

# Politics Among Rebels: The Causes of Division Among Dissidents

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*June 26, 2017*



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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- or group-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 treatment of civilians (e.g. Weinstein 2007), and do not consider the structure of the rebel movement that emerges. Yet, at least two rebel groups are simultaneously active at some point in 44% of civil conflicts.<sup>1</sup> Over the course of 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, Sudan in the 2000's have been similarly complex. The ongoing civil war in Syria is contested by at least two dozen armed groups. Even ethnically-homogeneous, geographically-concentrated populations with common goals, such as the Karen secessionist movement in Myanmar, 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 conflict, later splintered into dozens

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<sup>1</sup>Source: Pettersson and Wallensteen (2015).

of factions largely on the basis of religion, and now is again reducing in complexity as groups merge or are defeated.

Several studies examine the implications of rebel movement structure. Generally, these works find that fragmented rebel movements are associated with particularly concerning conflict attributes. Conflicts with multiple rebel groups 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 from the previous conflict. Finally, conflicts with multiple dyads feature over 20% more fatalities than dyadic ones.<sup>2</sup> In short, conflicts with multiple rebel groups are an unusually severe subset of civil wars.

While prior has firmly established the importance of understanding why some conflicts have multiple rebel groups while others do not, to date very few 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 works tend to focus on the organizational characteristics of rebel 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

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<sup>2</sup>Source: my own analysis using data from Sundberg (2008).

realism from international relations theory into a unified 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. 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.

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. Under what conditions do new rebel groups join an ongoing civil war? Why do existing rebel groups splinter into multiple factions? When and 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 of civilians should lead many of them 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, repression should also tend to induce greater levels of ethnic identification. Thus, repression should both create a pool of individuals willing to join the conflict, and lead to increased demand for rebel groups that emphasize ethnic identity. 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, closing the 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 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. By contrast, I find



that a rebel group's strength is predictive of neither its susceptibility to splintering, nor its propensity to form alliances. 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 I find no evidence that rebel group centralization is related to splintering. Instead, I find that both phenomena are strongly related to repression. I also build upon the existing literature by unifying explanations of splintering and alliances into a more comprehensive theory of rebel movement structure, and test my theory in a much wider empirical domain than prior work.

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 than 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.

## **1.2 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.

### **1.2.1 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. Yet few studies directly consider the phenomenon of new rebel groups joining ongoing conflicts. 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, however, instead recommending it as an area for future research. Staniland (2014) also argues that 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) too devotes relatively little space to rebel group formation, instead focusing on linking the attributes of the originating organizations to rebel group outcomes such as durability. Lewis (2016) offers a somewhat contrasting view 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.

There is also a substantial literature on the contagion of civil war. For example, 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 *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. This overlaps only partly with the scope of this project; I am also concerned with the emergence of new rebel groups in areas already experiencing conflict.

In short, surprisingly few studies have given much consideration to the formation of rebel groups. The few that do (e.g. Lewis 2016) focus entirely on groups whose origins coincide with war onset. While research on contagion effects sheds light on the expansion of conflict, it does not address the entry of new groups to existing conflict zones. I seek to resolve this gap.

### 1.2.2 Splintering

Existing rebel groups frequently splinter into multiple successor 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 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 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. 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 so as to maximize the likelihood of their preferences being represented in the post-war government, but the value of fighting decreases 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.

The existing work in this field tends to feature impressive data collection or fieldwork, and makes important contributions to our understanding of rebel group cohesion. Yet, making predictions from existing approaches tends to require detailed information about a rebel group and its internal workings, which is difficult to acquire, particularly while a conflict is still active. Furthermore, this literature tends to be somewhat disconnected from work on other rebel attributes and behaviors, including alliance formation. This dissertation addresses these limitations by unifying the formation of new groups, splintering, and alliance formation under a single theoretical framework which relies on explanatory factors that are relatively easy to observe, allowing for predictions about rebel group structure even during conflicts.

### **1.2.3 Alliance Formation**

Empirically, alliances among rebel groups are both common and noteworthy. 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 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.

The existing studies do much to advance our knowledge of relationships between non-state actors. Yet, some important aspects of alliance formation are beyond the scope of the existing studies, however. Namely, while relative power considerations can potentially account for why rebel groups form alliances, and when they will alter their ties, it does not explain why groups choose a particular partner. Horowitz and Potter (2013) do shed light on this question, finding that militants prefer to ally with powerful groups, but their focus is largely on transnational networks of terrorists and insurgents, rather than alliance formation within a particular conflict. I offer an explanation of alliance formation that can predict not only when rebel groups will seek alliances, but also with whom. Furthermore, I connect this process to the broader dynamics of rebel movement structure, particularly splintering.

#### **1.2.4 Repression**

As repression is central to the theoretical argument presented here, this dissertation is shaped by and contributes to the literature on the topic. The focus in the existing literature

has been on explaining why repression occurs, and identifying factors that might prevent it. Davenport (2007) 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.<sup>3</sup>

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. My findings in Chapter 3 add further support for this model, as I show that repression increases willingness to engage in violence, while decreasing the likelihood that individuals will engage in peaceful political activities such as voting. I also move beyond this debate to show that repression can shape not only the likelihood, but also the structure of civil war violence.

### 1.2.5 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

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<sup>3</sup>Long-running civil wars, however, might deter democratization and participation in human rights treaties.

on the assumption that identity is dynamic. At a minimum, individuals can choose which 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 discussions 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). Thus, it provides a strong foundation on which to build my theory. This dissertation also contributes to the ethnic identification in two ways. First, while previous work has suggested that internal conflict might have an opposite effect to external wars, leading to increased ethnic identification (Kaufmann 1996b), no existing work has demonstrated this systematically. My dissertation begins to resolve this gap, as Chapter 3 shows that both repression and the presence of civil wars are associated with heightened levels of ethnic identification. Second, whereas most prior studies examine individual-level ethnic identification in isolation (e.g. Eifert, Miguel, and Posner 2010), I connect the phenomenon to aggregate outcomes, namely the formation and restructuring of rebel groups.

### 1.2.6 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 homogenous rebel groups should be less prone to splintering in this case, and alliance should be more likely among groups with similar identities.

### **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 Mon separatists in Burma, and use the emergence of the All Burma Students' Democratic Front to explore the limits of 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. I illustrate both findings with a study of the Karen National Union, which originally split from the multi-ethnic Burmese independence movement to advance the interests of the Karen people, but later splintered itself along religious lines. Finally, consistent with my expectations I find evidence that repression increases the probability that new ethnically-homogenous 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.

Finally, I summarize the results in Chapter 6, discuss their theoretical and policy signifi-

cance, 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? In a static sense, 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 The Formation of Rebel Groups

I argue that rebellions tend to emerge out of similar processes. In any state there will naturally be some portion of the populations that either publicly or secretly opposes the regime, which I call the “dissident pool.” Entrepreneurial individuals attempt to construct rebel groups from this pool. They do so by making appeals centered around ideals or identities that they expect will attract a sufficient number of followers, with appeals that mobilize existing organizations being especially attractive. While rebel groups tend not to be especially democratic once forming, the ability of members to exit the group creates a degree of accountability. When rebel leaders fail to accommodate the changing demands of their members, realignments should often ensue.

### 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 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 refer to the complete set of rebel groups as the rebel movement. 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; Tilly 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.

In short, the pool of individuals who oppose the government often form a mix of violent and non-violent organizations, and tend to have several social and political cleavages that might serve as the basis for organizational fragmentation. I argue that whether such divisions do produce fragmented groups, however, is contingent on contextual factors which I explore in the following section.

### **2.1.1.1 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 Entrepreneurs and Rebel Mobilization**

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 entrepreneurial individuals, 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 Pahl 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.

Consistent with these notions, my own data collection<sup>1</sup> 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

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<sup>1</sup>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.

