

**HOW TERRORIST ORGANIZATIONS SURVIVE: COOPERATION AND
COMPETITION IN TERRORIST GROUP NETWORKS**

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University of Pittsburgh, 2012

Why do some terrorist groups last much longer than others? This dissertation is among a small but growing number of studies to apply social networks analysis to the study of terrorism, and addresses an outcome of interest that is important but under analyzed. Terrorist group survival is puzzling because it is not explained by the conditions that encourage terrorism generally. Much of the literature has focused on terrorist attacks as an outcome of interest, ignoring the group context in which most incidents occur. Organizational and social network research suggests that group dynamics have important effects on outcomes, but connections between these studies and terrorism are underdeveloped. The dissertation presents an organizational-network model of terrorist group survival. Organizational aspects are the base of the model, but network attributes are a greater innovation, as this research offers the first explanation of terrorist group longevity to incorporate network attributes. The argument suggests the importance of direct ties between terrorist groups – cooperative and adversarial. It also argues for a role of interorganizational relations more broadly, in terms of indirect competition and eigenvector centrality. Finally, I incorporate the state into the explanation, emphasizing how state attributes condition intergroup relations. Hypotheses are evaluated on a newly-extended global dataset of terrorist group networks 1987-2005. Case studies of terrorist groups in Colombia, Northern Ireland, and Pakistan illustrate how causal mechanisms often function as argued.

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ACRONYMS

AD	Direct Action
AUC	United Self-Defense Forces of Colombia
ELN	Army of National Liberation
EPLF	Eritrean People's Liberation Front
ETA	Basque Fatherland and Freedom
GTD	Global Terrorism Database
INLA	Irish National Liberation Army
IRA	Irish Republican Army
ISI	Inter-Services Intelligence
JKLF	Jammu and Kashmir Liberation Front
LeT	Lashkar-e-Taiba
M-19	April 19 Movement
MIPT	Memorial Institute for the Prevention of Terrorism
MIR	Movement of the Revolutionary Left
PKK	Kurdistan Workers' Party
TOPs	Terrorist Organization Profiles
UDA	Ulster Defense Association
UDA	Ulster Volunteer Force

1.0 CHAPTER 1: INTRODUCTION

Why do some terrorist groups last much longer than others? The Canadian separatist group Quebec Liberation Front was active for about 7 years, while the Irish Republican Army carried out attacks for 36 years. This dissertation explores the survival of terrorist groups, comparing how some factors cut short the life of otherwise robust groups, while others contribute to longevity. I draw on the organizational and social network literatures to build an explanation of terrorist group survival. I argue that intergroup relations are a crucial and often overlooked component of terrorist group survival. Empirical evidence, from an original global quantitative data set and case studies, mostly provides support for the argument.

The argument I introduce in this dissertation is an organizational-network model of terrorist group survival. This draws on the ideas of mobilization and incentives to suggest that certain organizational attributes – each terrorist group’s political motivation, sources of income, and size – can help them add and retain members. The network aspect of the model suggests that ties between terrorist groups are also important to helping the groups with mobilization issues. The emphasis on social networks makes this dissertation among the few research projects to look at ties between terrorist groups, globally, in a systematic manner. The argument also suggests that state attributes condition the impact of intergroup relationships on terrorist group longevity.

This chapter introduces the research question, “Why do some terrorist groups last much longer than others?” It discusses why this question is both important and insufficiently answered

by extant literature. It then explains the theoretical roots of the question, in terms of the definition of terrorism, the choice to analyze terrorist *groups* instead of terrorism generally, and the importance of the outcome of interest.

1.1 THE QUESTION: IMPORTANT AND NOT SUFFICIENTLY ADDRESSED

The question of terrorist group survival is important for both theoretical and policy-related reasons. One puzzle motivating this research is that terrorist groups do not seem to be especially durable in environments that are purported by the literature to be permissive of terrorism. For example, a number of studies suggest that democratic states, through various mechanisms, experience more terrorism than other types of states (Schmid 1992; Eubank and Weinberg 1994, 2001; Li 2005). However, recent evidence suggests that terrorist groups in democracies do not seem to last any longer than terrorist groups in non-democracies.¹ What is it about terrorist group survival that is different from terrorism generally? Learning about terrorist groups can answer this puzzle, helping us to understand an additional dimension of terrorism.

The topic of terrorist group survival also addresses discussions in the literature about why some terrorists seem to be more “successful” than others, and if indeed terrorism can be successful at all (e.g., Abrahms 2006, 2008; Chenoweth et al. 2009; Pape 2003; Moghadam

¹ Blomberg et al. (2010) fail to consistently find a statistically significant relationship between democracy and the survival of transnational terrorist groups. My analyses of the 648 domestic and transnational terrorist groups used in the Jones and Libicki (2008) book similarly fail to show that democracy is associated with terrorist group survival.

2006). There are many ways to measure success, but an organization surviving to bomb another day indicates a degree of accomplishment.²

Understanding terrorist group survival is also important for policymakers. Governments are concerned about terrorism generally, but often conduct counterterrorism with the goal of eliminating specific *groups*.³ The U.S. government in the 1960s and 1970s specifically focused on the Weather Underground, for example. Governments recognize the heterogeneity of terrorist groups, and worry about some more than others. Colombia has battled the leftist FARC for decades, but some elements of the military supported the reactionary United Self-Defense Forces of Colombia – which eventually signed a deal with the government to give up violence. The study of terrorist group survival allows us to compare how different group and state attributes might affect success in counterterrorism. Results of this research can provide some expectations about the likely survival of various groups.

In addition to generally helping policymakers understand terrorist group duration, this project also addresses an interesting puzzle of counterterrorism. A policy many governments have employed – being “soft” on or supporting reactionary terrorist groups, hoping they destroy another terrorist group – almost never works. States such as Colombia, Spain, and Turkey have used this tactic, failing to achieve desired results, and the argument presented here explains why.

² Very few terrorist groups have given up the tactic because they achieved their political goal. This is discussed below.

³ Many governments attempt to deal with terrorism by addressing supposed “root causes” such as poverty, but some research suggests this is not productive because the notion of root causes does not seem to be supported by the evidence (e.g., Piazza 2006; Bjorgo 2005; Krueger and Maleckova 2003).

The terrorism literature has yet to adequately address the question of terrorist group survival.⁴ One set of recent studies creates typologies of the ways that terrorist groups can “end” (arrests, joining the political process, etc.), and attempts to explain each type of ending (Jones and Libicki 2008; Cronin 2009). However, these studies lack a general explanation of group survival, regardless of ending type. Additionally, their empirical evaluation relies more on cross-tabulation than methods such as multivariate regression. Other studies take an empirical first cut at terrorist group survival, but do not present a novel theoretical framework or include terrorist group data with variation over time (Vittori 2009; Blomberg et al. 2010; Young and Dugan 2010). Some very recent articles are starting to move beyond these issues (Blomberg et al. 2011; Carter 2012). Overall, the literature is just beginning to look at terrorist group survival in a comprehensive manner.

1.2 UNPACKING THE QUESTION AND ITS LOCATION IN THE LITERATURE

1.2.1 Initial concepts: Terrorism and terrorist groups

The definition of terrorism has been the subject of much debate (e.g., Hoffman 2006, 1-42; Crenshaw 1995, 4-19; Ganor 2002). I use the following definition of terrorism: *Terrorism is politically motivated violence carried out by substate actors against noncombatants for the purpose of influencing a wider audience.* This definition suggests that terrorism has five

⁴ Some early studies explored the question of why terrorist groups end, providing important initial inquiries into the subject. However, they only looked at a few cases for evidence, or had other empirical limitations (e.g., Crenshaw 1991, 1996; Ross and Gurr 1989).

essential elements. First, it has a political motivation. Second, it is violence, actual or threatened. Third, its perpetrators are substate actors. Fourth, its victims are noncombatants. Fifth, the perpetrators attempt to intimidate a large audience beyond that of the immediate victims. While there is no consensus in the literature, the above criteria are similar to those used by many scholars (Enders and Sandler 2006, 3-5; Jones and Libicki 2008, 3; Piazza 2006, 165; Cronin 2008, 11, fn. 1).⁵

Regarding groups, I use the following definition: *Terrorist groups are non-state organizations that use terrorism to accomplish their aims.* “Non-state” means that that the group is not a part of the government. It might be sponsored by or hosted by a government, but the group has substantial autonomy (Crenshaw 1991, 75). “Organization” means some degree of formality, including a name for the group and definable membership, but this is discussed more below (Wilson 1973, 31). This suggests some sort of leadership and a general strategic direction (Jones and Libicki 2008, 3-4). The part of the definition of terrorist groups that is probably the most subject to debate is the latter section, about using terrorism. To be considered a terrorist group, a group should have a systematic campaign, a strategy to use terrorism, and this should result in more than one incident (Crenshaw 1991, 75-78; Cronin 2009, 208).

Some terrorist groups stop using terrorism, and these groups should only be considered terrorist groups during the period when they are using terrorism. MIR, in Chile, used terrorism from the 1960s to the 1980s, but is currently an accepted political party. Since it no longer uses

⁵ The one criterion that is less agreed upon is the fourth, that victims must be noncombatants. Of the works cited in the previous sentence, Enders and Sandler and Jones and Libicki limit their definition to groups who only target civilians, while Piazza and Cronin use the more general “noncombatants.” This includes both civilians and members of the military not armed or not on duty. I use a broader definition than civilians-only because some acts targeting non-civilians have face validity as terrorism. An additional advantage of using this definition to classify *groups* is that I can look at the range of incidents by a particular group to ensure that at least some of the acts fit the more strict definition of terrorism.

terrorism, it would be inaccurate to refer to it as a terrorist group today. Some groups, such as Peru's Shining Path, exist for years before they start using terrorism. By the same logic, then, Shining Path became a terrorist group when it started using terrorism.

Another conceptual distinction regarding terrorist groups involves groups that primarily use a form of violence other than terrorism. The Eritrean People's Liberation Front (EPLF), for example, was a non-state group that occasionally used terrorism against the Ethiopian government from the 1970s to the early 1990s. However, the vast majority of EPLF violence did not involve terrorism, as it used guerrilla warfare, and even moved on to conventional warfare with trenches, tanks, and artillery. Because of the rarity of terrorism relative to other types of violence by the EPLF, most analysts would probably not consider them a terrorist group (e.g., Crenshaw 1991). This is because groups like this behave differently than groups that primarily use terrorism, and therefore survival should be fundamentally different for these types of groups.

In addition to insurgent groups that sometimes arguably use terrorism, there are also criminal groups that engage in terrorism. For example, the Global Terrorism Database (GTD) includes an attack by the Gulf Cartel, during which members of the Mexican group threw two grenades into a crowded square, killing eight people including civilians.⁶ The members admitted that they were attempting to get the government to escalate the conflict between it and the drug producers. This act technically fits the definition of terrorism, but the ultimate goals of the group are criminal, not political. Its primary mission is to make money. For this reason, the Gulf Cartel is not considered to be a terrorist organization. This raises a question: What about terrorist groups that shift to a more profit-oriented motive? I view this shift as a move along a

⁶ <http://www.start.umd.edu/gtd/search/IncidentSummary.aspx?gtidid=200809150001> (Accessed October 30, 2011.)

spectrum, such as Makarenko's "crime-terror continuum" (2004) and not necessarily an adequate justification for removing the group from the "terrorist" category.⁷

1.2.2 Unit of analysis: Terrorist groups not terrorist incidents

The research question motivating this dissertation asks about terrorist *groups*, not incidents or terrorism in general. A great deal of qualitative research on terrorism has focused on particular groups, with some studies arguing for the importance of relationships between these groups (e.g., Bloom 2005). Meanwhile, most quantitative research on terrorism has focused on terrorist *incidents* as its outcome of interest.⁸ Studying counts of incidents is an important part of terrorism research, but it ignores the important context in which most of them occur. Sometimes terrorist attacks are isolated incidents, but the majority of them are components of a campaign by a group with certain relationships with the government and other groups. Terrorist incidents are indicators of these relationships. Attacks may vary considerably over the years, for a myriad of reasons, but as long as the group remains willing and able to attack again, it is a problem for the state.

For example, IRA attack levels fluctuated markedly during the group's 36 years of violence, but completely stopped when it gave up terrorism in 2005. Short-lived groups also

⁷ For example, the FARC, Abu Sayyaf, and the PKK are heavily involved in criminal activities, but they can still be considered terrorist groups because they retain a substantial political element. Other scholars analyzing terrorist groups use similar criteria, and consider these groups terrorists (Cronin 2009; Jones and Libicki 2008; Carter 2012; Hoffman 2006, 35, 74; Blomberg et al. 2010; Laqueur 2003, 203). The conceptual differences between criminal and terrorist groups have been the subject of discussion (e.g., Shelley and Picarelli 2002; Laqueur 2003, 203-206, 225-226), and some scholars argue that groups such as the FARC have "transformed" from terrorist to criminal status (Dishman 2001).

⁸ Exceptions include Oots (1986, 1989), Eubank and Weinberg (1994), Jordan (2009), and the work on terrorist group duration. Additionally, some formal theory work has explored group behavior (e.g., Bueno de Mesquita 2005). Some of these works are discussed below.

help explain patterns in terrorism. France saw upticks in terrorist incidents in 1984 and 1986, in part due to more attacks from Direct Action (AD). This group stopped attacks after 1986, however, due to the arrests of its leaders. France's terrorist incidents decreased after 1986, and an analysis that ignored AD's existence and demise would miss out on key dynamics. Learning more about groups can help us understand more about terrorism generally.

1.2.3 Outcome of interest: Group survival instead of explaining different types of termination

The most comprehensive recent analyses of terrorist group survival have used an approach that is different from mine. Both Cronin (2006, 2008, 2009) and Jones and Libicki (2008) approach the subject by first identifying ways that terrorist groups can end, and then they try to explain each ending type on its own.⁹ For example, terrorist groups can disband because of government policing efforts. Cronin (2009, 91-92) finds a few factors that seem to explain this type of ending: the extent to which the group relies on its leader, the level of public support for the terrorist group, and how well the group is mobilized.¹⁰ Jones and Libicki (37-38, 40-41) examine groups that end because of police work, and they find that this type of ending is associated with groups that have fewer than 1,000 members (when measured at their peak size), and it tends to occur in economically developed countries. Because group size is to some extent a reflection of public support and mobilization, both studies suggest that policing is more likely

⁹ The studies are remarkably similar in that they examine samples from the MIPT data, present descriptive data, discuss case studies, and apply the conclusions to policy prescriptions for defeating al Qaeda.

¹⁰ Her dependent variable is more specific than Jones and Libicki's. She looks at decapitation, when the group leadership is arrested or killed, but they look at police work generally.

to lead to the end of terrorist groups that do not have a high level of public support or mobilization.

Table 1.1. Ways that terrorist groups end

Study	Types of termination
Jones and Libicki 2008	<ol style="list-style-type: none"> 1. Terrorist victory 2. Splinter 3. Politics (shift into non-violent politics) 4. Police defeat 5. Military defeat
Cronin 2006	<ol style="list-style-type: none"> 1. The group leader is captured or killed 2. The group fails to transition to the next generation 3. The group achieves its aims 4. The group moves into the legitimate political process 5. The group loses public support 6. Government repression is successful 7. The group transitions from terrorism to other forms of political violence
Cronin 2008	<ol style="list-style-type: none"> 1. Catching or killing leaders 2. Crushing terrorism with force 3. Achieving the strategic objective 4. Moving towards a legitimate political process 5. Implosion and loss of popular support
Cronin 2009	<ol style="list-style-type: none"> 1. Decapitation, (the leader is killed or captured) 2. Negotiation 3. Success 4. Failure 5. Repression 6. Reorientation toward a different type of violence

Table 1.1 shows a summary of the typologies of terrorist group termination offered by Cronin and Jones and Libicki in their respective studies. These analyses tell us a great deal about specific types of ways that terrorist groups might go out of business. However, since the authors list as many as seven ways that terrorist groups might end, and they attribute multiple causal

factors to each ending type, one does not come away from the research with a parsimonious or general explanation of terrorist group survival. Instead we have a list of factors that apply to certain ending types.

I approach the subject from a different direction, by looking at what explains duration generally. This approach acknowledges the heterogeneity of terrorist group termination, but assumes that similar and overlapping factors lead to most types of termination. This assumption is reasonable because it seems likely that some of the same factors lead to, for example, military defeat of the group, police defeat of the group, and group splintering. If the group is having difficulty recruiting, all three ending types have an increased probability of occurring.¹¹

The one ending type specified by Cronin and Jones and Libicki that should have a unique causal explanation is success. This is the one outcome that does not imply failure of the group or of terrorism as a strategy. However, success is very rare for terrorist groups. Cronin finds that fewer than 5 percent of terrorist groups that have stopped using terrorism have done so because their goals have been achieved.¹² Due to the fact that victory is such a rare outcome for terrorist groups, a theory of terrorist group survival can focus on the other outcomes, which can be generally described as failure.¹³

Attempting to explain the duration of groups, instead of the duration until one type of termination or another, is analogous to studies of the longevity of other types of conflict.

¹¹ Jones and Libicki acknowledge the drawbacks of their approach when they state, for example, “[P]olitics cannot always be viewed as separate from policing” (25). They note that government actions can lead to internal disagreements and reduce public support for the group. Thus police work can actually lead to the end that they describe as “politics,” where the group decides to affect change non-violently. Cronin (2009, 8) makes a similar acknowledgement, noting that ending types are “not necessarily separate and distinct, as individual case studies of campaigns may reflect more than one dynamic for their demise.”

¹² Additionally, in some of these cases, the group’s goal seems to have been achieved *in spite of* its terrorism, and not because it.

¹³ Successful cases can be empirically isolated, treated as outliers, and examined thoroughly to further contribute to understanding terrorist group duration.

Terrorist group duration and civil war duration are comparable in that both topics involve a substate group violently challenging the state. Most civil war duration studies have attempted to explain duration generally (e.g., Fearon 1994; Balch-Lindsay and Enterline 2000; Cunningham 2006). In the words of Fearon (1994), they simply ask, “Why do some civil wars last so much longer than others?” This is in spite of the fact that civil wars can end by rebel victory, government victory, stalemate, or a negotiated settlement, and these endings can lead to quite serious and divergent outcomes (e.g., Toft 2009). Types of termination matter, and are worth explaining, but we also should understand conflict duration generally.

1.3 CONCLUDING REMARKS

This chapter introduced the research question and discussed its place in the literature. Chapter 2 presents my argument of terrorist group survival, based on the organization and social network theory frameworks, and lists related hypotheses. Chapter 3 describes the empirical tests of the hypotheses, which are conducted using a global data set of terrorist groups from 1987 to 2005. The data set used in Chapter 3 is the most temporally expansive global collection of data on terrorist groups and their relationships as they change over time. Chapter 4 illustrates the plausibility of the hypotheses by analyzing terrorist groups in three diverse countries: Colombia, Northern Ireland, and Pakistan. Chapter 5 concludes.

2.0 CHAPTER 2: AN ORGANIZATIONAL-NETWORK MODEL OF TERRORIST GROUP SURVIVAL

Why do some terrorist groups last much longer than others? The previous chapter demonstrated the importance of this question, and showed that the extant literature has yet to adequately address it. The majority of models designed to explain terrorism are state-centric models, and the few extant models of terrorist group survival rely substantially on state attributes, though also with organizational attributes. In this chapter I introduce a model of terrorist group survival that incorporates both organizational and social network elements.

This chapter offers a number of advances to the literature. First, it is the first explanation of terrorist group survival to include network elements. Furthermore, it is among the first few studies to explore terrorist group networks at all. Second, it sorts out the differences between networks specifically and the more general notion of a large number of terrorist groups in a geographical area. Third, it provides an explanation for why a policy many governments have used – passiveness or even secret support for terrorist groups in their own country, hoping they destroy another terrorist group – usually fails. Finally, it draws attention to the differences between material and non-material incentives, the latter of which I argue to be especially important for terrorist groups.

The chapter begins with a discussion of the relevance of organizational theory to terrorism. Then I discuss more specific concepts from organizational and social network

literatures. With these concepts in mind, I then explain the *organizational* part of the model of terrorist group survival, and present related hypotheses. Building on the organizational logic, I explain the *social network* part of the model, and present related hypotheses. (Hypotheses are summarized in Table 2.3.)

2.1 TERRORIST GROUPS AS ORGANIZATIONS

This dissertation treats terrorist groups as organizations, drawing on the rich literature of organizational studies. This research program has a great deal to offer the study of terrorism. It has addressed subjects such as organizational formation, success, merger, interdependence, decline, and demise. As a result, this framework seems helpful for explaining outcomes related to terrorist organizations.

James Q. Wilson's influential work defines organizations as formal, voluntary associations (Wilson 1973, 31).¹⁴ By formal, Wilson means that there is a clearly definable membership and a group name. Wilson focuses on organization leaders, arguing, "their behavior can be best understood in terms of their efforts to maintain and enhance the organization and their position in it" (9). My explanation of terrorist group survival focuses on groups, not leaders, but Wilson's assumptions provide an important direction for this study. I assume that terrorist groups try to maintain and enhance their position relative to the government and to other groups.

¹⁴ This definition and section of the book draws on Wilson and Clark (1961) and refers to the much earlier work of Barnard (1938).

An organizational approach makes sense because the majority of terrorist incidents are associated with named groups.¹⁵ Unaffiliated terrorists such as Timothy McVeigh are rare. Organizational structure varies substantially across terrorist groups, from networks of cells to more hierarchical configurations (e.g., Hoffman 2006, 38-40; Arquilla and Ronfeldt 2001). However, all of these groups fit the basic understanding of organizations, as formal associations with names. They face mobilization challenges that help explain their behavior. These mobilization issues are comparable to those faced by other, non-terrorist groups such as unions and businesses.¹⁶

A few studies of terrorism have explicitly adopted the organizational approach, but in different ways than I do, and for different purposes. Crenshaw (1985, 2001) argues that the organizational perspective can be a helpful way to understand terrorism. She refers to Wilson and others in suggesting that organizational explanations can explain why terrorist groups can survive whether or not they are particularly effective at achieving political change (2001, 21). Oots (1986, 1989) uses collective action arguments to suggest that smaller groups should be more effective.¹⁷ Asal and Rethemeyer (2008) look at the degree of connectedness to other organizations (using social network analysis), among other factors, to explain why some groups are more lethal than others.

The works discussed above explicitly and substantially draw on the sociology and business literature on organizations, but some other studies of terrorism use organizational

¹⁵ This is according to analyses of Global Terrorism Database (GTD) statistics. Many attacks are unclaimed, and a small number are by individuals unaffiliated with a group.

¹⁶ The next section describes differences between terrorist groups and other types of organizations.

¹⁷ The way that Oots conceptualizes a “terrorist group,” however, is different from the conceptualization in this project. Oots does not use formal associations, but instead considers a “group” to be the number of people associated with each terrorist attack. For example, he compares hijackings involving four terrorists with those perpetrated by two terrorists. This conceptualization of groups is helpful for understanding aspects of terrorist attacks, but does not tell us much about terrorist groups as they are more commonly understood.

concepts more generally. Bloom (2005) argues that the development of suicide bombing can be explained by the need of terror organizations to differentiate themselves from other groups as they compete for resources. Other examples include Jordan's (2009) analyses of the impact of leadership decapitation on terrorist groups and Chenoweth's (2010) study of terrorism in politically competitive environments.

These studies show that the organizational approach has potential in the study of terrorism. Unfortunately, few scholars have built upon these theoretical stepping-stones to create new explanations of terrorist behavior. The dearth is especially notable in global quantitative studies. One reason for this is that research questions in this field have been more directly state-based, such as, "Why do some countries experience more terrorism than others?" However, as the research advances, it is important to consider different research questions and levels of analysis.¹⁸ Terrorist groups, with their diverse relationships and attributes, are a crucial component of understanding terrorism. Organizational theory provides a suitable framework for understanding these groups.

Another likely reason for the lack of quantitative studies using organizational approaches is that global data on terrorist groups, until quite recently, have been limited to only transnational groups or groups on the U.S. State Department list of "foreign terrorist groups." This has

¹⁸ Taking organizations seriously is likely to have implications for the study of terrorism more generally. Research on crime provides an interesting example. Many quantitative crime studies use counts of crimes in an area (city, country, etc.) as the dependent variable. However, Marselli and Vannini (1997) show that factors normally associated with crime do not "work" when the empirical model also takes into consideration criminal organizations. Similarly, models of terrorism, tested on counts of terrorist acts in each country, could change considerably when terrorist group factors are included.

prevented the study of terrorist groups more generally, including domestic groups.¹⁹ New collections of data make the study of terrorist organizations more feasible.

My study explores duration, not terrorism generally, but the organizational approach should be helpful for either. In some ways, the study of organizations seems better suited for studying group survival, as extant organizational literature already addresses this question, although for other types of organizations, from unions to firms.

Terrorist groups are different from other types of organizations. Terrorist groups are violent, political, and compete for resources that are different from those needed by firms. Collective dissent of any type is argued to be difficult to achieve (Lichbach 1995), and terrorist violence is unusual in ways that makes its use costly. Terrorist groups generally use violence as “communication,” which is different from the instrumental way that other groups use violence (e.g., Schmid and de Graaf 1982). Terrorists by definition intentionally target civilians or noncombatants, which is generally less acceptable than other types of violence, adding costs to its use. Regarding politics, terrorist groups have particular political goals that affect their actions and relationships. Firms are generally not aligned or in opposition based on political goals; profits are what matter for firms. Finally, regarding resource competition, terrorist groups compete for government and public attention for the purpose of changing policy. This is different from firms’ competition for consumers or market share (e.g., Porter 1985), where the ultimate purpose is profit maximization.

¹⁹ For example, Eubank and Weinberg (1994) classify states as either having terrorist groups or not, but their selection of terrorist groups was criticized for not being sufficiently based in theory (Hewitt 1994; Sandler 1995). As the literature has advanced, and data collection has improved, more theoretically justified lists of groups have become available.

The next section discusses concepts in the organizational and social networks literatures, and their applicability to the study of terrorist group survival.

2.2 ORGANIZATIONS AND SOCIAL NETWORK THEORY: CONCEPTS, FINDINGS, AND APPLICABILITY

This section discusses some of the concepts that are important to my argument. I discuss incentives, mobilization, and social networks. These are some of the microfoundations underpinning the explanation of how intergroup relations affect terrorist group survival. The section starts with a discussion of terrorist group mobilization and recruitment issues. More specifically, I focus on the types of incentives that terrorist groups might use to attract and keep members.

2.2.1 Incentives and mobilization

Understanding terrorist group behavior requires that we understand why people participate in organizations. I start with the assumption that humans are rational and self-interested.²⁰ From this starting point, it has been noted that organizations get individuals to participate, to provide their resources to help the group succeed, because their membership is associated with *incentives* (Wilson 1973; Clark and Wilson 1961). Crenshaw's early work

²⁰ Enders and Sandler (2006, 11) describe terrorists as rational because they generally respond "in a sensible and predictable fashion to changing risks."

highlights different types of incentives as part of an organizational explanation of terrorism, but surprisingly few scholars have explored this further (Crenshaw 1985). Incentives are important because this is how groups overcome the collective action problem (Olson 1965).²¹ The problem is especially acute because terrorist groups, like other subnational violent political groups, face what Lichbach (1995, 16) calls “the rebel’s dilemma,” and describes as “the improbability of extensive collective dissent.” Dissident groups want sympathetic individuals to join them in the struggle, but the costs to the individuals – state sanctions, for example – can be high. Incentives help groups recruit and retain members by offsetting these costs. Clark and Wilson (1961) identify three types of incentives: material, “solidary,” and purposive.

Material incentives, probably the most familiar, refer to tangible goods such as cash or food. Solidary²² incentives are intangible benefits that group members get from the social aspect of the organization – a sense of belonging, personal relationships, and so forth. Purposive incentives are also intangible, but more related to the goals of the organization. An example of a purposive incentive is feeling that one is doing “the right thing” by joining a certain advocacy group whose work one believes is needed. A purposive incentive for joining Egyptian Islamic Jihad, for example, would be the rewarding feeling an Egyptian fundamentalist Muslim might get from contributing to the effort to make Egypt a theocracy. I refer to both solidary and purposive incentives as “non-material” incentives. Types of incentives, and examples, are shown in Table 2.1.

²¹ When I use the term incentives, I am referring to Olson’s notion of selective incentives – benefits available only to group members. Clark and Wilson simply use the term incentives for this idea.

²² The authors use the word “solidary,” and not solidarity.

Table 2.1. Types and examples of incentives

Non-material		Material
purposive	solidary	
1. feeling of purpose from working toward political goals 2. feeling of purpose from working to defend group from attack (difficult to distinguish from solidary incentives)	1. bonding between members of group when group is threatened by another group 2. bonding between members of group when increasingly isolated from rest of society	1. cash 2. arms 3. drugs

All three types of incentives are important. Regarding material incentives, terrorist groups have benefitted from the cash that comes from having state sponsors or trafficking drugs. However, the argument presented here is unique for also focusing on purposive and solidary incentives. These non-material incentives are especially applicable to terrorism. Non-material incentives are particularly likely to motivate terrorists because a special sort of calling or intense personal bond – and not simply cash – is probably needed to get someone to risk prison or death as they carry out violence, often in an extreme manner and against civilians.

Regarding solidary incentives in particular, arguments from the political psychology perspective suggest that terrorist groups members experience closer bonds than members of other groups due to the unusual and high costs of participation (Crenshaw 1992, 1986). Furthermore, a wealth of survey and biographical data shows that people join terrorist groups not only for

political reasons, but because of preexisting social bonds (family or friendship) with group members or because they are seeking companionship (e.g., Sageman 2004; Della Porta 1988; White 1992; Wasmund 1986).²³ The importance of these bonds continues beyond initial recruitment, as group members meld into a “radical fraternity” through risk and sacrifice.²⁴ Material incentives should matter less for groups based on these types of relationships.

