)
AIC	294.25	150.68	247.09
BIC	314.61	171.04	267.45
Log Likelihood	-141.12	-69.34	-117.54
Deviance	282.25	138.68	235.09
Num. obs.	220	220	220

$^{***}p < 0.001$, $^{**}p < 0.01$, $^*p < 0.05$

Table A.13: Logit Models of Rebel Group Ethnic Composition (Central Govt Conflicts Only)

	M10 Monoethnic	M11 Multiethnic	M12 Nonethnic
(Intercept)	1.29	−5.12**	−0.64
	(0.85)	(1.77)	(0.95)
Splinter	−0.26	1.04	−0.60
	(0.70)	(0.95)	(1.13)
Joiner	−0.32	−15.24	0.53
	(0.91)	(2241.35)	(0.94)
Previously Active	1.46	−0.56	−16.33
	(1.15)	(1.25)	(1604.27)
Ethnlinguistic Fractionalization	0.27	1.98	−1.54
	(1.22)	(2.12)	(1.46)
Transnational	0.03	1.34	−0.64
	(0.54)	(1.14)	(0.67)
AIC	104.23	52.11	78.06
BIC	119.92	67.80	93.75
Log Likelihood	-46.12	-20.06	-33.03
Deviance	92.23	40.11	66.06
Num. obs.	101	101	101

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$

Table A.14: Logit Models of Rebel Group Ethnic Composition (Secessionist Conflicts Only)

Alliance Formation by Conflict Intensity

	M13 Mono-ethnic	M14 Multi-ethnic	M15 All
(Intercept)	1.36	−5.41	2.46
	(4.62)	(27.55)	(3.17)
Change in Human Rights	−1.71*	0.09	−1.47*
	(0.83)	(3.05)	(0.66)
Ethnolinguistic Fractionalization	0.23	32.86	0.44
	(1.43)	(48.98)	(1.10)
Prev. Multi-rebel	−0.71	−0.23	0.06
	(1.18)	(1.81)	(0.62)
Contiguous Civil War	−0.05	0.86	−0.13
	(0.22)	(0.90)	(0.19)
Logged GDP per capita	−0.25	−0.25	−0.44
	(0.42)	(1.29)	(0.30)
Logged Population	−0.37	−2.66	−0.28
	(0.33)	(2.71)	(0.24)
Polity	−0.04	0.37	0.01
	(0.06)	(0.26)	(0.04)
AIC	109.48	35.86	166.05
BIC	152.71	79.10	209.29
Log Likelihood	-45.74	-8.93	-74.02
Deviance	91.48	17.86	148.05
Num. obs.	901	902	902

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$, $^{\dagger}p < 0.1$

Table A.15: Rare Events Logit Models of Alliance Formation (Conflict-Years with < 1000 Fatalities Only)

	M16 Mono-ethnic	M17 Multi-ethnic	M18 All
(Intercept)	−1.57	17.00	0.16
	(6.88)	(32.36)	(6.74)
Change in Human Rights	0.09	−1.22	−0.61
	(2.01)	(1.72)	(1.44)
Ethnolinguistic Fractionalization	1.39	−3.73	2.84
	(2.71)	(17.46)	(2.76)
Prev. Multi-rebel	0.06	0.58	0.45
	(1.17)	(1.55)	(0.79)
Contiguous Civil War	0.12	0.19	0.08
	(0.23)	(0.82)	(0.19)
Logged GDP per capita	−0.46	−0.60	−0.54
	(0.63)	(3.07)	(0.60)
Logged Population	0.08	−1.10	−0.18
	(0.54)	(2.29)	(0.49)
Polity	0.02	0.08	−0.04
	(0.10)	(1.90)	(0.11)
AIC	65.67	36.54	84.40
BIC	99.24	70.11	117.97
Log Likelihood	-23.84	-9.27	-33.20
Deviance	47.67	18.54	66.40
Num. obs.	308	308	308

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$, $^{\dagger}p < 0.1$

Table A.16: Rare Events Logit Models of Alliance Formation (Conflict-Years with > 1000 Fatalities Only)