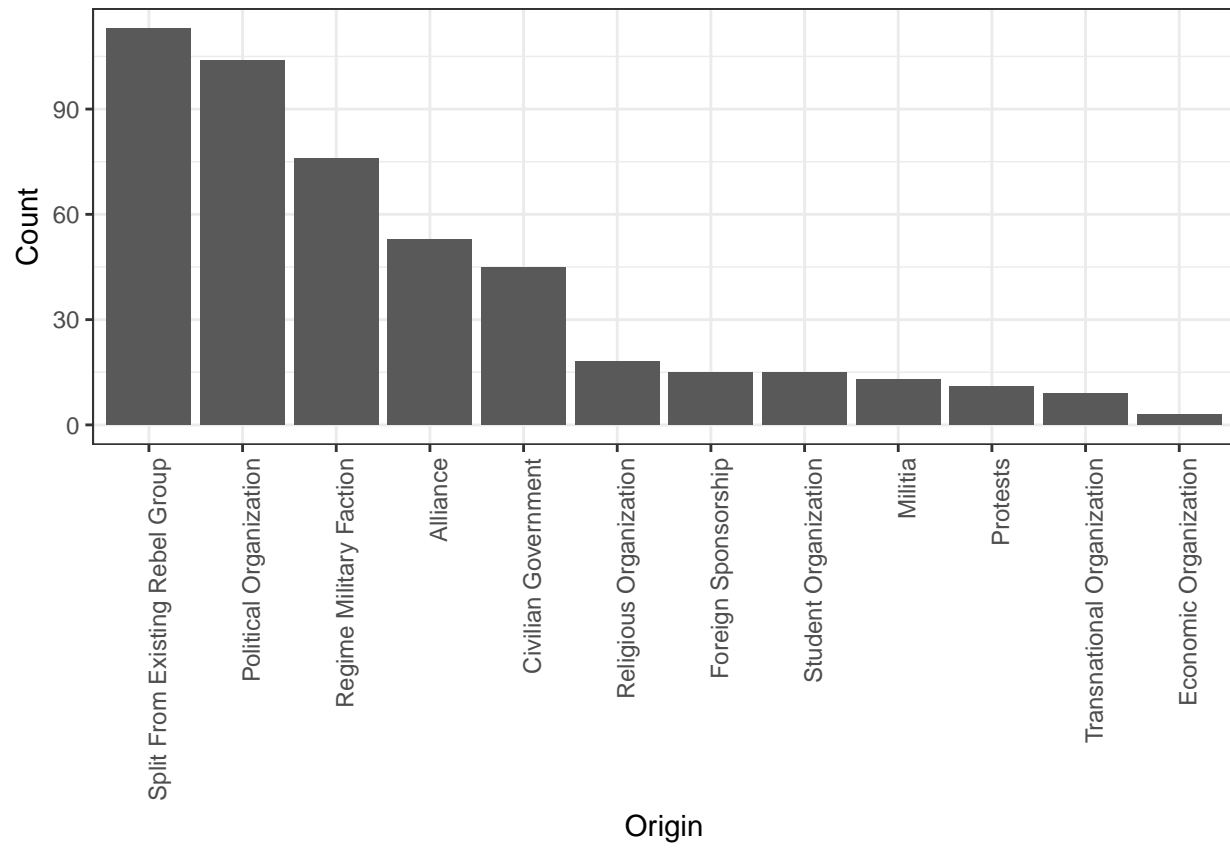


Figure 2.1: The Origins of Rebel Groups, 1946–2015



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, 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 Rebel Governance and Preference Aggregation**

I argue that rebel structure is shaped by a bottom-up process in which the preferences of rank-and-file members 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.<sup>2</sup> 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

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<sup>2</sup>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.

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 differing ideologies or identities.

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,<sup>3</sup> 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. Individual thresholds for violence will continue to vary, meaning that some will continue

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<sup>3</sup>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.

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, and perhaps even deriving from a biological basis (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.<sup>4</sup> A vast scholarly literature views ethnic identity as a cause of conflict (e.g. Horowitz 1985). Recently, several scholars have 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 (1996a) 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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<sup>4</sup>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. Repression of this kind is likely to make ethnicity more salient, and trigger the linked fate mechanism described by Kuran (1998). If individuals are targeted for repression on the basis of their ethnicity, banding together with co-ethnics may offer their best chance at survival.

Individuals who participate in a rebel group are likely to be targeted by repression (or worse) regardless of whether it is applied on the basis of ethnicity or not. Thus, the preceding discussion applies most directly to non-violent dissident constituents. Yet, this increased ethnic identification among constituents can extend to rebel groups 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). In a sense, then, the true target of repression 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.

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. I provide further support for this notion with a variety of causal inference techniques in the subsequent empirical chapters.

### 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 includes several 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<sup>5</sup> 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*

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<sup>5</sup>The survey data I use (the Afrobarometer survey) only asks individuals whether they have been attacked, without specifying the attacking party.

Additionally, I expect that repression will tend to induce its targets to identify more strongly with their ethnic group<sup>6</sup>, as repression is often applied disproportionately to certain groups, increasing the salience of such identities.

*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.

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<sup>6</sup>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.

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, meaning the set of previously non-violent individuals suddenly willing to join the conflict should grow with the proportion of the dissident pool that is targeted. The crucial question, then, is whether they join existing rebel groups, or form new ones. I argue that in addition to changing the cost of fighting, repression should make individuals more inclined to emphasize sub-national identities such as ethnicity. How this translates to division at the rebel group level requires a discussion of the manner in which ethnicity shapes politics.

Intra-ethnic politics often follows a dynamic known as “outbidding,” 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, we should expect their willingness to participate in multi-ethnic coalitions to decrease. Rebel entrepreneurs should seize on this shift in preferences, and attempt to outbid existing rebel groups by forming rebel groups that place a greater emphasis on ethnic identity.

While this process should initially re-orient a subset of dissidents around the ethnic identities 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. Furthermore, these newly-mobilized individuals may not have social ties to members of existing rebel 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 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.

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 monoethnic 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 through 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.

Rebel alliances can be valuable for a number of reasons. First, alliances aggregate 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. 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 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 legislature) 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 this process will influence the choice of alliance partners. As the level of threat to civilian constituents increases, the desire of co-ethnic rebels to provide protection should increase. As rebel coalitions grow broader and more diverse, the likelihood that they would prioritize the protection of any particular group should generally decrease. Rebel leaders attempting to stave off outbidding appeals, or initiate one themselves, should generally be disinclined to enter into multi-ethnic alliances under these conditions.

*Hypothesis 9: The probability that new, multi-ethnic alliances will form should decrease with the level of repression*

At the same time, increased ethnic identification might create opportunities for new alliances among rebel groups who share a common ethnicity. When the salience of ethnicity increases, differences on other social dimensions should decline in relative importance. For example, if two Kurdish rebel groups were previously unwilling to cooperate due to religious differences, an increase in the salience of ethnicity might paper over these differences, reducing the barriers to an alliance that would be otherwise desirable. Thus, in addition to making multi-ethnic alliances less likely, repression should increase the likelihood that mono-ethnic alliances will form.

*Hypothesis 10: The probability that new, mono-ethnic alliances will form should increase 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<sup>1</sup> 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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<sup>1</sup>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 A1 of the Appendix.

Table 3.1: The Afrobarometer Survey by Wave

| 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        |

One 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. Each of these attributes is suboptimal, but I argue that each introduces bias *against* my hypotheses, rather than for them. I expect that repression will induce individuals to be more willing to engage in violent mobilization, and more likely to identify with their ethnic group. By excluding areas experiencing high levels of violence, the sample is likely to exclude many of the areas experiencing the highest levels of repression. Thus,

my hypotheses face a hard test — I must find an effect for repression in a sample where repression levels are mostly low or moderate.

### 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. 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. The violence, meeting, and protest questions share a common stub:

Question text: "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."

Responses: "No, would never do this," "No, but would do if had the chance," "Yes, once or twice," "Yes, several times," and "Yes, often."

The voting question differs as individuals generally vote only once, and it solicits explanations for why individuals did not vote:

Question text: "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?"

Responses "You were not registered to vote," "You voted in the elections," "You decided not to vote," "You could not find the polling station," "You were prevented from voting," "You did not have time to vote," "You did not vote because you could not find your name in the voters' register," "Did not vote for some other reason," "You were too young to vote," "Don't Know / Can't Remember."

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 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). While social desirability bias might lead some individuals to claim they have voted while in fact they have not, the effect is likely to be in the opposite direction for less desirable behaviors such as protesting and violence. These effects are most likely to introduce bias into my analysis if individuals misreport behavior on both the independent in dependent variables. For example, if individual falsely claimed both to have been attacked and engaged in violence themselves, they would contribute to the relationship between those variables being overstated.

Table 3.2: Summary of Participation (waves 3-6)

| Variable | Yes   | No     | Percentage Yes |
|----------|-------|--------|----------------|
| Violence | 1473  | 50077  | 2.9%           |
| Protest  | 16492 | 142056 | 10.4%          |
| Meeting  | 92849 | 65719  | 58.6%          |

| Variable | Yes    | No    | Percentage Yes |
|----------|--------|-------|----------------|
| Vote     | 111632 | 46952 | 70.4%          |

The participation measures are summarized in Table 3.5. 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. The question text is as follows:

“Let us suppose that you had to choose between being a [ENTER NATIONAL-ITY] and being a \_\_\_\_\_ [Respondent’s Ethnic Group]. Which of the following best expresses your feelings?”

Respondents place themselves on a five point scale with the possible responses: “I feel only [ethnicity]”, “I feel more [ethnicity] than [nationality]”, “I feel equally [ethnicity] and [nationality]”, “I feel more [nationality] than [ethnicity]”, and “I feel only [nationality]”. I collapse the measure into a binary variable, with respondents in the first two categories coded as ethnic identifiers, and all others as non-ethnic identifiers.

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 3.3: 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 3.6). 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:

“During the past year, have you or anyone in your family: Been physically

attacked?”

The possible responses are: “no,” “once,” “twice,” “three or more times,” and “don’t know.” 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 this to create bias against my hypotheses. 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 threat perception, 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, only asking about election-related violence,<sup>2</sup> 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.

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<sup>2</sup>Question text: “During election campaigns in this country, how much do you personally fear becoming a victim of political intimidation or violence?”

At the country level, I employ I use 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.<sup>3</sup> 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. These include the respondent's gender, logged age, and an ordinal measure of educational attainment,<sup>4</sup> and binary indicators of whether they are employed at least

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<sup>3</sup>Calculated with all country-years included in the data weighted equally.