Additionally, material incentives should matter less for terrorist groups than other types of groups because terrorists do not tend to be especially poor (Krueger and Maleckova 2003), and studies have failed to find a relationship between economic factors and terrorism (e.g., Abadie 2006; Piazza 2006). Material incentives are likely to be more important for other types of organizations and even other types of violent or criminal organizations. Civil war, for example, has been shown to have substantial correlation with poor economic conditions, and one popular argument suggests that people should be more willing to join a rebellion when their opportunity costs are low and the rebels can pay them (Collier and Hoeffler 2004). Material incentives should be more important for larger organizations, like rebel groups trying to take on a state with guerrilla warfare, than types of organizations that tend to be smaller.²⁵

Finally, in many cases money follows purpose. Donors are more likely to contribute when there is a greater sense of purpose associated with the group and purposefully motivated

²³ Wasmund (1986) surveyed West German terrorists, and found that “Most terrorists, in fact, have ultimately become members of terrorist organizations through personal connections with people or relatives associated. ... [T]he number of couples, and brothers and sisters is astonishingly high” (204). The importance of family and friendship ties can also be seen in how Egyptian Islamic Jihad (EIJ) came to assassinate Anwar Sadat. The group member who proposed the idea was motivated by the arrest of his brother. Then, an EIJ leader suggested two group members for the mission: a childhood friend and a brother-in-law of a different old friend (Sageman 2004, 134-135).

²⁴ The phrase “radical fraternity” comes from Young (1980), describing Russian terrorists of the 1870s. Pomper (1995, 81) summarizes Young’s findings: “The close ties formed in the process of apprenticeship, commitment, shared sacrifice, satisfying organizational work – in short, socialization in a kind of ‘radical fraternity’ – created the emotional basis for acceptance of escalation to increasingly radical tactics.”

²⁵ See Laqueur (1976, xi) for membership size and other general distinctions between terrorist groups and groups that use guerrilla warfare more.

members require less in the way of material incentives. In other words, the ability to provide material incentives should help terrorist groups, but in many cases this ability is explained by the group's purpose or solidarity – non-material incentives.

Overall, incentives are crucial for terrorist groups because that is how they mobilize the group's membership. When I use the term mobilization, I am referring to the process of a group maintaining its membership and getting new members.²⁶ Mobilization sometimes refers to increasing resources generally (e.g., Tilly 1978, 54), but I focus on the mobilization of group members in particular because these are a terrorist group's most important resources. Mobilization is vital for organizations, and for terrorist groups this means mobilization of group members. Hoffman (2006, 234) compares terrorist groups to sharks: if they do not keep moving forward, they will die. Terrorist groups must constantly keep members mobilized by providing incentives, or the groups will likely disintegrate.

The next sub-section explains how incentives and mobilization are affected by relationships between terrorist groups – networks of terrorist groups. This is a shift in the unit of analysis. Incentives are individual, and they matter because they help organizations. But in considering networks, this study looks at how intergroup relations, the broader terrorist group environment, contribute to the group's need and ability to offer incentives to its members.

²⁶ Oberschall (1973, 102) defines mobilization as “the process of forming crowds, groups, associations, and organizations for the pursuit of collective goals.”

2.2.2 Social networks

Incentives and mobilization matter for this dissertation because these are the mechanisms through which attributes of terrorist groups, including relationships, affect group survival. In examining intergroup relations, this study assumes the importance of *social networks*. Social networks are sets of actors and the relationships between them (Wasserman and Faust 1994). An extensive literature shows the importance of these sets of relations, and I use concepts and tools from that literature to better understand terrorism. Exploring relationships and their causal contributions is important because otherwise we would be falsely assuming the independence of terrorist groups. Falsely assuming the independence of actors is referred to as Galton's problem (George and Bennett 2005, 33), and considering relationships between actors can help address related issues.

A number of elements are important to social network analysis. Most fundamentally, there are actors and the relationships or ties that connect them (Wasserman and Faust 1994, 17-18). Actors are also referred to as nodes. (See Figure 2.1 for a very basic network diagram.) Some examples of ties provided by Wasserman and Faust include friendship, transfers of material resources, behavioral interaction (e.g., sending of messages), or biological relationship. Another important concept is centrality. Centrality is an indication of an actor's prominence in the network. The most common measure of centrality is *degree centrality*, or a count of an actor's ties (Knoke and Yang 2008, 62-65). This dissertation also considers *eigenvector centrality*, which captures not only the number of relationships an actor has, but also how well-connected are the actors to which the original actor is connected (Bonacich 1987). For example,

a group with only a tie to the FARC has a higher eigenvector centrality score than a group with only a tie to Quintin Lame – which was far less connected than the FARC.²⁷

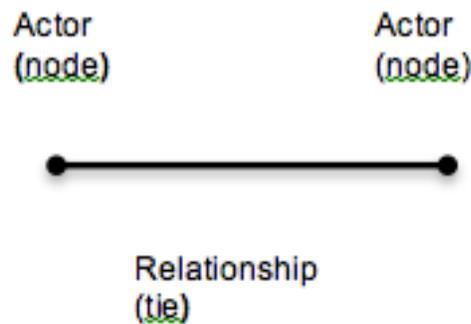


Figure 2.1. A two-actor network

Social network analysis has been used in many fields, and political science research has increasingly shown promise with the approach (e.g., Maoz 2009; McClurg 2006; Hafner-Burton et al. 2009). Analyses of terrorism have benefitted as well.²⁸ Some studies chart connections between individual terrorists (Sageman 2004; Pedahzur and Perliger 2006), and a few have explored relationships between terrorist groups (Asal and Rethemeyer 2008; Horowitz 2010). Social network theory provides a fitting framework for describing such relationships, and also provides a set of tools to examine data and empirically evaluate hypotheses.²⁹

²⁷ For more specific measurement parameters, see Bonacich (1972). For further discussion of the concept and its applications see Bonacich (2007).

²⁸ See Perliger and Pedahzur (2011) for a review of the most recent studies on terrorism that use network analysis.

²⁹ Note that the study of social networks is not necessarily a part of organizational studies. A great deal of social network research looks at networks of individuals, but many studies also look at networks of organizations. I follow that path, using social network analysis to complement organizational studies.

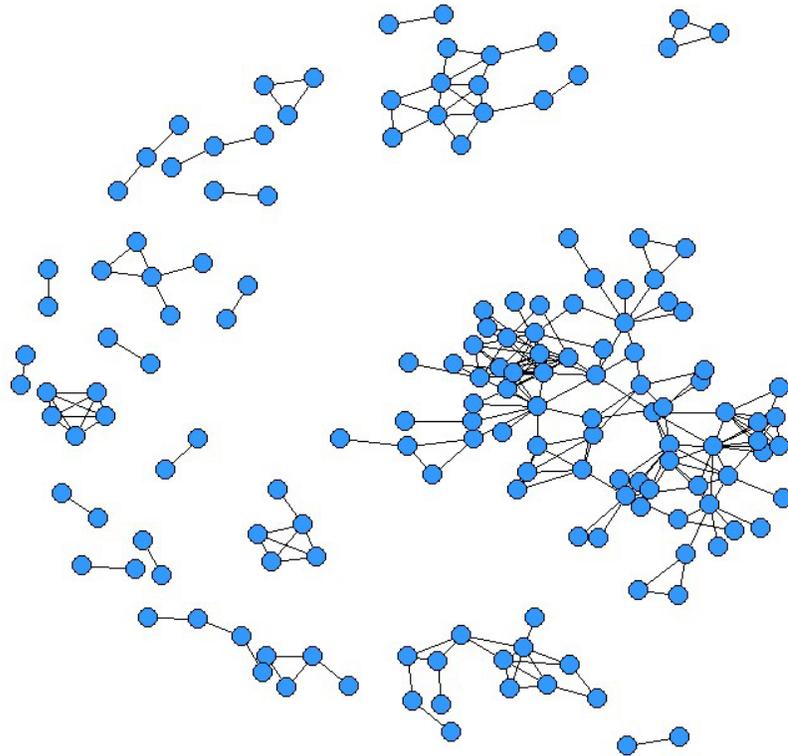


Figure 2.2. Global terrorist group network, 1987-1989.

Do terrorist groups operate in networks? Figure 2.2 shows ties among terrorist groups in the late 1980s.³⁰ Here, ties can be cooperative or adversarial, and circles (nodes) represent the terrorist groups. This snapshot indicates that there are many links connecting terrorist groups. Similar patterns exist at other time periods. Karmon's research (2005), for example, while not explicitly from the social network approach, finds a dense mesh of relationships between

³⁰ Graph made using UCINET. Source material for graph includes newspaper archive searches, the Global Terrorism Database (<http://www.start.umd.edu/gtd/>), and books. Research design section includes more information about coding. Groups without ties are not shown.

European and Middle Eastern terrorist groups in the 1970s and 1980s. Others have explored terrorist groups more recently.

The global dataset I built for this dissertation, examining terrorist group relationships between 1987 and 2005, finds that more than one third of the groups have at least one cooperative relationship, and about 10 percent of the groups have at least one adversarial relationship. Asal and Rethemeyer (2008) examine a global sample of terrorist groups between 1998 and 2005 (their data set forms the foundation for my own) and find that each group has, on average, at least one “positive” or basically cooperative relationship. They find that groups with more cooperative relationships are more lethal. Horowitz (2010) examines the diffusion of tactics and finds the network approach helpful for explaining why some terrorist groups adopt suicide terror. Terrorist group relationships have important consequences, although they are a relatively new area of research in terrorism studies.

This section has discussed the concepts of incentives, mobilization, and social networks. These concepts are important for understanding organizations generally, although terrorist groups are different in some ways from other types of groups. The next section presents the foundation for my organizational-network model of terrorist group survival. It introduces the organizational part of the model, and then proposes related hypotheses.

2.3 THE FOUNDATION OF THE ORGANIZATIONAL-NETWORK MODEL: ORGANIZATIONAL ATTRIBUTES

All organizations face the challenge of getting members to participate. Terrorist groups face unusual challenges, requiring members to pay especially high costs to help the organization carry out shocking violence – often against civilians. These groups keep members mobilized by providing incentives, often non-material incentives, as discussed in the previous section. Terrorist groups, however, vary considerably in their ability to provide incentives to members. This section explains how different organizational factors affect a group’s ability to provide incentives to members – helping with mobilization, and thus helping the groups survive.

2.3.1 Non-material incentives: ethnic and religious group motivations

Certain terrorist groups are *ex ante* better able to provide members with non-material incentives – a deep sense of purpose relating to the group’s goals (purposive incentives), and a sense of solidarity among members (solidary incentives). A primary difference between groups in this regard is the overall political goals of the group. Some terrorist groups are motivated by the goal of global communism, while others are committed to anarchy or animal liberation. These groups, however, are different in important ways from groups inspired by two other motivations: ethnic goals and religious goals.

Many terrorist groups have political goals primarily related to an ethnic group they claim to represent. “Ethnic group” refers to a group larger than a family in which membership is primarily determined by descent rule, and “markers” such as a common language, religion, or ancestral territory can also define the boundaries of the ethnic group (Fearon 2004, 852).

Quintin Lame in Colombia, ETA, and Palestinian terrorist groups have all used terrorism to get policy concessions from governments related to their respective ethnic communities. Empirical evidence regarding the durability of ethnic groups is mixed.³¹ I argue that ethnic motivation should be especially helpful to terrorist groups as they attempt to keep members mobilized because of the relative permanence of ethnic identity, the existential nature of the group's goals, and the relationship between the group and the larger ethnic community.

First, ethnically-motivated groups should have an advantage in providing a sense of purpose and solidarity to members because ethnic identity can be a powerful organizing force (Olzak 1983). A person's ethnicity is more permanent than left-wing or right-wing beliefs.³² For example, Horst Mahler, who helped found the left-wing Red Army Faction in 1970, had changed his views to right-wing by the mid-1980s. Static ethnic identity does not guarantee constant support for terrorism, but it lessens the chance that an individual group member will lose the very identity that makes him or her value the non-material incentives the group provides. This identity should help with increasing the salience of non-material incentives, and also with making police infiltration and surveillance more difficult (Paoli and Reuter 2008). Finally, ethnic identity, and its visibility, makes it easier for leaders to monitor members and enforce organization rules (Rogowski 1974; Lichbach 1995, 214).

³¹ Jones and Libicki (2008) find that "nationalist" groups last longer than other types of groups. Carter (2012) does not find a statistically significant relationship between nationalist motivations and group survival. As indicated in Chapter 1, other quantitative studies have not examined group motivations (e.g., Young and Dugan 2010; Blomberg et al. 2010; Vittori 2009). Regarding the difference between ethnic and nationalist groups, ethnic is basically more broad, since nationalism often implies a desire for nation state, while ethnic refers to any concern related to the ethnic group, including fairer treatment.

³² Changes in general political views are relatively frequent (Kim and Fording 2001; Berry et al. 1998), especially among young people – the most likely to become terrorists. Debates exist about the extent to which ethnic identity is primordial or socially constructed (Nagel 1994; Fearon and Laitin 2000). It is possible that a person can "lose" or change their ethnic identity. However, this seems less likely than a change in religion or political views. For the purpose of this dissertation I consider ethnic identity to be exogenous.

Second, while ethnic identity does not automatically mean support for terrorism in the name of one's community, ethnic concerns are more likely to be existential – and this can in turn lead to a higher likelihood of commitment to terrorism by individuals motivated by such a cause. Left-wing groups, for example, are interested in more abstract or global goals than the perceived survival – or at least fair treatment of – one's own community. Fighting for one's own people, ancestral territory, and family is likely to be more salient than fighting for economic justice for the entire working class. A terrorist group with ethnic goals, then, can provide a deeper sense of purpose to its members, and there will likely be a greater degree of solidarity among its members.

Finally, in addition to dynamics within the group, ethnically-based groups should also benefit from dynamics between the terrorist group and the larger ethnic community. The wider community means an easily identifiable nearby pool of recruits, and bonds of kinship suggest that many community members are likely to be attracted to the sense of purpose provided by the terrorist group (Sageman 2004, 112-113). Hoffman (2006, 242-243) argues that ethno-nationalist groups have benefitted substantially from their "...unique ability to replenish their ranks from within already close, tight-knit communities...." The kinship should also help with donations of material resources, but as indicated above, this flow of material resources is explained by the antecedent *purpose* that unites the group and its co-ethnic supporters. Overall, ethnic-based terrorist groups are especially equipped to provide non-material incentives to members, helping with survival.

Religiously-motivated groups should also be especially able to provide non-material incentives to their members, helping the organization mobilize.³³ Religious terrorism has gained a great deal of notoriety because of Islamist groups such as al-Qaeda, but religious terrorism has existed for millennia (e.g., Laqueur 1978, 7). Other groups that are solely or partially motivated by religion include Aum Shinrikyo in Japan and Aryan Nations in the United States.³⁴ The effect of religious motivation on group survival should not be as strong as the effect of ethnic motivation, for reasons discussed below, but religion is likely to play a role in helping groups mobilize.

Non-material incentives should help religious groups with motivation for some of the same reasons they help ethnically motivated groups – religious group members should be especially likely to value non-material rewards, and they are more likely than members of other types of groups to stay committed to terrorism as a tactic, due to the type of belief structure motivating the group. Furthermore, the fact that most people’s religious views do not change during the course of their lives means that religious motivations are more likely than other types of views to remain salient over time.

First, religious groups benefit from the fact that group members are motivated by belief structures that demand certain acts, with many or most religions promising rewards in the afterlife. Juergensmeyer (2003, Ch. 6) describes the “cosmic war” that religious militants believe they are waging, and that this can make struggles seem more salient than any worldly

³³ The few quantitative analyses of terrorist group survival that have examined the impact of religious motivation on group survival have found a positive relationship (Carter 2012; Jones and Libicki 2008).

³⁴ Distinctions between groups that have one motivation and groups that have multiple motivations are discussed in the operationalization section of the quantitative empirical chapter. For the purpose of this chapter, a “religious group” can include both groups that are solely religious and groups that are religious, among other motivations (religious and leftist, for example).

motivation. Individuals might be more inclined to accept terrorism as a tactic – and stay committed to its use – if the perpetrators believe it to be essential to their eternal salvation. The idea of a supernatural audience, and the consequences it can bring about, is part of the reason religious terrorist groups are argued to be especially lethal (Asal and Rethemeyer 2008; Hoffman 2006, 88-89).

Second, and compounding the above, religious beliefs are less likely to change than a person's general political beliefs. One study of individuals in 40 developed countries found an average of about 5 percent of those surveyed indicated they had ever changed religions (Barro et al. 2010).³⁵ As suggested above, however, changes along the left-right political spectrum are more common. This suggests that members of religious terrorist groups, more than members of leftist or rightist groups, for example, should stay motivated by the non-material incentives the group provides.

Overall, groups with ethnic or religious motivations should be unusually able to keep group members motivated and committed to terrorism. This is due to their ability to provide non-material incentives, which I argue are important for terrorist group survival. This suggests the following hypothesis:

H1: A terrorist group with an ethnic or religious motivation is less likely to end than a group with another type of motivation.

³⁵ Conversion rates vary considerably. The highest reported were in Canada (17 percent) and the United States (16 percent).

While religion should help with mobilization, its impact on group survival should not be as great as the impact of ethnic motivation. Bonds created by ethnicity, with its quasi-familial nature and shared history, should generally be stronger than bonds created by religion alone. Additionally, as discussed above, people do change their religion, or lose their faith, and this can impact religious group mobilization efforts. Finally, the wider ethnic community beyond the terrorist group, with familial bonds, should further set apart ethnic groups in their ability to mobilize – in terms of both recruiting and monitoring of group members. All of these conditions imply that ethnic groups should be especially able to provide incentives to members, in a deeper and longer-lasting way than even a religious group. This suggests the following hypothesis:

H2: The impact of ethnic motivation on terrorist group survival is stronger than the impact of religious motivation on terrorist group survival.

2.3.2 Material incentives: state sponsorship and drug trafficking

Non-material incentives are important for terrorist groups, as they hope to get individuals to engage in potentially costly illegal violence, often against civilians. As stated earlier, non-material incentives should be more important to terrorist groups than they are to other types of groups, due to the unusual nature of terrorism. Material incentives, however, should also help terrorist groups survive.

One way terrorist groups can obtain funds is through state sponsorship. Byman (2005, 10) describes state sponsorship as a government's *intentional assistance* to a terrorist group to

help it use violence, bolster its political activities, or sustain the organization (italics in original).³⁶ In Carter's (2012) global study of terrorist groups between 1968-2006, he finds that 19 percent of the groups had a state sponsor during at least some part of their existence. He shows that this can help terrorist groups survive, although with caveats.³⁷ With money from a state, a terrorist group can provide its members with funds to offset opportunity costs associated with terrorism. It can also use the funds, and donated arms, to carry out more substantial attacks, which in turn can serve as recruiting propaganda. IRA attacks increased after it received support from Libya in the mid 1980s (Mallie and McKittirck 2001, 67).

State sponsorship might have disadvantages. Carter (2012, 3) argues that groups can come to depend on sponsors – leaving them vulnerable if the sponsor decides to withdraw support. Furthermore, sponsors can control the agenda of terrorist groups, paying them to attack targets they otherwise would not and to some degree turning them into mercenaries. This can reduce the group's original (political) support base. The Japanese Red Army and the Abu Nidal Organization are examples of this phenomenon.³⁸ Overall, however, state sponsorship provides funds to terrorist groups that can be instrumental in providing material incentives to group members. This suggests the following hypothesis:

³⁶ Byman acknowledges there are different degrees of sponsorship. Additionally, in a more recent work, he disaggregates “the state” into the central government, independent bureaucracies, and key social actors (2008, 4-5). State sponsorship usually refers to support from the central government.

³⁷ Carter finds that when state sponsorship ends, the group is more likely to end. This suggests state-sponsored groups depend on the state aid. However, he breaks down sponsors into those that provide safe havens and those that do not, and finds groups provided with safe havens are *more* likely to end, particularly through being eliminated by the state they are targeting. Furthermore, when he divides group termination into “internal dissolution” and “target elimination,” he finds that state sponsorship reduces the risk of the former, but not the latter. He ultimately concludes: “this study does indicate that sponsorship generally aids groups in maintaining their organizations” (30).

³⁸ Both groups were paid by Libya to carry out attacks on U.S. interests throughout the world, particularly during the 1980s. For examples, see Sneider and Wayne (1988) and the Christian Science Monitor (1987).

H3: A terrorist group with a state sponsor is less likely to end than a group without a state sponsor.

Another way a terrorist group can obtain funds, to provide material incentives to members, is through illicit business such as drug trafficking. A substantial and growing literature looks at the so-called crime-terror nexus (Makarenko 2004; Dishman 2001), and suggests that criminal business generally helps terrorist groups. Drug production and trafficking is reportedly the primary source of funds for both terrorist groups and non-terrorist criminal organizations (Shelley and Picarelli 2002, 312). Indeed, Piazza (2011) finds that countries with coca or heroin production experience more terrorism. The revenues can help pay group members and finance terrorist attacks, generally contributing to group survival. This is comparable to the idea that the presence of illicit drugs can help fund civil wars, and therefore is associated with their duration (Ross 2004).

It is also possible that involvement in the drug trade could be harmful to groups; the connection between drug trafficking and terrorist group survival has not yet been empirically tested, so it is unclear. Terrorist groups sometimes shift their goals from purely political to more of an emphasis on group member enrichment, and getting into illicit business helps with this shift.³⁹ The FARC serves as an example.⁴⁰ Criminal activity such as drug trafficking can cost

³⁹ This is consistent with Merton's (1968) notion of "goal displacement," when an organization shifts its *raison d'être* to simply survival.

⁴⁰ I view this shift as a move along a spectrum, such as Makarenko's "crime-terror continuum" (2004) and not an adequate justification for removing the FARC from the "terrorist" category. The FARC, like Abu Sayyaf and the PKK, are probably now more criminal than political, but they can still be considered terrorist groups because they retain a political element. Other scholars analyzing terrorist groups use similar criteria, and consider these groups terrorists (Cronin 2009; Jones and Libicki 2008; Carter 2012; Hoffman 2006, 35, 74; Blomberg et al. 2010; Laqueur 2003, 203). The conceptual differences between criminal and terrorist groups have been the subject of discussion

terrorist groups legitimacy and thus political support (Dishman 2001, 46) – raising the question of whether the material incentive gains can offset the loss in non-material incentives that come from political purpose. Regardless, involvement in the drug business should provide terrorist groups with material incentives for their members, contributing to group survival. This suggests the following hypothesis:

H4: A terrorist group involved in the drug business is less likely to end than a group not involved in the drug business.

Finally, a terrorist group's size, in terms of its number of members, should play an important role in its ability to survive.⁴¹ Larger groups are better able to weather the capture, killing, or defection of group members – mitigating mobilization concerns. A group of only 25 members, for example, could be devastated by the loss of a dozen members, while this would not seriously affect a group of several hundred members. Additionally, larger groups are likely to be able to carry out more visible and more frequent attacks (Asal and Rethemeyer 2008), which serve as effective recruiting propaganda (Schmid and de Graaf 1982). There might be some disadvantage to a group having more members; this could make it more visible to authorities, and then more susceptible to being targeted. Larger terrorist groups could also suffer from the collective action problem (Oots 1986, 1989; Olson 1965). However, overall, larger groups have certain advantages in terms of mobilization, and therefore should survive longer.

(e.g., Shelley and Picarelli 2002; Laqueur 2003, 203-206, 225-226), and some scholars argue that groups such as the FARC have “transformed” from terrorist to criminal status (Dishman 2001).

⁴¹ The few studies that have examined the possible relationship between group size and survival have found a positive relationship (Vittori 2009; Jones and Libicki 2008).

H5: A larger terrorist group is less likely to end than a smaller terrorist group.

A terrorist group's political motivation, funding sources, and size are the most important aspects of the organizational part of the organizational-network model of terrorist group survival. These attributes indicate how well a group will be able to keep its members mobilized, and therefore survive. Other organizational attributes could be included in the model, but the implications of other attributes for terrorist group survival are unclear.⁴² Furthermore, there are missing data issues for other terrorist group attributes. I include the minimum for a parsimonious model. This allows me to also incorporate network attributes, and distinguish the explanatory power of each part of the larger model. The next section presents the social network portion of the organizational-network model.

2.4 COMPLETING THE ORGANIZATIONAL-NETWORK MODEL: NETWORK ATTRIBUTES

This section presents the network portion of the model. It draws on organizational microfoundations, particularly regarding incentives and mobilization. However, this section

⁴² For example, groups vary considerably in their organizational structure. Some groups are vertically organized, a strict hierarchy with a clear command structure. On the one hand, the structure of these groups would make them effective in many regards, including mobilization and their ability to control members' actions (Cronin 2008). Vertically structured groups, however, are probably more susceptible to decapitation, and could end with the capture or killing of a few leaders. Sendero Luminoso's experience shows the benefits and pitfalls of hierarchy (e.g., Palmer 1995). On the advantages of "flat" group structure, see Arquilla and Ronfeldt (2001). Unfortunately, there are no available global data on terrorist group organizational structure, suggesting an important lacuna worthy of future research.

examines relationships between terrorist groups, and offers what has not yet been seen in the literature: a network-based model of terrorist group survival.

I start by considering how a terrorist group is affected by its number of relationships or, in the terms of the network literature, its degree centrality. This is admittedly a rough cut, because in this analysis degree centrality includes both cooperative and adversarial ties. However, this is consistent with the notion of relationships, generally, mattering, as the social network literature suggests. I then distinguish degree centrality from the count of terrorist groups in the environment generally, and argue that relationships are fundamentally different from groups simply co-existing in the same country. Regarding centrality, I consider the concept of eigenvector centrality as well. This concept takes into consideration the relations of groups with whom a terrorist group has a relation. Then I explore two types of direct relationships, cooperative and adversarial, and their impact on terrorist group survival. This shows that each type of relationship has an impact on survival, and makes the counterintuitive argument that adversarial relationships should help groups survive. Finally, I argue that the impact of these ties should be conditioned by attributes of the state in which the terrorist group primarily operates.

2.4.1 Network connections generally: degree centrality

Many terrorist groups have ties or relationships with other terrorist groups. Ties can take a number of forms, such as the transfer of material resources or behavioral interaction (e.g., training together or attacking each other). Note that I include adversarial (negative) relationships, such as groups attacking each other, in addition to cooperative (positive) relationships. While we can imagine different effects of different types of relationships, this section considers how relationships generally should affect the groups involved. This is

consistent with the notion of degree centrality, the count of a group's relationships. Groups with more relationships are more *central* in the network. Knoke and Yang (2008, 5) summarize well how relationships, generally, can affect participants: "Direct contacts and more intensive interactions dispose entities to better information, greater awareness, and higher susceptibility to influence or being influenced by others."

More network ties with other groups, or being more central, should be beneficial for three reasons. First, groups in relationships can directly help each other. Second, groups can learn from each other. Third, groups can compete with each other, spurring innovation and general improvement.

Regarding groups in relationships potentially helping each other, a great deal of terrorist group interaction is cooperative (e.g., Karmon 2005). This is discussed in more detail below, but the basic point is that many groups have teamed up for training or carrying out attacks. These groups benefit from sharing resources (Wiewel and Hunter 1985), reducing the net costs to the groups associated with attacks, and therefore mitigating mobilization concerns. This should contribute to terrorist group survival.

Terrorist groups in relationships, cooperative or otherwise, should benefit from learning from each other. Terrorist groups need to learn from their own mistakes and successes, and those of other groups. A number of studies show that terrorist groups update their behavior as new information becomes available (e.g., Enders and Sandler 1993; Im et al. 1987). While it is possible that terrorist groups learn from each other indirectly, such as through reading news accounts, a number of studies suggest that direct interaction – training or attacking together – is

crucial to terrorist group learning (Forest 2006; Kenney 2007, Chapter 5).⁴³ In a similar vein, and as discussed previously, Horowitz (2010) shows that linkages between groups increase their likelihood of adopting innovative tactics.

Finally, terrorist groups in relationships can compete with each other, which also encourages the groups to improve. If a direct rivalry develops, this should provide the members with a new sense of purpose (purposive incentives), and the threat from the “other” should strengthen bonds among group members (solidary incentives).⁴⁴ To address the competition, in order to survive, groups are likely to evaluate how they can improve and make necessary changes. Chenoweth (2010) finds that competition leads to more terrorism.⁴⁵ Bloom (2005) argues that terrorist group competition leads groups to tactical innovations – particularly suicide terror. She focuses on that outcome, but the business literature suggests competition should lead to innovation generally (Porter 1985). Overall, through these various mechanisms, ties to other terrorist groups should help terrorist groups survive. This suggests the following hypothesis:

H6: A terrorist group is less likely to end if it is involved in more relationships with other terrorist groups (higher degree centrality).

⁴³ Furthermore, terrorists can obtain instructions from mail-order catalogues or the Internet, but munitions experts say that for devices such as remotely controlled detonators, even knowledgeable students “must be taught by experts” (Kenney 2007, 140). Direct group interaction is helpful in this regard, and the case study chapter shows more specific examples.

⁴⁴ The impact of violent rivalries, or adversarial relationships, is discussed in more detail below.

⁴⁵ While Chenoweth discusses competition between terrorist groups, her argument is about terrorist groups in “politically competitive” environments generally, where terrorist groups compete with conventional interest groups. My argument, solely about relations between terrorist groups, is substantially different.

2.4.2 Degree centrality vs. the number of groups in the geographical area: different concepts, divergent consequences

Some readers might think that degree centrality of a terrorist group is highly associated with the number of terrorist groups in a group's country, and this density of groups, not the ties, would drive any relationship.⁴⁶ A country dense in terrorist groups might be oversaturated, with public attention and other resources scarce, and therefore groups might be less likely to survive. This is consistent with the findings of one unpublished study: Young and Dugan (2010) find that the number of terrorist groups in a country is *negatively* associated with group survival. They attribute this to the environment being especially competitive.

