Politics Among Rebels: The Causes of Division Among Dissidents

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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 possibility that rebels do not always form a single group. Yet, at least two rebel groups are active at some point in 44% of civil conflicts. Over the course of the Chadian Civil War, for instance, 25 distinct rebel groups fought against the government at various times. 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. The existing literature offers many useful insights to the conditions under which civil war will emerge, but it has relatively few explanations for the structure

¹Source: Pettersson and Wallensteen (2015).

of rebel movements. The studies that do address some aspect of the phenomenon focus overwhelmingly on the fragmentation of existing groups (e.g. McLauchlin and Pearlman 2011; Christia 2012; Staniland 2014), and do not consider the mobilization of entirely new groups. I thus address the question: why do rebel groups join ongoing civil conflicts?

While little attention has been given to the sources of rebel movement structure, several studies suggest that fragmented rebel movements are associated with particularly concerning conflict attributes. Conflicts with multiple rebel groups last longer than dyadic competitions (Cunningham 2006; Cunningham, Gleditsch, and Salehyan 2009; Akcinaroglu 2012). Furthermore, Cunningham, Gleditsch, and Salehyan (2009) find that the presence of multiple government-rebel dyads decreases the likelihood of peace agreements and increases the likelihood of rebel victories, though Findley and Rudloff (2012), find that fragmented rebel movements are often associated with an *increased* likelihood of negotiated settlement. Relatedly, Atlas and Licklider (1999) and Zeigler (2016) find that episodes of conflict renewal often occur between formerly allied rebel factions. Finally, conflicts with multiple dyads feature more fatalities than dyadic ones.² Clearly, conflicts with multiple rebel groups comprise one of the most severe subsets of civil wars. Thus, understanding the causes of multi-dyadic conflict is of great normative and policy importance.

This work contributes to the existing literature by advancing our understanding of the complexity of civil conflict in terms of the number of warring parties. In doing so it builds on the growing literature on a related facet of complexity — the fragmentation of existing groups (see Cunningham, Gleditsch, and Salehyan 2009; W. Pearlman and Cunningham 2011; Staniland 2014). Furthermore, examining the relationships between rebel groups sheds new light on debates about the motives behind rebellion (e.g. Collier and Hoeffler 2004). For instance, if rebellion is fundamentally about ethnic or religious grievances as recent works have asserted (Cederman, Wimmer, and Min 2010), we might expect to see such concerns influence the structure of rebel coalitions as well. If, by contrast,

²Source: my own analysis using data from Sundberg (2008).

rebels are motivated by the desire for profits from natural resources or illicit activities, the propensity for new groups to enter conflicts would likely be related to the availability of such resources, and not to political context. Finally, as my theory emphasizes the role of repression in incentivizing new actors to join the conflict, it builds on existing work on wartime civilian targeting (e.g. Kalyvas 2006) to show that repression can shape not only whether individuals elect to join conflicts, but also how they organize themselves when choosing to do so.

I proceed by elaborating a theoretical framework for studying the processes that might lead new rebel groups to join an ongoing civil conflict. Next, I argue that targeted repression is an especially influential force in producing new rebel groups, as it both reduces the relative cost of fighting, and induces individuals to identify more strongly with sub-national groups. After outlining a research design, I use fixed-effects poisson regressions to model the number of rebel groups competing in civil wars worldwide between 1946 and 2015, finding support for my hypotheses. Finally, I summarize the implications of the findings and identify several opportunities for further research.

1.1 Previous Work on the Structure of Rebel Movements

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

1.1.1 Group Formation

Around 30% of conflicts have at least one rebel group that was neither active from its beginning, nor did it split from an existing rebel group. 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; ???; 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). (???) 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. (???) 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. ???) 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.

1.1.2 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.

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. Organiza-

tions 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.

1.1.3 Alliance Formation

Several studies consider the formation of alliances among various types of militant organizations. 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. Bapat and Bond (2012) model the logic of alliance formation among rebel groups. They 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 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. 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 when multiple options are available. Christia suggests that these decisions are shaped by personal relationships between rebel elites, but does not give this question extended consideration in her empirical analysis. Horowitz and Potter (2013) find 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 seek to resolve this gap by explaining not only whether, but also with whom rebel groups will choose to form alliances.