<sup>4</sup>Possible responses: No formal schooling, Informal schooling only (including Koranic schooling), Some primary schooling, Primary school completed, Intermediate school or Some secondary school / high school, Secondary school / high school completed, Post-secondary qualifications, other than university e.g. a diploma or degree from a polytechnic or college, Some university, University completed, Post-graduate.

part-time, whether they reside in an urban area, and whether they support the ruling party. 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 be 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). s 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 be 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). >>>>>> 3c7dbf8c2317472ac8e8909042c0042d99010ece

### 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 3.5, 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 from around 0.02 for individuals who have not been attacked, to 0.09 for individuals who have (see Figure 3.1). While this increase is small in absolute terms, it represents a large percentage change given how rare violence is in general. 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***<br>(0.66) | -1.78***<br>(0.48)    |
| Human Rights                                   | 0.05<br>(0.24)     | -0.01<br>(0.18)       |
| Ethnolinguistic Fractionalization              | -1.45<br>(2.76)    | 0.64<br>(2.03)        |
| Ethnolinguistic Fractionalization <sup>2</sup> | 2.30<br>(2.79)     | -0.45<br>(2.07)       |
| Polity   | -0.01<br>(0.04)    | -0.04<br>(0.03)       |
| Civil War                                      | -0.32<br>(0.18)    | 0.17<br>(0.18)        |
| Separatist War                                 | -0.07<br>(0.69)    | -0.45<br>(0.45)       |
| Attacked                                       | 1.13***<br>(0.07)  | 0.45***<br>(0.06)     |
| Intimidated                                    | 0.12<br>(0.07)     | 0.13**<br>(0.05)      |
| Employed                                       | -0.05<br>(0.07)    | -0.03<br>(0.05)       |
| Primary Education                              | 0.14*<br>(0.07)    | 0.05<br>(0.05)        |
| Urban  | -0.08<br>(0.08)    | -0.14**<br>(0.05)     |
| Ruling Party Supporter                         | -0.09<br>(0.06)    | -0.04<br>(0.04)       |
| Age  | -0.09<br>(0.06)    | -0.26***<br>(0.05)    |
| Female   | -0.32***<br>(0.06) | -0.21***<br>(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 3.4: Multilevel Models of Attitudes Toward Violence

Perhaps due in part to its rarity, only a few control variables are significantly related to

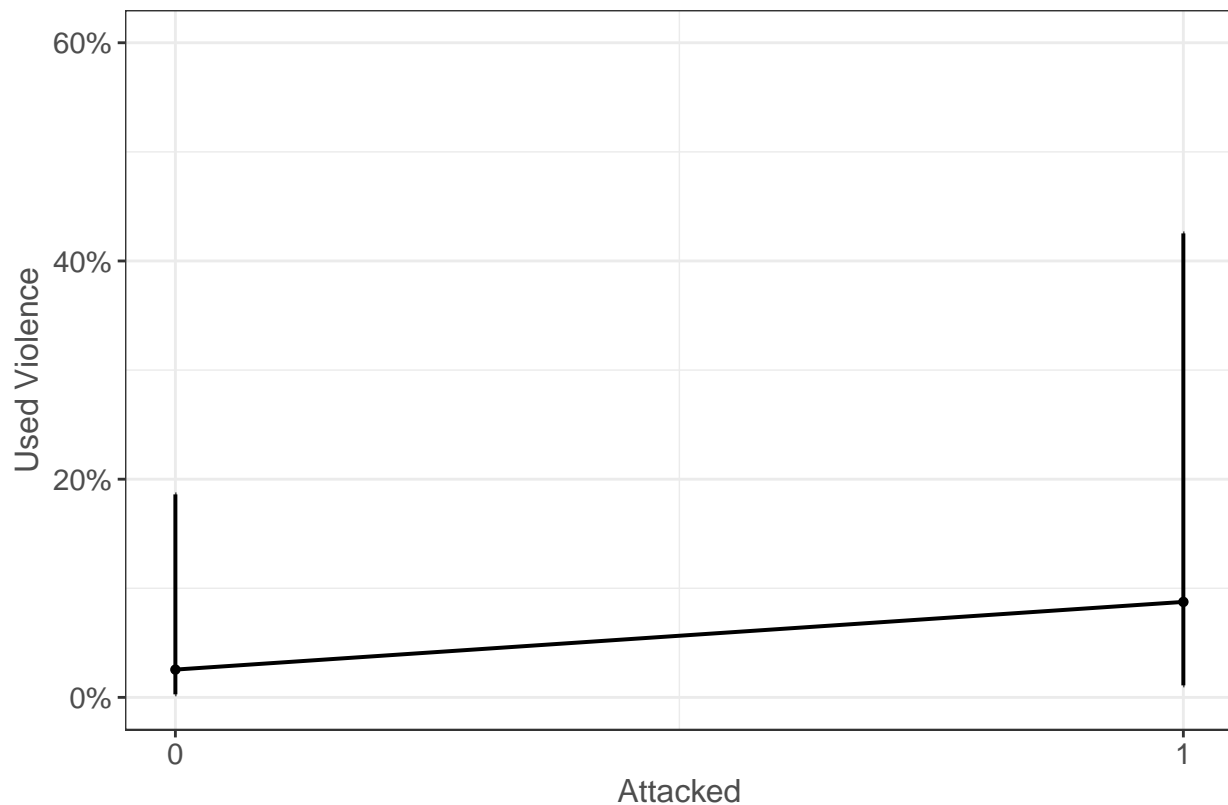


Figure 3.1: Predicted Probability of the Use of Violence (Model 1)

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. 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 that 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         |
|--|--------------------|--------------------|--------------------|
| Human Rights                                   | 0.13<br>(0.08)     | 0.22*<br>(0.09)    | -0.20<br>(0.13)    |
| Ethnolinguistic Fractionalization              | -0.53<br>(1.65)    | -5.02<br>(7.26)    | 2.12<br>(1.89)     |
| Ethnolinguistic Fractionalization <sup>2</sup> | 0.84<br>(1.61)     | 5.59<br>(7.04)     | -0.85<br>(1.84)    |
| Polity   | 0.01<br>(0.02)     | 0.22***<br>(0.02)  | 0.05*<br>(0.02)    |
| Civil War                                      | 0.07<br>(0.05)     | 0.32***<br>(0.05)  | -0.66***<br>(0.07) |
| Separatist War                                 | 0.36<br>(0.33)     | 0.74*<br>(0.36)    | -0.37<br>(0.42)    |
| Attacked                                       | -0.15***<br>(0.03) | 0.18***<br>(0.03)  | 0.82***<br>(0.04)  |
| Intimidated                                    | -0.12***<br>(0.02) | 0.03<br>(0.02)     | 0.09**<br>(0.03)   |
| Employed                                       | 0.36***<br>(0.02)  | 0.12***<br>(0.02)  | 0.22***<br>(0.03)  |
| Primary Education                              | 0.10***<br>(0.02)  | 0.13***<br>(0.02)  | -0.38***<br>(0.03) |
| Urban  | -0.06*<br>(0.03)   | -0.06**<br>(0.02)  | 0.11**<br>(0.04)   |
| Ruling Party Supporter                         | 0.24***<br>(0.02)  | 0.21***<br>(0.02)  | -0.05<br>(0.03)    |
| Age  | 1.84***<br>(0.03)  | 0.67***<br>(0.02)  | -0.16***<br>(0.03) |
| Female   | -0.14***<br>(0.02) | -0.44***<br>(0.02) | -0.32***<br>(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 3.5: Multilevel Models of Political Participation

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 3.6. 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.<sup>5</sup> 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 is substantively modest, increasing the probability from rough 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.

---

<sup>5</sup>I use year instead of survey wave as the country-level variables are measured in yearly intervals.

|  | M5                 | M6                 | M7                 |
|--|--------------------|--------------------|--------------------|
| Human Rights                                   | −0.70***<br>(0.12) | −0.66***<br>(0.13) | 0.12<br>(0.11)     |
| Ethnolinguistic Fractionalization              | 6.58*<br>(2.78)    | 6.38*<br>(3.18)    | 3.63*<br>(1.63)    |
| Ethnolinguistic Fractionalization <sup>2</sup> | −5.89*<br>(2.74)   | −5.77<br>(3.11)    | −3.17*<br>(1.58)   |
| Polity   | 0.15***<br>(0.02)  | 0.15***<br>(0.03)  | 0.03<br>(0.02)     |
| Civil War                                      | 0.29***<br>(0.06)  | 0.33***<br>(0.06)  | 0.62***<br>(0.07)  |
| Separatist War                                 | 1.26**<br>(0.46)   | 1.61**<br>(0.53)   | 0.64<br>(0.36)     |
| Attacked                                       | 0.25***<br>(0.04)  | 0.27***<br>(0.04)  | 0.23***<br>(0.04)  |
| Intimidated                                    | 0.23***<br>(0.03)  | 0.22***<br>(0.03)  | 0.20***<br>(0.03)  |
| Employed                                       | −0.08**<br>(0.03)  | −0.09**<br>(0.03)  | −0.08**<br>(0.03)  |
| Primary Education                              | 0.42***<br>(0.03)  | 0.41***<br>(0.03)  | 0.40***<br>(0.03)  |
| Urban  | −0.11***<br>(0.03) | −0.08*<br>(0.03)   | −0.10**<br>(0.03)  |
| Ruling Party Supporter                         | −0.14***<br>(0.03) | −0.12***<br>(0.03) | −0.12***<br>(0.03) |
| Age  | 0.01<br>(0.02)     | −0.00<br>(0.02)    | −0.00<br>(0.02)    |
| Female   | 0.10***<br>(0.02)  | 0.10***<br>(0.03)  | 0.10***<br>(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 3.6: Multilevel Models of Ethnic Identification