Here I describe the difference between direct relationships and an environment simply full of terrorist groups. Then I explain how the number of groups in a geographical area, the organizational density, should affect terrorist group survival. *Organizational density* refers to the number of same-type organizations within a geographic area (e.g., Baum 1995).⁴⁷ Organizational density is said to affect the survival of firms through *legitimacy* and *competition* (e.g., Hannan and Freeman 1989). Initial increases in the number of same-type organizations establish the legitimacy or "taken-for-grantedness" of the organization type, and this makes operations easier (Hannan and Carroll 1992, 33-34).⁴⁸ However, there are diminishing returns, because high levels of competition essentially become stifling, leading to a lower survival rate.

⁴⁶ In other words, a higher than average number of terrorist groups in a country represents an *opportunity* for relationships that does not exist in most countries.

⁴⁷ Scholars have studied how organizational density affects the survival of newspapers in Argentina (Hannan and Carroll 1992), trade associations in the United States (Aldrich et al. 1994), and daycare centers in Toronto (Baum and Oliver 1992).

⁴⁸ Wiewel and Hunter (1985) also point to the possibility for resource exchange, and the way in which an increasing number of groups helps define the organizational domain.

Overall, because of legitimacy and competition, organizational density usually has an inverted U-shaped relationship with organizational survival – organizations are most likely to survive at moderate numbers of organizations.⁴⁹ Figure 2.3 displays this basic relationship.

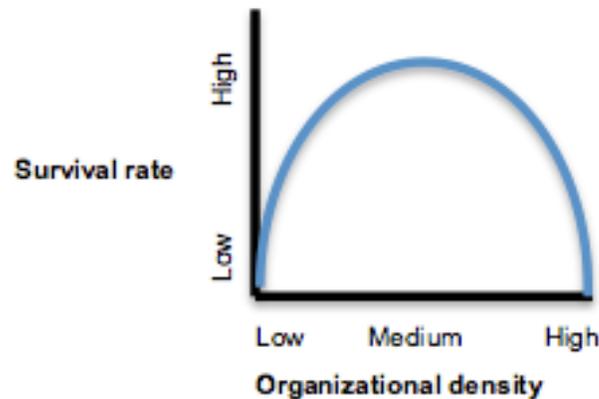


Figure 2.3. Organizational density relationship typically found in organizational literature

This concept is interesting to compare with network connections because it allows us to sort out simple group co-existence from actual relationships – direct interaction. I argue that increased organizational density presents terrorist groups with competition’s disadvantages, without conferring the benefits that often come to non-terrorist organizations. There are two important factors here: First, terrorist groups do not receive the gains from increased “legitimacy” that non-terrorist groups experience. Second, terrorist groups benefit from competition in relationships, but not from what I call the *indirect competition* of an environment that is group-dense but not necessarily relationship-dense.

⁴⁹ A review of the business literature shows that this inverted U-shape relationship exists for many types of firms (Baum 1995).

The business literature suggests that organizational “legitimacy” contributes to duration because it makes interactions easier with other actors.⁵⁰ Terrorist groups, however, are not as dependent on other actors on a day-to-day basis as firms are.⁵¹ Additionally, governments are unlikely to consider terrorist groups legitimate actors as long as they practice terrorism, no matter how many terrorist groups exist. Terrorist groups should *not* see benefits from increased organizational density – the upward sloping left side of the inverted U-shaped relationship between group density and group survival – that firms do. Instead, terrorist group organizational density seems that it should have a negative relationship with survival. See Figure 2.4 for comparison with Figure 2.3.

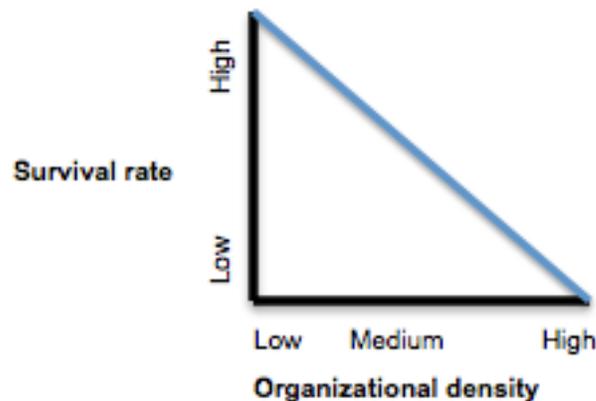


Figure 2.4. Terrorist group organizational density should be *negatively* related to survival

⁵⁰ This is not the same as moral legitimacy. For example, more restaurants mean more restaurant suppliers, banks that are used to working with restaurants, customers that are used to eating at restaurants, economies of scale in numerous relationships, etc.

⁵¹ Terrorists benefit from relationships with other terrorist groups, as I argue and show. However, terrorist groups do not have as complicated systems of inputs and outputs as firms do, with a variety of customers, suppliers, competitors, and regulators (Thompson 1967). Terrorist groups generally interact with the government, their targets, the public, and other terrorist groups.

Furthermore, and more directly related to network analysis, group density in an area offers the disadvantages but not the benefits of intergroup relationships. Above I argued that an increased number of relationships should contribute to survival through cooperation, learning, and competition. Increased organizational density does not imply cooperation. Learning is possible, such as groups reading media reports about each other, but this is unlikely to be as beneficial as the knowledge groups get from directly interacting with each other. Finally, when groups *directly* compete with each other, this provides them with an “other” with which they can motivate their members, and this directly forces them to innovate. *Indirect* competition, however, is unlikely to offer such benefits.

By indirect competition I mean groups that are working to capture the same resources, but without directly interacting with each other. They might not even be aware of each other’s existence. The resources groups in this situation are after are likely at the national level, such as national media coverage or national government attention and possibly policy concessions. Groups on opposite sides of a country compete for these resources, but do not necessarily directly compete with each other in the sense of being adversarial toward each other.

We can think of two terrorist groups in India – the Islamic Defense Force in the South East, and the United Liberation Front of Assam (ULFA) in the North East. They never had a relationship with each other. However, both groups, active in the 1990s, hoped to get the attention of the national media, to cause fear in the public, in order to have the highest chance of getting national politicians to offer them policy concessions. Yet the media, public, and politicians have finite time and other resources. The Islamic Defense Force, were it the only terrorist group in India, might capture national attention, leading to public demands of some

policy concession. Lost in the din of approximately 30 other Indian terrorist groups including the ULFA, however, the Islamic Defense Force gave up terrorism after a few years, in 1998.

One group's likelihood of survival is negatively affected by the existence of another due to indirect competition. Network relationships, degree centrality, can help groups overcome these issues, but they are not a given. Overall, this suggests the following organizational density hypothesis:

H7: A terrorist group is less likely to end if there are fewer other terrorist groups in the same country (lower organizational density).

2.4.3 Beyond simple counts of ties: eigenvector centrality

The notion of a social network suggests that actors are embedded in a web of interactions beyond their own direct relationships, and even beyond a simple count of those relationships. To consider these dynamics, an alternate conception of centrality – eigenvector centrality – is helpful. This concept captures the number of relationships an actor has, and also how well-connected are the groups to which the actor has ties (Bonacich 1987).

A terrorist group with a higher value of eigenvector centrality should be less likely to fail because it is connected to important actors in the network. This should be more valuable than network connections generally because connections to important (well-connected) groups should indicate more assistance with resources. This should be helpful both in terms of learning and other types of direct cooperation.

Regarding learning, terrorist groups that are well-connected should have access to more information than other types of terrorist groups. Exposure to a broad group of other actors

means less likelihood of being insulated, and this suggests more information that can be passed along to ties. Information could include knowledge about tactics and ongoing counterterrorism operations. For example, al-Qaeda, with its approximately 30 ties, should be uniquely able to provide more important information on to its relationship partners. When it moved into Pakistan in the early 2000s, it brought a wealth of experience that helped Pakistan groups improve their attacks on Kashmir (Abou Zahab and Roy 2004, 65).

Direct cooperation, such as training together or joint attacks, should also be more helpful if one's tie is highly connected. Well-connected groups are likely to have more resources, a broad range of ties to draw on, to make relationship activity more consequential. For example, in the early 2000s the FARC trained with the IRA – which had previously trained with groups from Germany, Spain, and other locations of course including Northern Ireland. The FARC greatly benefitted from this joint work (Seper 2002), likely because the IRA had a great deal of diverse experience it could draw on to share with the FARC. Overall, connections to well-connected groups should help terrorist groups survive. This suggests the following hypothesis:

H8: A terrorist group is less likely to end if it has relationships with groups that are themselves connected to many groups (higher eigenvector centrality).

2.4.4 Beyond centrality: Cooperative and adversarial ties

Terrorist groups affect each other in a number of ways. Simultaneously considering multiple types of relationships acknowledges the “multiplex” nature of terrorist group networks (Knoke and Yang 2008, 11). This allows us to ensure that one type of relationship is not driving the centrality results, and it lets us see the relative impact of different relationship types.

Two types of intergroup relations should be especially important to terrorist group survival. First, terrorist groups can have *cooperative relations*, working with each other to carry out attacks. This is logistical or operational support regarding terrorist acts, and not simply vocalized support. Second, they can have *adversarial relations*, directly attacking each other and their supporters. This occurs both with groups that share political goals, such as Hamas and Fatah, as well as groups with opposite political goals, such as ETA and Spain's Anti-Terrorism Liberation Group. These relationship types, with pairs of groups as examples, are shown in Table 2.2. Direct relationship types are divided by whether groups have cooperative or adversarial relations, and whether they have similar or opposite goals.⁵²

Table 2.2. Types of cooperative and adversarial relationships

	Cooperative Relations	Adversarial Relations
Similar political goals	(1) Red Brigades, Red Army Faction; (2) Hamas, Popular Front for the Liberation of Palestine;	(1) Fatah, Hamas; (2) Shining Path, Túpac Amaru Revolutionary Movement;
Opposite political goals	(empty cell)	(1) FARC, United Self-Defense Forces of Colombia; (2) ETA, Anti-Terrorist Liberation Group;

The first way that terrorist groups affect each other is when they cooperate. This is shown in the top-left quadrant of the table. Terrorists groups often collaborate on attacks and

⁵² These are ideal types, and there can of course be differences of degree within each type. Other types are possible, such as cooperation between groups with orthogonal or even opposite goals (bottom-left quadrant of Table 2.2). For example, U.S. white supremacists have suggested aligning with al Qaeda to attack Jews and the U.S. government (Schuster 2005). Due to the relative rarity of these types of relationships, however, I do not focus on them.

share resources, sometimes for individual attacks, and sometimes for longer-term projects.⁵³ For example, European leftist groups have frequently teamed up for attacks, such as the Red Brigades and the Red Army Faction (Karmon 2005). More recently, Islamic fundamentalist groups such as Lashkar-e-Taiba and Hizbul Majahideen, which primarily attack Indian targets near Kashmir, have worked together on attacks. Terrorist groups cooperate for a number of reasons. Karmon (2005, 279) examines Europe and Palestinian terrorist groups, and finds that they tend to cooperate when threatened.⁵⁴

How should cooperative relationships affect terrorist group survival? While not a great deal has been written about terrorist group cooperation, research on alliances between other types of subnational violent groups shows mixed consequences. Discussing cooperation between criminal organizations, Williams (2002) suggests these ties are often mutually beneficial, but can lead to problems. For example, he cites examples of group cooperation leading to conflict and competition.⁵⁵ Lichbach (1995) considers cooperation between dissident groups, and is more optimistic about its potential consequences (see below). However, he argues that cooperation is difficult to maintain. He writes, “long-lived coalitions are rare,” “activities... are difficult to coordinate,” and “major forms of cooperation (e.g., sharing of patrons’ support, coordinating operations) are impossibilities” (Lichbach 1995, 18-19). Cooperation between terrorist groups could also be detrimental to the groups involved because it could make them more visible to the state.

⁵³ Cooperative relations can be compared to Porter’s (1985) “tangible” business relations.

⁵⁴ Using formal theory, Bapat and Bond (2007) explore why some terrorist groups cooperate with others. They argue that stronger terrorist groups should try to cooperate with other strong groups, while weaker groups should try to align with stronger groups as well.

⁵⁵ For example, Colombian drug trafficking organizations cooperated with Mexican organizations, paying them in cocaine, and this played a role in the Mexican groups getting into the cocaine trade themselves. Thus the Colombian organizations in part created their competitor. #

In spite of the possible disadvantages of terrorist group cooperation, I argue that this type of relationship should enhance these groups' durability, as it allows them to pool resources and increase their capabilities. This provides them with more material incentives to provide members, ameliorating mobilization concerns.

Research on social movements suggests that when groups align, this provides them with new opportunities for success. Wiewel and Hunter (1985) posit that "resource exchange" between groups is one of the most important ways that groups benefit from interaction. Resources can be used to provide material incentives to members. McAdam (1996) argues that *allies* are one of the important attributes of the opportunity structure for social movements. Regarding dissident groups, Lichbach (1995, 255-256) argues that "coalitions" between dissident groups, while difficult to achieve, could help with resource sharing and increase the probability of their victory. Coalitions, or less formally, cooperative relationships, should be similarly important for terrorist groups. For example, when Germany's Red Army Faction teamed up with other leftist groups in the mid-1980s, it was able to carry out a new wave of especially injurious attacks (Merkl 1995). As discussed previously, terrorist organizations with more allies generally tend to be more lethal (Asal and Rethemeyer 2008).

Terrorist groups in cooperative relationships can pool resources and reduce the transaction costs associated with carrying out terrorist attacks. A lower demand for resources makes it easier for terrorist groups to sustain their organization and carry out attacks. When sharing resources, groups do not have as much of a need to try to mobilize new members. For example, when Lashkar-e-Taiba wanted to attack more in India's primary cities (as opposed to Kashmir, where it had been working), it could have recruited new members and built up a logistics infrastructure to do so. This would have been costly. Instead, however, it teamed up

with terrorist groups in the areas it wanted to attack, and conducted joint operations (Tankel 2009). Cooperative relations, through resource aggregation and the related mitigation of mobilization concerns, should help terrorist organizations survive. This suggests the following hypothesis:

H9: A terrorist group is less likely to end with each additional terrorist group cooperative ally.

Adversarial relationships are the other type of direct relationship between terrorist groups that should impact duration. Adversarial relationships are comparable to what the interstate war literature describes as rivalry, which it in turn defines as “militarized competition” (Diehl and Goertz 2000). Similarly, with terrorist groups, an adversarial relationship is antagonism between groups manifesting itself in physical attacks on each other or their supporters. First I discuss how adversaries can have similar or opposite political goals, then I outline how either kind of adversarial relationship should affect duration similarly, drawing on the logic of non-material incentives.

Terrorist groups that have similar political goals appeal to the same segment of society. For example, ethnopolitical terrorist organizations claim to represent a certain ethnic group, and often multiple terrorist groups claim to represent the same group. Therefore, they compete with each other for resources such as recruits and donations, and this can turn adversarial. This type of relationship is represented in the top-right quadrant of Table 2.2; Fatah and Hamas are one example. The resource base for groups in this situation must be divided, and the groups try to “outbid” each other with increasingly bold tactics (Bloom 2005; see also Hoffman 2006, 144-

154, 163-165). Groups in this situation also occasionally target each other or their supporters, as Fatah and Hamas have. These are adversarial relationships. However, adversarial relationships are not limited to groups with the same pool of potential supporters and recruits.

Terrorist groups that support opposite political goals often have adversarial relationships as well. These groups are represented in the bottom-right quadrant of Table 2.2. Opposing groups compete for political influence. Groups with conflicting views often attack each other's alleged members and supporters. Perhaps the most visible example of this is when right-wing terrorist groups have formed in reaction to left-wing terrorist groups. The United Self-Defense Forces of Colombia formed to counter the FARC and other groups. Groups have formed to attack ethnonationalist groups as well. The Anti-Terrorist Liberation Group formed to attack ETA members and supporters in Spain.

How should adversarial relationships affect terrorist group survival? Lichbach (1995, 208-210) notes that the literature is divided on the question of whether competition between dissident groups should ultimately help or hurt them. Regarding terrorist group adversarial relations in particular, it is possible that these ties could lead to the destruction of one or both groups at the hands of the other. Crenshaw (1985, 483), drawing on Hirschman's (1970) analyses of organizations, argues that when terrorist groups face stress from competing with each other, group members might defect or the group might splinter. In addition to internal issues, adversarial relationships could lead to the destruction of one group at the hands of another. This happened in Sri Lanka in the late 1980s, for example (Bush 2004). The potential for these outcomes is why some states, such as Colombia, Spain, and Turkey, have at least indirectly supported reactionary terrorist groups. It is also part of the reasoning behind government and

popular apathy when terrorists target each other.⁵⁶ However, my argument goes against this conventional wisdom regarding terrorist group adversaries.

I argue that adversarial relationships generally contribute to terrorist group survival by providing new incentives to group members and potential group members. This might not immediately seem logical, but one must think about the types and sources of incentives. A terrorist group can offer a sense of purpose to members based on the group's overall goal, such as policy change or territorial change; these are purposive incentives. However, once a group has a terrorist group adversary, a new, additional purpose appears: *defend the group and its supporters from the rival*. This can help keep members motivated.

Related to this, the focus on the “other” can bring together group members, deepening their bonds – in other words, providing more solidary incentives. The idea that a violent rival can help a group with mobilization is consistent with some anecdotal evidence: right-wing terrorism in Argentina increased support for the left-wing terrorist groups (Gillespie 1995) and anti-ETA terrorism in France and Spain increased support for ETA (Reinares and Alonso 2007). Overall, adversarial relationships should provide new incentives to members, helping with mobilization and survival.

An additional way that having an adversary can help terrorist groups is that the competition can spur group innovation. This was discussed above under degree centrality, as group relationships generally can lead to competition. However, adversarial relationships, as violent competition, provide immediate reasons for groups to attempt to improve. Bloom's (2005) work shows that direct competition between adversarial groups leads to innovations, and

⁵⁶ For example, the press attaché of the mayor of Cartagena, Colombia, said of terrorist groups, “Let them all kill each other in the mountains and jungles, who cares!” (Parsa 2007)

this is consistent with research on business organizations (Porter 1985) and social movements (Tarrow 1989). Innovation can help groups survive. This might not be as important as the non-material incentives that having an adversary provide a group; this will be explored more in the case studies. Overall, this suggests the following hypothesis:

H10: A terrorist group is less likely to end if it is involved in an adversarial relationship with another terrorist group.

2.4.5 Bringing the state back in: State factors condition the impact of ties

Most explanations of terrorism only theorize about relations between terrorist groups and the state, or terrorists generally and the state (e.g., Bapat 2006; Pape 2003; Jordan 2009). In contrast, my explanation thus far has focused directly on intergroup relations. However, the state can play an important role in conditioning the impact of these factors. The next set of hypotheses focuses on interactions between state attributes and intergroup relations. The state attributes that this section focuses on are *capabilities* and *regime type*.

State capabilities matter because counterterrorism can be effective. I first explore how capabilities affect group duration, and then I discuss how this relationship conditions the impact of group relations. Jones and Libicki (2008, 19) find that about half of all terrorist groups end as a direct result of police or military action.⁵⁷ Generally, terrorist groups are more likely to survive in less capable states (Carter 2012; Young and Dugan 2010). For example, the weakness

⁵⁷ Jones and Libicki find policing more effective than military force, with 40% of the groups they analyze ending as a result of police action, and 7% ending due to military action. Another 43% of the groups ended in a less direct way, which they classify as “politicization.” This generally means the group turned to non-violent politics, which is likely a result of both government action (police, military, and otherwise) and other factors.

of the Colombian state (relative to other states), has been cited as one of the chief reasons for robustness of terrorist organizations there (Waldmann 2007). However, countries vary substantially in their abilities in this regard. Wealthier countries generally invest more in law enforcement, judicial, and military approaches to preventing and reacting to terrorism. The United States, for example, has invested heavily in law enforcement, judicial, and military approaches to preventing and reacting to terrorism. Technological advances combined with innovative policing allow U.S. agencies to thwart plots and bring suspects to justice. Most other countries do not have these capabilities. India, for example, has had some success stopping terrorist groups, but its relative lack of security resources has made it less effective than it otherwise might be.

State capabilities should condition the impact of terrorist group relationships on group survival in the following manner. Previous hypotheses suggest that cooperation helps groups through resource aggregation and mitigating mobilization concerns, and adversarial relationships help groups by providing additional justifications for their existence. The benefits of these ties should be especially important in more-capable states. In all kinds of states, network ties should contribute to terrorist group relations. However, terrorist groups should have a higher likelihood of being dismantled in stronger states, so the benefits provided by relationships should be especially meaningful in these countries.

Above it was argued that cooperative ties should help terrorist groups through resource aggregation and the related mitigation of mobilization concerns. The groups should especially need these resources, and need assistance with mobilization, when facing strong states. It was also argued above that an adversarial tie should help terrorist groups by providing them with additional motivations for existence, an additional “other” (beyond the state) against which the

group can rally its members. This source of motivation, and the related aid to mobilization, should be particularly valuable for groups facing states with strong counterterrorism capabilities.

This suggests the following conditional hypothesis:

H11: The survival-enhancing impact of relationships on terrorist group survival will increase in more capable states.

In addition to capabilities, states differ in important ways relating to the freedoms afforded to their citizens. Just as especially capable states make it harder for terrorist groups survive, less-democratic regimes are particularly able to put an end to terrorist groups. Here I discuss the impact of regime type on terrorist group survival. Then I explain how regime type of a state conditions the impact of terrorist group relationships in that state.

Regime type remains one of the most-discussed state attributes in terrorism studies (e.g., Li 2005; Wade and Reiter 2007; Brooks 2009). Some studies suggest, for example, that unconstrained regimes (autocracies) experience less terrorism because these types of states make it harder for dissidents to organize and attack (Eubank and Weinberg 1994; Li 2005; Piazza 2007).⁵⁸ When a terrorist group exists, the state can simply destroy its members or suspected members – without the need for search warrants, trials, or concern about minimizing collateral damage. For example, Argentina saw a substantial decline in terrorism during the late 1970s, largely because its military dictatorship killed or captured so many leftists and sympathizers. A

⁵⁸ Li looks at different aspects of “democracy,” and finds that government constraints, also described as civil liberties, are positively associated with terrorist attacks. This is the aspect of democracy to which this section refers.

lack of constraints on the government is also a substantial part of the reason why Saudi Arabia has had relatively little terrorism for a country of its size or region.⁵⁹

An autocratic regime type, then, is comparable to higher state capabilities. Essentially, autocracy indicates a higher amount of capabilities – or at least a different set of capabilities – that the state can use in counterterrorism. Indeed, a number of books on democracy and counterterrorism exist because democracies face unique challenges when attempting to fight terror (Wilkinson 1986; Art and Richardson 2007). Terrorist groups in autocratic countries, like terrorist groups in more-capable countries (in terms of traditional definitions of capabilities), should have a more difficult time surviving.

Terrorist groups in more autocratic regimes, given the *ex ante* difficulties regarding survival, should be especially likely to benefit from ties to other terrorist groups. This is similar to the conditional hypothesis discussed regarding state capabilities. Network ties, whether cooperative or adversarial, should be helpful to terrorist groups in any type of environment. However, in conditions where the groups are especially challenged (autocratic regimes), ties should be particularly advantageous to their mobilization needs. In environments more conducive to terrorism – more democratic countries – ties should contribute to group survival, but not with the same degree of importance as in less democratic countries. This suggests the following conditional hypothesis:

⁵⁹ Saudi Arabia, rated as fully autocratic by Polity, is reported to have experienced 61 terrorist attacks between 1970 and 2010. During the same years, Jordan, which is much smaller population-wise, experienced 80 terrorist attacks. Jordan is considered by Polity to have been an anocracy since 1989, and most of its terrorism has occurred since then. Iran's population is approximately three times that of Saudi Arabia, yet it has experienced more than 10 times as many terrorist attacks, 691. Since its 1979 revolution, Iran has been rated as less autocratic than Saudi Arabia, and most of its terrorism has occurred since then as well. Terrorism data come from the Global Terrorism Database. <http://www.start.umd.edu/gtd/> (Accessed Nov. 4, 2011.)

H12: The survival-enhancing impact of relationships on terrorist group survival will increase in more autocratic states.

Hypotheses are presented together in Table 2.3.

Table 2.3. Hypotheses

Hypothesis number	Hypothesis
	<i>Organizational hypotheses</i>
1	A terrorist group with an ethnic or religious motivation is less likely to end than a group with another type of motivation.
2	The impact of ethnic motivation on terrorist group survival is stronger than the impact of religious motivation on terrorist group survival.
3	A terrorist group with a state sponsor is less likely to end than a group without a state sponsor.
4	A terrorist group involved in the drug business is less likely to end than a group not involved in the drug business.
5	A larger terrorist group is less likely to end than a smaller terrorist group.
	<i>Network hypotheses</i>
6	A terrorist group is less likely to end if it is involved in more relationships with other terrorist groups (higher degree centrality).
7	A terrorist group is less likely to end if there are fewer other terrorist groups in the same country (lower organizational density).
8	A terrorist group is less likely to end if it has relationships with groups that are themselves connected to many groups (higher eigenvector centrality).
9	A terrorist group is less likely to end with each additional terrorist group cooperative ally.
10	A terrorist group is less likely to end if it is involved in an adversarial relationship with another terrorist group.
	<i>Network hypotheses, conditional on state attributes</i>
11	The survival-enhancing impact of relationships on terrorist group survival will increase in more capable states.
12	The survival-enhancing impact of relationships on terrorist group survival will increase in more autocratic states.

2.5 CONCLUDING REMARKS

This chapter presented an explanation of terrorist group survival based on the assumption that terrorist groups are formal organizations involved in a network of other terrorist groups. I first looked at organizational attributes that help with mobilization and, thus, survival. If groups can provide non-material incentives to members, such as by having an ethnic or religious motivation, this should help them survive. Furthermore, if they are more able to provide material incentives – such as through state sponsorship or drug sales – this should help them as well. Overall, however, non-material incentives should matter more to terrorist groups because of the unusual nature of terrorism. Finally, larger groups should have an easier time keeping mobilized and therefore surviving.

Drawing on social networks concepts, but also using the organizational framework of incentives and mobilization, I argued that relationships between terrorist groups contribute to their longevity. I also showed that this is distinct from a group simply being in a country with many terrorist groups – which in fact hurts a group’s chance of survival. My argument explains these divergent results. I also argued that cooperative and adversarial relationships contribute to group longevity. The argument then explores the likely consequences of another network attribute, eigenvector centrality. Finally, I considered how the impact of these ties is conditioned by the attributes of the state in which groups operate, particularly the state’s capabilities.

In the next two chapters, I subject my hypotheses to empirical testing. Chapter 3 describes my global dataset of terrorist groups and their relationships. It then provides quantitative tests of the hypotheses. Chapter 4 tests the hypotheses with case study analysis, looking at terrorist groups in Colombia, Northern Ireland, and Pakistan.

3.0 CHAPTER 3: QUANTITATIVE EMPIRICAL TESTS

The previous chapter introduced a model of terrorist group survival incorporating both organizational and social network elements, and provided related hypotheses. This chapter describes quantitative empirical testing of the hypotheses. First, I present the data set I use, a global collection of information on terrorist group networks that incorporates changes over time. Then I describe the variables I use to measure important concepts, and explain the statistical procedure. Finally, I discuss the results.

3.1 DATA, VARIABLES, ESTIMATOR

3.1.1 Data

To test the hypotheses, I use a global data set of terrorist groups in existence at any point between 1987 and 2005. The sample includes 622 terrorist groups, although some models involve fewer groups because of missing data on independent variables. The unit of analysis is group-year. The number of observations in most analyses is 4,033, meaning that groups are observed for an average of about six and a half years.

The data are an extension, with some changes, of Asal and Rethemeyer's (2008) collection of terrorist group network data from their study of terrorist organization lethality. The

data used in that study come from their larger data project, the Big, Allied and Dangerous database, which contains information on terrorist groups that existed at some point during 1998 and 2005.⁶⁰ The Asal and Rethemeyer data are, to my knowledge, the first published social network data on terrorist groups globally.⁶¹

Variables in the Asal and Rethemeyer data set do not vary over time.⁶² To make the data more amenable to duration analysis, I temporally expanded the data, to both add years and introduce temporal variation. Their time-invariant data begin in 1998, so I went back about 10 years, and gathered data on terrorist groups between 1987-1989. This essentially makes a late-1980s time wave to be compared with Asal and Rethemeyer's late-1990s and early 2000s wave.⁶³ Examining some data in time periods is reasonable because finding yearly data for many attributes is unlikely, due to the clandestine nature of terrorism. I assume, for the purpose of these models, that terrorist group attributes in the late 1980s remain constant through 1997. This is admittedly not ideal, but other data on terrorist groups assume that group attributes remain constant for decades, if a group survives that long (e.g., Jones and Libicki 2008; Cronin 2009; Blomberg et al. 2010). My data set, with some temporal variation, provides advantages over existing data collections.

⁶⁰ Their data are largely based on information in the RAND-Memorial Institute for the Prevention of Terrorism (MIPT) Terrorism Knowledge Base database. These data are now part of the Global Terrorism Database (GTD) project hosted by the University of Maryland. The data are here: <http://www.start.umd.edu/gtd/>

⁶¹ Horowitz and Potter (2011) have a working paper on terrorist group networks, which like Asal and Rethemeyer looks at terrorist group lethality and uses time-invariant network data. There are also data on networks between individual terrorists (e.g., Sageman 2004; Pedahzur and Perliger 2006), but my hypotheses are about groups. Horowitz (2010) includes a measure of groups with a link to al-Qaeda, but more general network connections are not measured.

⁶² Unless otherwise noted I am referring to what is technically the BAAD1 project. The BAAD2 project, which is currently underway, incorporates variation over time within the 1998-2005 sample. For more information see: http://www.albany.edu/pvc/current_projects.shtml

⁶³ While I use the Asal and Rethemeyer data as a foundation, some of my network variables differ from their original coding. I update their data, to ensure that the same coding scheme is used throughout the 1987-2005 sample.