1.2 Previous Work on the Consequences of Repression

1.3 Previous Work on Ethnic Identification

1.4 Broader Contributions

This project also contributes to a number of larger discussions in the civil war literature. Both the theoretical arguments and empirical results presented here shed new light on a number of ongoing questions.

1.4.1 Rebel Motives

An examination of the relationships between dissident groups is also likely to offer a new perspective on rebel motives. For the last 15 years, 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 view 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

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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, the structure of rebel movements should be shaped largely by the natural resources present in a country. As many of the extraction of many of the resources thought to be associated with rebellion is not particularly labor-intensive (for instance, the extraction of alluvial diamonds from river beds), rebels should prefer to keep their groups small so as to maximize the share of profits given to each individual member. In resource-rich areas, we should see highly fragmented rebel movements. Furthermore, the use of violence in such a scenario is likely to be aimed at acquiring and defending access to resources, and if anything is more likely if other groups have adopted violent tactics. If rebellion is a political enterprise, by contrast, there should be possibilities for coalition building and cooperation between rebels, as the primary concern is maximizing the likelihood of defeating the government. Yet, there is also a possibility for free riding, suggesting the decision to resort to violence is interdependent in the direction of becoming less likely as

other groups mobilize.

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 Prahl 1988). Many civil society organizations will produce such ties among members. For example, members of a teachers' union might expect to interact throughout their career, as would most members of a political organization representing the interest of a particular geographic area. Drawing from existing groups also offers the possibility of mobilizing a large number of people quickly, particularly if rebel entrepreneurs can gain the support of group leadership. Existing social organizations can also produce a cohesive rebel group, particularly if they have strong vertical ties between leadership and rank-and-file members, and strong horizontal ties between chapters or geographic areas, as this allows the central leadership to exert a high degree of command and control over members (Staniland 2014). Finally, building a movement by recruiting existing groups will often allow rebel entrepreneurs some control over group size, whereas recruiting individuals may not.

Consistent with these notions, my own data collection¹ 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

¹I 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.

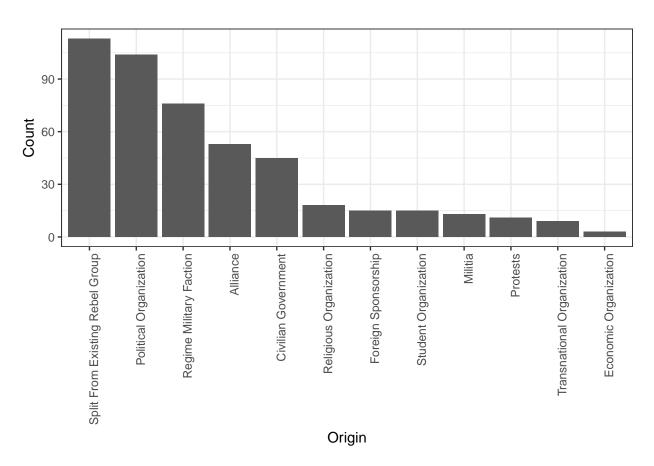


Figure 2.1: The Origins of Rebel Groups, 1946–2015

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.² Yet, the ability to directly voice concerns to leadership is not the only way for rank-and-file rebels to exert influence in an organization. In general dissatisfied individuals also have the ability to exit an organization (Hirschman 1970). This is especially true in the context of rebel organization, as rebels frequently break away from their group to form new splinter organizations (see Pearlman and Cunningham 2011). While some rebel

²Some 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,³ which often provide a basis for division within the dissident movement, and more inclusive priorities such as a non-sectarian ideology. I expect that government repression will be a crucial determinant of this orientation.

2.2.1 The Relative Cost of Fighting

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

Thus, individuals who experience repression, either personally or in close enough proximity to influence their expectations of safety, should become more willing to engage in violence. Individual thresholds for violence will continue to vary, meaning that some will continue

³Subsequently, 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. 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 (1996) argues that in conflicts where ethnicity is the primary dividing line, individuals will experience a security dilemma in which their survival is increasingly tied to the success of their group. However, this does not explain why ethnicity would become the basis for conflict in the first place. Kuran (1998) offers an explanation for this, arguing that "ethnic activists" can provoke a cascade of increased ethnic identification, particularly when they use violence on behalf of the ethnic group. He explains,

⁴Hereafter 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 counterviolence, 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 and Hollenbach 2013). 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.