The control variables provide a number of interesting results. As I expected, ethnolin-

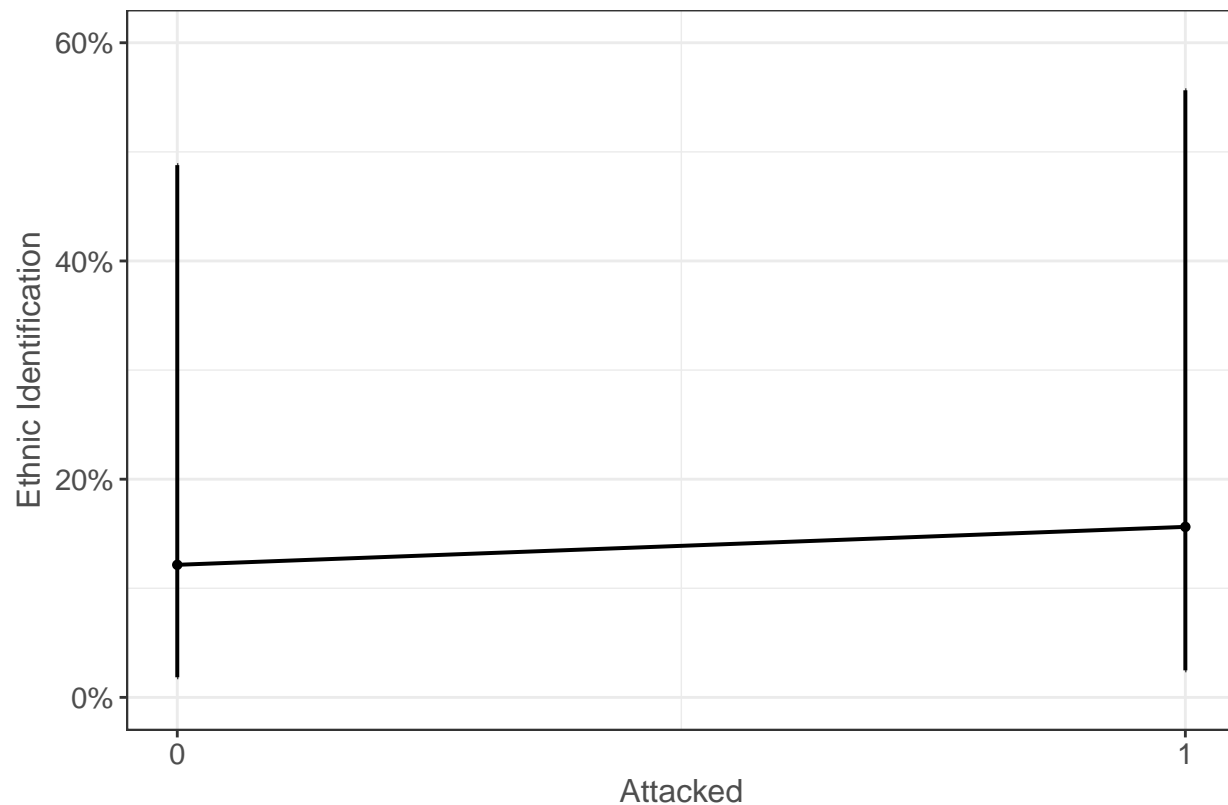


Figure 3.2: Predicted Probability of Ethnic Identification (Model 5)

guistic 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 will identify ethnically, and women are slightly more likely than men to adopt such an identity.



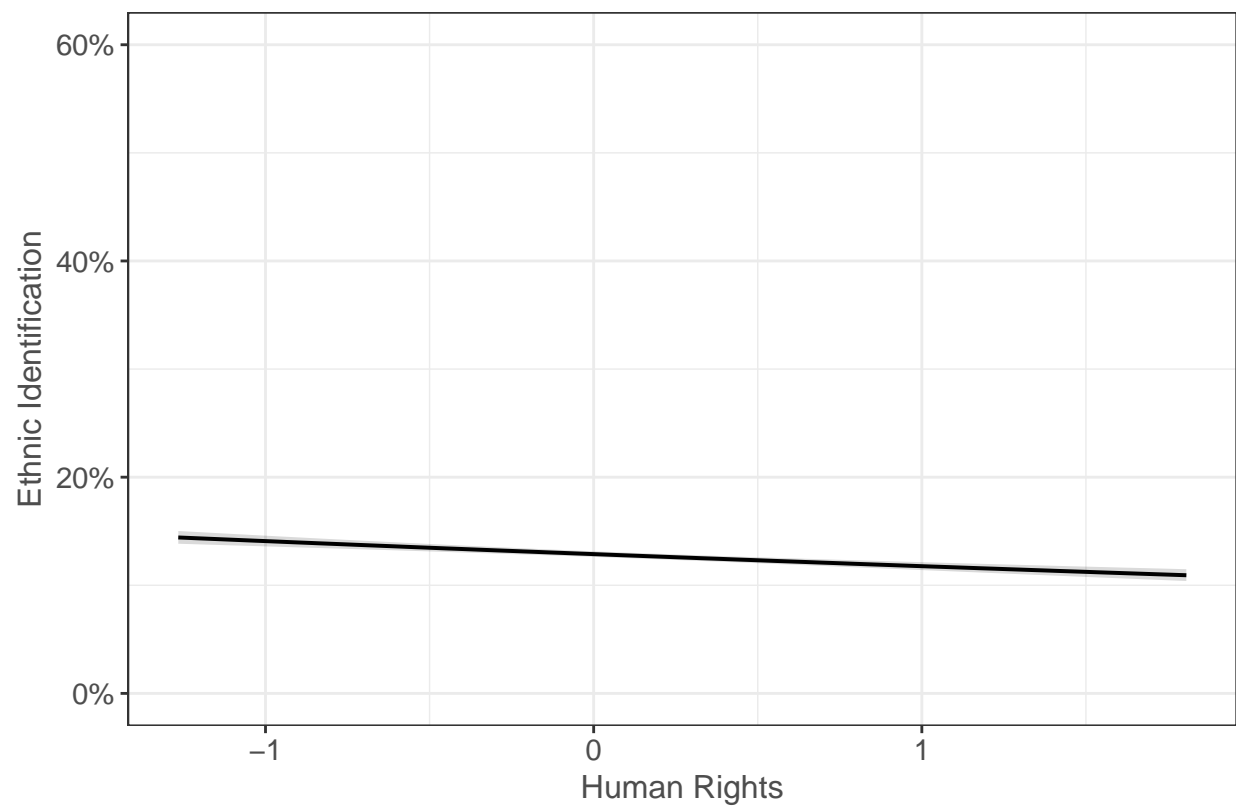


Figure 3.3: Predicted Probability of Ethnic Identification (Model 5)

While further analysis is needed 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 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. 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.

As an alternative 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<br>(0.17)        | 0.08<br>(0.25)     | -0.19<br>(0.13)    |
| Ethnolinguistic Fractionalization              | 1.32<br>(1.97)        | -0.43<br>(2.89)    | 4.99**<br>(1.54)   |
| Ethnolinguistic Fractionalization <sup>2</sup> | -1.01<br>(1.99)       | 1.59<br>(2.89)     | -4.78**<br>(1.53)  |
| Polity   | -0.04<br>(0.03)       | -0.01<br>(0.04)    | -0.03<br>(0.02)    |
| Civil War                                      | 0.21<br>(0.20)        | -0.44*<br>(0.20)   | 0.14<br>(0.19)     |
| Separatist War                                 | -0.18<br>(0.53)       | -0.82<br>(0.86)    | 0.30<br>(0.43)     |
| Attacked                                       | 0.48***<br>(0.07)     | 1.09***<br>(0.08)  | 0.25***<br>(0.06)  |
| Intimidated                                    | 0.14**<br>(0.05)      | 0.11<br>(0.08)     | 0.29***<br>(0.04)  |
| Employed                                       | -0.05<br>(0.06)       | -0.05<br>(0.08)    | -0.00<br>(0.05)    |
| Primary Education                              | 0.01<br>(0.05)        | 0.16*<br>(0.08)    | 0.39***<br>(0.05)  |
| Urban  | -0.17*<br>(0.07)      | -0.19*<br>(0.09)   | -0.06<br>(0.06)    |
| Ruling Party Supporter                         | -0.08<br>(0.05)       | -0.14*<br>(0.07)   | -0.16***<br>(0.04) |
| Age  | -0.22***<br>(0.06)    | 0.01<br>(0.08)     | -0.07<br>(0.05)    |
| Female   | -0.22***<br>(0.05)    | -0.32***<br>(0.07) | 0.04<br>(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 3.7: Models with Matched Data

The results using the matched data are reported in Table 3.7, and the estimates for the attack variable are very similar to those seen in the raw data. Individuals who have experienced