The terrorist group data come from two time waves, but because groups begin and end in specific years (thus entering or exiting the data), the data set is structured as group-year. State attributes vary each year. Some group attributes, such as group size, do not vary each year in the data because they are only recorded for the two time periods. However, there is yearly variation in the *relationship* data when groups form or end, and therefore enter or leave the data. For example, if two groups are in a cooperative relationship in the late 1980s, but police action eliminates one of the groups in 1992, the relationship is coded as ending that year. The surviving group is coded as *not* in that relationship from 1993 onward.⁶⁴ Data on the number of groups in each country (“organizational density”) also change regularly as groups start and end.

Most of the studies that have quantitatively examined terrorist group duration (e.g., Jones and Libicki 2008; Cronin 2009; Blomberg et al. 2010) have used time-invariant data – one observation on each terrorist group, no matter how long the group existed or how many changes it or its country experienced.⁶⁵ My study offers an advantage over this approach by looking at some changes in variables over time. Examining changes over time can give us more confidence about causality, as we can have more information about when in a group’s life it took on certain values for certain independent variables. This is important because most factors in models of terrorist group survival change with time.

To determine which groups existed in the late 1980s, I first examined the Asal and Rethemeyer data set, which contains the group’s “age” as of 1998, to see which groups were extant as early as 1987. Second, I checked other group databases, primarily the Global Terrorism Database (GTD) Terrorist Organization Profiles (TOPs) and the GTD terrorist

⁶⁴ As a robustness check, I also run models with relationship data constant during the two periods (1987-1997, and 1998-2005). This is discussed later.

⁶⁵ Exceptions are Carter (2012) and Young and Dugan’s (2010) working paper.

incident data set.⁶⁶ These data sources are the result of years of work by experts, and are the most commonly used sources of terrorist group data (e.g., Jones and Libicki 2008; Cronin 2009). I also checked the Jones and Libicki data set (2008), although this largely relies on the TOPs.⁶⁷

Table 3.1. Regional distribution of terrorist groups, 1987-2005

Region	Number of groups
Latin America	113
United States	21
Europe	198
Sub-Saharan Africa	36
Middle East	126
Asia	128
<i>Total</i>	622

The final sample, 622 terrorist groups, provides a diverse set of cases to observe. Table 3.1 shows the regional distribution of the groups. Europe, perhaps surprisingly, has the most groups with 198. This is somewhat explained by the plethora of Marxist and more recently anarchist groups, particularly in Greece. Additionally, Europe’s population is larger than that of any other region but Asia. Latin America, the Middle East, and Asia each have over 100 groups

⁶⁶ Many groups associated with attacks in the GTD do not have a profile in the GTD TOPs. To ensure I get all GTD groups from the period I searched the GTD for all attacks between January 1, 1987, and December 31, 1989, and recorded every group name listed. This was time-intensive because there were 11,219 attacks in this period, but it was the best way to ensure I am including all groups. The GTD has relatively liberal criteria for terrorist attacks, so I exclude some groups if they appear to only attack military targets in a war environment. This is consistent with the group coding of Cronin (2009) and others.

⁶⁷ I thank Martin Libicki for sharing this data.

in the sample as well. As far as the general survival tendencies of the terrorist groups, the average group in the sample reaches an age of 10.4 years.⁶⁸ There is considerable variation, however, as many groups only last a few years, and the most durable group has been the Ku Klux Klan.⁶⁹ A majority of the groups, 376 (60 percent), end at some point between 1987 and 2005.

⁶⁸ The number 10.4 is the mean of the maximum age of each group during the sample. Age is calculated by subtracting the group's founding year from the current year, then adding 1 to avoid ages of 0.

⁶⁹ Following others (e.g., Cronin 2009; Jones and Libicki 2008), the Klan is coded as reaching the age of 140 in 2005, having been founded in 1866. As a robustness check I exclude this extreme outlier, but results are essentially unchanged.

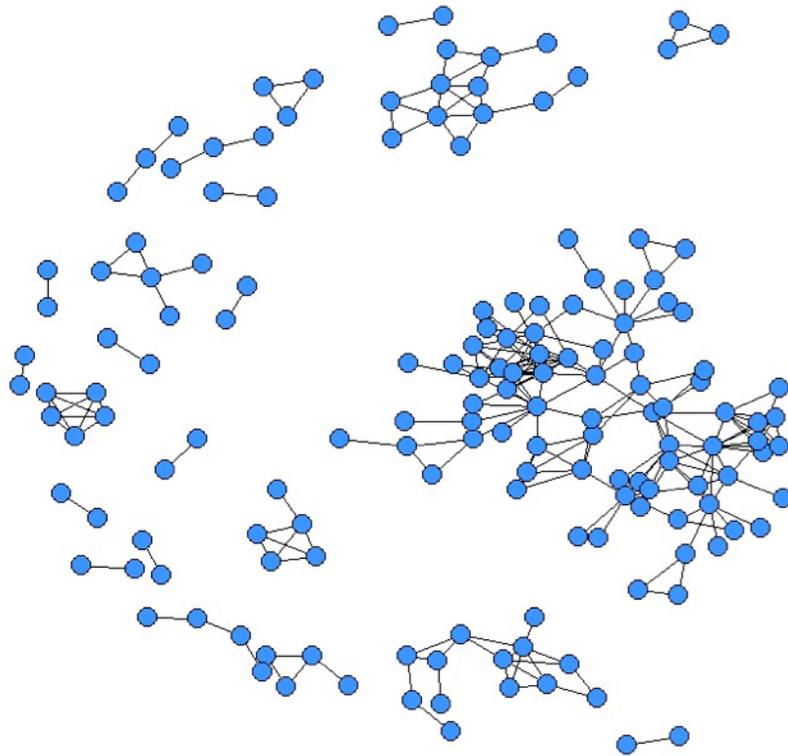


Figure 3.1. Terrorist group ties, 1987-1989

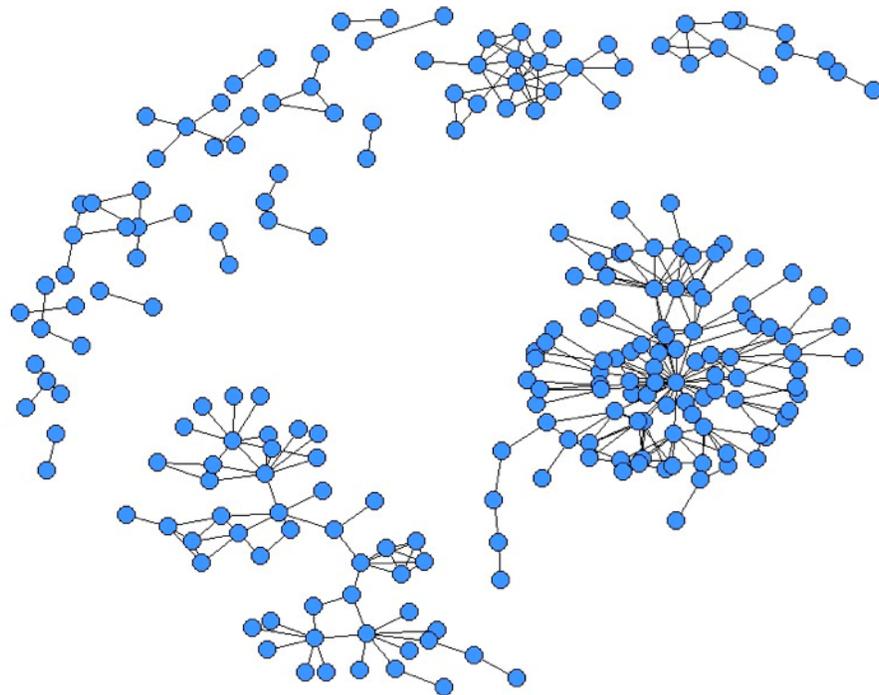


Figure 3.2. Terrorist group ties, 1998-2005

Both figures created in UCINET NetDraw, with Gower metric scaling, equal edge-length bias, and node repulsion. Groups without ties not shown.

Figures 3.1 and 3.2 shows a snapshot of the relational portion of the data, as well as how the data change with time. The nodes in the figures are *not* arranged according to geography. They are simply placed in an effort to keep a similar amount of distance between each node, and avoid overlap. This is a common representation of network data (Borgatti et al. 1999). Terrorist groups are not labeled in these figures – there are no proper nouns, to paraphrase Przeworski and Teune (1970) – but they show the general structure of the network. The two time-period networks have one clear similarity: in each, there is one “primary component” or dominant subgroup of interconnected terrorist groups.⁷⁰ The primary components are the large masses on the right side of each figure. The other clusters are much smaller, sometimes of only two or three other groups. The two figures also have an interesting difference. In the 1987-1989 figure, the primary component is rather loosely interconnected. In the 1998-2005 data, however, the primary component is more structured, more densely connected in a “core-periphery” form (Carrington et al. 2005). The “core” group at the center of the 1998-2005 primary component is al-Qaeda.

⁷⁰ A network has multiple “components” when there are subgroups of connected nodes where none of the nodes in one subgroup has a connection to a node in another subgroup of connected nodes (component). (Wasserman and Faust 1994, 109-110). The primary component is the component with the most nodes.

Color indicates group's region

- Americas
- Europe
- S.S. Africa
- Mid. East
- Asia

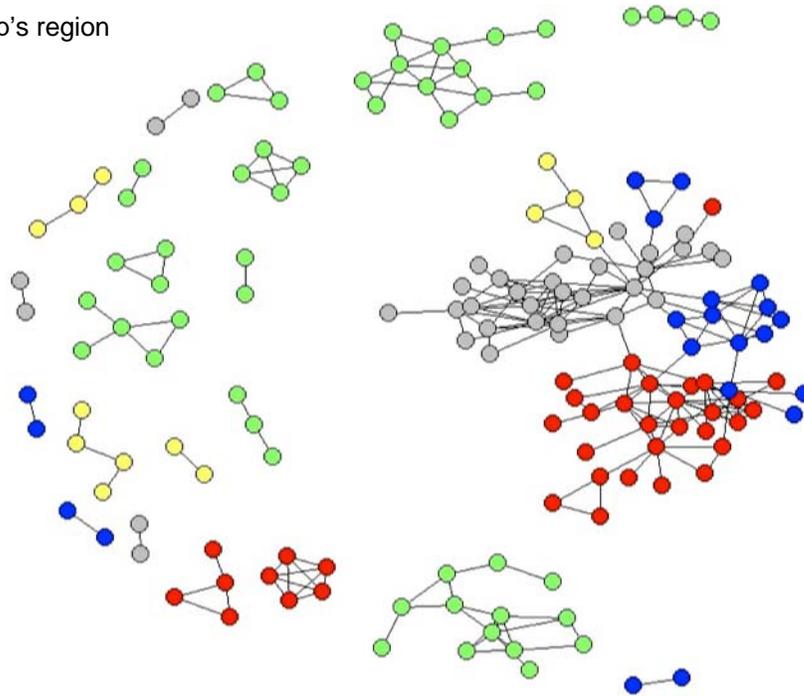


Figure 3.3. Terrorist group ties with regions, 1987-1989

Color indicates group's region

- Americas
- Europe
- S.S. Africa
- Mid. East
- Asia

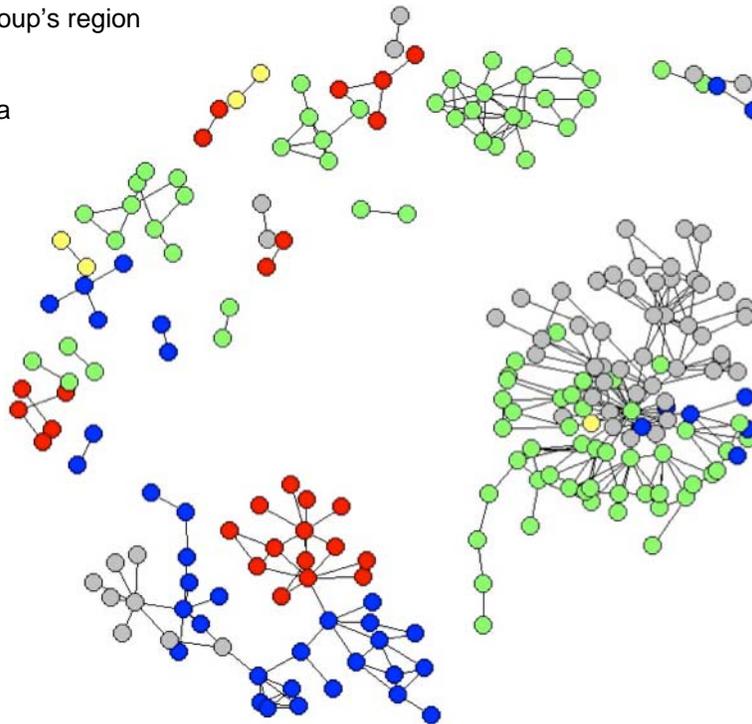


Figure 3.4. Terrorist group ties with regions, 1998-2005

Both figures created in UCINET NetDraw, with Gower metric scaling, equal edge-length bias, and node repulsion. Groups without ties not shown.

Figures 3.3 and 3.4 add more information to the network portrayal, with groups colored according to the primary geographic region in which they operate. These figures indicate that groups tend to have ties to groups in their own region. However, there are interesting patterns of how groups in certain regions tend to behave, as well as patterns of how groups from certain regions tend to have ties to groups in certain other regions. As with the network structure generally, these patterns change with time. Figure 3.3 shows that the primary component (dominant cluster) in 1987-1989 comprised mostly Middle Eastern and Latin American groups, with a number of European and a few Sub-Saharan African groups as well. This is because Palestinian and Lebanese groups were especially active during that period, and often cooperated with left-wing and ethnonationalist groups in other regions. There are no Asian groups in the primary component in 1987-1989. They are generally in smaller clusters, and a closer look at the data suggests this is because they tend to be more focused on domestic concerns during this era.⁷¹

Figure 3.4 shows a substantially different global terrorist network, in terms of who is connected to whom. The dominant feature of the network is the al-Qaeda-based primary component, which mostly involves Asian and Middle Eastern groups.⁷² Most of the European and Latin American groups – leftists and nationalists – are out of the primary component, no longer connected to the Middle Eastern groups. The comparison of Figures 3.3. and 3.4

⁷¹ Another potential explanation for why Asian groups tend to cooperate domestically instead of internationally, and therefore are in smaller clusters, is relatively high cultural and linguistic heterogeneity among Asian countries. The change to more international and interregional cooperation in the 1998-2005 sample shows this heterogeneity is not insurmountable.

⁷² Bringing together groups from so many different regions, al-Qaeda is indeed the important “boundary spanner” of the era (Williams 2007, 199). It is important to note that these changes in network patterns are not simply the emergence of groups in Afghanistan and Iraq after the U.S.-led wars began there in 2001 and 2003. Groups tied to al-Qaeda are also located in Algeria, China, Egypt, Indonesia, Lebanon, Pakistan, Russia (Chechnya), Thailand, Uzbekistan, Yemen, and other countries.

corresponds to Rapoport's (2004) notion of a shift from one type of terrorism to another in the 1990s. Leftist groups described by Rapoport as the Third Wave gave way to religious groups, the Fourth Wave, as the dominant terrorists.⁷³

In spite of the interesting differences between the time periods, it is important to recall the similarities between the two. Each period has a dominant cluster or primary component, and each primary component is surrounded by many smaller sets of groups with fewer connections. This means that in both time periods there are many groups with ties, and a subset of the groups has many ties. Also, contrary to some ideas related to globalization, terrorist groups have about the same amount of connectedness, on average, regardless of time period. In fact, groups in the 1987-1989 sample are slightly more connected than those in the more recent sample. The average group in the first sample has 1.5 ties, while the average group in the later sample has 1.4 ties. Overall, the global terrorist group data show some interesting changes across time – suggesting the importance of gathering data at multiple time points – but the data also show a similar general network structure at both time points.

3.1.2 Variables

The dependent variable is *group end*. This variable is coded 1 in the year that the terrorist group ended, if it ended during the sample. A terrorist group has “ended” when it has either ceased to exist as an organization, or has given up terrorism as a tactic even if it remains a political group (Cronin 2009, 210). An example of the first scenario is the Japanese Red Army in 2001, which

⁷³ Rapoport's four waves are Anarchist, anti-colonial, New Left, and religious. See also Juergensmeyer (1993), whose prescient work described a “new Cold War” involving religious nationalists vs. secular states.

disbanded after police arrested the majority of its members. An example of the second scenario is the Palestine Liberation Organization, which gave up terrorism in 1993.⁷⁴ Following Cronin and others, my primary source for terrorist group end dates is the GTD and its TOPs. I also look to news sources and other terrorist group data sets (e.g., Cronin 2009; Jones and Libicki 2008). In the absence of any of the above, and again following Cronin, I use the year of the final reported terrorist attack of the group in the GTD.

The variables in the organizational model, representing Hypotheses 1-6, are based on variables from Asal and Rethemeyer (2008), coded according to their code book (Anderson et al. 2009).⁷⁵ For years before 1998, these variables are coded using the sources described above for other terrorist group information – GTD TOPS, newspaper archive searches, and so on.⁷⁶

⁷⁴ Sometimes groups say they will give up terrorism, but relapse. ETA is an example. Like other researchers, I consider these groups still active. Similarly, the IRA declared to give up terrorism in 1994, 1998, and 2005, but it is only coded as ending in 2005, because terrorism followed the previous declarations. One advantage of the data set ending in 2005 is that there is sufficient time to see if a group relapses.

⁷⁵ I use different names for some variables, with the intention of greater clarity. For example, my variable *religious* is the same as Asal and Rethemeyer's *contain_relig*, and my *state sponsored* is the same as their *statespon*.

⁷⁶ The variables *ethnic motivation*, *religious motivation*, *size*, and *state sponsored* for groups in Africa and Asia between 1987-1989 were coded by undergraduates supervised by Ian Anderson of the Project on Violent Conflict at the University of Albany, State University of New York. I thank them for their assistance. I checked a random sample of the groups that they coded, and generally came up with the same values for variables.

Table 3.2. Hypotheses

Hypothesis number	Hypothesis
	<i>Organizational hypotheses</i>
1	A terrorist group with an ethnic or religious motivation is less likely to end than a group with another type of motivation.
2	The impact of ethnic motivation on terrorist group survival is stronger than the impact of religious motivation on terrorist group survival.
3	A terrorist group with a state sponsor is less likely to end than a group without a state sponsor.
4	A terrorist group involved in the drug business is less likely to end than a group not involved in the drug business.
5	A larger terrorist group is less likely to end than a smaller terrorist group.
	<i>Network hypotheses</i>
6	A terrorist group is less likely to end if it is involved in more relationships with other terrorist groups (higher degree centrality).
7	A terrorist group is less likely to end if there are fewer other terrorist groups in the same country (lower organizational density).
8	A terrorist group is less likely to end if it is has relationships with groups that are themselves connected to many groups (higher eigenvector centrality).
9	A terrorist group is less likely to end with each additional terrorist group cooperative ally.
10	A terrorist group is less likely to end if it is involved in an adversarial relationship with another terrorist group.
	<i>Network hypotheses, conditional on state attributes</i>
11	The survival-enhancing impact of relationships on terrorist group survival will increase in more capable states.
12	The survival-enhancing impact of relationships on terrorist group survival will increase in more autocratic states.

Table 3.2 shows all of the hypotheses of the dissertation, repeating what had been Table 2.3 in the previous chapter. The independent variables *ethnic motivation* and *religious motivation* are used to test Hypothesis 1. *Ethnic motivation* is a dichotomous variable coded 1 if a group's political motivation includes an ethnic element. 229 (37 percent) of the groups are coded as having an ethnic component to their motivation. Note that this does not require a group to be solely motivated by ethnic goals. It also includes groups such as the Democratic Front for the Liberation of Palestine, which is both ethnically motivated and leftist: It wants a Palestinian state, and it wants the government to be left-wing. *Religious motivation* is a dichotomous variable coded 1 if a group's political motivation includes a religious element. 159, or about 26 percent, of the groups in the sample are coded as having a religious element. Both of these variables should be negatively associated with *group end*. Hypothesis 2 argues that *ethnic motivation* should matter more than *religious motivation*, as ethnic motivation should help more with group mobilization for several reasons.

Regarding measures of groups' ability to provide material incentives, Hypothesis 3 is tested with *state sponsored*. This is a dichotomous variable coded 1 if the group is provided with material support by a state. 106 (17 percent) of the groups have a state sponsor at some point during their existence. This variable should be negatively associated with *group end*. Hypothesis 4 is tested with the variable *drugs*. This is a dichotomous variable indicating if a terrorist group is involved in illegal drug production or trafficking. There are 41 groups (7 percent) coded as being in the illegal drug business. Like the other variables measuring terrorist group organizational attributes, these variables come from Asal and Rethemeyer (2008) for 1998-2005, and I coded them for earlier years following the same criteria.

Size, which tests Hypothesis 5, is a standard approximation of the number of members in a terrorist group. It is an ordinal variable coded 0 if the group has fewer than 100 members, 1 if the group has between 100 and 999 members, 2 if the group has between 1,000 and 9,999 members, and 3 for the few groups with 10,000 or more members. This is not as precise of a measure as we might prefer, but it is the best that is currently available given the scarcity of information on terrorist group size. Other studies have used this same measure (Asal and Rethemeyer 2008; Jones and Libicki 2008). The most common value for this variable is 0, fewer than 100 members. *Size* should be negatively associated with *group end*.

Regarding network measures, the independent variable *ties* is used to test Hypothesis 6. *Ties* is a count variable measuring the number of relationships (ties) that a group has. This includes both cooperative and adversarial relationships. Both types of relationships, and more specific coding procedures, are discussed below under Hypotheses 9 and 10. Basically, however, to gather information for the relationship variables, I searched the online Lexis-Nexis database for all news articles about the group. These open sources contain a great deal of information about terrorist groups, as terrorist almost by definition publicize their acts – including, often, with whom they act. Some examples of relevant passages from newspaper articles are shown in Table 3.3. For many groups, I read every single article about them during the time period. For more prominent groups, I was able to do more targeted searches or use books. As described above, the data I gathered for the late 1980s was then combined with the Asal and Rethemeyer data for the 1990s and early 2000s.⁷⁷

⁷⁷ My coding for types of network relationships differs somewhat from Asal and Rethemeyer's, in ways I describe below when discussing the variables for Hypotheses 9 and 10.

Ties and other relationship variables have yearly variation as groups enter and exit the data when they form or end. To repeat an example, if two groups are in a cooperative relationship in the late 1980s, but police action eliminates one of the groups in 1992, the relationship is coded as ending that year. The surviving group is coded as *not* in that relationship from 1993 onward. *Ties* ranges from 0-33, with al-Qaeda in the early 2000s as an outlier with the highest value.⁷⁸ The mean of the variable is 1.4. The variable should be negatively related to *group end*.

⁷⁸ Running the analyses with al-Qaeda excluded does not change any results.

Table 3.3. Examples of coding sources

Quote	Source	Tie type
<p>Jan. 26, 1988, commandos of the guerrilla groups Alfaro Vive and Montoneros Patria Libre assaulted 10 radio stations in Quito and other cities and forced them to transmit a “proclamation about the political situation in the country.”</p>	<p>El País. “Montoneros Patria Libre dice que secuestró a Berrocal.” Aug. 31, 1989. [Translated]</p>	<p>Allies</p>
<p>Co-operation between the European terrorist groupings, especially the West German Red Army Faction and the Italian Red Brigades, has become closer over the past two years, for which the security authorities in Rome see three reasons.</p>	<p>The Times (London). By Roger Boyes. “Europe’s anti-terror drive nets Italian guerrillas in Paris.” Sept. 26, 1988.</p>	<p>Allies</p>
<p>“[United Liberation Front of Assam] has set up military camps and gets weapons and training from across the Burmese border, aided by the Kachin Independent Army, one of the Burmese ethnic guerrilla groups fighting the Rangoon government.</p>	<p>The Independent (London). By David Wigg. “Assam Under Delhi’s Control.” Nov. 29. 1990.</p>	<p>Allies</p>
<p>Authorities said the IRA slaying of a leading Protestant paramilitary leader could lead to reprisals and an increase in violence during the unusually quiet Christmas period...McMichael was second in command of the militant Ulster Defence Association...</p>	<p>Associated Press. By Malcolm Brodie. “IRA Car Bomb Kills Protestant Paramilitary Leader.” Dec. 23, 1987.</p>	<p>Adversary</p>
<p>The five-hour clash pitted guerrillas of George Habash's Marxist Popular Front for the Liberation of Palestine against Syrian-backed fighters of Col. Saeed Mousa's Fatah-Uprising.</p>	<p>Associated Press. “Three Killed, Nine wounded in Palestinian Clashes.” Sept. 3, 1988.</p>	<p>Adversary</p>
<p>“Dozens of deaths have been reported in factional fights between the Chukaku-ha and the Kakumar-ha, or Revolutionary Marxist Faction, which supports the Communist Party.”</p>	<p>Associated Press. By Eric Talmadge. “Radicalism a Generation Later: Smothered by Affluence.” March 24, 1989.</p>	<p>Adversary</p>

To test Hypothesis 7, I use the variable *groups in country*. This is a count variable measuring the number of terrorist groups in the primary country of the group being analyzed. This concept is referred to as organizational density, the number of organizations in an area. This variable ranges from 1 to 33, with India having the highest value during 2002. The mean is 11.6. As with relationship variables, this variable changes yearly in many cases as groups begin or end. *Groups in country* should be positively related to *group end*.

Hypothesis 8 is tested with *eigenvector*. This is a node centrality measure that captures not only the number of relationships a node has, but also takes into consideration how well-connected are the nodes to which the original node is connected. Bonacich (1987), who developed the measure, describes eigenvector centrality as a unit's "summed connections to others, weighted by their centralities." A terrorist group in a relationship with a highly-connected terrorist group will have a higher *eigenvector* score than a terrorist group in a relationship with a terrorist group that has no other relationships.⁷⁹ *Eigenvector* is calculated in the program UCINET (Borgatti et al. 1999). This variable is created using the network of relationships (as illustrated graphically in Figures 3.1 and 3.2), where there is one network matrix for 1987-1989 and another for 1998-2005. Therefore, this variable is group-period, and does not change yearly since there are not matrices constructed for each year. The variable ranges from 0 to .588, with a mean of .016. Like *ties* and other network variables, *eigenvector* has a skewed distribution. The terrorist group with the maximum value is al-Qaeda, and many of the groups with high values for this variable are groups connected to al-Qaeda.⁸⁰

⁷⁹ For more specific measurement parameters, see Bonacich (1972). For further discussion of the concept and its applications see Bonacich (2007).

⁸⁰ The high eigenvector scores relating to al-Qaeda occur in the post-1997 portion of the sample. In the earlier sample, Hezbollah and Fatah have the highest *eigenvector* scores, .391 and .353 respectively.

Examining terrorist groups that have divergent values of *ties* and *eigenvector* highlights how the latter differs from the former. For example, the Islamic Movement of Uzbekistan has only two ties, which is about average. However, its *eigenvector* score is well above average (.102), because the groups to whom it has ties are al-Qaeda and the Taliban. An example of a group with a high value for *ties* and a relatively low value for *eigenvector* is the 1980s Colombian group April 19 Movement, which had a far-above-average 12 ties, but an *eigenvector* of .019. These examples suggest that *ties* and *eigenvector* capture different concepts.⁸¹

Hypothesis 9 is tested with *allies*. This is a count variable measuring for each group the number of its cooperative allies. A terrorist group is considered to be in a cooperative relationship with another terrorist group if a source indicates the groups have cooperated on planning for or carrying out terrorist attacks. This is consistent with Karmon's (2005) notion of the concept. He argues that logistical cooperation and operational cooperation are important, but expressions of solidarity are not as meaningful. Similarly, I do not include expressions of solidarity, as they should not be especially important for mobilization. *Allies* is a non-directed measure, meaning that both partners in a relationship are coded regardless of who is helping whom (Wasserman and Faust 1994, 72-75), because I am interested in the general notion of cooperation. Sources used are the same as for other group variables. Examples of passages from sources are shown in Table 3.3.

⁸¹ While the concepts are different, the variables are substantially correlated, at .68. This is not surprising, since both variables attempt to measure different aspects of terrorist group "centrality" in the network. The potential impact of this correlation is discussed later with the results.

The coding of *allies* for 1998 and later relies substantially on Asal and Rethemeyer's (2008) group alliance or positive relationship measure.⁸² *Allies* ranges from 0-33. As with *ties*, al-Qaeda is the highest and an outlier – the mean of the variable is 1.5, and all other groups have 12 or fewer allies. *Allies* should be negatively related to *group end*.

To test Hypothesis 10, I use a dichotomous variable called *adversary*. This is coded 1 if the group has an adversary, and 0 otherwise. A terrorist group is in an adversarial relationship when another terrorist group physically attacks it or its supporters, or vice versa.⁸³ Sources are largely the same as those for *allies*. However, an additional source for *adversary* is attacks in the GTD attack list. The searchable database classifies types of targets, and two of the target types are “terrorists” and “violent political party.” This clearly helps with identifying groups that attack each other. Below is an example of a GTD incident summary that indicates that the Maoist Communist Center and the People's War Group have an adversarial relationship:

*11/18/1999: 200 suspected members of the Maoist Communist Center opened fire on the sleeping family of a rival group, Maoist People's War Group (PWG), and then beheaded the bodies in Loto, Palamu District, Jharkhand State, India. Twelve people died in the attack.*⁸⁴

Adversary is measured dichotomously instead of as a count because I expect the greatest degree of variation in group duration to be explained by the difference between not having an adversary and having an adversary. Additionally, relatively few terrorist groups have more than

⁸² My concept of cooperation is more specific than Asal and Rethemeyer's “positive relationships” variable, so I start with that variable for 1998 onward, but un-code groups that only, for example, had been coded for “supported cause” of another group, according to TOPs.