Alliance Formation by Conflict Type

	M19 Mono-ethnic	M20 Multi-ethnic	M21 All
(Intercept)	−5.22	1.66	−0.70
	(5.92)	(13.00)	(3.77)
Change in Human Rights	−1.37†	−0.96	−0.93
	(0.82)	(1.16)	(0.63)
Ethnolinguistic Fractionalization	1.71	7.91	1.24
	(1.87)	(10.50)	(1.13)
Intensity Level	0.40	0.31	0.09
	(0.74)	(0.94)	(0.52)
Prev. Multi-rebel	−0.17	0.10	0.48
	(0.86)	(0.89)	(0.52)
Contiguous Civil War	−0.01	−0.07	−0.09
	(0.22)	(0.29)	(0.16)
Logged GDP per capita	0.06	−1.11	−0.23
	(0.51)	(1.10)	(0.34)
Logged Population	−0.07	−0.43	−0.20
	(0.41)	(0.81)	(0.28)
Polity	−0.07	0.01	−0.03
	(0.09)	(0.11)	(0.05)
AIC	96.23	68.48	162.22
BIC	139.11	111.38	205.10
Log Likelihood	-38.11	-24.24	-71.11
Deviance	76.23	48.48	142.22
Num. obs.	538	539	538

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$, $^{\dagger}p < 0.1$

Table A.17: Rare Events Logit Models of Alliance Formation (Central Govt Conflicts Only)

	M22 Mono-ethnic	M23 All
(Intercept)	4.59	2.38
	(8.60)	(5.79)
Change in Human Rights	−2.62	−2.02
	(2.02)	(1.39)
Ethnolinguistic Fractionalization	−0.58	−0.79
	(3.24)	(2.32)
Intensity Level	0.32	0.04
	(1.14)	(1.15)
Contiguous Civil War	0.12	−0.09
	(0.29)	(0.25)
Logged GDP per capita	−0.47	−0.69
	(0.60)	(0.54)
Logged Population	−0.51	−0.02
	(0.65)	(0.44)
Polity	0.02	0.01
	(0.07)	(0.06)
AIC	79.58	91.03
BIC	120.16	131.63
Log Likelihood	-30.79	-36.52
Deviance	61.58	73.03
Num. obs.	671	672

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$, $^{\dagger}p < 0.1$

Table A.18: Rare Events Logit Models of Alliance Formation (Secessionist Conflicts Only)

Combined Processes by Conflict Intensity

	M24	M25	M26
(Intercept)	−2.74	−2.40	−2.23
	(1.68)	(1.72)	(1.65)
Change in Human Rights	−1.23*	−1.22*	
	(0.54)	(0.53)	
Human Rights			−0.79***
			(0.23)
Ethnolinguistic Fractionalization	−0.82	−5.44***	−5.02**
	(0.52)	(1.58)	(1.56)
Ethnolinguistic Fractionalization^2		5.15**	4.60**
		(1.67)	(1.65)
Prev. Multi-rebel	3.30***	3.25***	3.13***
	(0.23)	(0.24)	(0.23)
Contiguous Civil War	−0.21*	−0.18*	−0.11
	(0.08)	(0.08)	(0.08)
Logged GDP per capita	−0.00	0.05	0.04
	(0.14)	(0.14)	(0.14)
Logged Population	−0.04	−0.14	−0.22
	(0.15)	(0.15)	(0.15)
Logged Area	0.09	0.14	0.12
	(0.12)	(0.12)	(0.12)
Post Cold War	0.22	0.13	0.25
	(0.25)	(0.25)	(0.25)
AIC	544.00	536.48	566.62
BIC	596.35	593.59	624.86
Log Likelihood	-261.00	-256.24	-271.31
Deviance	522.00	512.48	542.62
Num. obs.	862	862	947

$^{***}p < 0.001$, $^{**}p < 0.01$, $^{*}p < 0.05$

Table A.19: Logit Models of Multi-Rebel Conflict-Years (< 1000 Fatalities Only)