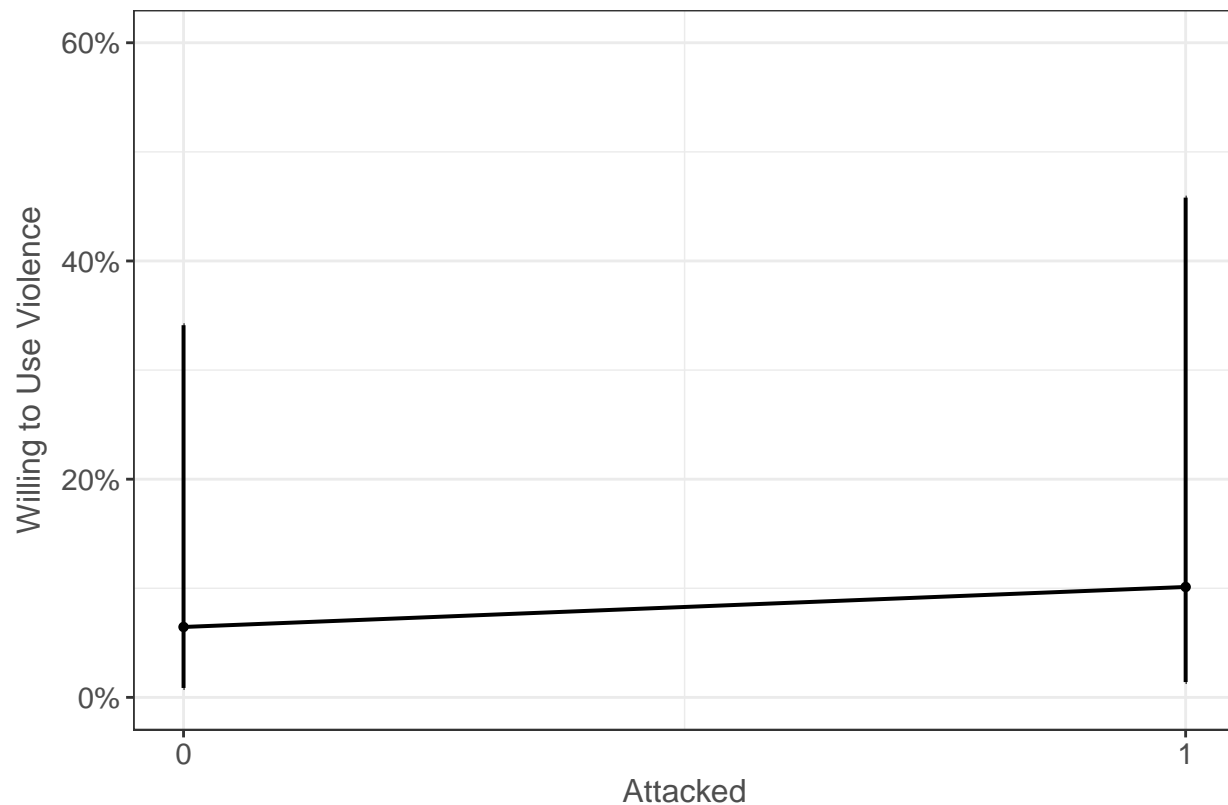


Figure 3.4: Predicted Probability of the Use of Violence (Model 8)

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

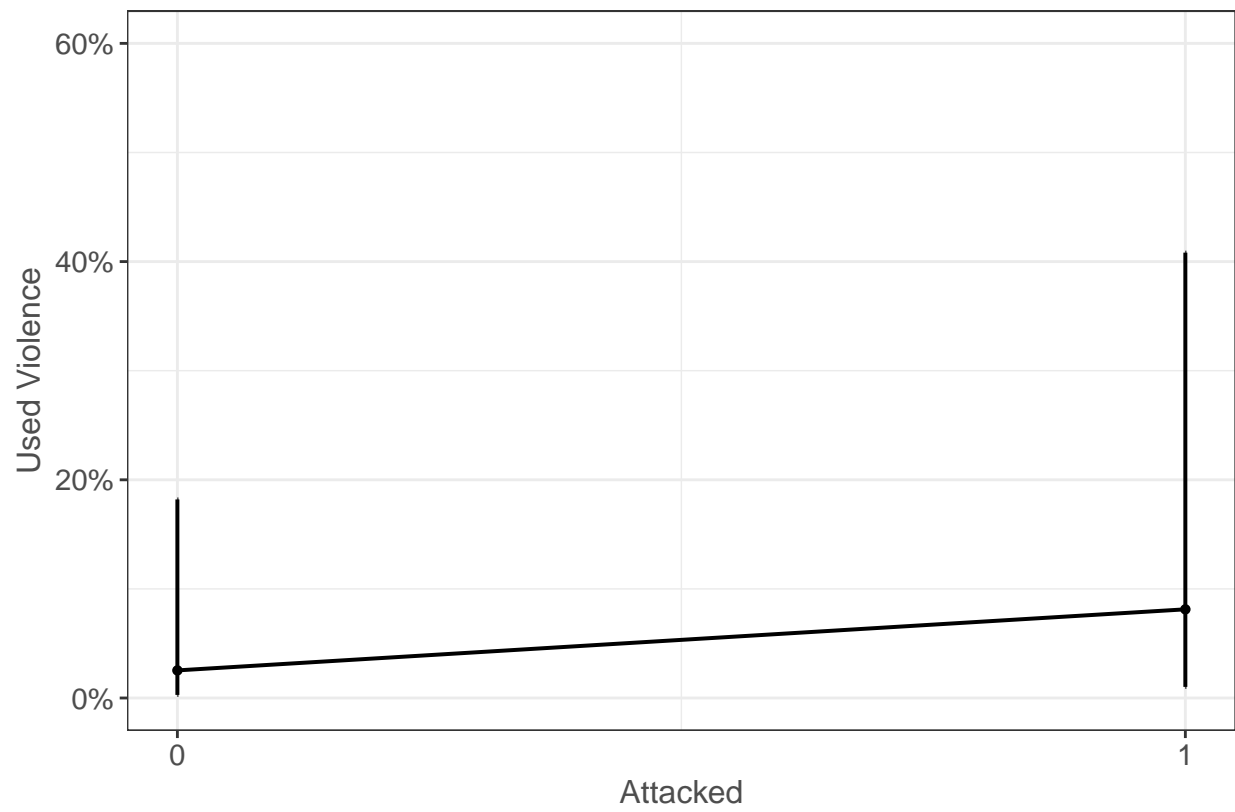


Figure 3.5: Predicted Probability of the Use of Violence (Model 8)

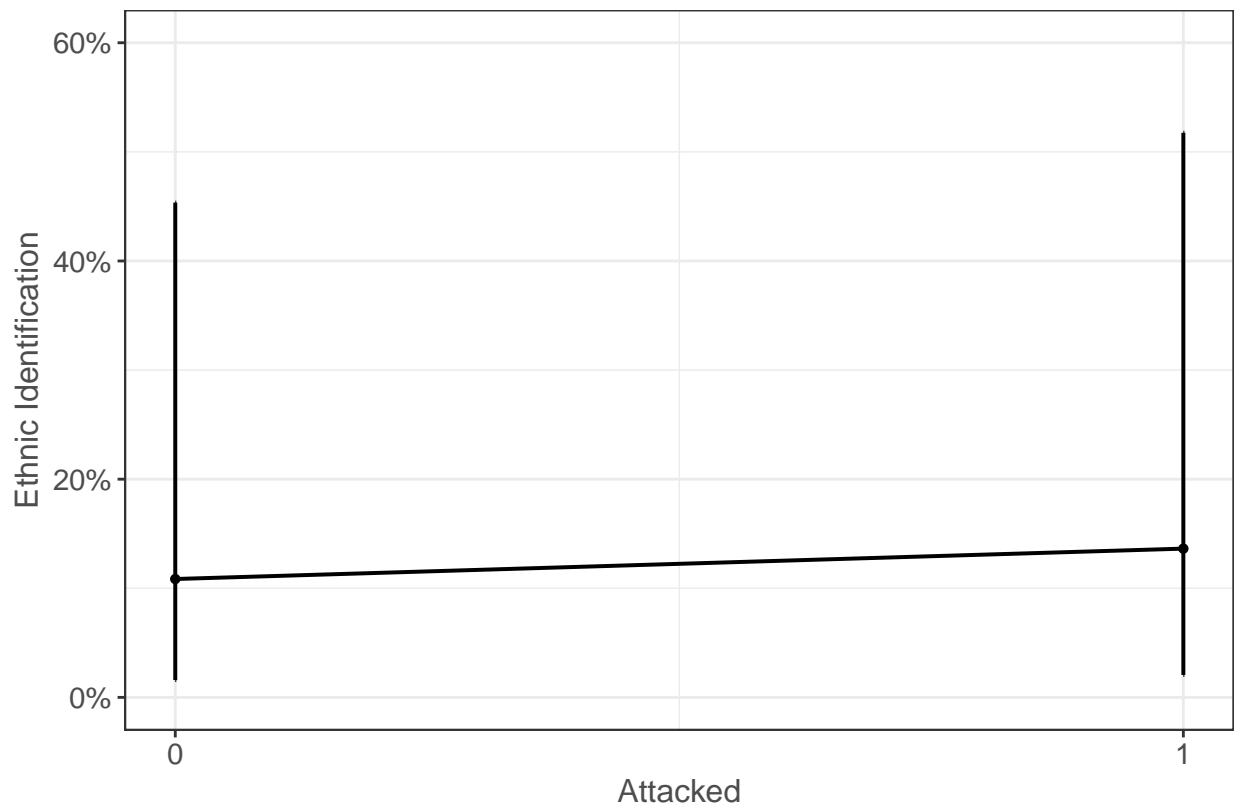


Figure 3.6: Predicted Probability of Ethnic Identification (Model 9)

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 attack 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 62% 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 that an 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 country war-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 overthrow 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. 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 Appendix XX), 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, 126 fit the definition. As some of these entered the same conflict in the same year, 106 of 1879<sup>1</sup> (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 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

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<sup>1</sup>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.