⁸³ This is more specific than the Asal and Rethemeyer “negative relationship” coding, and I make changes accordingly. Some of their negative relationships are apparently non-violent, and this is not consistent with my conception of adversaries. Like *allies*, this is a non-directed measure.

⁸⁴ Source: <http://www.start.umd.edu/gtd/search/IncidentSummary.aspx?gtdid=199911180001>. Accessed May 21, 2011.

one adversary. About 15 percent of the terrorist groups have had an adversary at some point in the sample. Like the other group relationship variables, *adversary* varies with time because of the data collection at two time points, and because many relationships begin or end within the sample when a group in the relationship is either founded or ends.

To test Hypotheses 11, the interactive hypothesis about state capabilities, I use multiplicative terms combining *ties* with *capability*. *Capability* is measured with gross domestic product per capita (GDPPC), in thousands of 1996 dollars, of the state in which the group primarily operates. The source is Penn World Tables. GDPPC is a standard proxy for state capability. Fearon and Laitin (2003, 80), for example, use it as a measure of “a state’s overall financial, administrative, police, and military capabilities.” In models without interaction terms, this variable is a control variable. The variable ranges from \$306 (Afghanistan, 1994) to \$41,870 (United States, 2005). The mean is \$10,824.⁸⁵ GDPPC might not be an ideal measure for state capability, but it is not clear that there is a better measure that can be used cross-nationally, across time, and especially in developing countries. One alternative I tried was military spending per capita, but it did not change any results for variables representing hypothesized relationships and was usually statistically insignificant.⁸⁶

To test the interactive hypothesis about regime type (H12), I interact *ties* with *regime type*. The regime variable is generally measured with the Freedom House 1-7 scale, reversed so that 1 is most autocratic and 7 is the most democratic (Freedom House 2009). The mean of the

⁸⁵ Because this variable is in thousands of dollars, the actual variable values are .306, 41.870, and 10.824.

⁸⁶ Military spending per capita is generally statistically insignificant in models including network models. It achieves statistical significance in underspecified models (Models 1 and 2), but is surprisingly negatively signed – suggesting that terrorist groups are less likely to end in countries with higher military spending per capita. This could be an endogeneity problem, where countries with more vibrant terrorist groups spend more on the military. This suggests a problem with military spending per capita as a capability proxy. Regardless, it was tested as an alternative measure, and results I report were not affected by its inclusion.

variable is 4.7. As with *capability*, this variable is also used as a control when not in interaction models.

There are many different measures for regime type, which often return different results, so I also use an alternate measure for *regime type* in some models. The secondary measure used is the 21-point Polity measure, where -10 is fully autocratic, and 10 is fully democratic. Results for the Polity measure are not reported in the primary tables, but results are discussed in the text. The Polity results should be interpreted with caution, because Polity is missing a substantial amount of data, including Iraq since 2003, Lebanon from 1990-2004, and a few periods of Afghanistan. Models with the Polity measure drop hundreds of observations, and 29 terrorist groups (about 5 percent of the sample) completely. Furthermore, the countries missing Polity data are not random. They tend to be countries experiencing civil conflicts.⁸⁷ However, Polity is widely used in the terrorism literature, so I test it in some models and discuss the results.

The models include a number of theoretically justified control variables. Each group is coded for the country in which it primarily operates, and the state attribute variables measure characteristics of these states. I include *capability*, discussed above, as a control variable when it is not included to test the interaction hypothesis. I expect terrorist groups in more capable countries to not last as long as groups in less capable countries, because wealthy states are better able to wage counterterrorism. I also include *population*, a natural logarithm. This also comes from the Penn World Tables. This variable should be negatively related to *group end*, because terrorist groups should be able to hide better in larger populations.

⁸⁷ The Polity variable used, Polity2, offers less missing data than other Polity variables, attempting to correct for the problem of data missing during crises such as civil wars. However, even with the correction, there is a substantial amount of information lost.

The models also include *regime type*, discussed above, as a control variable in addition to its use in interaction models. *Regime type* should be negatively related to *group end*, as more democratic countries are constrained in their ability to fight terror (e.g., Li 2005). Additionally, more democratic countries are argued to be fertile environments for terrorism because these types of states are more likely to continue to grant terrorist groups concessions (Pape 2003; Wilkinson 2006).

All models include regional control variables to take into consideration cross-regional variation not captured in other measures. The Middle East is the omitted category, and regions used are shown in Table 3.1. Because of space reasons, regional control results are not shown in tables. However, results are discussed in the text.

3.1.3 Estimator

The hypotheses are tested using a Cox proportional hazard model. Hazard models estimate the probability that an event will occur to a particular unit at a particular time (Box-Steffensmeier and Jones 1997, 2004). In this case, they estimate the risk of a terrorist group ending each year, relative to the risk of other groups ending in the same year. The Cox model is the standard model used when researchers do not have an ex ante expectation about the shape of the hazard function (Box-Steffensmeier and Jones 2004). A plot of the Schoenfeld residuals shows that the proportionality assumption of the Cox model seems to be supported (Box-Steffensmeier and Jones 2004, 120-121). Tests with hazard models that have different assumptions about the hazard function (Weibull, Gompertz, etc.) show very little change to the results.

The model is estimated using the Efron method, which takes into consideration ties in group duration.⁸⁸ Because the unit of analysis dictates that each terrorist group is measured repeatedly (that is, each year), the standard errors are likely not independently and identically distributed (Woolridge 2003; Zorn 2006). To address this “group effects” problem, I cluster the standard errors by terrorist group. For a more rigorous test of my hypotheses, I cluster robustly (Zorn 2006).

The goodness of fit of the models is gauged with the Bayesian Information Criterion (BIC), which allows researchers to compare nested models (Kennedy 2008, 101-102). A lower score indicates a better model fit. Note that the BIC can only be used to compare changes in terms of added or subtracted variables (nested models), and not changes to the sample. This is because the score depends in part on the size of the sample used.

3.2 RESULTS

3.2.1 Initial models

Table 3.4 shows the results of the first set of models, testing Hypotheses 1-8. Model 1 includes several state attributes that often are important for explaining outcomes related to political violence. *Capability* is statistically insignificant, suggesting that a terrorist group’s risk of ending in a given year is not affected by the level of capability of the state in which the group

⁸⁸ Results do not change whether using the Breslow method or Efron method. However, the Efron method is generally preferred, as it takes into consideration the risk set at each time t, therefore offering a more accurate approximation of the risk, given a tie (Box-Steffensmeier and Jones 2004, 55).

primarily operates. This is contrary to expectations, but it could be due to the imprecise nature of GDPPC as a measure of capability. Further models, as well as the case studies, should shed more light onto the impact of state capability on terrorist group survival.

Table 3.4. Initial models

	Model 1	Model 2	Model 3	Model 4	Model 5
	State factors only	Organizational model	Organizational -network model, ties (aggregated)	Organizational-network model, eigenvector centrality	Primary organizational -network model
<i>Ties</i>			-.459 (.069)***	-.442 (.069)***	
<i>Eigenvector</i>				-2.756 (5.527)	
<i>Allies</i>					-.500 (.070)***
<i>Adversary</i>					-.539 (.221)**
<i>Ethnic motivation</i>		-.500 (.138)***	-.415 (.140)***	-.412 (.140)***	-.433 (.140)***
<i>Religious motivation</i>		-.381 (.196)*	-.209 (.194)	-.196 (.198)	-.199 (.194)
<i>State-sponsored</i>		-.580 (.169)***	-.225 (.171)	-.219 (.170)	-.235 (.173)
<i>Drugs</i>		-.379 (.216)*	-.172 (.200)	-.171 (.210)	-.250 (.207)
<i>Size</i>		-.643 (.090)***	-.394 (.091)***	-.399 (.091)***	-.383 (.091)***
State factors:					
<i>Capability (GDPPC)</i>	.006 (.013)	-.014 (.013)	-.008 (.013)	-.007 (.013)	-.008 (.014)
<i>Population (log)</i>	-.194 (.050)***	-.200 (.052)***	-.190 (.050)***	-.194 (.050)***	-.192 (.050)***
<i>Regime type (FH)</i>	.043 (.055)	-.010 (.056)	.012 (.060)	.011 (.060)	.013 (.060)
<i>Groups in country</i>			.034 (.008)***	.034 (.008)***	.034 (.008)***
N (number of groups)	4033 (622)	4033 (622)	4033 (622)	4033 (622)	4033 (622)
BIC	4229	4148	4056	4064	4061

Note: Dependent variable is *group end*. Robust standard errors show in parentheses, clustered by terrorist group. Regional dummies are included in all models, but not shown here. Statistically significant coefficients and standard errors highlighted in **bold**. *** $p < .01$, ** $p < .05$ * $p < .10$

Population is statistically significant and negative, suggesting that a terrorist group has less of a risk of ending in a given year if it operates in a more populous state, other factors held constant. This is consistent with my expectations, as terrorist groups might hide from the state better in a larger state.

Regime type, measured with Freedom House, is statistically insignificant. This is somewhat surprising, as a substantial body of terrorism literature suggests that democracies are more permissive of terrorism, for a number of reasons. One might think this would lead to a higher likelihood of survival for terrorist groups. When *regime type* is measured with Polity (not shown), it is statistically significant, at the $p < .05$ level, and has a positive coefficient. This suggests that terrorist groups in more democratic countries have a *higher* risk of ending in a given year, other factors held constant.⁸⁹ One possible explanation for the positive sign on the Polity coefficient is that terrorist groups have more options for affecting politics in more democratic countries, so this might encourage them to give up terrorism. As discussed above, however, the Polity variable is missing a substantial amount of data, some of it systematically, so one should be cautious about the results.

Model 1, like all models, also includes regional control variables, although they are not reported in the tables for space reasons. The omitted category is the Middle East. All of the regional dummy variables are statistically significant and positive, meaning that a terrorist group in a region outside of the Middle East is more likely to end in a given year than a group inside the Middle East. These results are robust in other models, except when noted. Overall, Model 1,

⁸⁹ This difference in results between Freedom House and Polity is surprising, given that the variables have a .88 correlation. Polity is statistically insignificant in most models, as discussed below.

while very simple, suggests that some state population and region are helpful for understanding terrorist group survival.

Model 2 includes the terrorist group organizational attributes discussed in Hypotheses 1-5. Results are discussed from the top of the table to the bottom. *Ethnic motivation* is statistically significant and negative, suggesting that a terrorist group with an ethnic political motivation is less likely to end in a given year than a group without such a motivation, other factors held constant. *Religious motivation* is also statistically significant and negative, suggesting that a terrorist group with a religious political motivation is less likely to end in a given year than a group without such a motivation, other factors held constant. This suggests support for Hypothesis 1. Hypothesis 2 argues that ethnic motivation should have more of an impact than religious motivation, and there is marginal support for that in this model. The coefficient on *ethnic motivation* is larger and the result more statistically significant, although the substantive magnitude of variables is discussed in more detail below.

State sponsored is statistically significant and negative, suggesting that terrorist groups with material support from a state are less likely to end in a given year than terrorist groups without such support. This provides support for Hypothesis 3. *Drugs* is statistically significant and negative, suggesting support for Hypothesis 4. *Size* is statistically significant and negative, suggesting that larger terrorist groups are less likely to end in a given year. This provides support for Hypothesis 6. Results of the state-level control variables, *capability*, *population*, and *regime type*, as well as the regional control variables, remain the same in terms of statistical significance and direction.

Model 2 suggests that a number of organizational factors are important for explaining terrorist group survival. The BIC score is lower than it is in Model 1 (the model with only state factors), suggesting that Model 2 offers a better goodness of fit.

Model 3 is the first organizational-network model. It adds *ties*, the count of each group's relationships, and *groups in country*, the count of terrorist groups operating in a group's country that year. *Ties* is statistically significant and negative, suggesting that for each additional relationship that a terrorist group has, it has a decreased risk of ending in a given year. This provides support for Hypothesis 6. *Groups in country* is statistically significant and positive, suggesting that each additional terrorist group in a group's country increases the risk of the group ending that year. This is consistent with Hypothesis 7.

The inclusion of these variables affects the results of some organizational variables. *Religious motivation*, *state sponsorship*, and *drugs* no longer have a statistically significant relationship with *group end*, which qualifies support for Hypothesis 1 (ethnic and religious motivations) and suggests no support for Hypotheses 3 and 4. Hypothesis 3 suggests that ethnic motivations should have a greater impact than religious motivations on mobilization, and this model provides more support for the assertion. Overall, these changes suggest that network relationships, as well as indirect effects of the terrorist group environment as measured by *number of groups*, capture a substantial amount of the variation in group survival that would otherwise be explained by the organizational attributes.

State attributes basically remain unchanged in Model 3. However, the secondary measure of *regime type*, Polity (not shown in the table), does not achieve statistical significance

when included in Model 3.⁹⁰ Neither commonly used regime type measure has an effect on terrorist group survival when network effects are taken into consideration. This points to the value of considering network attributes. Furthermore, BIC scores indicate that the network-organizational model offers an improvement in goodness of fit over the plain organizational model. The BIC scores for this model are the lowest of any of the later models, suggesting its goodness of fit is the best of all reported models.

Model 4 includes *eigenvector*, the measure of each group's network centrality that takes into consideration the level of connectedness of a group's connections. This variable is statistically insignificant. *Ties* remains statistically significant and is almost the same in terms of its coefficient, suggesting that a terrorist group's count of relationships is more important than eigenvector centrality to its survival.⁹¹ Hypothesis 8 is not supported. This is surprising but is considered more in the discussion section.

Model 5 includes *allies* and *adversary*, disaggregating the relationship types that were combined in Model 3. Disaggregating these relationship types is important because these are different types of interactions, suggesting different causal consequences. Because this model includes both of these important relationship types – separately – I consider this model the primary organizational-network model. The model suggests that additional terrorist group allies

⁹⁰ Of all the models where Polity is tested unconditionally as a secondary *regime type* measure (Models 1-13), it usually does not achieve statistical significance beyond Models 1 and 2. It is statistically significant and positive when included in Model 5, the model with *allies* and *adversary*, at the $p < 10$ level. It is also significant and positive when tested in Models 7 and 9, the robustness checks of larger and older groups. This could be because larger and older groups have more chance of political success without violence, and the opportunity for this is greater in more democratic countries. However, as indicated earlier, the Polity variable is missing substantial data and its results should be treated with caution.

⁹¹ If *eigenvector* is included in the model without *ties*, it does achieve statistical significance. However, the goodness of fit of this model is much worse than the one that includes *ties*. Furthermore, as discussed above, I consider these measures complements and not substitutes, as they measure different concepts. If *eigenvector* is included in a model with *allies* and *adversary*, such as Model 5, it fails to achieve statistical significance without substantially affecting the other network measures.

and having an adversary are each independently associated with reducing a terrorist group's risk of ending in a given year. Hypotheses 9 and 10 are supported. Other variables in this model return results that are similar to those in the previous network models.

Table 3.5. Substantive impact of hypothesis variables in Table 3.4

Variable	Variable change	Substantive impact	Hypothesis	Supported?
<i>Ethnic motivation</i>	From not having to having ethnically-related political goals	35% reduction in risk of ending	1, 2*	Yes
<i>Religious motivation</i>	From not having to having religious political goals	Not statistically significant	1*	No
<i>State sponsored</i>	From not having to having a state sponsor	Not statistically significant	3	No
<i>Drugs</i>	From not being to being involved in the illegal drug business	Not statistically significant	4	No
<i>Size</i>	From fewer than 100 to 100-999 members (for example)	32% reduction in risk of ending	5	Yes
<i>Ties</i> (from Model 3)	One additional terrorist group relationship (cooperative or adversarial)	37% reduction in risk of ending	6	Yes
<i>Groups in country</i>	One additional other terrorist group in the country	3% increase in risk of ending	7	Yes
<i>Eigenvector</i> (from Model 4)	One standard deviation increase in the measure of connections to highly-connected groups	Not statistically significant when <i>ties</i> included in model. This is a theoretical question.	8	No
<i>Allies</i>	One additional cooperative relationship	39% reduction in risk of ending	9	Yes
<i>Adversary</i>	From not having an adversary to having an adversary	42% reduction in risk of ending	10	Yes

Note: Results come from Model 5, with the exception of the results for *ties* and *eigenvector* as noted. Magnitude is estimated with hazard ratios.
 *Hypothesis 2 suggests that ethnic motivations should have a more substantial impact than religious motivations.

Table 3.5 shows the substantive significance of the variables in the full model, Model 4. These are calculated using hazard ratios, and statistically insignificant results are not discussed. The result for *ethnic motivation* suggests that if a group has an ethnic component to its political goals, it has a 35 percent lower risk of ending in a given year, relative to groups that do not have an ethnic motive, other factors held constant. *Size* has a similar impact. A change in size category (0-99 members, 100-999 members, etc.) is associated with a 32 percent reduction in a group's risk of ending in a given year. The result for *ties* suggests that for each additional terrorist group relationship that a group has, its likelihood of ending in a given year is reduced by 37 percent. The result for *groups in country* indicate that for each additional terrorist group operating in a group's country, that group experiences a 3 percent increase in its risk of ending in a given year, other factors held constant. This is a much weaker effect than that for *ties*, and is consistent with my argument that direct relationships are very different from simply coexisting in the same geographical space, as discussed in the previous chapter.

The results for *allies* and *adversary* suggest that each of these disaggregated relationship types has an important impact on terrorist group survival. Each additional cooperative tie is estimated to reduce the risk of a group ending by 39 percent. Having an adversary is estimated to reduce the risk of a group ending by 42 percent. These are the most substantial effects of any variables in the models. Overall, the variables *ethnic motivation*, *size*, and *groups in country* are important, but the direct relationship variables have the most substantial impact. The disaggregated relationship variables *allies* and *adversary* each show a greater impact than the aggregate variable, *ties*.

3.2.2 Robustness checks of initial models

Table 3.6. Robustness checks of primary organizational-network model

	Model 5 (repeated for reference)	Model 6	Model 7	Model 8	Model 9
	Organizational- network model	Only smaller groups	Only larger groups	Only younger groups	Only older groups
<i>Allies</i>	-.500 (.070) ^{***}	-.682 (.131) ^{***}	-.496 (.110) ^{***}	-.960 (.180) ^{***}	-.376 (.082) ^{***}
<i>Adversary</i>	-.539 (.221) ^{**}	-1.083 (.362) ^{***}	-.338 (.330)	-1.164 (.506) ^{**}	-.452 (.262) [*]
<i>Ethnic motivation</i>	-.433 (.140) ^{***}	-.570 (.175) ^{***}	.168 (.264)	-.582 (.198) ^{***}	.185 (.201)
<i>Religious motivation</i>	-.199 (.194)	-.050 (.217)	-.601 (.465)	-.150 (.212)	-.718 (.318) ^{**}
<i>State- sponsored</i>	-.235 (.173)	-.118 (.253)	.053 (.280)	-.384 (.442)	.109 (.227)
<i>Drugs</i>	-.250 (.207)	.004 (.250)	-.746 (.464)	-.517 (.338)	-.183 (.370)
<i>Size</i>	-.383 (.091) ^{***}		.245 (.210)	-1.069 (.289) ^{***}	-.097 (.134)
State factors:					
<i>Capability (GDPPC)</i>	-.008 (.014)	-.002 (.015)	-.049 (.031)	-.010 (.016)	-.047 (.024) [*]
<i>Population (log)</i>	-.192 (.050) ^{***}	-.126 (.061) ^{**}	-.338 (.090) ^{***}	-.136 (.060) ^{**}	-.217 (.081) ^{***}
<i>Regime type (FH)</i>	.013 (.060)	-.024 (.072)	.284 (.118) ^{**}	.141 (.075) [*]	.040 (.092)
<i>Groups in country</i>	.034 (.008) ^{***}	.022 (.008) ^{***}	.035 (.023)	.016 (.009) [*]	.026 (.019)
N (number of groups)	4033 (622)	1519 (401)	2514 (229)	1074 (463)	2959 (314)

Note: Dependent variable is *group end*. Robust standard errors shown in parentheses, clustered by terrorist group. Regional dummies are included in all models, but not shown here. Statistically significant coefficients and standard errors highlighted in **bold**. *** $p < .01$, ** $p < .05$, * $p < .10$. Goodness of fit is not shown because measures depend on sample used, and samples change here.

Before proceeding to look at other network effects, and how relationships interact with state effects, I briefly check the robustness of the primary organizational-network model shown in Model 5. In Table 3.6, Models 6-8 show samples split by the groups' sizes and ages.⁹² This is done because it could be that a subset of groups is driving the results. In particular, larger or older groups might be more likely to have ties to other groups, and to continue surviving independently of those ties.⁹³ This would be an endogeneity problem.

Models 6 and 7 compare the models on subsamples of only smaller or larger groups. In Model 6, the results mostly stay the same. The coefficient for *adversary* increases substantially, suggesting that the impact of having an adversary on reducing a group's likelihood of failure is more substantial in smaller groups than it is in the general population of terrorist groups. In Model 7, which only looks at terrorist groups with at least 100 members, results for most variables change substantially. The only hypothesis variable that seems to matter for larger groups is *allies*. *Adversary*, *ethnic*, *size*, and *groups in country* all fail to achieve statistical significance in this model. This subsample is a minority of the groups, only 229, but the results of Model 7 qualify support for hypotheses 1, 2, 5, 7, and 10. It seems that larger groups are especially durable, and these factors offer no "value-added" to groups. Interestingly, *regime type* is statistically significant and positive in the subsample of larger groups. This could be because

⁹² Model 6 includes only groups with fewer than 100 members. Model 7 includes only groups with 100 or more members. Model 8 includes only groups younger than 5 years old. Model 9 includes only groups at least five years old.

⁹³ The importance of looking at age in particular is related to the "liability of newness" (Freeman et al. 1983), the idea that younger groups are simply more likely to fail. These groups also might be less likely to have developed relationships, although certainly many new and young groups have ties to other groups.

larger groups are better equipped to take advantage of the non-violent alternatives that more democratic states offer, so they are more likely to give up terrorism.

Models 8 and 9 split the sample by age, and Model 8 is in some ways similar to the primary model, Model 5. Statistical significance of hypothesis variables does not change when only younger groups are examined. However, the magnitude of the coefficients for *allies*, *adversary*, and *size* increase substantially. This suggests that younger groups, relative to the general population of terrorist groups, benefit more from allies, having an adversary, or being larger in size. This makes sense given the “liability of newness” (Freeman et al. 1983), the high failure rate for young organizations generally, and that these helpful attributes should be especially beneficial during a group’s early years. *Regime type* is also statistically significant and positive in this model, suggesting that younger groups have a higher likelihood of ending in a more democratic regime than in a less democratic regime. This could be related to non-violent exit options, as discussed above, but this does not make as much sense for younger groups as it does for larger groups.

Model 9 shows the model on older groups, which in this sample means groups five years or older. The results for *allies* and *adversary* are basically unchanged in this model, although with slightly less statistical significance. Other variables change in interesting ways. *Ethnic* loses statistical significance, while *religious* gains statistical significance. It could be that once an ethnically-motivated group is older, it could give up violence for a number of reasons (including concessions), while older religious groups are unlikely to receive serious concessions, and therefore less likely than non-religious groups to fail. *Size* loses statistical significance, suggesting that size does not have an impact on a group’s risk of failure, once it is old. *Capabilities* is statistically significant in Model 9, unlike the results of every other model. It is

negatively signed, suggesting that older groups are *less* likely to end in more capable states than they are in less capable states. This is surprising, and could be related to a state's ability to offer some sort of concessions – which maybe usually only happens with older groups. The final change in results in this model is that *groups in country* loses statistical significance – as it did for larger groups – suggesting that in more competitive environments, it is only the young and small groups that fail because of indirect competition.

The models above in Table 3.5 show important differences between terrorist groups, depending on their membership size and age. The primary change was that larger and older groups seem less affected by factors such as the number of terrorist groups in the area or whether or not a group has an ethnic motivation. The only factors that show a robust association with *group end* in all models are *allies* and the control variable *population*. *Adversary* is statistically significant in all models but one. Overall, Models 6-9 suggest that the results of *allies*, and to a lesser extent *adversary*, are robust to a number of changes in the sample, increasing support for the idea that relationships generally help groups survive. This further suggests the importance of network attributes, especially relative to organizational attributes such as type of political motivation or funding sources.

Table 3.7. Additional analysis of organizational-network model

	Model 5 (repeated for reference)	Model 10	Model 11
	Organizational- network model	Allies, adversaries (count)	Allies, adversaries, adversaries squared
<i>Allies</i>	-.500 (.070) ^{***}	-.490 (.069) ^{***}	-.499 (.070) ^{***}
<i>Adversary</i>	-.539 (.221) ^{**}		
<i>Adversaries (count)</i>		-.285 (.171) [*]	-.528 (.220) ^{**}
<i>Adversaries squared</i>			.085 (.042) ^{**}
<i>Ethnic motivation</i>	.433 (.140) ^{***}	-.434 (.140) ^{***}	-.431 (.131) ^{***}
<i>Religious motivation</i>	-.199 (.194)	-.197 (.194)	-.195 (.194)
<i>State- sponsored</i>	-.235 (.173)	-.238 (.172)	-.238 (.173)
<i>Drugs</i>	-.250 (.207)	-.236 (.207)	-.222 (.207)
<i>Size</i>	-.383 (.091) ^{***}	-.388 (.091) ^{***}	-.388 (.091) ^{***}
<i>State factors:</i>			
<i>Capability (GDPPC)</i>	-.008 (.014)	-.009 (.013)	-.009 (.013)
<i>Population (log)</i>	-.192 (.050) ^{***}	-.191 (.050) ^{***}	-.189 (.050) ^{***}
<i>Regime type (FH)</i>	.013 (.060)	.015 (.060)	.011 (.060)
<i>Groups in country</i>	.034 (.008) ^{***}	.034 (.008) ^{***}	.034 (.008) ^{***}
N (number of groups)	4033 (622)	4033 (622)	4033 (622)
BIC	4061	4063	4069

Note: Dependent variable is *group end*. Robust standard errors shown in parentheses, clustered by terrorist group. Regional dummies are included in all models, but not shown here. Statistically significant coefficients and standard errors highlighted in **bold**. *** $p < .01$, ** $p < .05$ * $p < .10$

Table 3.7 explores the impact of adversarial relationships in more detail. The variable *adversary* is dichotomous because Hypothesis 10 argues that having a single adversary should be beneficial to a group. As discussed above, this is a theoretical decision because I expect having an adversary to be more important to group survival than the number of adversaries. The theory chapter speculated that unlike allies, it is unclear if there are benefits to increasing number of adversaries. Table 3.7 investigates the consequences of multiple adversaries.

Model 10 replaces the dichotomous *adversary* with a count of adversarial relationships, *adversaries*. This variable is also statistically significant and negatively related to *group end*. However, its magnitude and significance are reduced. This is consistent with my argument. Additionally, it is possible that higher numbers of adversaries could be less advantageous than lower numbers of adversaries.

Model 11 examines if there is a non-linear relationship between *adversaries* and *group end*. This is not a hypothesized relationship, but interest in this idea comes from analysis of the results this far. The model includes *adversaries* and a squared term, *adversaries squared*. Both variables are statistically significant, with *adversaries* still negative and the squared term positive. This suggests that there are survival-enhancing benefits to having adversaries, but there is some point at which more adversaries are less helpful, or even harmful. This will be explored more in the case studies. Hypothesis 10, about the impact of having an adversary on group survival, is supported, but the impact of multiple adversaries is not as clear.

3.2.3 Interaction term models

Table 3.8 shows the interaction term models, the tests of Hypotheses 11 and 12. These hypotheses suggest that impact of terrorist group relationships on group survival is conditional

on state attributes. Model 12 tests the impact of *allies* and *adversary* conditional on state capability. Model 13 tests the impact of *allies* and *adversary* conditional on regime type. Model 14 includes all of the interaction terms, and therefore is probably specified in the most theoretically thorough manner. The coefficients for the interaction term variables in Table 3.8 are not directly helpful, as they do not show the values of *ties* at all levels of *capabilities*. The conventional approach to this issue is to compute the linear combinations of the interactions and their components terms and graph the results (Braumoeller 2004), as I do in Figures 3.5-3.12.⁹⁴

⁹⁴ I use the `lincom` command in Stata, and then create these graphs in Excel.