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 repressed⁵ should on average exhibit a greater willingness to engage in violence than individuals who lack such experiences.

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

Additionally, I expect that repression will tend to induce its targets to identify more strongly with their ethnic group⁶, as repression is often applied disproportionately to certain groups, increasing the salience of such identities.

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

⁶In 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.

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

2.3 Processes of Structural Change

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

2.3.1 Group Formation

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

Second, there must be a division among the dissident constituents. Newly mobilizing individuals must have a reason for forming a new group rather than joining an existing one. At their most benign, these divisions might simply reflect the difficulty of coordinating actions across physical distance or linguistic barriers. For example, dissidents on opposite sides of a mountain range might choose to form independent organizations. In such cases

the formation of multiple rebel groups might be a matter of convenience rather than an indicator of animosity or divergent objectives. In other cases, however, divisions may be deeper and more difficult to reconcile. For instance, if some rebels make improving the status of their ethnic group a primary concern, it is unlikely that members of other ethnic groups will join their organization, and any existing members with differing ethnic identities will be likely to leave.

As noted in the preceding discussion of individual-level dynamics, repression can satisfy both of these conditions. The application to the first condition requires little explanation. Repression should reduce the relative cost of fighting, 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 utlimately 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 realtively 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 entreprenuers 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 though other means to be associated with a single ethnic group.

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

2.3.3 Alliance Formation

Both group formation and splintering can increase the number of rebel groups active in a conflict. This number can decrease, however, when rebel groups form alliances. I define an alliance as substantial integration of capabilities and command by two or more previously active, independent rebel groups. Typically these alliances will result in the creation of a named umbrella organization to coordinate battlefield operations. For example, the Syrian Democratic Forces coordinates the actions of several Kurdish and Arabic forces in their fight against the Islamic State. Note that this definition entails a deeper level of integration than most alliances between states. I choose to focus on this category for two reasons. First, named umbrella organizations are easily identifiable, whereas less comprehensive cooperative arrangements are often not well-publicized, as rebels lack formalized processes such as treaties for creating them, and may have incentives to hide such cooperation from the government. Second, mergers of this sort have a meaningful effect on the complexity of civil wars, as rebel groups often channel most or all of their activities through umbrella groups. Less formal alliances, by contrast, are often short-lived, and may entail a more circumscribed form of cooperation, such as a non-aggression pact. I expect that alliance formation is driven by a similar underlying dynamic to splintering - as dissident constituents shift their identities and preferences, the rebel movement should change in structure to reflect these contours.

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 legistlature) must be divided among the members of the winning alliance (Christia 2012). These concerns should tend to constrain the value of alliances in civil war. The existing literature finds that these concerns limit the size of rebel coalitions (Christia 2012). Logically, they should also shape the choice of partners with whom rebels ally.

I do not expect that repression will directly affect the willingness of rebel groups to form alliances. If alliances are intended to aggregate or coordinate capabilities, external factors such as rebel strength relative to the government, or battlefield events should be the primary influences on the attractiveness of alliances. The experience of civilians should affect these calculations only insofar as they alter the level of resources available to rebel groups. I do, however, expect that 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 Ethnic Identification

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 3-6¹ 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

¹The 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

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,² 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.

²Question 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 0.26.³ 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,⁴ and binary indicators of whether they are employed at least

³Calculated with all country-years included in the data weighted equally.

⁴Possible 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 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).