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.

Table 4.1: Rebel Groups by Ethnic Affiliation

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

#### 4.1.2 Independent Variables

- **Human Rights** To measure repression I again use the Latent Human Protection scores, version 2 (Fariss 2014; Schnakenberg and Fariss 2014). Within my data the mean score is -1.19, and no country year has a score higher than 1.51. This measure is lagged by one year.
- **Discrimination** Currently, all major human rights data is measured at the country level. A direct measure of the extent to which repression is targeted at specific ethnic groups, geographic locales, etc. is thus unavailable. I use a measure constructed from the Ethnic Power Relations Core dataset, 2014 version (Vogt et al. 2015). EPR codes the political status of each politically-relevant ethnic group in the world, as well as several group attributes including their size as a percentage of the population. I consider groups coded as “Discriminated” or “Powerless” to be the victims of discrimination, and use the group size measure to calculate the percentage of the total country population that is subjected to discrimination. To aid in interpretation,

I use the percentage of the country that is *not* subjected to discrimination in the models. Thus, as the measure increases, the extent to which repression is targeted at a small minority increases. The rare cases where no members of society experience discrimination are recoded to 0, as this indicates a non-discriminatory regime. This measure is lagged by one year.

### 4.1.3 Control Variables

- **Conflict Intensity** 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  $r = -0.25$ ).
- **Number of UCDP Conflicts** I include the number of distinct UCDP conflicts in a country-year as a control. Recall that all rebels challenging the central government are coded as being part of the same conflict, but each territory that is subject to a secessionist movement is considered distinct.
- **Percentage Territorial Conflicts** To control for the possibility that secessionist conflicts produce different rebel structures, I include percentage of UCDP conflicts in a country-year that are fought over territory rather than the central government.
- **Neighboring Civil War** One potential mechanism that might produce increased numbers of rebel groups in a conflict is the movement of groups from neighboring countries into new conflicts. To control for this possibility I construct an indicator for the presence of a civil war in a neighboring state using the UCDP Dyadic data and

the Correlates of War Direct Contiguity data, version 3.2 (Stinnett et al. 2002).

- **Ethnolinguistic Fractionalization** To control for the possibility that simple ethnic diversity, rather than the repression of particular ethnic groups, accounts for the number of rebel groups in a country, I include a measure of ethnolinguistic fractionalization from Fearon and Laitin (2003). The measure represents the probability that two randomly selected individuals from a country will speak different languages.
- **Logged Population** Conceivably, the number of rebel groups in a country might simply be a function of the country's size. I thus control for the logged population of the country using data from Gleditsch (2002).
- **Logged GDP per capita** Economic development correlates with a variety of important political outcomes, including the onset of civil war. I include the logged per capita GDP of each country, with data again from Gleditsch (2002).

Additionally, I have examined the effect of several other control variables. None were statistically significant, nor did they substantially alter the performance of my variables of interest. Thus, I excluded them from the models reported below. This included several country-level variables, as well as several attributes of the largest rebel group active in a country-year.

- **Democracy** A binary indicator for countries with a Polity IV score greater than 5 (Marshall, Gurr, and Jaggers 2016).
- **Mountainous Terrain** A measure of the percentage of land in a country that is mountainous (Fearon and Laitin 2003).
- **Oil Revenue** A binary indicator of whether one-third or more of a country's exports come from fossil fuels (Fearon and Laitin 2003).
- **Previous Conflict** A binary indicator of whether the country had experienced a previous episode of conflict separated by at least three calendar years with no fighting reaching the 25 fatality threshold.

- **Rebel Group Central Control** A binary indicator of whether the largest rebel group active during a conflict year had a centralized control structure (Cunningham, Gleditsch, and Salehyan 2013).
- **Rebel Group Political Wing** A binary indicator of whether the largest rebel group active during a conflict year had a political wing (Cunningham, Gleditsch, and Salehyan 2013).
- **Rebel Group Stronger** A binary indicator of whether the largest rebel group active during a conflict year was stronger than the government (Cunningham, Gleditsch, and Salehyan 2013).
- **Rebel Presence in Other States** A binary indicator of whether the largest rebel group active during a conflict year had a presence in other states (Cunningham, Gleditsch, and Salehyan 2013).
- **Rebel External Support** A binary indicator of whether the largest rebel group active during a conflict year was received any form of support from an outside government (Cunningham, Gleditsch, and Salehyan 2013).
- **Multi-Ethnic Rebel Group** An indicator of whether a rebel group draws support from more than one ethnic group, constructed from the ACD2EPR version 4-2014 dataset (Vogt et al. 2015).

#### 4.1.4 Statistical Model

As the dependent variable in this study is a count of rebel groups, Ordinary Least Squares regression would be inappropriate. A Cameron and Trivedi test shows no evidence of overdispersion in any model specification, meaning that Poisson regression is an appropriate model, rather than negative binomial. I include fixed effects for both country and year. However, the time fixed effects do not substantially alter the results, and I exclude them from the models presented here. Additionally, I cluster the standard errors by country.



## 4.2 Results

The poisson regression results are reported in Table 2. Models 1 and 2 use a dependent variable that includes all rebel groups active in a given year. Models 3 and 4 exclude splinter organizations. The “Human Rights” coefficient in Model 1 provides a test of *H1* which predicted that the number of rebel groups should increase with the level of repression. I am able to reject the null hypothesis of no relationship between repression and the number of rebel groups, as the latent respect for human rights measure has a negative relationship that is statistically significant at the 99.9% level. As respect for human rights improves, the expected number of rebel groups declines. As a country becomes more repressive, by contrast, the expected number of rebel groups increases. Model 3 shows similar results (though only at a 95% significance level), suggesting that the relationship is not driven by the fragmentation of existing groups, but rather includes the mobilization of many new groups. Substantively, the effect of repression is large. As Figure 1 shows, the predicted number of rebel groups at the most repressive end of the spectrum is roughly 3. In the country-years where respect for human rights is highest (moderately high, in absolute terms), the expected number of groups is around 1.

|                                   | Model 1            | Model 2            | Model 3           | Model 4             |
|-----------------------------------|--------------------|--------------------|-------------------|---------------------|
| (Intercept)                       | -3.34***<br>(0.14) | 2.13<br>(2.34)     | 1.88<br>(2.37)    | 15.84<br>(14518.78) |
| Change in Human Rights            | -1.42***<br>(0.34) | -1.60***<br>(0.42) | -3.63**<br>(1.14) | -1.87**<br>(0.61)   |
| Ethnolinguistic Fractionalization |                    | 0.57<br>(0.68)     | 1.06<br>(0.74)    |                     |
| Human Rights X Fractionalization  |                    |                    | 3.66<br>(1.89)    |                     |
| Intensity Level                   |                    | -0.30<br>(0.38)    | -0.31<br>(0.38)   | 0.04<br>(0.45)      |
| Prev. Multi-rebel                 |                    | 0.34<br>(0.36)     | 0.37<br>(0.36)    | -0.83*<br>(0.37)    |
| Contiguous Civil War              |                    | -0.02<br>(0.10)    | -0.03<br>(0.10)   | 0.33*<br>(0.15)     |
| Secessionist                      |                    | -1.04*<br>(0.42)   | -0.93*<br>(0.43)  |                     |
| Logged GDP per capita             |                    | -0.09<br>(0.20)    | -0.11<br>(0.20)   |                     |
| Logged Population                 |                    | -0.46**<br>(0.17)  | -0.46**<br>(0.17) |                     |
| Polity                            |                    | -0.01<br>(0.03)    | -0.01<br>(0.03)   |                     |
| Post Cold War                     |                    | -0.15<br>(0.36)    | -0.13<br>(0.37)   |                     |
| AIC                               | 494.70             | 336.83             | 334.85            | 568.90              |
| BIC                               | 505.45             | 398.01             | 401.13            | 1247.10             |
| Log Likelihood                    | -245.35            | -156.42            | -154.42           | -156.45             |
| Deviance                          | 490.70             | 312.83             | 308.85            | 312.90              |
| Num. obs.                         | 1597               | 1210               | 1210              | 1478                |

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

Table 4.2: Logit Models of Rebel Group Formation

Models 1 and 3 also provide tests of  $H2$ , which expects that the number of rebel groups should increase with the extent to which repression is targeted in a discriminatory fashion. Again I am able to reject the null hypothesis, as the effect of discrimination is positive and statistically significant at the 99.9% level in Model 1, and at the 99% level in Model 3. As the percentage of a country's population that is *not* subjected to discrimination (i.e. discrimination becomes more targeted), the expected number of rebel groups increases.