Table 3.8. Interaction term model

	Model 12	Model 13	Model 14
	Interactions with state capabilities (GDPPC)	Interactions with regime type (Freedom House)	Interactions with capabilities, regime type
<i>Allies</i>	-.368 (.070)***	-.532 (.212)**	-.664 (.228)***
<i>Allies* Capability</i>	-.012 (.009)		-.018 (.009)*
<i>Allies* Regime type</i>		.007 (.038)	.069 (.045)
<i>Adversary</i>	-.505 (.359)	.208 (.517)	-.251 (.488)
<i>Adversary* Capability</i>	-.008 (.028)		.023 (.033)
<i>Adversary* Regime type</i>		-.165 (.112)	-.215 (.123)*
<i>Ethnic motivation</i>	.415 (.142)***	-.431 (.140)***	-.422 (.142)***
<i>Religious motivation</i>	-.215 (.195)	-.187 (.193)	-.185 (.194)
<i>State-sponsored Drugs</i>	-.210 (.176)	-.234 (.173)	-.216 (.175)
<i>Size</i>	-.237 (.093)***	-.205 (.091)***	-.177 (.093)***
State factors:			
<i>Capability (GDPPC)</i>	-.003 (.014)	-.009 (.014)	-.003 (.015)
<i>Population (log)</i>	-.188 (.050)***	-.192 (.050)***	-.188 (.050)***
<i>Regime type</i>	.014 (.060)	.028 (.066)	.004 (.068)
<i>Groups in country</i>	.032 (.008)***	.034 (.008)***	.032 (.008)***
N (number of groups)	4033 (622)	4033 (622)	4033 (622)
BIC	4074	4075	4088

Note: Dependent variable is *group end*. Robust standard errors show in parentheses, clustered by terrorist group. Regional dummies are included in all models, but not shown here. Statistically significant coefficients and standard errors highlighted in **bold**. *** $p < .01$, ** $p < .05$ * $p < .10$

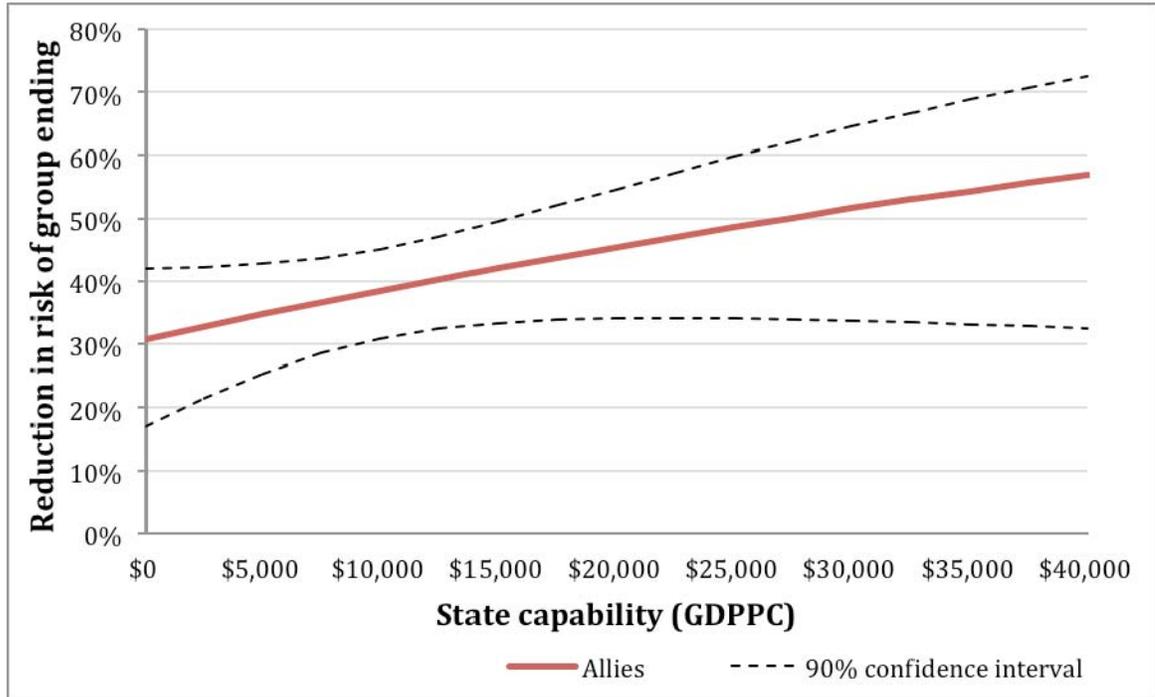


Figure 3.5. The impact of *allies* conditional on state capabilities. Regime interactions excluded.

Figure 3.5, from Model 12, shows the value of *allies* at different levels of *capability*, measured with GDPPC. The results are consistent with the hypothesis. Terrorist group relationships are estimated to have the most substantial impact on group survival at higher levels of *capability*. I argued that this is because terrorist groups should have a harder time surviving in more capable states, so they should especially benefit from relationships. Groups in France, for example, have more to gain from ties than do groups in less-capable states. In terms of substantive significance, if a country has \$2,500 GDPPC, each additional terrorist group relationship is estimated to reduce a group's risk of ending by 33 percent, other factors held constant. In a country with \$40,000 GDPPC, the reduction in risk is 57 percent. *Allies* is statistically significant at all levels of *capability*. The margin of error is rather wide at higher levels of GDPPC, but the results generally support the hypothesis.

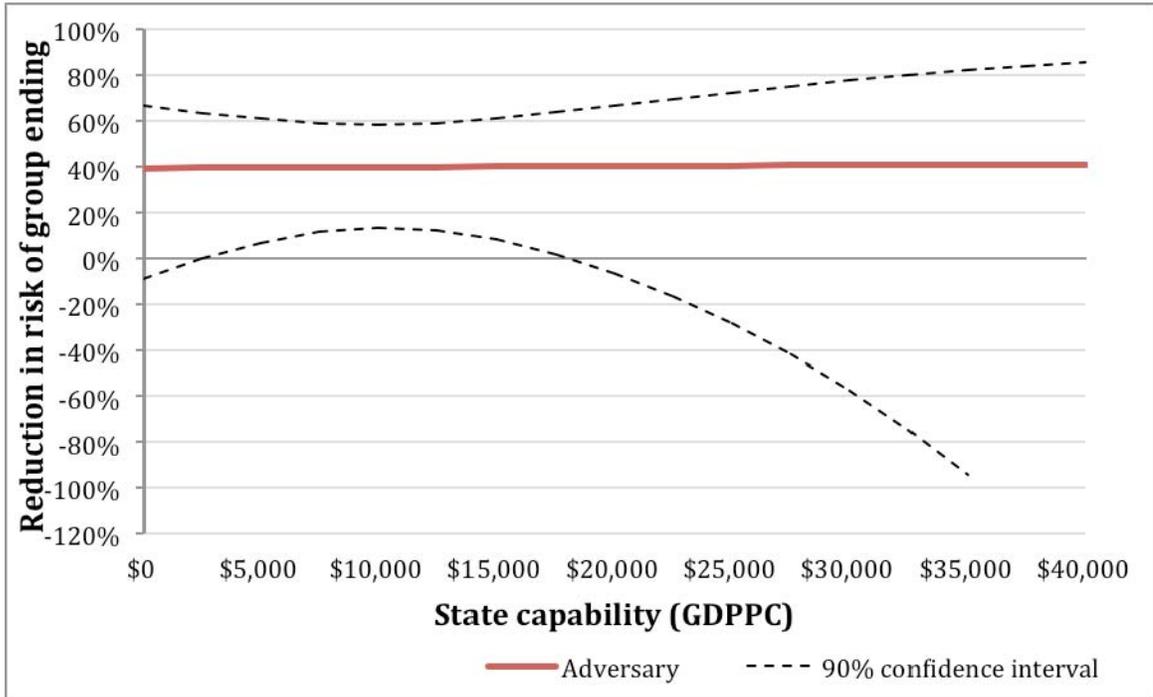


Figure 3.6. The impact of *adversary* conditional on state capabilities. Regime interactions excluded.

Figure 3.6 shows the value of *adversary* at different levels of *capability*, measured with GDPPC. As with the previous figure, the data come from Model 12. The results in Figure 3.5 do not provide support for Hypothesis 11; Adversarial relationships do not have a greater impact in more capable states. On the contrary, *adversary* is statistically insignificant in states with a GDPPC of \$20,000 or greater. This suggests that adversarial ties do not have an impact on group survival in wealthy states. This is the opposite of what the hypothesis suggests. It also qualifies the support found previously for the impact of adversarial relationships generally.

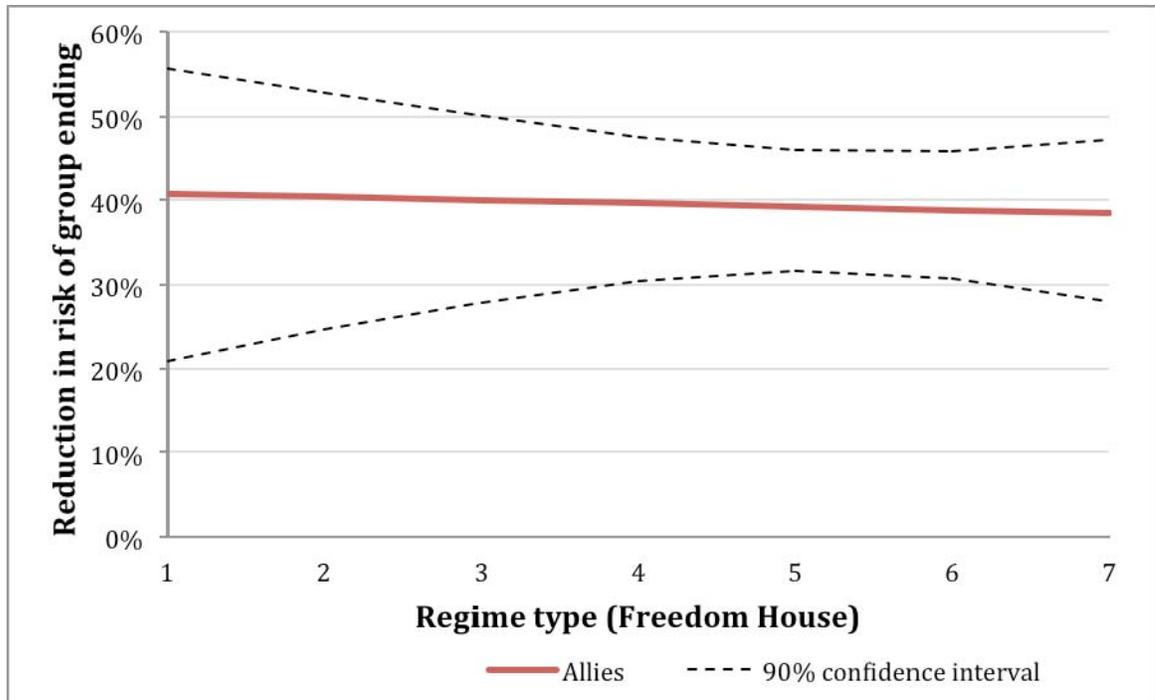


Figure 3.7. The impact of *allies* conditional on state regime type. Capability interactions excluded.

Figure 3.7 comes from Model 13, and shows the impact of *allies* conditional on different levels of *regime type*. Regime is here measured with Freedom House. Hypothesis 12 suggests that allies should matter more in more autocratic states, and the line in the above figure suggest a very slight slope in that direction – an additional ally is expected to reduce a group’s risk of ending by 41 percent in a fully autocratic state, while an additional ally is expected to reduce a group’s risk of ending by only 38 percent in a fully democratic state. However, this change is very minor, and the margin of error is considerable in full autocracies. As a result, the test of *allies* in Model 13 does not lend much support to Hypothesis 12.

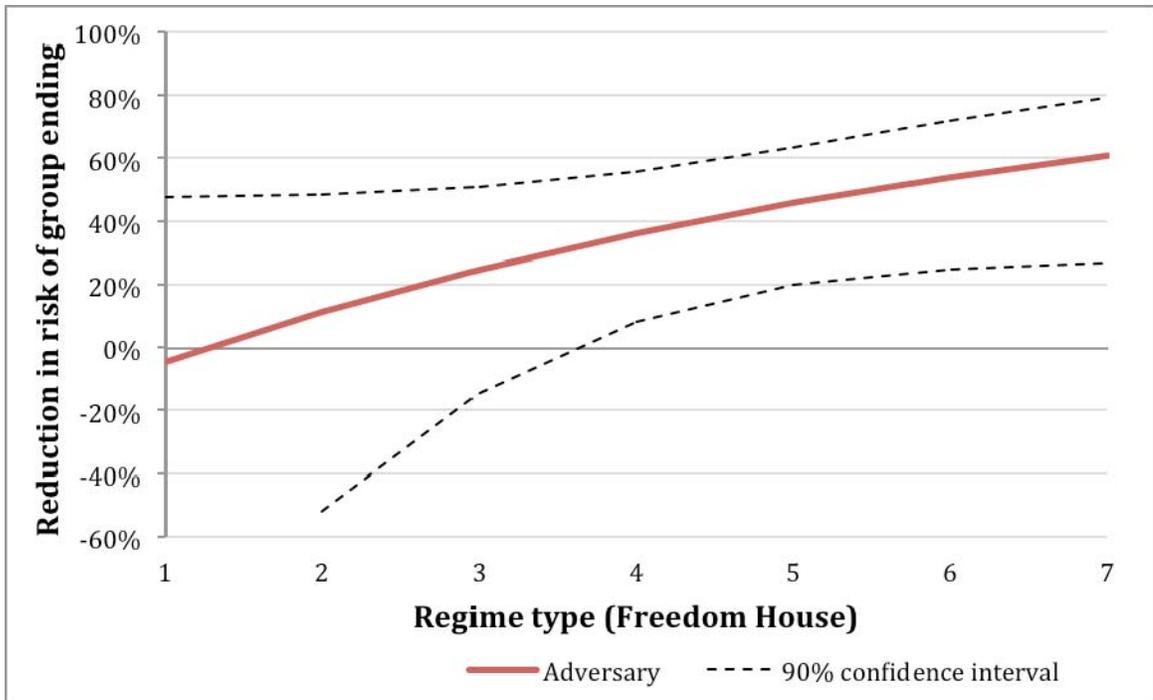


Figure 3.8. The impact of *adversary* conditional on state regime type. Capability interactions excluded.

Figure 3.8 shows the estimated impact of *adversary* conditional on different levels of state regime type, again measured with the Freedom House data. This figure, like the one before it, is drawn from results shown in Model 13. The data suggest that adversarial relationships have their greatest substantive impact in more democratic states. This is the opposite of what Hypothesis 12 suggests. Additionally, adversarial ties are estimated to have no statistically significant effect in the most autocratic states. It could be that adversarial relationships motivate sympathetic community members to join or support terrorist groups, but that this mobilization is difficult to take advantage of in less-democratic states. The non-material incentives that adversarial ties provide group members and potential supporters – the additional sense of purpose associated with defending the group and attacking the “other” – are more easily harnessed in more democratic states where individuals have more freedom.

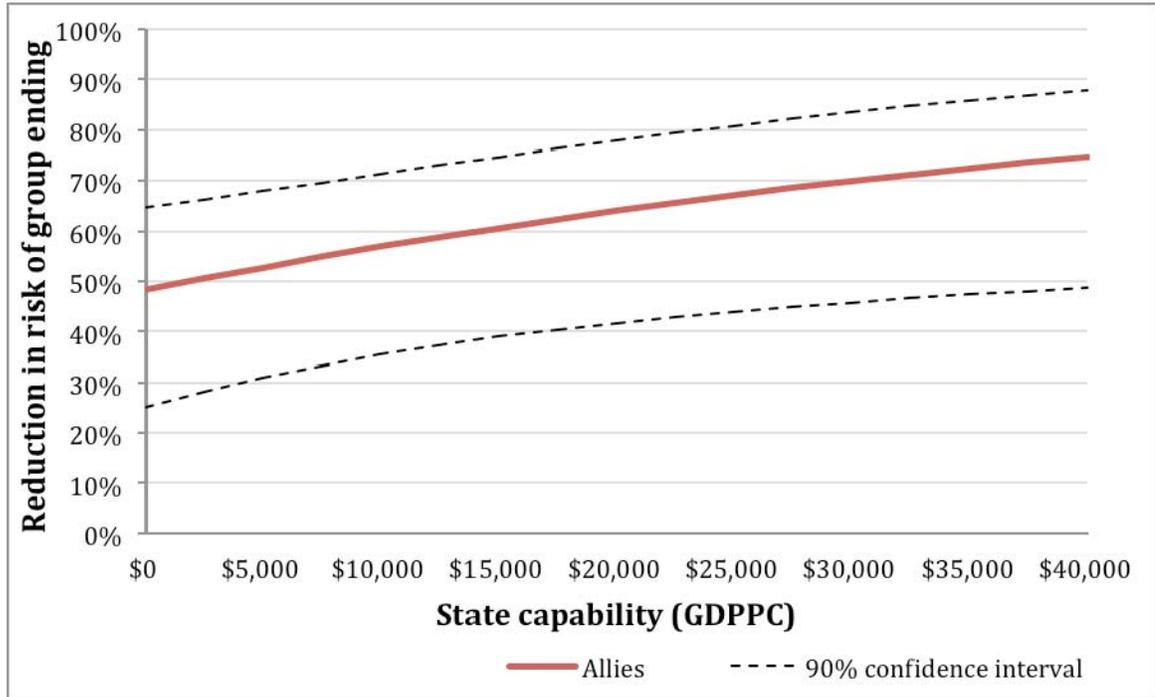


Figure 3.9. The impact of *allies* conditional on capabilities, with regime interactions in model

The next set of figures is from Model 14, which includes both state capability and state regime type interaction terms. Figure 3.9 shows the impact of *allies* conditional on different levels of state capabilities. Allies have their greatest impact at higher levels of state capabilities. This is consistent with Hypothesis 11, and with the results shown in Figure 3.5 (the interactions from Model 12, without the regime type interactions). If a state with a minimum level of GDPPC gains an additional ally, it is estimated to have a 49 percent reduction in its risk of ending in a given year, other factors held constant. If a state with the maximum level of GDPPC gains an additional ally, the risk reduction increases to 75 percent. Allies are more of a help to terrorist group survival in more capable states.

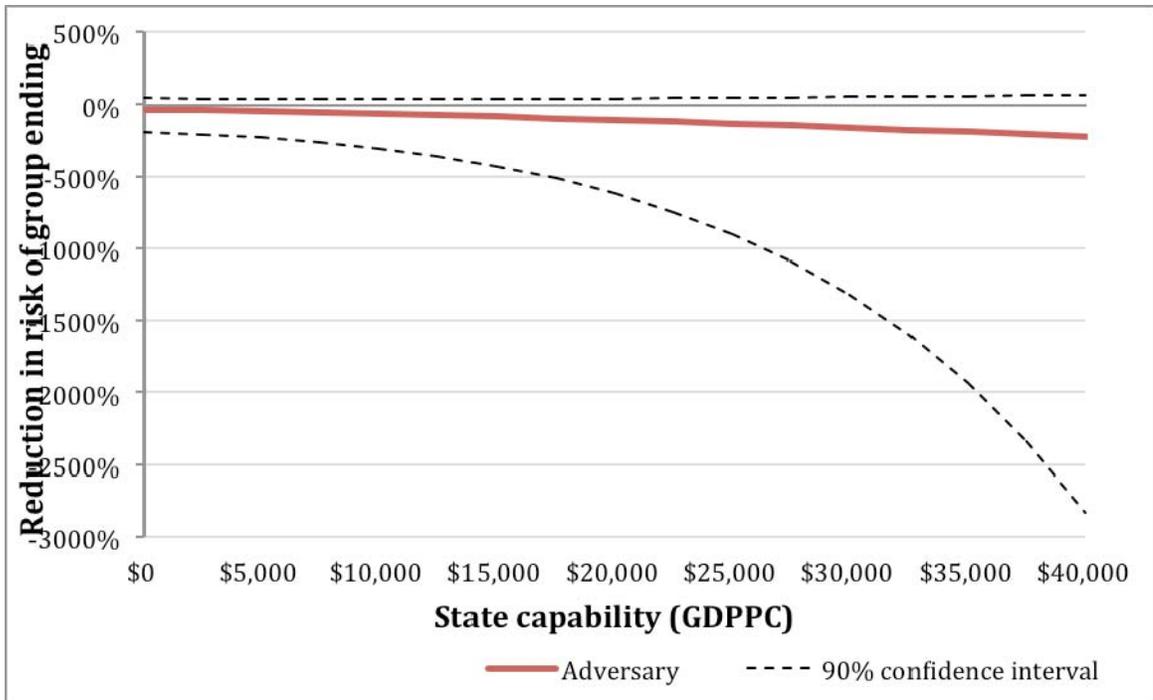


Figure 3.10. The impact of *adversary* conditional on capabilities, with regime interactions in model

Figure 3.10, also from Model 14, shows the impact of *adversary* conditional on levels of state capabilities. This model suggests that *adversary* is statistically insignificant at all levels of state capabilities. This suggests that Hypothesis 11 may have support for *allies*, but not for *adversary*. Furthermore, it raises doubts about the causal importance of adversarial relationships generally. The initial hypothesis about having an adversary, Hypothesis 10, does not make an assertion about conditional relationships. Therefore this model does not necessarily suggest that Hypothesis 10 is not supported, but it does raise questions about the robustness of the result.

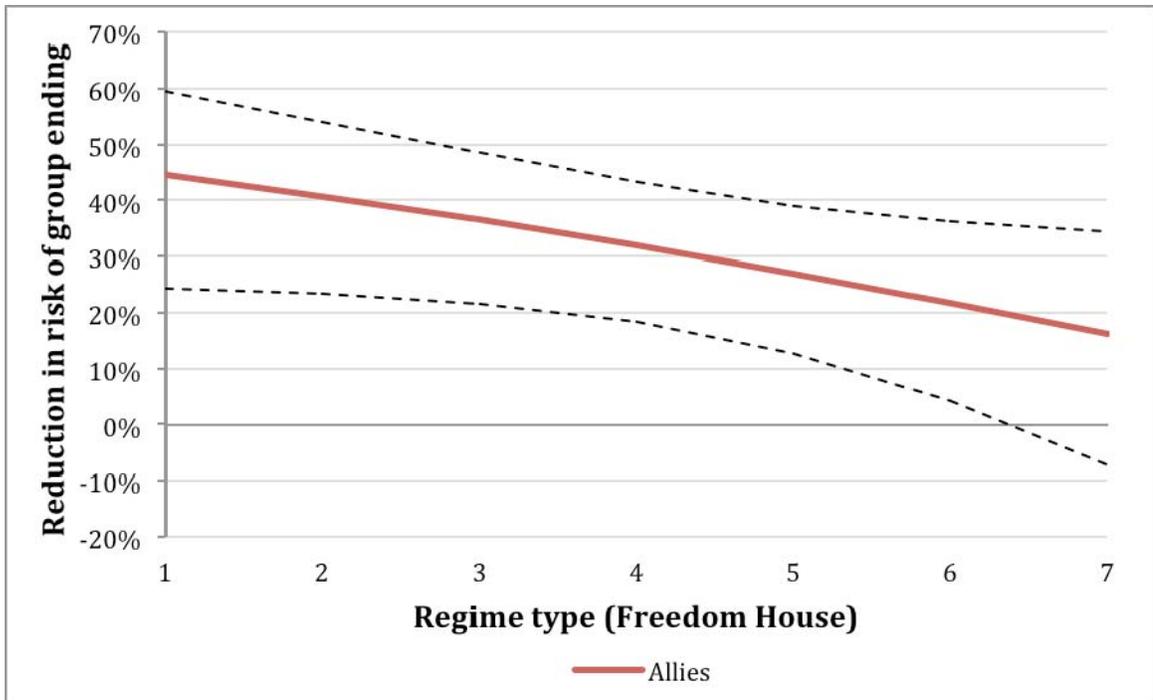


Figure 3.11. The impact of *allies* conditional on regime type, with capability interactions in model

Figure 3.11 shows the impact of *allies* conditional on *regime type*. As with the two preceding figures, this refers to Model 14, which includes both the *capability* interaction terms and the *regime type* interaction terms. The figure suggests that the impact of *allies* is greatest in the most autocratic countries. This is consistent with Hypothesis 12. Interestingly, however, Figure 3.7 suggested a different result, a flat or non-conditional relationship. That result came from the less-fully specified model, Model 13, which did not include capability interactions. Overall, however, Figure 3.11 suggests that there is some support for the *allies* portion of Hypothesis 12. In the most-autocratic state such as Algeria during certain years or Myanmar (Freedom House =1), an additional ally is estimated to reduce the risk of a group ending by 45 percent, other factors held constant. In a more democratic country such as Colombia or Turkey, (Freedom House=5) the reduction is estimated to be 27 percent. This was argued to be because

allies are more helpful in environments where groups face an especially challenging existence, and this includes in more autocratic states. *Allies* is statistically insignificant at higher levels of democracy. This is consistent with the interaction hypothesis, but qualifies support for the non-interactive hypothesis for *allies*, Hypothesis 9.

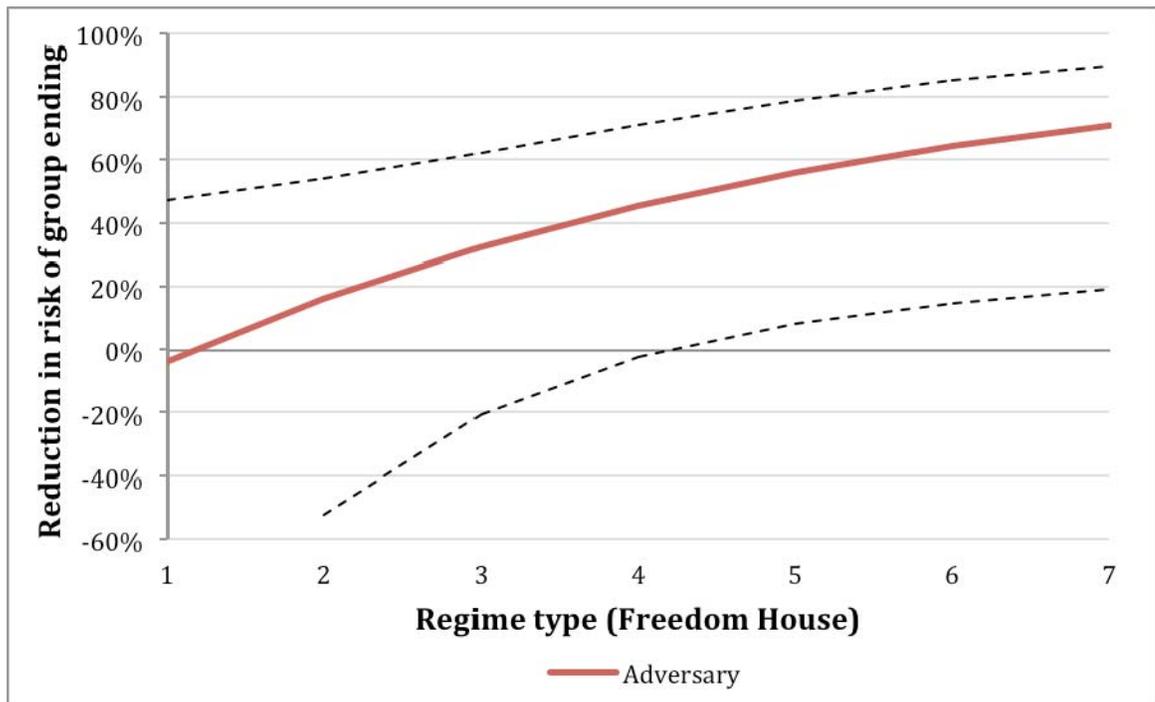


Figure 3.12. The impact of *adversary* conditional on regime type, with capability interactions in model

Figure 3.12, also from Model 14, shows the impact of *adversary* conditional on different levels of regime type. The results suggest that having an adversary has the most substantial survival-enhancing effect in more democratic states. This is the opposite of what Hypothesis 12 states, but is consistent with the results from the previous model, Model 13. I suggested that this unexpected result could be a consequence of adversarial relationships potentially spurring

mobilization – but this result depends on how easily citizens can mobilize in a society. Opportunities for mobilization should be higher in democracies.

Overall, the above interaction term table and figures present a great deal of information.

I summarize the results of the interaction models as follows:

- Allies have their greatest impact in more capable states, consistent with Hypothesis 11. (Figs. 3.5, 3.9)
- Having an adversary does not appear to be conditional on state capability, contrary to Hypothesis 11. (Figs. 3.6, 3.8)
- There is some support for the idea that allies have their greatest impact in more autocratic states, consistent with Hypothesis 12. (Fig. 3.11; less-specified Fig. 3.7 shows no effect)
- Having an adversary has its greatest impact in more democratic states, which is the opposite of Hypothesis 12. The confidence intervals around this finding are wide, however. (Figs. 3.8, 3.12)
- Overall, state attributes condition the impact of terrorist group ties in important ways.
- Cooperative relationships seem to have consequences that are very different from those of adversarial relationships – when we consider how state attributes condition the impact of each tie type on terrorist group survival.

3.2.4 Robustness checks of interaction term models

Previous robustness checks (Table 3.6) analyzed Model 5, the primary organizational-network model. Here I discuss looking at subsamples of terrorist groups, and alternate regime type measurements, to explore effects on the interaction term models.⁹⁵ As discussed earlier, changing the sample is an effort to show that it is not only large groups or old groups that are driving the results – hypothesized relationships should matter for groups regardless of size or age. Interaction results vary somewhat with changes in the sample. Combining interaction terms and split samples essentially makes triple interactions: for example, examining *allies*capability* in a small terrorist group sample and a large group sample is basically the interaction term *allies*capability*size*.

The results for the interaction of *allies* and *capability* are robust to most sample specifications. Allies are estimated to generally have a greater survival-enhancing impact in more capable states. The one exception is that in the subsample of larger terrorist groups, those with at least 100 members, this result is not robust. As indicated above with the robustness tests shown in Table 3.6, very few factors are associated with terrorist group survival in this subsample of groups. In smaller and younger groups, the impact of cooperative ties on survival is stronger than in the full sample.⁹⁶

The interaction of *allies* and *regime type* are affected in very similar ways to the interaction of *allies* and *capability* discussed above, when subsamples of terrorist groups are analyzed. Allies is estimated to have an impact, conditional on state regime type, in all

⁹⁵ These results are *not* shown in tables or figures for space reasons.

⁹⁶ This is consistent with general results shown in Model 3.6, and for younger groups in particular is likely to be related to the phenomenon of the “liability of newness” (Freeman et al. 1983).

subsamples, and the impact is greater in more autocratic states. However, in the subsample of larger groups, the impact does not vary with levels of regime type; there is a statistically significant relationship, but the line is flat. As with *allies*capability*, the overall impact of *allies*regime type* is greatest in smaller and younger groups.

In the subsamples, the interactions with *adversary* are often flat lines – indicating a relationship between adversarial relationships and group survival that is *not* conditional on state capability or regime type – or statistically insignificant. One exception is that for smaller groups (less than 100 members), the survival-enhancing impact of adversarial relationships in more democratic countries is greater than it was in the full sample of terrorist groups. This could be because smaller groups are especially helped by the mobilization benefits that an adversarial relationship provides a group.