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

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

Table 3.4: Multilevel Models of Attitudes Toward Violence

Perhaps due in part to its rarity, only a few control variables are significantly related to violence. Consistent with previous findings (e.g. Humphreys and Weinstein 2008), women

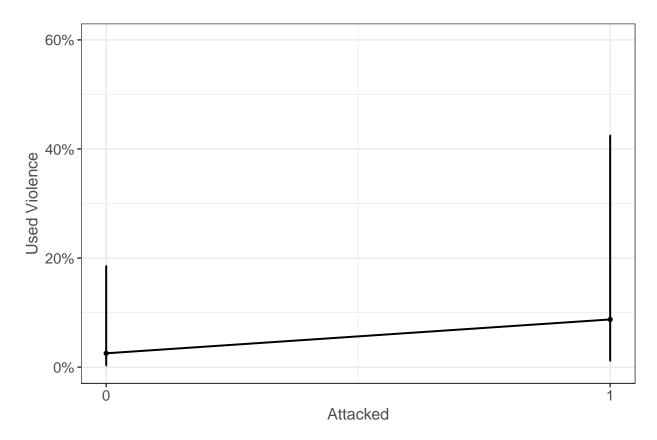


Figure 3.1: Predicted Probability of the Use of Violence (Model 1)

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

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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 than an individual has participated in community meetings, as is the country-level human rights situation. The country-level measure is not significantly related to protest activity, but being attacked once again is, with individuals who have experienced an attack being more than twice as likely to have participated in protest. It should be noted, however, that the same endogeneity concerns that exist for violence apply to these forms of participation as well, as these results are consistent

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

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

Table 3.5: 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. 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.

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

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

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

Table 3.6: Multilevel Models of Ethnic Identification

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

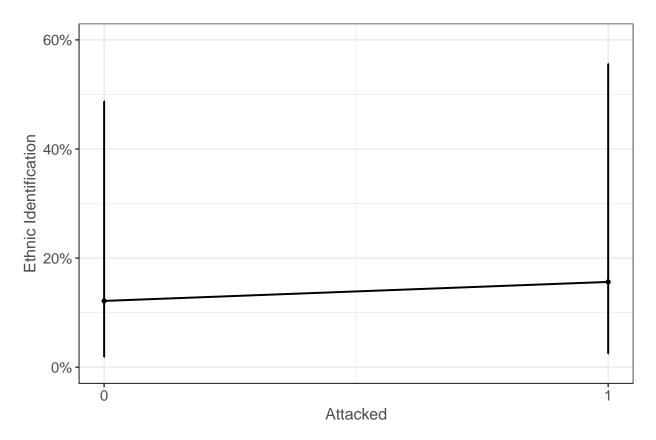


Figure 3.2: Predicted Probability of Ethnic Identification (Model 5)

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

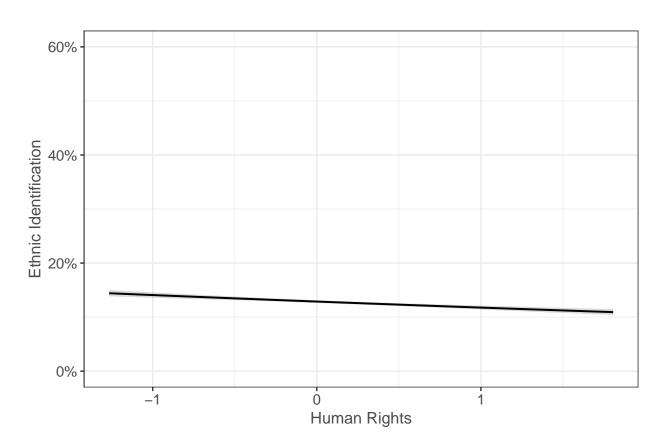


Figure 3.3: Predicted Probability of Ethnic Identification (Model 5)