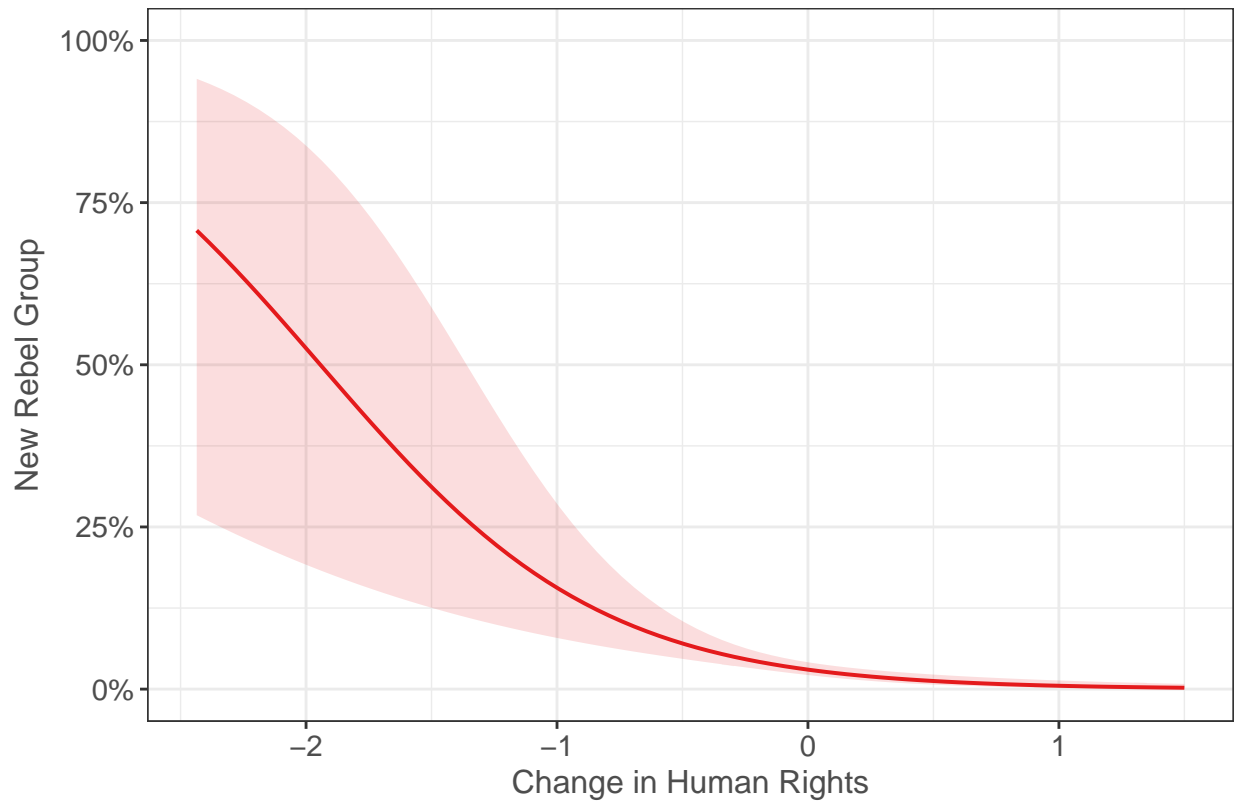


Figure 4.1: Predicted Probability of New Rebel Group Formation

The substantive effect is smaller than that for Human Rights, however (see Figure 1). Moving from perfectly indiscriminate policies to the most finely targeted increases the expected number of rebel groups from roughly 1.4 to slightly over 2.

*H3*, which predicts an interactive effect between repression and discrimination, is tested in Models 2 and 4. In Model 2 the interaction is positive and statistically significant at the 99.9% level. The marginal effects are plotted in Figure 2. The red line shows the predicted effect of Human Rights at the lowest observed value (i.e. the most repressive). At the lowest values of Discrimination (i.e. a perfectly indiscriminate political system) and most repressive values of Human Rights, the expected number of rebel groups is slightly below 2. As discrimination increases, however, the effect of repression increases. When 50% of the population is subject to discrimination, the expected number of rebel groups is roughly 2.8. When discrimination is at its highest, with 99% of the population being free from political

discrimination, the effect of repression is quite strong, with a prediction of roughly 4.3 rebel groups. At the highest observed levels of human rights, the expected number of rebel groups is consistently around 1, and not affected by the level of Discrimination. In short, the interaction result suggests that we should see the greatest number of rebel groups when governments use strongly repressive tactics, but deploy such repression in a highly targeted fashion. When used indiscriminately, repression has little effect on the number of rebel groups. In Model 4, the interaction term is just shy of statistical significance. This suggests that splintering accounts for some of the interaction effect.

While the results are largely consistent with my hypotheses, this analysis does have limitations. Perhaps most notably, it does not use a perfect measure of targeted repression, instead relying on political discrimination as a proxy. I would argue, however, that this limitation is more likely to create bias *against* my hypotheses than for them. There may be people who are not part of an excluded minority group, but nevertheless are subjected to human rights violations. Indeed, as factors such as judicial independence and press freedom are significant components of the Latent Human Rights Scores, such patterns are likely. In such a case my measure would detect discrimination, but there would be many individuals behaving as if repression was indiscriminate. Conversely, some individuals may face limited political opportunities as a result of discrimination against their ethnic group, while avoiding threats to their physical integrity. This combination should produce individuals who are disinclined to cooperate with other members of society, but are not especially incentivized to resort to violence due to the absence of physical repression. Nevertheless, more precise measures should be pursued.

Additionally, this analysis does not facilitate causal claims. It is possible that government repression strategy is endogenous to the expectation that multiple rebel groups will emerge, for example. While lagging the repression and discrimination variables may mitigate this concern slightly, the addition of an instrumental variable or other quasi-experimental

technique would greatly improve the validity of the analysis.

|                          | M1 Monoethnic     | M2 Multiethnic     | M3 Nonethnic      |
|--------------------------|-------------------|--------------------|-------------------|
| (Intercept)              | 0.40<br>(0.21)    | -2.99***<br>(0.38) | -0.46*<br>(0.23)  |
| joiner                   | 0.63*<br>(0.32)   | -0.50<br>(0.59)    | -0.55<br>(0.35)   |
| splinter                 | 0.56<br>(0.37)    | 0.69<br>(0.49)     | -1.35*<br>(0.53)  |
| alliance                 | 0.06<br>(0.41)    | 1.56**<br>(0.50)   | -1.85**<br>(0.70) |
| Incompatibilityterritory | 1.19***<br>(0.30) | -1.25**<br>(0.47)  | -0.91*<br>(0.35)  |
| prevactive               | -0.24<br>(0.39)   | 0.06<br>(0.47)     | 0.42<br>(0.55)    |
| country_ethnic           | -0.02<br>(0.01)   | 0.04*<br>(0.02)    | 0.00<br>(0.02)    |
| rebpresosts != "no"TRUE  | 0.06<br>(0.23)    | 1.06**<br>(0.35)   | -0.80**<br>(0.30) |
| AIC                      | 478.49            | 255.13             | 375.78            |
| BIC                      | 510.20            | 286.84             | 407.49            |
| Log Likelihood           | -231.25           | -119.56            | -179.89           |
| Deviance                 | 462.49            | 239.13             | 359.78            |
| Num. obs.                | 389               | 389                | 389               |

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

Table 4.3: Logit Models of Rebel Group Ethnic Composition

## 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.<sup>2</sup> 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

<sup>2</sup>The country's military regime began using the name "Myanmar" in 1989, but most dissidents and the U.S. government continue to use "Burma."

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 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



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

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 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 qualify 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 Arakense 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 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 Arakense 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 Arakense dissidents, but did support the movement and aided in the establishment of several of the rebel groups there (Smith 1999).

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 willing 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 targeted repression should increase the number of rebel groups active in a civil war by reducing the relative cost of participation in rebellion, and by activating ethnic and other subnational identities that provoke divisions among dissidents. In my empirical analyses I find support for this theory, as both repression and discrimination are associated with an increase in the expected number of rebel groups in a conflict. Furthermore, an interaction effect shows that repression has the greatest effect on the number of rebel groups when it is most targeted.

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 context from which rebels emerge (Staniland 2014), 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). Future work should examine the government's strategic calculus in more detail. My theory gives little agency to the government, treating as a largely exogenous source of repression. While it is quite plausible that governments would prefer to fight

a divided opponent rather than a unified one, my theory and findings suggest that the source of this division is often new individuals entering the conflict. As this is a seemingly undesirable outcome, the government's use of targeted repression in conflict settings is puzzling.

There are also significant opportunities for methodological improvements to this line of research. First, my empirical analysis does not directly test my theoretical mechanism - the reorientation of individuals away from national identities and toward ethnic and other subnational ones. Survey or experimental research on individuals who have been targeted by repression would provide a much more direct test of the mechanism. Additionally, a better measure of targeted repression would improve the validity of the study. It may be possible to construct such a measure from geocoded events data. Finally, an instrumental variable or other causal inference technique would greatly improve the analysis.