In addition to checking the robustness of interaction results on different subsamples, I also ran the models with the Polity regime type measure instead of the Freedom House measure. The results with Polity were similar to those with Freedom House. These models showed similar results for the capabilities interactions (Hypothesis 11). Regarding regime type interactions (Hypothesis 12), the results with Polity also showed that additional cooperative relationships help terrorist groups more in more autocratic countries. In a fully autocratic country (Polity=-10), an additional cooperative tie is estimated to reduce a group's risk of ending by 70 percent. In a more democratic country (Polity=7), the risk reduction is 21 percent. As with the Freedom House interaction results, cooperative ties do not have a statistically significant relationship with *group end* in the most democratic countries. This is consistent with Hypothesis 12. Regarding adversarial ties, the lack of support for the *adversary*regime type* portion of Hypothesis 12 also occurs with the Polity measure. As indicated above, the Polity results involve a smaller sample

of terrorist groups, and the missing data are mostly from developing countries experiencing civil conflict. However, the basic consistency between Freedom House and Polity results provides an additional robustness check on the Freedom House results.

3.2.5 Discussion

The results provide some support for the organizational model of terrorist group survival, but even more for the organizational-network model. Network or relationship effects are substantial and robust throughout numerous tests. Tests of interactions between relational attributes and state attributes, however, do not receive as much support as the unconditional relational arguments. The results provide a number of implications for the study of terrorist groups and their survival.

Starting with organizational attributes, ethnic motivation is one of the factors most consistently associated with terrorist group survival. The argument set forth in the previous chapter was that ethnic politics help groups with mobilization, as group members – and their support base – enjoy a familial bond that is often stronger than that experienced by groups with other motivations. The only exception to this seems to be with larger groups (those with 100 or more members), most likely because larger groups already have some sort of mobilization structure that allows them to prosper, independently of whether they are ethnically motivated or not.

The only other organizational factor associated with group survival in most of the models is group size, the number of members in each terrorist group. This is perhaps surprising, given that one might think larger groups would be easier for the state to identify and take out, or that

larger groups might have the best infrastructure in place to shift into non-violent politics, as some terrorist groups indeed do. Furthermore, Oots (1986) argues that larger terrorist groups should be less successful because of collective action problems. However, overall, larger groups are simply much more likely to survive. This result is perhaps in part due to the many small terrorist groups that exist for one or several years and disappear. As argued previously, when a group of 25 members has a dozen members arrested, this could effectively end the group.⁹⁷ Larger organizations can weather such losses.

The other organizational factors, contrary to my expectations, were not shown to be important in the models. Religious motivation does not appear to have an impact on group survival. This is surprising because this attribute is important for other group-related outcomes, such as lethality. This could be because, as Hoffman suggests (2006, 242-243), religious terrorists groups often do not have clear (or realistically obtainable) policy goals, such as the creation of an ethnically-based state or more rights for an ethnic minority. Instead they often want to rid their government of secular institutions. This makes a sustained mobilization more difficult, as members become disillusioned with lack of progress could be likely to drop out.

Neither state sponsorship nor involvement in the illegal drug business seems to be associated with terrorist group longevity, when network attributes are taken into consideration. The state sponsorship result is not a great surprise, since Carter (2012) finds mixed support for the impact of state sponsorship on group survival. Regarding involvement in the illegal drug industry, my study is the first to test the impact of involvement in the drug trade on terrorist

⁹⁷ Examples of small groups affected in such a way include Action Direct in France and the U.S. group Evan Meacham Eco-Terrorist International Conspiracy (EMETIC). Action Direct carried out high-profile attacks for a decade, but its main members were arrested together at a farmhouse hideout. EMETIC carried out small attacks for several years, until all four members were arrested together after an FBI investigation.

group survival. A growing body of literature is looking at relationships between criminal organizations and terrorist organizations, and overlaps between the two, so hopefully other studies will look in more detail at how the drug business affects terrorist groups.

The insignificance of state sponsorship and drugs is interesting because these are the two measures that most explicitly capture the idea of “material incentives” discussed in the previous chapter. I argued that terrorist groups should depend more on *non-material incentives*, such as feelings of purpose or solidarity, because of the unusual and illegal political violence required of members. The results support this idea. The argument also suggested terrorist groups are different from many (but not all) types of groups because of this difference in sources of incentives. The tests in this chapter did not compare terrorist groups to other groups, but this would make interesting future research.

While some organizational attributes (ethnic motivation, size) seem to be important for terrorist group survival, the tests in this chapter suggest that an organizational-network model of terrorist group survival is superior to a model that only includes organizational characteristics. Terrorist groups’ intergroup relationships in general are associated with a lower risk of a group ending, as the results with the aggregated (cooperative and adversarial) ties measure suggest. The model with this result (Model 3) has the best goodness of fit of all models, although it is very close to other models involving network variables. An organizational-network model with the number of each group’s ties seems to a parsimonious yet effective explanation of terrorist group survival. For theoretical reasons, however, it is important to consider other network effects, including disaggregating cooperative and adversarial relationships.

The number of terrorist groups in a group’s country is generally associated with a higher risk of terrorist group failure. This is interesting because the number of same-type organizations

in one's geographical area, the organizational density, is argued to help groups survive, or at least help them until a certain point, in a non-linear relationship (Hannan and Carroll 1992). My argument, however, is that the more groups co-exist in a state, the more they have to compete for media attention and space on the government agenda. This competition comes without the mobilization-supporting benefits that come from direct adversarial relationships. The results support my argument. Additionally, the inclusion of the count of groups in the country is important to the model because the number of groups could proxy a number of situations in the country, such as underlying social issues or state problems – as well as some degree of opportunity for terrorist groups to form relationships. A model without such a measure might be underspecified.

The results suggest that a number of other relationship attributes help explain terrorist group longevity. Eigenvector centrality, the notion of how well-connected one's relationship partners are, theoretically should help groups survive. However, when the relationship count and the eigenvector measure are included in the same model, only the count is important. This suggests that the number of relationships matters more than to whom one is connected. The results could occur because, for example, a relationship to a well-connected group such as al-Qaeda does not guarantee support from al-Qaeda. It is important to note that the measure of eigenvector centrality *did* find support when the count measure of ties was excluded from the model. The question of whether eigenvector centrality is important could depend on whether one thinks it is a complement to a count of relationships, or a substitute. I considered them complements (in the same model together), but other scholars could find theoretical reasons to think of them as substitutes. They are highly correlated.

The difference in significance between relationships and eigenvector centrality is also interesting because Horowitz and Potter (2011) find basically the opposite result in a study of terrorist group lethality: a group's count of relationships does not seem to affect its lethality, but its eigenvector centrality does.⁹⁸ They argue that the "quality" of relationships matters more than quantity, for terrorist group lethality.⁹⁹ One explanation for our divergent results is that a connection to al-Qaeda (or a connection to any well-connected group) might help an organization carry out a few extremely lethal attacks, but this does not ensure years of vitality for that group. Instead, a connection to well-connected group could indicate or lead to some dependence on that group. This is no substitute for organic support, in terms of mobilization. In this sense, a relationship with a well-connected group carries one of the risks of state sponsorship, dependence (Carter 2012, 3). Overall, eigenvector centrality has been shown to be important for many types of networks (e.g., Borgatti 2005), but has only barely been considered in the study of terrorist group networks, so this subject is worthy of further investigation.

The results also suggest that both cooperative and adversarial relationships help groups survive. It is helpful to disaggregate relationship types because different types of relationships could lead to different types of consequences. For example, one might think that only cooperative ties would be helpful to groups. Additionally, some qualitative studies look at the consequences of terrorist group adversaries (Bruce 1992), but these types of relationships have been absent from most cross-national or quantitative analyses of terrorism. I argued that having

⁹⁸ They only looked at alliances, while I include both alliances and adversarial relationships in my count. However, if I substitute a count of only alliances/allies in the model, my results do not substantially change. Horowitz and Potter include their count of ties and the measure of eigenvector centrality in the same model, and the ties count is statistically insignificant.

⁹⁹ Our dependent variables are different so it might be necessary to compare our results. However, each study looks at some positive outcome for terrorist groups (their survival or their lethality), and ours are among the very few studies of terrorism to look at these factors.

an adversary should contribute to group mobilization, through the notion of competition with an “other.” However, when looking at counts of adversarial relationships, it appears that having many adversarial relationships is not as helpful as is having one or few adversaries. In other words, there is a non-linear relationship. This is overall consistent with my argument, and shows an interesting difference between cooperative and adversarial relationships.

Finally, the models investigate how the impact of terrorist group relationships on terrorist group survival might be conditioned by the attributes of the states in which they operate. Results are mixed. Cooperative ties seem to have a stronger impact on survival in more capable states, as the hypothesis suggests. However, adversarial ties do not experience such a conditioning effect – showing another important difference between these two types of ties. Additionally, the interaction hypothesis regarding capability assumes that terrorist groups generally have a more difficult time surviving in more capable states, but the control variable for state capability is never statistically significant in unconditional models. This raises questions. The primary issue might be that GDPPC is an imprecise measure of state capability to confront terrorist groups. The case studies will allow a more nuanced analysis of state capabilities. Regardless, the interaction tests show support for the idea that terrorist groups benefit more from cooperative relationships in stronger states, consistent with my argument.

The results regarding the conditioning impact of regime type on the effect of terrorist group relations also depend on whether one is looking at cooperative or adversarial ties. The survival-enhancing impact of cooperative ties is greater in more autocratic states, as the hypothesis suggests.¹⁰⁰ Cooperative ties, then, seem to help terrorist groups overcome

¹⁰⁰ This effect only appears in Model 14, the model with both capability and regime type hypothesis. This model is more fully specified, in a more theoretically justified manner.

challenging conditions, whether they are more capable states or more autocratic states. Adversarial ties experience the opposite effect regarding regime type: they seem to offer more longevity benefits to terrorist groups in more democratic states. I suggested that this could be because terrorist groups with adversaries are better able to take advantage of the mobilization benefits of rivalry in more democratic states. Mobilization generally is easier in these types of states, as citizens are freer to join and participate in dissident organizations. There is mixed support for the regime type interaction argument (Hypothesis 12), but the unexpected results for adversaries suggest interest subject for future research.

As a whole, the interaction tests are an important step forward in the study of terrorist group behavior. I am unaware of any cross-national or quantitative analysis of terrorist group behavior that analyzes the impact of terrorist group characteristics conditional on aspects of the state in which they operate. Many studies only analyze state attributes, and a few look at terrorist group attributes, but surely there are conditioning effects between the two. This is especially worth considering when we think about state tactics – negotiation with terrorist groups, military approaches, etc. – and how differences in tactics can affect outcomes. These factors make a less parsimonious model, and are difficult to measure in a global study such as this, but surely are a part of the explanation of important terrorist group activities. The models tested in this chapter, then, tell us a substantial amount about terrorist organizations, but also remind us that many dimensions to the subject deserve further analysis.

3.2.6 Concluding remarks

This chapter used a new global data set of terrorist groups and their relationships to test hypotheses set forth in the previous chapter. The organizational-network model as a whole

found considerable support, although most individual organizational attributes did not. Network attributes seem to have an important impact on terrorist group survival. Both cooperative and adversarial relationships are robustly associated with terrorist group survival, with cooperative ties especially robust. Additionally, tests of interaction terms suggest that the impact of cooperative relationships is greater in autocracies and more capable states, as the argument suggests. The next chapter further subjects the hypotheses to testing through case studies. I look at terrorist groups in three areas: Colombia, Northern Ireland, and Pakistan.

4.0 CHAPTER 4: CASE STUDIES

The previous chapter used a global dataset of terrorist groups to quantitatively test hypotheses derived from the organizational-network model of terrorist group survival. This chapter looks at a set of cases to provide further empirical investigation. It examines six terrorist organizations in an in-depth manner to see if the mechanisms described in the model appear to occur various situations. The terrorist groups examined are located, two each, in Colombia, Northern Ireland, and Pakistan. The first section discusses how the cases complement the large-n analysis, and explains how cases were selected for comparison. The chapter then contains three sections, one for each country and its two selected terrorist groups.¹⁰¹ Each country section discusses the country's general characteristics and relevant history, and then overall traits of its terrorist groups are presented. After this important contextual information, the two terrorist groups in the country are analyzed. The case studies of the six terrorist groups – diverse and from diverse countries – provide the opportunity to explore the plausibility of the hypotheses in a variety of settings.

¹⁰¹ The term “country” is used in spite of the fact that Northern Ireland has a different legal status than that of the other entities. It is not a “state” in the traditional sense, because it is in the territory of the United Kingdom. However, the United Kingdom describes Northern Ireland as one of its four “countries.” I follow the United Kingdom's terminology by using the term “country” as shorthand. See: <http://www.ons.gov.uk/ons/guide-method/geography/beginner-s-guide/administrative/the-countries-of-the-uk/index.html> [Accessed September 9, 2011].

4.1 CASE STUDY APPROACH, CASE SELECTION, AND SOURCES

4.1.1 Case study approach

The case studies of this chapter complement the large-n study of the previous chapter. Approaches to empirical investigation often involve tradeoffs between *generalization* and *complexity* (e.g., Peters 1998, 5).¹⁰² The global quantitative tests offer a substantial deal of inferential leverage because the sample includes so many terrorist groups (generalization), but case studies offer the opportunity to more thoroughly consider measurement, multiple causation, and the causal process over time (complexity). Regarding the subject of this dissertation, case studies are valuable because they can illustrate specifically how certain factors played a role in each terrorist group's survival or failure. The downside is generalization: we do not know to what extent the processes observed in these cases are applicable to the wider universe of terrorist groups. However, if the processes are observed in a diverse sample of cases, and they correspond to the inferences drawn from the quantitative studies, we can have more confidence about the plausibility of the explanations.

The “complexity” advantages of case studies come in a number of forms. Measurement can be an issue in large-n studies because we might not have accurate measures of all the variables we would like, across time and in all countries (Mahoney 2007, 126-128). In the previous chapter, for example, state capabilities were measured using a common but relatively rough indicator, GDPPC. Case studies, however, can consider more specific dimensions of

¹⁰² Or, as Gerring (2004) states, “Research designs invariably face a choice between knowing more about less or knowing less about more.”

capabilities, such as counterterrorism spending and training by foreign governments. Case studies can also be helpful for exploring multiple causation (Ragin 1992), beyond the interaction terms in the large-n models. A final advantage offered by case studies is the ability to study causal processes over time to see if mechanisms unfold in the manner described in the theory section. Process tracing is used to determine to whether causation seems to be occurring, or simply correlation (George and Bennett 2005; Mahoney 2007, 131).

4.1.2 Case selection and sources

A widely noted problem with case study investigation, as suggested above, is that it is unclear to what extent the findings from a small number of cases are applicable to the wider universe. This is basically because there are not enough cases to consider all the possible explanatory variables with adequate degrees of freedom. One way to mitigate this issue is through case selection.

This chapter looks at two groups in each country examined because this allows country factors to be held constant for the two groups there. The most substantial variation, when looking at two cases in the same country, is in terrorist group attributes. This is beneficial because it reduces possible alternative explanations. In other words, it reduces extraneous variance, which is one of the most important tasks for researchers (Peters 1998, 30). This is consistent with Przeworski and Teunue's (1970) "most-similar systems design," which involves looking at cases with some similarities to note which factors seem to be associated with changes in the dependent variable. Similarly, Lijphart (1975) suggests looking at "comparable cases," meaning cases with some factors in common, to reduce possible explanatory variables. This chapter does not attempt to provide a research design that produces inferential leverage

comparable to that of the previous chapter, but it aims to provide illustrations to convince the reader of the plausibility of the argument, and case selection contributes to that end.

Table 4.1. The six terrorist groups analyzed in case studies

Group	Country
Revolutionary Armed Forces of Colombia (FARC)	Colombia
United Self-Defense Forces of Colombia (AUC)	Colombia
Irish Republican Army (IRA)	Northern Ireland
Ulster Defense Association (UDA)	Northern Ireland
Jammu and Kashmir Liberation Front (JKLF)	Pakistan
Lashkar-e-Taiba (LeT)	Pakistan

The six terrorist groups studied are a diverse set (see Table 4.1), permitting illustrations of how certain factors help terrorist organizations survive, in spite of vast differences between the groups. Specific group attributes are discussed in each country section below, but the groups are different in terms of their intergroup relationship patterns, political motivation, funding sources, size, and other attributes. The groups also vary in the outcome of interest – whether the groups survive or not. Variation in the dependent variable is a central part of Mill’s method of difference, as explaining an outcome requires that we understand why it occurs, as well as understanding instances when it does not occur (Geddes 1990, 132-133; King et al. 1994, 129).

Table 4.2. Terrorist group attributes by country, 1987-2005

	Global average, 621 groups	Colombia average, 22 groups	Pakistan average, 17 groups	Pakistan (liberally defined)^ average, 33 groups	Northern Ireland average, 12 groups
<i>Group attributes</i>					
Ties (count)	1.43	2.64	3.24	3.73	3.92
Allies (count)	1.20	2.18	2.94	3.52	2.25
Adversary	.15	.32	.29	.21	.67
Eigenvector centrality	.016	.003	.052	.060	.008
Ethnic	.37	.09	.65	.67	1
Religious	.26	0	.82	.82	0
State sponsorship	.17	.09	.42	.45	.25
Drugs	.06	.32	.06	.12	.25
Size (0-3 categorical)	.61	.82	1.12	1.03	.58
Age (count), maximum	10.1	11.95	9.43	13.42	19.25
Failure	.61	.68	.24	.24	.33
<i>State attributes</i>					
State capability (GDPPC)	\$9,352	\$6,410	\$2,691	\$2,691^	\$24,897*
Regime type (FH 1-7)	4.12	4.52	3.26	3.26^	6.71*
Groups in country	3.84	8.95	9.92	9.92^	9.63*

In order to examine multiple terrorist groups in certain countries, countries needed to be selected. Colombia, Northern Ireland, and Pakistan were chosen because of their relative diversity, as well as their interesting terrorist group dynamics. Country characteristics, compared to global averages, are shown in Table 4.2. In terms of state capabilities (GDPPC) and regime type, Colombia is about average, while Northern Ireland is above average and Pakistan is below

average.¹⁰³ However, there is interesting temporal variation within the countries. Both Colombia and Pakistan had increases in their counterterrorism capabilities (other than GDPPC), as the United States increasingly provided each with more money to fight militant groups. Pakistan also became less democratic with time (see Figure 4.1). All of the countries are above average in terms of their number of terrorist groups, so it might seem that there is not variation between them on organizational density. However, there is interesting within-country variation in organizational density over time, which is analyzed in the cases. Finally, each country is from a different region, with Latin America, Western Europe, and South Asia represented.

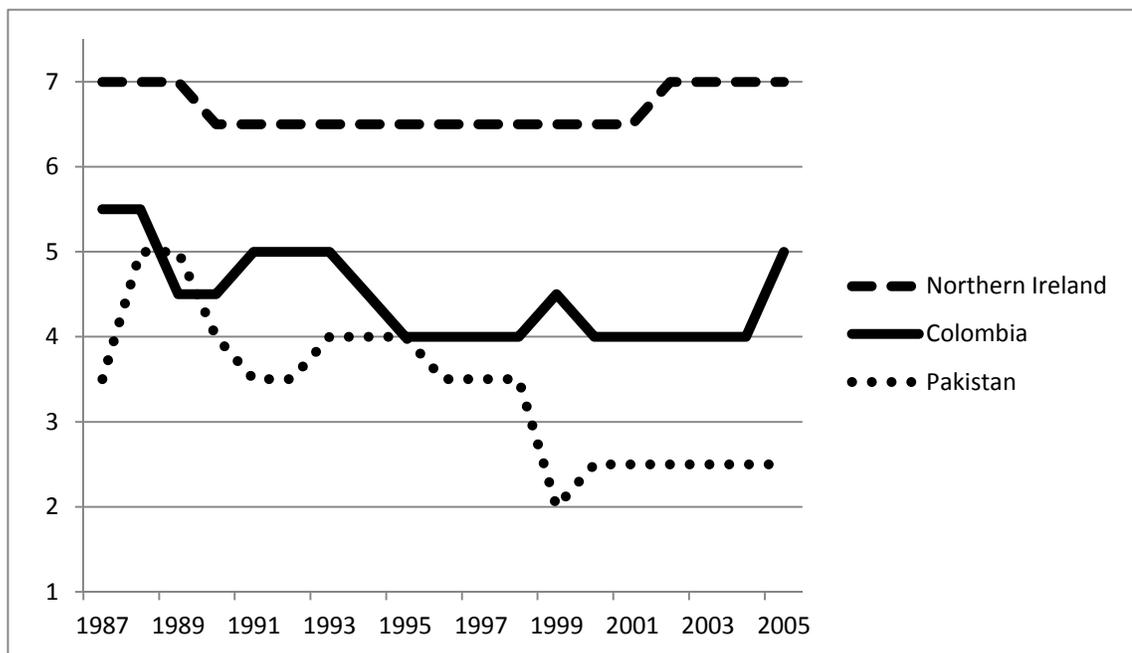


Figure 4.1. Freedom House regime type in three countries, 1987-2005

¹⁰³ Overall between 1987-2005, Pakistan was below the global democracy average. However, this includes seven years of military dictatorship at the end of the sample. This makes interesting within-case variation in regime type, which I discuss when analyzing Pakistan and its terrorist groups. See Figure 4.1 for changes in regime type over time.

To gather evidence for the case studies, I consulted primary sources such as newspaper archives (Lexis-Nexis), government documents, and NGO reports, as well as secondary sources such as books and journal articles. Some sources in Spanish were consulted for the Colombian groups, but most sources accessed were in English. One note of disclosure is that because of language and other issues, there is far more accessible information on the terrorist groups of Colombia and Northern Ireland than those of Pakistan.¹⁰⁴ The case studies on Pakistani groups do not have as many colorful and first person anecdotes as those of groups in other countries, but there are enough sources for thorough analyses and in-depth comparison.¹⁰⁵ Overall, beyond their utility for illustrating the mechanisms of the organizational-network model of terrorist group survival, these case studies should be informative to scholars interested in any of the terrorist organizations analyzed.

¹⁰⁴ For example, the first English-language book on Lashkar-e-Taiba was published in 2011 (Tankel 2009, 2; 2011).

¹⁰⁵ Recent years, for obvious reasons, have seen a surge in English-language books on Pakistan and its terrorist groups, written by Pakistani journalists and social scientists (e.g., Abbas 2004; Gul 2009; Haqqani 2005; Hussain 2010; Saigol 2006), as well as foreign experts (e.g., Abou Zahab and Roy 2004; Riedel 2011; Tankel 2011).

4.2 COLOMBIA: REVOLUTIONARY ARMED FORCES OF COLOMBIA (FARC) AND UNITED SELF-DEFENSE FORCES OF COLOMBIA (AUC)

“The government has to understand that facing this opportunistic and rogue attitude of the FARC, we have a right to defend ourselves, and that requires, in some cases, that we attack the enemy before it attacks us.” – Carlos Castaño, leader of the AUC (Hernández-Mora 2002)

“We know IRA members were sent to Colombia to train the FARC in explosives and other terrorist methods which have worked for the IRA against the British in Northern Ireland...” – Francisco Santos, former vice president of Colombia (Santos 2005)

Colombia is interesting for the study of terrorism for several reasons. First, the country has been home to dozens of terrorist groups in the past several decades. These groups have mostly been leftist, as have most Latin American groups, so studying Colombia can tell us somewhat about the broader region. Furthermore, some of these groups have shifted substantially from political violence to criminal violence, which is a global trend, so studying Colombian groups can tell us more about this phenomenon as well. Finally, Colombia is interesting because it has had terrorist group adversarial relationships based on left-right ideological lines, as well as adversaries that support the same cause (e.g., two left-wing groups attacking each other). Both types of adversarial relationships have occurred in other Latin American countries.

This section discusses the historical context in Colombia, and then presents an overview of the characteristics of all of the terrorist groups in the state between 1987 and 2005. The section then presents two case studies, of the Revolutionary Armed Forces of Colombia (FARC) and the United Self-Defense Forces of Colombia (AUC). The FARC is the dominant leftist group in the country and well represents the transition, made by many terrorist groups, from

political activity to substantial criminal activity. The AUC, also considerably involved in crime, represents the phenomenon of pro-status quo terrorist groups that have received assistance from some elements of the military and police. This has also occurred (with varying degrees of state permissiveness or collusion) in Spain, Turkey, and other states.

The FARC and AUC cases permit exploration of a number of the hypotheses of this dissertation. Table 4.3 shows the hypotheses that are examined in detail during the Colombian cases, since one or both of the Colombian groups have the attributes described in the hypotheses. (The groups and their attributes are discussed in more detail below, in each group's section.) However, note that all 12 of the dissertation's hypotheses are alluded to during each case study. For example, the FARC does not have an ethnic or religious political motivation (H1 and H2), but its lack of these characteristics is discussed as a possible weakness of the group, especially since popular support seems to have declined for the group in recent decades. Nonetheless, the Colombian cases explore the hypotheses listed in Table 4.3 because the mechanisms argued to be behind the causation are explicitly analyzed; mechanisms behind non-effects or negative cases (FARC's lack of ethnic motivation not helping it survive, for example) cannot actually be analyzed. I do not suggest that these hypotheses are "tested" in the sense of a rigorously controlled experiment; Instead, the hypotheses are explored here to see if the causal processes seemed to have worked as discussed in Chapter 2.

Table 4.3. Hypotheses explored in Colombia group cases

Hypothesis number	Hypothesis
	<i>Organizational hypotheses</i>
4	A terrorist group involved in the drug business is less likely to end than a group not involved in the drug business.
5	A larger terrorist group is less likely to end than a smaller terrorist group.
	<i>Network hypotheses</i>
6	A terrorist group is less likely to end if it is involved in more relationships with other terrorist groups (higher degree centrality).
7	A terrorist group is less likely to end if there are fewer other terrorist groups in the same country (lower organizational density).
8	A terrorist group is less likely to end if it is has relationships with groups that are themselves connected to many groups (higher eigenvector centrality).
9	A terrorist group is less likely to end with each additional terrorist group cooperative ally.
10	A terrorist group is less likely to end if it is involved in an adversarial relationship with another terrorist group.
	<i>Network hypotheses, conditional on state attributes</i>
11	The survival-enhancing impact of relationships on terrorist group survival will increase in more capable states.

4.2.1 Colombia background: *La Violencia* and an arguably failed state

Colombia is a poor country, with an average GDPPC of about \$6,000 during the 1987-2005 period.¹⁰⁶ Its per capita wealth that is triple that of Pakistan, but it is much lower than Northern Ireland's. Population-wise, it is the third largest country in Latin America. Colombia's regime type is close to the global average. However, its imposing geography, large population, historic

¹⁰⁶ All 1987-2005 data figures come from sources discussed in the previous chapter. More recent country data in this chapter come from the CIA Factbook unless otherwise noted.

class divisions, and poverty have presented challenges for governance of the country. The increase in drug production in the area has added to its problems. It has had more terrorist groups than the typical country in the world, and the related violence has been yet another impediment as Colombia attempts to develop.

Colombia has been an independent state for almost 200 years. According to some scholars, however, it never fully consolidated as a “state” because it has never exercised full control over its territory (e.g., Holmes 2003). One explanation for the weakness of the state is the rough terrain of the country, with three mountain ranges, and infrequent contact between the many citizens in coastal areas and the capital, Bogotá, which sits 8,600 feet above sea level on a central savannah. This geography is used to explain both regionalism and distrust of the central government (Leech 2011, 4-5). These conditions, and others, have played a role in the unusual amount of violence the country has seen.

Colombia has experienced a great deal of intrastate conflict, with the greatest periods of violence in the Thousand Days’ War of 1899-1902 and *La Violencia* during the late 1940s and 1950s. Both conflicts were started by disputes largely between the two dominant political parties, the Liberals and Conservatives. *La Violencia* killed hundreds of thousands of Colombians and turned at least a million residents into refugees, with violence spread throughout the country (e.g., Sánchez 1985). One consequence of the conflict was that the government legalized armed community self-defense groups, the so-called Autodefensas.

A second consequence of *La Violencia* was the creation of the National Front, a system of alternating power between the Liberals and Conservatives. This essentially institutionalized exclusion of other parties, such as the growing Communist Party (Leech 2011, 10-11). This in turn fomented alienation among the far left, which led to the creation of violent groups such as

the Army of National Liberation (ELN) and the FARC in the 1960s. This launched a new era of Colombian political violence, the leftist groups versus the government, which continues today.

Politics in Colombia, and especially this new wave of violence, has been affected by two important and interrelated factors: drugs and the United States. Regarding drugs, Colombia produces more cocaine than any other country, and the amount substantially increased in the final decades of the 20th century (U.S. Department of State 2000). The coca growing in the country, and the coca brought from nearby and processed in Colombia, provide an income to many of the country's residents, and also provide crucial funding to basically all of its terrorist groups.

The United States, whose citizens consume the majority of Colombian cocaine, devotes substantial resources toward stopping the flow of drugs toward the United States. U.S. interest in Colombia in the 1960s through 1980s was based largely on Cold War concerns, because of the powerful left-wing violent groups in the country. However, starting in the 1980s, and even more so in the 1990s, the United States became substantially involved in Colombia in an effort to wage its supply-side battle in the "War on Drugs." In addition to U.S. demand for cocaine affecting Colombia, the U.S. response – providing billions of dollars to Colombia for the military and coca eradication in the operation Plan Colombia – also greatly affected the country. A stronger Colombian military and efforts to reduce coca production had some consequences for terrorist groups, although almost all of the groups extant in the late 1990s still exist today.

4.2.2 Colombia terrorist groups overview

The terrorist groups of Colombia are more likely than groups elsewhere in the world to have ties to other terrorist groups (See Table 4.2). However, they are less connected to other groups than

are the groups of Pakistan and Northern Ireland. Colombian groups are also above the global average in their involvement in drugs and their size. Colombian groups are almost entirely leftist in terms of their motivation, with a few ethnically-motivated groups and no religious terrorist groups. Most have not had a state sponsor. In terms of eigenvector centrality, the measure of how well-connected are the groups to which a group is tied, Colombian terrorist groups are also below the global average. This is likely because the Colombian groups have been especially domestically oriented, and (with the exception of FARC), unlikely to be tied into the global terrorist network including well-connected “hubs” such as ETA, al-Qaeda, Fatah, or Greece’s 17 November.¹⁰⁷

This mixed bag of organizational-network attributes might be why Colombian groups have a failure rate that is above the global average. A few groups, such as the FARC, have lasted for decades, but they are the outliers that are responsible for the high mean age of Colombian terrorist groups (about 12 years).¹⁰⁸ The case studies below explore the FARC in more detail, to determine what has helped it survive so long. The AUC, a very different type of Colombian group, is also studied. Overall attributes of the groups are shown in Table 4.4.