While further analysis is need to establish the direction of the causal relationship, these results do allow me to tentatively reject the null hypothesis of no relationship between repression and ethnic identification associated with *H*2. 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	0.08	-0.19
	(0.17)	(0.25)	(0.13)
Ethnolinguistic Fractionalization	1.32	-0.43	4.99**
	(1.97)	(2.89)	(1.54)
Ethnolinguistic Fractionalization ²	-1.01	1.59	-4.78**
	(1.99)	(2.89)	(1.53)
Polity	-0.04	-0.01	-0.03
	(0.03)	(0.04)	(0.02)
Civil War	0.21	-0.44^{*}	0.14
	(0.20)	(0.20)	(0.19)
Separatist War	-0.18	-0.82	0.30
	(0.53)	(0.86)	(0.43)
Attacked	0.48^{***}	1.09***	0.25^{***}
	(0.07)	(0.08)	(0.06)
Intimidated	0.14^{**}	0.11	0.29^{***}
	(0.05)	(0.08)	(0.04)
Employed	-0.05	-0.05	-0.00
	(0.06)	(0.08)	(0.05)
Primary Education	0.01	0.16^{*}	0.39^{***}
	(0.05)	(0.08)	(0.05)
Urban	-0.17^*	-0.19^*	-0.06
	(0.07)	(0.09)	(0.06)
Ruling Party Supporter	-0.08	-0.14^{*}	-0.16^{***}
	(0.05)	(0.07)	(0.04)
Age	-0.22^{***}	0.01	-0.07
	(0.06)	(0.08)	(0.05)
Female	-0.22^{***}	-0.32^{***}	0.04
	(0.05)	(0.07)	(0.04)
AIC	13661.19	7297.64	18584.48
BIC	13801.42	7437.88	18724.71
Log Likelihood	-6813.60	-3631.82	-9275.24
Num. obs.	28251	28251	28251
Num. groups: Ethnic:Country	497	497	497
Num. groups: Country	26	26	26
Var: Ethnic:Country (Intercept)	0.19	0.39	0.30
Var: Country (Intercept)	0.16	0.35	0.09

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

Table 3.7: 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



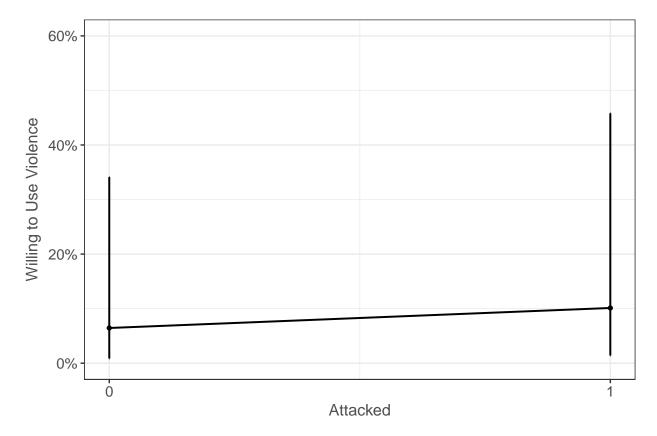


Figure 3.4: Predicted Probability of the Use of Violence (Model 8)

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

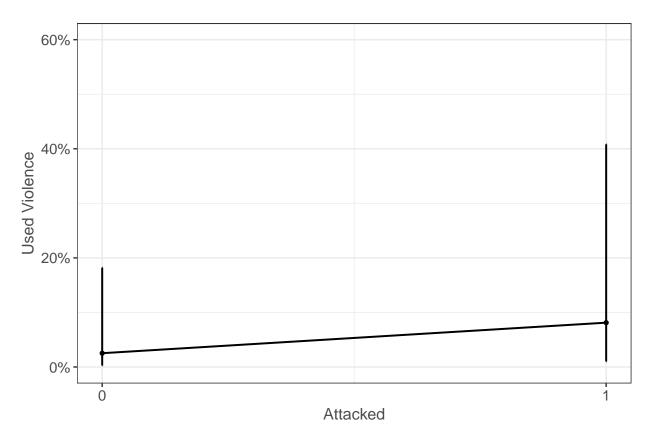


Figure 3.5: Predicted Probability of the Use of Violence (Model 8)

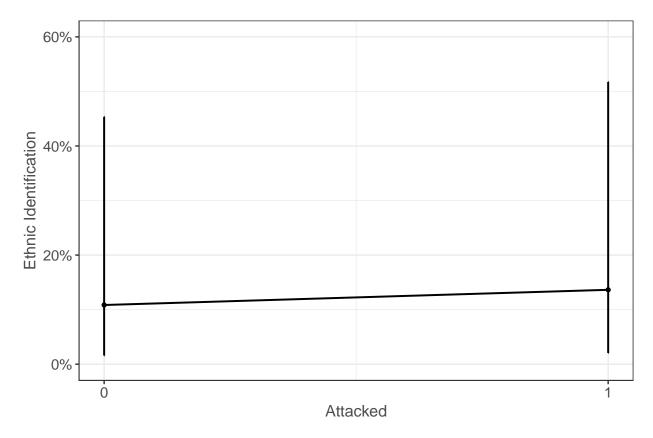


Figure 3.6: Predicted Probability of Ethnic Identification (Model 9)

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.