	M27	M28	M29
(Intercept)	-1.44	-1.35	-2.24
	(3.16)	(3.14)	(3.12)
Change in Human Rights	-0.97	-0.98	
	(0.61)	(0.61)	
Human Rights			-0.79
			(0.45)
Ethnolinguistic Fractionalization	1.09	-2.51	1.51
	(1.14)	(4.63)	(4.31)
Ethnolinguistic Fractionalization^2		3.53	-0.25
		(4.38)	(4.14)
Prev. Multi-rebel	3.83***	3.78***	3.61***
	(0.45)	(0.45)	(0.43)
Contiguous Civil War	-0.09	-0.08	-0.13
	(0.12)	(0.12)	(0.12)
Logged GDP per capita	-0.25	-0.27	-0.17
	(0.28)	(0.28)	(0.28)
Logged Population	0.13	0.09	-0.03
	(0.33)	(0.34)	(0.32)
Logged Area	-0.15	-0.08	-0.12
	(0.25)	(0.27)	(0.26)
Post Cold War	0.70	0.65	0.79
	(0.47)	(0.47)	(0.45)
AIC	184.51	185.86	199.57
BIC	224.49	229.48	243.89
Log Likelihood	-81.25	-80.93	-87.78
Deviance	162.51	161.86	175.57
Num. obs.	280	280	297

$^{***}p < 0.001, ^{**}p < 0.01, ^{*}p < 0.05$

Table A.20: Logit Models of Multi-Rebel Conflict-Years (> 1000 Fatalities Only)

Combined Processes by Conflict Type

	M30	M31	M32
(Intercept)	−4.68*	−5.00**	−5.00**
	(1.86)	(1.90)	(1.76)
Change in Human Rights	−1.13*	−1.19**	
	(0.46)	(0.46)	
Human Rights			−0.82**
			(0.25)
Ethnolinguistic Fractionalization	0.19	−5.63**	−5.14*
	(0.55)	(2.08)	(2.01)
Ethnolinguistic Fractionalization^2		6.26**	5.63**
		(2.16)	(2.07)
Intensity Level	0.17	0.28	0.11
	(0.29)	(0.30)	(0.29)
Prev. Multi-rebel	3.04***	2.96***	2.77***
	(0.25)	(0.26)	(0.25)
Contiguous Civil War	−0.21*	−0.21*	−0.15
	(0.09)	(0.09)	(0.08)
Logged GDP per capita	0.05	0.16	0.21
	(0.17)	(0.18)	(0.18)
Logged Population	0.12	0.06	−0.04
	(0.18)	(0.18)	(0.17)
Logged Area	0.02	0.08	0.06
	(0.13)	(0.13)	(0.12)
Post Cold War	0.45	0.41	0.51
	(0.27)	(0.28)	(0.27)
AIC	441.40	434.81	469.09
BIC	492.54	490.21	525.63
Log Likelihood	-208.70	-204.41	-221.55
Deviance	417.40	408.81	443.09
Num. obs.	524	524	572

$^{***}p < 0.001, ^{**}p < 0.01, ^{*}p < 0.05$

Table A.21: Logit Models of Multi-Rebel Conflict-Years (Central Gov Conflicts Only)

	M33	M34	M35
(Intercept)	0.59	0.64	0.62
	(3.58)	(3.62)	(3.79)
Change in Human Rights	-0.69	-0.69	
	(0.75)	(0.75)	
Human Rights			-0.89^*
			(0.36)
Ethnolinguistic Fractionalization	-0.82	-1.13	0.27
	(1.31)	(3.14)	(3.13)
Ethnolinguistic Fractionalization^2		0.34	-1.03
		(3.10)	(3.13)
Intensity Level	-0.02	-0.02	-0.33
	(0.51)	(0.51)	(0.49)
Prev. Multi-rebel	3.77***	3.78***	3.64***
	(0.36)	(0.36)	(0.35)
Contiguous Civil War	-0.12	-0.12	-0.11
	(0.12)	(0.12)	(0.12)
Logged GDP per capita	-0.11	-0.11	-0.10
	(0.25)	(0.25)	(0.25)
Logged Population	0.14	0.12	0.17
	(0.27)	(0.31)	(0.32)
Logged Area	-0.26	-0.25	-0.37
	(0.34)	(0.35)	(0.34)
Post Cold War	-0.27	-0.28	-0.23
	(0.51)	(0.51)	(0.52)
AIC	274.37	276.35	285.89
BIC	327.48	333.90	344.52
Log Likelihood	-125.18	-125.18	-129.95
Deviance	250.37	250.35	259.89
Num. obs.	618	618	672

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$

Table A.22: Logit Models of Multi-Rebel Conflict-Years (Secessionist Conflicts Only)