A final direction for new research would examine the relationship between original and joining rebel groups. If my theory is correct, joining groups should tend to have different ethnic make-ups, and likely a stronger emphasis on ethnic identity than originating groups. I do not make any predictions about the relationship between rebel groups when multiple are present. Surprisingly few works explore conflict between rebel groups (but see Fjelde and Nilsson 2012), nor do many explore alliances between rebels (but see Bapat and Bond 2012). If the results presented here are to be believed, such work will be relevant so long as governments repress.

## Chapter 5

# The Realignment of Rebel Groups

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

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

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

*Hypothesis 9: The probability that new, multi-ethnic alliances will form should decrease with the level of repression*

*Hypothesis 10: The probability that new, mono-ethnic alliances will form should increase with the level of repression*

## 5.1 Splintering Results

|                                   | Model 1            | Model 2          | Model 3          | Model 4            |
|-----------------------------------|--------------------|------------------|------------------|--------------------|
| (Intercept)                       | -2.92***<br>(0.11) | 2.53<br>(2.10)   | 2.56<br>(2.11)   | -0.51<br>(19.87)   |
| Change in Human Rights            | -0.14<br>(0.45)    | -0.47<br>(0.57)  | -1.43<br>(1.41)  | -1.69***<br>(0.39) |
| Ethnolinguistic Fractionalization |                    | 0.89<br>(0.72)   | 0.95<br>(0.73)   |                    |
| Human Rights X Fractionalization  |                    |                  | 1.60<br>(2.24)   |                    |
| Intensity Level                   |                    | -0.57<br>(0.41)  | -0.58<br>(0.41)  | 0.28<br>(0.32)     |
| Prev. Multi-rebel                 |                    | -0.15<br>(0.40)  | -0.15<br>(0.40)  | 0.14<br>(0.34)     |
| Contiguous Civil War              |                    | 0.04<br>(0.09)   | 0.04<br>(0.09)   | 0.16*<br>(0.08)    |
| Secessionist                      |                    | -0.38<br>(0.39)  | -0.37<br>(0.39)  |                    |
| Logged GDP per capita             |                    | -0.49*<br>(0.20) | -0.50*<br>(0.20) |                    |
| Logged Population                 |                    | -0.20<br>(0.15)  | -0.20<br>(0.15)  |                    |
| Polity                            |                    | 0.01<br>(0.03)   | 0.01<br>(0.03)   |                    |
| Post Cold War                     |                    | 0.47<br>(0.35)   | 0.49<br>(0.35)   |                    |
| AIC                               | 650.46             | 368.39           | 369.91           | 435.17             |
| BIC                               | 661.21             | 429.57           | 436.19           | 472.19             |
| Log Likelihood                    | -323.23            | -172.20          | -171.96          | -210.58            |
| Deviance                          | 646.46             | 344.39           | 343.91           | 421.17             |
| Num. obs.                         | 1596               | 1210             | 1210             | 1465               |

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

Table 5.1: Logit Models of Splinter Group Formation



|                | Model 1         |
|----------------|-----------------|
| (Intercept)    | 0.02<br>(0.09)  |
| multieth       | 0.04<br>(0.06)  |
| latentmean     | -0.03<br>(0.02) |
| centcontrolyes | 0.11<br>(0.09)  |
| AIC            | 327.96          |
| BIC            | 347.70          |
| Log Likelihood | -158.98         |
| Deviance       | 51.44           |
| Num. obs.      | 383             |

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

Table 5.2: Statistical models

## 5.2 Alliance Formation Results

How to cite this model in Zelig: Christine Choirat, Christopher Gandrud, James Honaker, Kosuke Imai, Gary King, and Olivia Lau. 2017. relogit: Rare Events Logistic Regression for Dichotomous Dependent Variables in Christine Choirat, Christopher Gandrud, James Honaker, Kosuke Imai, Gary King, and Olivia Lau, “Zelig: Everyone’s Statistical Software,” <http://zeligproject.org/> How to cite this model in Zelig: Christine Choirat, Christopher Gandrud, James Honaker, Kosuke Imai, Gary King, and Olivia Lau. 2017. relogit: Rare Events Logistic Regression for Dichotomous Dependent Variables in Christine Choirat, Christopher Gandrud, James Honaker, Kosuke Imai, Gary King, and Olivia Lau, “Zelig: Everyone’s Statistical Software,” <http://zeligproject.org/> How to cite this model in Zelig: Christine Choirat, Christopher Gandrud, James Honaker, Kosuke Imai, Gary King, and Olivia Lau. 2017. relogit: Rare Events Logistic Regression for Dichotomous Dependent Variables in Christine Choirat, Christopher Gandrud, James Honaker, Kosuke Imai, Gary King, and Olivia Lau, “Zelig: Everyone’s Statistical Software,” <http://zeligproject.org/>

|                                   | M1 All Alliances             | M2 Multiethnic   | M3 Monoethnic                |
|-----------------------------------|------------------------------|------------------|------------------------------|
| (Intercept)                       | 1.71<br>(2.84)               | -1.25<br>(12.46) | 1.56<br>(3.82)               |
| Change in Human Rights            | -0.99 <sup>†</sup><br>(0.55) | -1.15<br>(1.26)  | -1.20 <sup>†</sup><br>(0.70) |
| Ethnolinguistic Fractionalization | 1.12<br>(0.95)               | 11.27<br>(10.54) | 0.79<br>(1.21)               |
| Intensity Level                   | 0.03<br>(0.45)               | 0.54<br>(0.89)   | 0.09<br>(0.58)               |
| Prev. Multi-rebel                 | 0.31<br>(0.47)               | 0.35<br>(0.88)   | -0.42<br>(0.78)              |
| Contiguous Civil War              | -0.06<br>(0.13)              | 0.08<br>(0.28)   | 0.01<br>(0.15)               |
| Logged GDP per capita             | -0.43 <sup>†</sup><br>(0.26) | -0.78<br>(1.01)  | -0.39<br>(0.35)              |
| Logged Population                 | -0.29<br>(0.20)              | -0.75<br>(0.70)  | -0.33<br>(0.26)              |
| Polity                            | -0.01<br>(0.04)              | 0.00<br>(0.11)   | -0.04<br>(0.05)              |
| AIC                               | 241.14                       | 71.96            | 163.10                       |
| BIC                               | 292.12                       | 122.94           | 214.07                       |
| Log Likelihood                    | -110.57                      | -25.98           | -71.55                       |
| Deviance                          | 221.14                       | 51.96            | 143.10                       |
| Num. obs.                         | 1210                         | 1210             | 1209                         |

\*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ , <sup>†</sup> $p < 0.1$

Table 5.3: Rare Events Logit Models of Alliance Formation

# Chapter 6

## Conclusion

### 6.1 Areas for Future Research

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 they engaged in violence. 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.

# Appendix

## Chapter 2 Appendix

### Coding Rules for Rebel Origin Data

The origin variable records the type of organization from which the rebel group emerged. In many cases organizations do not seamlessly transition to violence. Rather, elites from a group elect to launch a rebellion, and recruit partially or entirely from elsewhere. As it is often difficult to discern the origins of rank-and-file members, I code group origins on the basis of their leadership. I account for the extent to which the new rebel group overlaps with the predecessor organization with two variables: “parent.org.subset”, which codes whether only a portion of the parent group joined the rebellion, and “other.sources” (COMING SOON), which codes whether a group draws membership from sources other than the origin group.

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 violent 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. 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 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.
- **Military Faction** Military factions are a portion of the governmental 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.
- **Government Faction** 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.

- 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.
- Regional Government** A number of secessionist movements have been led by organizations that previously comprised most or all of the subnational government in a region. Most of the secession movements in former Soviet republics fall into this category.

## Chapter 3 Appendix

### 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 |
| Senegal       | 1196 | 0    | 0    | 0    |
| Sierra Leone  | 1200 | 1200 | 1200 | 1200 |
| South Africa  | 1191 | 1190 | 0    | 0    |
| Sudan         | 2390 | 2399 | 2400 | 2400 |
| Swaziland     | 1200 | 1199 | 0    | 0    |
| Tanzania      | 1200 | 1200 | 0    | 0    |
| Togo          | 2386 | 2400 | 1208 | 1304 |
| Tunisia       | 1200 | 1200 | 0    | 0    |
| Uganda        | 1200 | 1200 | 0    | 0    |
| Zambia        | 2400 | 2400 | 2431 | 2400 |
| Zimbabwe      | 1199 | 1200 | 1200 | 1200 |
|               | 2400 | 2400 | 1200 | 1048 |

Table A1: Survey Responses by Country and Wave



## Response Rates for Dependent Variables

|  | Count  | Percentage |
|--|--------|------------|
| Missing  | 0      | 0.0        |
| You were not registered to vote                        | 9666   | 6.1        |
| You voted in the elections                             | 111632 | 70.4       |
| You decided not to vote                                | 8353   | 5.3        |
| You could not find the polling station                 | 1154   | 0.7        |
| You were prevented from voting                         | 1225   | 0.8        |
| You did not have time to vote                          | 3309   | 2.1        |
| You did not vote because your name not in the register | 4133   | 2.6        |
| Did not vote for some other reason                     | 10274  | 6.5        |
| You were too young to vote                             | 6777   | 4.3        |
| Don't Know / Can't remember                            | 816    | 0.5        |
| Refused  | 0      | 0.0        |
| Not Asked in this Country                              | 1200   | 0.8        |

Table A2: Summary of Voting Responses



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