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Consistent with this hypothesis, I find that while such sentiments are generally rare, individuals who have experienced a violent attacked are roughly 30% more likely than others to report a willingness to use violence, and are nearly three times more likely to report having used violence. I also predicted that repression should induce greater levels of ethnic identification among its targets. Indeed, I find that individuals who have experienced an attack are 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 than individual will vote, suggesting that governments may be accepting increased numbers of violent individuals in exchange for the opportunity to shape the electorate. Second, the results suggest that repression can trigger a vicious cycle, in which the government responds to an initial threat in a way that further entrenches the opposition, leading to ever-greater levels of violence.

This 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.

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 Entry of New Groups

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 excluded all interstate conflicts from the data, and include all civil wars, anti-colonial wars, and internationalized civil wars. I then aggregate this data to the country-year, producing a count of the number of rebel groups active in each country experiencing a civil war each year. This results in a dataset of 1,501 observations, covering the period 1946–2015. Note that the UCDP data typically allows for the presence of multiple conflicts within the same country-year — rebel groups pursuing secession are considered part of a separate conflict from rebels challenging the central government, and rebels pursuing secession for different territories are considered separate from one another. I ignore these distinctions and aggregate to the country-year for two reasons. First, my theory focuses largely on the role of government behavior in shaping

rebel structure, and thus it makes sense to group all rebels facing the same government together. From the government's standpoint, beyond a tactical level it may make little difference whether a new rebel group is challenging the central government or pursuing secession — both outcomes are undesirable. Second, most of my independent variables are measured at the country level, and in many cases it would be difficult to record subnational variation, particularly in a dynamic fashion.

4.1.1 Dependent Variables

- Number of Rebel Groups My primary dependent variable is the number of rebel groups active in a country-conflict-year. The data comes from the UCDP Dyadic data (Harbom, Melander, and Wallensteen 2008; Melander, Pettersson, and Themnér 2016), which considers rebel factions to be separate groups if they have a discernible name. In other words, a faction connected to a larger group would be considered an independent organization and count toward this measure if it had its own name; otherwise, it would be considered part of the larger organization. Name *changes*, however, only result in the entry of a new group to the data if they are accompanied by a substantial change to the organization's composition such as a merger with another group. Note that given the difficulties of determining precisely when many rebel groups ceased operations, this measure includes all groups that appear at any point during the calendar year; it is therefore possible that this measure overstates the number of groups that were active simultaenously in some cases.
- Number of Non-Splinter Rebel Groups As the process by which entirely new rebel groups emerge is likely to be somewhat different than the process by which existing rebel groups splinter, I employ an alternate DV that excludes splinter organizations from the count of active rebel groups. The measure is based on my own data collection on rebel origins, with groups being coded as splinter organizations if their leader and

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majority of members were previously part of a different rebel group, and transitioned directly to operating as an independent group (i.e. there was no period of peace between membership in the previous and new organizations).

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).
- 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 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, Jaggers, and Gurr 2012).
- **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 Travedi 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 frmo 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

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of rebel groups, as the latent respect for human rights measure has a negative relationship that is statiscally 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	-1.76**	-2.03***	-14.76***	-14.94***
-	(0.61)	(0.60)	(0.88)	(0.65)
Human Rights	-0.26***	-0.39***	-0.27^{***}	-0.35^{***}
Ü	(0.03)	(0.05)	(0.04)	(0.06)
Discrimination	-0.40***	0.00	-0.43^{**}	-0.15
	(0.11)	(0.11)	(0.14)	(0.20)
Human Rights X Discrimination		0.31^{***}		0.19
Ü		(0.08)		(0.10)
Intensity Level	0.01	0.02	0.17^{***}	0.17^{***}
·	(0.03)	(0.03)	(0.04)	(0.04)
Number of Conflicts	0.38***	0.38^{***}	0.33***	0.33***
	(0.02)	(0.02)	(0.02)	(0.02)
% Conflicts Over Territory	-0.22***	-0.21^{***}	-0.26^{***}	-0.25^{***}
	(0.05)	(0.05)	(0.07)	(0.07)
Logged GDP per capita	0.10^{**}	0.10^{**}	-0.10^*	-0.10^*
	(0.03)	(0.03)	(0.05)	(0.05)
Ethnolinguistic Fractionalization	-1.21^{***}	-1.42***	-0.21	-0.33
	(0.28)	(0.29)	(0.42)	(0.42)
Contiguous Civil War	0.02	0.01	-0.01	-0.01
	(0.04)	(0.04)	(0.05)	(0.05)
Logged Population	0.07	0.09	-0.14^{*}	-0.13
	(0.05)	(0.05)	(0.07)	(0.07)
AIC	3084.14	3082.34	2828.59	2829.58
BIC	3503.30	3506.55	3247.75	3253.79
Log Likelihood	-1459.07	-1457.17	-1331.30	-1330.79
Deviance	210.38	206.59	406.70	405.69
Num. obs.	1153	1153	1153	1153

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

Table 4.1: Poisson Regression Models of Rebel Group Count

Models 1 and 3 also provide tests of *H*2, 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. The substantive effect is smaller than that for Human Rights, however (see Figure 1).

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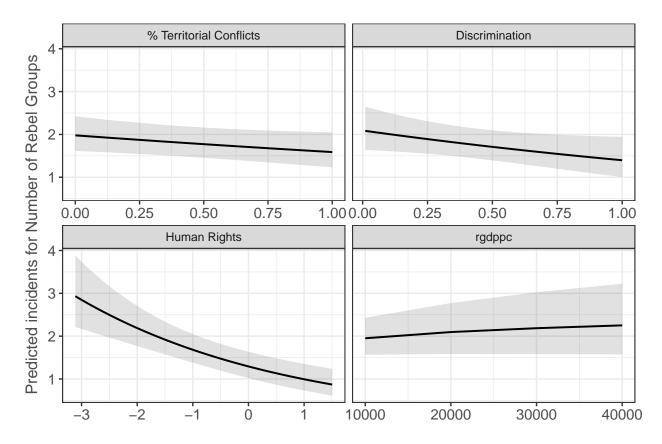


Figure 4.1: Effect Plots for Model 1

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 signficant 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

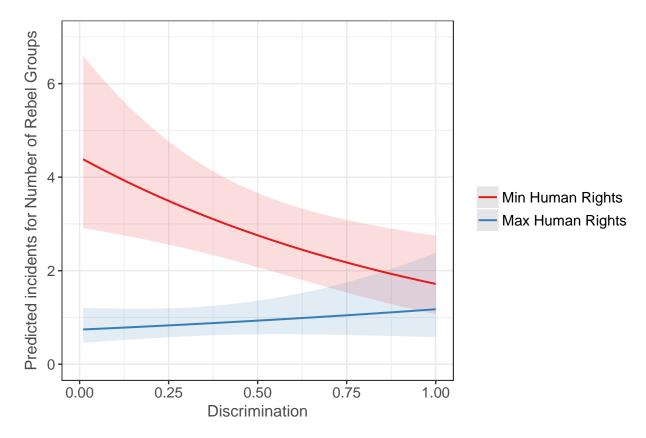


Figure 4.2: Marginal Effects Plots for Repression X Discrimination Interaction (Model 2)

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 limitations 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

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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 discinclined 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.

4.3 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.

Appendix

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

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S <u+00e3>0 Tom<u+00e9> and Pr<u+00ed>ncipe</u+00ed></u+00e9></u+00e3>	1196	0	0	0
Senegal	1200	1200	1200	1200
Sierra Leone	1191	1190	0	0
South Africa	2390	2399	2400	2400
Sudan	1200	1199	0	0
Swaziland	1200	1200	0	0
Tanzania	2386	2400	1208	1304
Togo	1200	1200	0	0
Tunisia	1200	1200	0	0
Uganda	2400	2400	2431	2400
Zambia	1199	1200	1200	1200
Zimbabwe	2400	2400	1200	1048

Table 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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