¹⁰⁷ FARC itself is especially well-connected, so groups with ties to FARC have higher eigenvector centrality scores. However, many groups in Colombia have not had ties to the FARC.

¹⁰⁸ The FARC, ELN, and People’s Liberation Army (EPL) have all now survived more than 40 years. However, no other Colombian group has survived 20 years. The mean age of Colombian groups – excluding FARC, ELN, and EPL – is 7.3 years instead of 12.

Table 4.4. FARC and AUC attributes, 1987-2005

	Global average	Revolutionary Armed Forces of Colombia (FARC)	United Self-Defense Forces of Colombia (AUC)
<i>Group attributes</i>			
Ties (count)	1.43	8	4
Allies (count)	1.20	7	2
Adversary	.15	1	1
Eigenvector centrality	.016	.013	.000
Ethnic	.37	0	1
Religious	.26	0	0
State sponsorship	.17	0	0
Drugs	.07	1	1
Size (0-3 categorical)	.61	3	2
Age (count), maximum	10.1	42	12
Failure	.61	0	0*
<i>State attributes</i>			
State capability (GDPPC)	\$9,352	\$6,410	\$6,410
Regime type (FH 1-7)	4.12	4.52	4.52
Groups in country	3.84	8.95	8.95

* The AUC ended in 2008.

4.2.3 Terrorist group case study: FARC

The FARC was founded in 1964 as a response to an agrarian crisis and, more directly, a U.S.-backed crackdown on leftist peasant organizers (Dudley 2004, 9-10; Leech 2011, 14-21). It started fighting for a communist revolution, and now, decades later, is the best-known terrorist group in Colombia and probably Latin America. It has outlasted groups that were sponsored by Cuba and other states, as well as groups with support from elements of the Colombian government. More generally, it has outlived many of its fellow leftist organizations. The FARC

owes its durability to a number of its attributes, some of which changed as the Cold War was ending. Interestingly, the FARC was rather self-sufficient through the 1980s, drawing on a wide peasant support base. In that decade, however, it shifted its behavior in a number of ways, which seem to have helped it survive.

The FARC is said to have more of a connection to peasants than other Colombian terrorist groups because its original members were from rural backgrounds themselves.¹⁰⁹ The FARC's rural roots, combined with perceived government mistreatment or neglect of the rural population, helped it grow substantially during its early years. Its membership went from several hundred in the 1960s to several thousand in the early 1980s (Rochlin 2003, 137).¹¹⁰ Beyond organizational attributes, the FARC likely survived into the 1980s because of a combination of a weak government that had been unwilling to negotiate, and popular support for leftist ideas.

In the 1980s, the dynamics of terrorist group survival changed considerably. There were substantial increases in coca cultivation in Colombia, and the FARC imposed "taxes" on coca producers, greatly increasing the funds available them.¹¹¹ This also led to conflict. In the same decade, drug traffickers, ranchers, and others started so-called self-defense groups to combat the growing leftist groups. They were upset that the leftist groups were often kidnapping people who refused to pay "taxes" (Gutiérrez Sanín and Barón 2005). Drug traffickers also fought with

¹⁰⁹ For example, longtime FARC leader Manuel Marulanda, it was reported in 2001, had never stepped foot in Bogotá, or any other major city (de Borchgrave 2001). The ELN and April 19 Movement (M-19), in contrast, were founded by urban middle-class intellectuals and students (Waldmann 2007; Leech 2011, 21-22).

¹¹⁰ As a comparison, the ELN achieved a strong growth rate during that period as well, going from fewer than 100 members in the late 1970s to 600-800 in the mid-1980s (Rochlin 2003, 104-105). The ELN started with a smaller membership, however, and has never approached the FARC's membership numbers.

¹¹¹ Contrary to popular belief, the FARC has *not* been substantially involved in the international sale of drugs. Its profits come from the lower levels of the trade, such controlling territory and handling some domestic processing (U.S. Drug Enforcement Agency 2006).

the FARC over control of territory. An additional source of conflict was that the FARC claimed to defend the rights of the peasants harvesting coca (Schulte-Bockholt 2006, 133).

All of these issues led to adversarial relations between the FARC and the various self-defense groups. Initially, these groups were the primary aggressors of the inter-group relationships, attacking the FARC – and also assassinating leftist politicians, union leaders, and peasants who seemed to support them. One prominent FARC member at the time suggested retaliation would be strong:

“The cowardly paramilitary assassins can take the lives of one or two of our comrades, but they can't assassinate all of our leaders. And what's more, the people will accompany us and respond to the assassins with more political vigor using the combination of all the forms of struggle” (Dudley 2004, 94).

Indeed, the paramilitary attacks did inspire some peasants to support or join the FARC (Leech 2011, 49). In 1987 the FARC increased their attacks against the self-defense groups. This in turn inspired these groups to hire Israeli mercenaries to train them in new techniques, such as C-4 letter bombs, taking over houses, and shooting from moving vehicles (Dudley 2004, 122-123). Repeatedly throughout the 1990s, one group would attack, and then “the tables were turned,” with the victim starting an offensive (Gutiérrez Sanín and Barón 2005, 6). The tit-for-tat between the FARC and self-defense groups, including the AUC, continued into the 2000s.

The FARC has also fought with its fellow leftist groups. In the 1990s, its animosity with the ELN escalated, and has not abated. In 2000, the ELN accused the FARC of executing five of its leaders (Rochlin 2003, 124). The groups fight over control of drug trade and other income sources. For example, the FARC bombed an Occidental Petroleum pipeline more than

1,000 times in the early 2000s, to send a message to the ELN, which extorts millions of dollars from oil-related interests in the area. “According to military officials and provincial politicians, the objective of most of the bombings was to force the ELN to share more of the proceeds” (Wilson 2003). Terrorism has been described as “violent communication” (Schmid and de Graaf 1982), and while the FARC started out only “communicating” with the government, in recent decades its audience has widened to self-defense groups, the ELN, and others. This is consistent with my notion of adversarial relationships providing additional goals for the group, additional reasons for its existence.

The FARC has benefitted from cooperative ties as well. It was initially not as willing as smaller Colombian groups to cooperate,¹¹² but by the late 1980s it had joined up with the ELN and other groups to attack the government and self-defense groups (Rochlin 2003, 102). In the early 2000s, in spite of (or perhaps because of) increased pressure of Plan Colombia on the FARC, the group increased its international ties. Its attacks apparently “increased in their proficiency after the arrival of IRA members,” as the two groups conducted joint training (Seper 2002). It has also planned attacks with ETA on Colombian officials in Spain, and the groups enjoy “mutually beneficial logistical and tactical connections” (Berti 2009).

The relationships with well-connected groups such as the IRA and ETA, and their help to the FARC, suggest some support for the notion of eigenvector centrality. These groups, with their familiarity with operating overseas and interacting with other groups, were uniquely positioned to assist the FARC. Ties to well-connected groups are one difference between the

¹¹² M-19 was especially eager to cooperate with other groups (Halloran 1987), perhaps because it was too small to accomplish much on its own. The FARC did not join into a 1985 attempt at Colombian group cooperation (Rochlin 2003, 105). When it did cooperate with M-19 in 1987, it was an effort proposed by M-19 (BBC 1987).

FARC and the ELN, so maybe this is part of the explanation for why the FARC is able to remain so dominant.

The strength of the Colombian state likely conditioned the impact of the FARC's relationships on its survival, as it did for other Colombian groups. This is especially interesting to consider given that Colombia's military capabilities greatly increased in the 1990s and 2000s, with billions of dollars from the United States.¹¹³ It seems likely that as the capabilities of the state increased, relationships were more valuable to the FARC. Ties might not have been that helpful in the 1980s or early 1990s, but ties in later years seemed to have a substantial impact when the FARC was facing a more powerful state. It is less clear that regime type had a conditioning impact on the effects of ties. Chapter 2 hypothesized that ties should matter more in autocracies, and Colombia has been democratic (relative to the rest of the world) in the past several decades. This suggests ties should not matter as much as in other states. It is difficult to know this. Colombia's changing capabilities, however, and the apparent change in benefits of ties, is more apparent.

Regarding the FARC's political motivations, it has always claimed to support a left-wing revolution.¹¹⁴ My argument suggests that this should not contribute to a group's survival as much as motivations based in ethnicity or religion. Left-wing ideology has clearly been salient in Colombia, with its income inequality and inspiration from nearby states such as Cuba and Nicaragua. However, when the Cold War ended, and many leftist groups around the world

¹¹³ This aspect of capabilities, foreign military aid specifically for fighting subnational groups, is not captured in the GDPPC measure of capabilities in the previous chapter. The case studies are helpful for looking at capabilities in a more detailed manner.

¹¹⁴ There is disagreement about to what extent the FARC is still a leftist group. Some scholars argue that it is now almost entirely criminal (Makarenko 2004), while others argue that it is still substantially political – pointing to the relative poverty in which leaders and most members live, political speech, and negotiation demands (Schulte-Bockholt 2006, 137-138; Leech 2011, 73-74; Brittain 2010, esp. 91-92).

ended, the FARC only grew stronger. This was likely because the changing dynamics of Colombian conflict – drug money, battles with self-defense groups, and increased intergroup cooperation – helped the FARC find support in new ways. Leftist goals helped the FARC survive until the 1980s, but since then it seems to have survived *in spite of* its proclaimed ideology. This is consistent with what one Colombian senator, a former member of the April 19 Movement (M-19), has said about the FARC:

“They do not need the traditional support that traditional guerrillas need, because the [drug] money allows their army to be self-supporting and to expand. They do not need popular support, and they are losing their politics.” (Leech 2011, 145)

In spite of a possible decline in popular support, the FARC has always had more members than other Colombian terrorist groups. The FARC counted around 15,000 members in the mid-1990s (Romero 2003, 120; Pécaut 2008, 90), and was closer to 20,000 in the early 2000s (Wilson 2003). Its size has contributed to its survival in meaningful ways. The FARC controlled more territory than other groups, so this helped it profit from the drug trade (occurring on its territory) in ways that other groups could not. Furthermore, its size made the government take it more seriously. Because the FARC was the biggest threat to the state in 1999, President Andres Pastrana ceded the group a Switzerland-sized piece of territory as a gesture to start negotiations. The ELN, jealous of not being courted to the same degree, reportedly increased its attacks during this time because the group “wanted to send a message to Pastrana's government that they remain a viable military force” (Faiola 1999).¹¹⁵ This struggle for government attention is consistent

¹¹⁵ When the government refused to give the ELN its own piece of territory, the group walked away from the talks (Hodgson 1999).

with my argument about organizational density – that a crowded terrorist group environment can make it harder for groups to be seriously considered by the government or people (see Figure 4.2).

It is impossible to know to what extent the FARC's growing numbers can be attributed to coca production, and to what extent it can be attributed to a reaction to the human rights violations of the self-defense groups. Drug production likely played a more important role. The FARC's membership increased at the steepest rate in the late 1990s and early 2000s, the time when coca production was increasing the most (Brittain 2010, 148).¹¹⁶ However, these were the years when the Autodefensas were killing the most people – and they committed a far greater proportion of the human rights violations than did the FARC or other leftist groups (Brittain 2010, 132-133).

The FARC survives today for many reasons. In its early years, it appears to have gotten by on popular support based on conditions in the state. Factors such as these are difficult to measure for global quantitative tests, but are obviously important. Starting in the 1980s, however, the situation changed. Coca production in Colombia increased, the state offered amnesty to members of violent groups, U.S. military support for the state increased, self-defense groups started, and the FARC started to interact more with these and other militant groups.¹¹⁷ From the 1980s onward, various aspects of the organizational-network model explain the FARC's continued existence. Drug profits, network ties, and the group's size have been especially important. Also contributing to the FARC's longevity has been the fact that its talks with the Colombian government have repeatedly failed. (This is discussed more in the

¹¹⁶ Interestingly, AUC membership increased in tandem with both FARC membership and coca production (ibid.).

¹¹⁷ These conditions are to different degrees interrelated. For example, increased coca production in some ways led to the starting of the self-defense groups, as discussed.

conclusion of the chapter.) Despite decades of attacks from the Colombian military and self-defense groups (including the AUC), the FARC survives.

4.2.4 Terrorist group case study: AUC

The United Self-Defense Forces of Colombia (AUC) was founded in 1997 after a merger of smaller groups. It was a reaction to the rapidly growing FARC, and its increasing influence throughout the country – in large part due to FARC’s income from coca production. The AUC was a massive organization, said to have as many as 20,000 members (Arnson 2005). It also had a successful funding base, taxing coca as FARC had done. The AUC, like other so-called self-defense groups before it, had support from some elements in the government. However, it committed far more human rights violations than the leftist organizations (Brittain 2010, 132-133). In 2001 it was branded a “terrorist group” by the United States and the European Union. The Colombian government, apparently seeing the group as more of a liability than an asset, negotiated with it to demobilize. In 2008, the group finally disbanded.

Self-defense groups, generally defined, have been legal in Colombia since 1965 (Arnson 2005). This is because of the great deal of intrastate violence and the government’s inability to protect many communities. The more modern notion of self-defense groups, founded largely by drug traffickers to battle the FARC and other leftists who cut into drug profits, began around 1981. One of the first such organizations was Death to Kidnappers (MAS), which was founded after a relative of members of the Medellin drug organization was kidnapped by M-19 (Human

Rights Watch 1996).¹¹⁸ These groups tended to be regional, but as the FARC grew, so did they, and they merged into the single national organization in 1997.

The AUC was founded to fight extant terrorist groups, so it has always had adversarial ties. “Irregular warfare is necessary to defeat the guerrillas or force them to negotiate. It is necessary to give the guerrillas their own medicine,” said one AUC political officer (Salisbury 2003). While the AUC suggests it is simply using the same tactics as the leftist groups, human rights groups say that the AUC, at least in the late 1990s and early 2000s, killed far more civilians than did the other terrorist organizations (Arnson 2005, 2; Brittain 2010, 132-133).¹¹⁹ Contrary to the notion of a “self-defense group” defeating another group to bring peace – and consistent with my argument about adversarial relationships spurring on involved groups – human rights violations by all actors substantially *increased* in the years after the creation of the AUC (Isacson 2008).¹²⁰

The AUC’s violence likely had the unintended consequence of helping the groups that it intended to destroy. However, the AUC benefited from the continued violence of the leftist groups such as the FARC. For example, one cattle rancher who was driven off his land by the FARC, and able to return once the AUC took over the territory, said:

“Without [the AUC], the guerrillas would be back within two hours. They are heroes here, people of glory. I will help them in any way I can” (Wilson 2001a).

¹¹⁸ Interestingly, this coordination of the drug organizations in response to M-19’s kidnapping is also described as the beginning of the modern era of massive Colombian cocaine cartels (Williams 1994).

¹¹⁹ For example, the AUC committed 69 percent of the political assassinations in 1997, and 70 percent of Colombia’s political massacres in 2000 (Rochlin 2003, 147). (The Colombian government defines a massacre as a killing of four or more people at one time.)

¹²⁰ Human rights violations only started to decline in 2003, possibly because this was when substantial demobilization of the AUC started to occur. The data cited by Isacson come from the Center for Research and Popular Education (CINEP) in Colombia.

The violence of other groups also encouraged people to join the AUC. According to one survey of demobilized AUC members, half of respondents said they had joined because they felt threatened or a family member had been killed in the conflict. Only 23 percent said they joined because of economic reasons (Villegas 2005, 31-33).¹²¹

The AUC greatly affected its adversaries as well. For example, the ELN appears to have been more motivated to attack the AUC than its traditional target, the state. “The ELN's most venomous attacks,” according to Rochlin (2003, 124), “have been launched against its archenemy, the right-wing paramilitaries -- The Autodefensas Unidas de Colombia (AUC).” This adversarial relationship might have directly helped the ELN survive that period – by sabotaging negotiations that could have ended the group. The Colombian government was poised to make considerable bargaining concessions to the ELN in 2000, to get it to demobilize, but the AUC organized massive roadblocks across the country to protest concessions. The government backed down and negotiations collapsed (Rochlin 2003, 125). A similar situation occurred in 2001. Romero (2003, 24) describes the AUC as a “definite factor” in the failure of ELN-government negotiations. The ELN survives today.¹²²

While adversarial relationships were the AUC’s primary vocation, it also had a few cooperative relationships with other self-defense groups. Perhaps the most helpful might have been its cooperation with the United Self-Defense Forces of Venezuela (AUV), because the

¹²¹ The survey was of a demobilized unit from Medellín, the Bloque Cacique Nutibara. 25 percent of respondents cited an “external threat,” 25 percent cited the death of a family member in the conflict, 23 percent cited economic reasons, 20 percent cited “other” reasons, and 7 percent cited conflictual relations with family, friends or neighbors.

¹²² In addition to the AUC intentionally acting as a spoiler, it also indirectly disrupted negotiations between the ELN (and the FARC) and the government. In 2003, the leftist groups walked away from talks because they felt the president was offering the AUC better deals than he was offering them (Salisbury 2003).

leftist groups had somewhat of a safe haven across the border in Venezuela (Agence France Presse 2002). However, the AUV was not very powerful itself, keeping a low profile since 2002, so perhaps it could not offer much to the AUC.

The AUC had multiple relationships to other terrorist groups, but unlike the FARC, the AUC had no ties to highly connected groups such as the IRA or ETA. In other words, the AUC had a low value for eigenvector centrality. This was unfortunate for the organization, as it could have provided the group the international or global connections that could have helped sustain it for additional years. Perhaps the AUC's lack of ties to highly-connected groups in some ways reflects its fundamentally domestic goals. The groups in Colombia that reached out to well-connected terrorist groups in other parts of the world – FARC, M-19 – had domestic goals, but were interested in global communism as well. The distinction between domestic terrorist groups and internationalist terrorist groups is difficult to draw, but is worthy of future investigation, and is discussed in the chapter conclusion.

To what extent was the impact of the AUC's relationships on its survival conditioned by the state? The Colombian state was democratic and not very strong during the years of the AUC's existence, and my argument suggests that relationships do not matter as much in these conditions. It is possible that this is one part of the reason that the AUC ended after less than 10 years, in spite of multiple important relationships. Additionally, the strength of the state increased during the 2000s, with military aid from the United States, so this could have increased the value of the AUC's relationships. Perhaps without its multiple and important relationships, the AUC would have folded under the pressure of the increasingly strong state. Unfortunately, there was not as much variation in state strength during the AUC's lifetime as there was during the FARC's lifetime, so the impact of the state is not as clear to see.

The number of other terrorist groups in Colombia, the country's terrorist group organizational density, likely played a role in the AUC's survival and eventual failure. The AUC came into existence as a reaction to other terrorist groups, even those that were not technically its adversaries – those that it did not directly fight. Because of the number of terrorist groups in Colombia, and because an increasing number were in the drug trade, Colombia attempted to get them to disband. It was successful with the AUC. Organizational density, then, contributed to the demise of the AUC. Colombia's organizational density declined after the 1980s, likely as a result of the end of the Cold War, but its higher-than-global-average density still appears to have created a competitive or pressured environment for its terrorist groups, even when they were not directly in relationships with each other.

Regarding the AUC's political motivations, the group is generally described as either right-wing or in favor of the status quo (e.g., Wilson 2001a). The AUC had neither an ethnic nor religious motivation, which might have helped it survive longer. Even the leftist motivation of the FARC and others, as discussed above, helped those groups sustain themselves for decades. One problem with being a group that favors the status quo is when change (communist revolution, for example) seems less likely, this could result in less support for one's cause. Or, when the reactionary group replaces its target as the primary threat to civilians, civilians have less reason to support the reactionary group.

The state played a substantial role in the life of the AUC, from beginning to end. The group was generally not considered to be “state sponsored,”¹²³ but it had a complicated

¹²³ Daniel Byman, probably the foremost authority on state sponsorship of terrorist groups, does not mention Colombia in his book on the subject (2005). The relationship between the Colombian military and the AUC is of a similar type as the relationship between the British military and loyalist terrorist groups. However, there was a substantial difference in degree, perhaps due to the incapability of the Colombian state and the intensity of the

relationship with the government. It and other self-defense groups often colluded with certain military units or lower-level members of the military (e.g., U.S. Department of State 1999; Romero 2003). However, all such self-defense groups, while legalized in 1965, were outlawed in 1989. The Colombian government began negotiating with the AUC in 2003, and the demobilization process was carried out during the following years. If the government truly saw a value to the AUC, and was sponsoring it, the group would likely still exist today.

The AUC, like the FARC and many groups in Colombia, benefitted from the drug trade. Carlos Castaño, a leader of the group, famously claimed that 70 percent of its financing came from coca (Kotler 2000). However, also like the FARC, the AUC said that it did not make or sell drugs – it simply “taxed” those that do. “Logically, we impose a tax, but this doesn't make us drug traffickers,” said one AUC regional leader (Robberson 2000). However, there is substantial evidence that the AUC indeed trafficked drugs, with some leaders charged with exporting 17 tons of cocaine to the United States (Slevin 2003). The AUC greatly benefitted from the drug industry, and probably never would have lasted as long as it did, or gotten as large as it did, without money from drugs.¹²⁴

The size of the AUC, in terms of its membership, made it a formidable opponent to both the leftist groups and the government trying to force it to stand down. Most analysts say the organization peaked at about 20,000 members (Arnson 2005). It grew at such a fast rate that the Uribe government, in 2005, bragged that the group was “only” growing at 10 percent per year in

conflict. Many members of the military cooperated with the AUC, often savagely, but there is “no solid proof linking the Colombian federal government or Washington directly to the paramilitaries” (Rochlin 2003, 149).

¹²⁴ The AUC raised funds in a variety of manners, including receiving millions of dollars from U.S. corporations such as Coca-Cola and Chiquita (Leech 2011, 142). It is unclear to what extent this was simple extortion, or more nefarious on the part of the corporations. Regardless, the majority of the AUC's funds are believed to have come from drugs.

the first few years of its administration (Franco 2005, 23). These numbers helped the group absorb the losses from attacks from other groups, and the buyout of its members in government demobilization programs. The size of the group was repeatedly cited as an obstacle to ending the organization. For example, the U.S. ambassador to Colombia said that the estimated cost of demobilization would be about \$8,500 per individual demobilized (Wood 2005, 54). The group's size is likely a substantial reason why the process took years.

The organizational-network attributes discussed thus far clearly played an important role in the survival of the AUC. However, as with the FARC, other types of factors were consequential as well. First, the Colombian government was obviously central to the AUC's eventual demobilization. Organizational-network conditions likely helped the group survive as long as it did, through years of government negotiations, but ultimately the group succumbed to state pressure. The government's willingness and ability to negotiate was important for ending the AUC. Factors outside of the organizational-network model, including the bargaining environment, are discussed more in the chapter conclusion.

Ultimately, many factors explain the survival and failure of the AUC. Organizational and network attributes, such as adversarial relationships, drug profits, and its membership size, helped the group endure for 11 years. In the end, the state was able to get the group to give up its arms. Negotiations and international pressure were important. The AUC's deficiencies in some organizational-network attributes likely contributed to the state's success. If the AUC had more allies, a state sponsor, or some source of political motivation more enduring than the status quo, it might continue to exist today. It is worth noting that smaller self-defense groups still exist in Colombia; right-wing paramilitarism is still a threat. The largest self-defense organization, however, failed to survive past 2008.

4.2.5 Colombia cases conclusion

The FARC and the AUC show interesting contrasts regarding terrorist groups and their survival. Both groups survived through 2005 (the end of the quantitative study), with the FARC extant today and the AUC ending in 2008. Table 4.5 repeats the hypotheses explored in the Colombian group case studies, and indicates which hypotheses found support. The case studies suggest that both drug profits and each group's size contributed to each group's longevity. Ties to other terrorist groups also clearly helped the organizations. In terms of eigenvector centrality, the FARC had more ties to highly connected groups, such as the IRA, which helped it obtain resources that it otherwise might not have. Cooperative ties in particular helped both groups, and the FARC has had more of these types of relationships. Adversarial tie also provided new incentives to both groups, but in the AUC's case it was the organization's primary source of incentives – and seems to have been insufficient for that group's survival. Finally, regarding the interactions of the impact of ties with changes in state capabilities, the Colombian state strengthened in the 2000s with increased resources from the United States. Ties appears to have mattered more to terrorist groups in this era, as they used the benefits of relationships to survive in a more capable state environment.

Table 4.5. Hypotheses explored in Colombia group cases, and extent of support found

Hypothesis number	Hypothesis	Support for causal mechanisms as described in theory?	Note
	<i>Organizational hypotheses</i>		
4	A terrorist group involved in the drug business is less likely to end than a group not involved in the drug business.	Mostly yes	Drug income helped AUC survive, but it ultimately failed.
5	A larger terrorist group is less likely to end than a smaller terrorist group.	Yes	
	<i>Network hypotheses</i>		
6	A terrorist group is less likely to end if it is involved in more relationships with other terrorist groups (higher degree centrality).	Yes	
7	A terrorist group is less likely to end if there are fewer other terrorist groups in the same country (lower organizational density).	Mostly yes	The AUC ended when org. density was lower than it had been, but it was far above global average
8	A terrorist group is less likely to end if it has relationships with groups that are themselves connected to many groups (higher eigenvector centrality).	Yes	
9	A terrorist group is less likely to end with each additional terrorist group cooperative ally.	Yes	
10	A terrorist group is less likely to end if it is involved in an adversarial relationship with another terrorist group.	Mostly yes	Adversarial ties helped AUC survive, but it ultimately failed.
11	The survival-enhancing impact of relationships on terrorist group survival will increase in more capable states.	Yes	

One hypothesis with support, although the support is not as straightforward as that for other hypotheses, the organizational density assertion (H7). My argument suggests that groups should have better odds of survival in a less terrorist-group-dense environment. Colombia had its highest density in the late 1980s (during the Cold War), yet the FARC did not end at that time, and the AUC did not yet exist. (See Figure 4.2.) However, Colombia's organizational density is always six or higher, while the global average is less than four. Therefore, all of the groups in the country, regardless of year, face an especially dense environment. The FARC case study discussed the example of the ELN, which had a difficult time getting serious attention from the government in the face of other groups. This is consistent with the hypothesis. Additionally, as discussed in the AUC case study, the Colombian government felt pressure (from its own people and from the United States) to negotiate with terrorist groups to disband them, and this led to the fall of the AUC. If there were few or no other groups in the country, Colombia might not have dismantled the group. This is a different mechanism than that discussed in the theory section, but the anecdote still suggests that organizational density makes it more challenging for terrorist groups to survive.

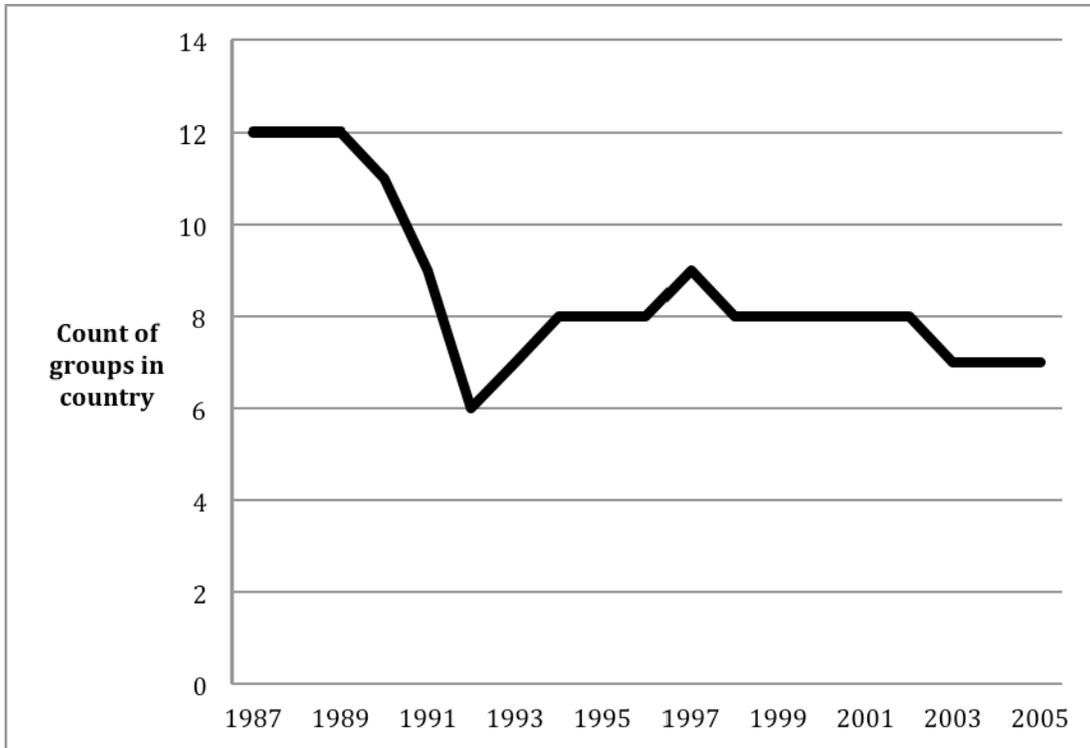


Figure 4.2. Colombia terrorist group organizational density, 1987-2005

The AUC ultimately failed, perhaps because of its lack of substantial cooperative ties and declining popular support. International conditions mattered as well, with U.S. government opinion toward the AUC changing after the 1990s. The closeness of the AUC to some military forces might have made it easier for the state to prosecute its leaders – when it decided to do so. (Factors outside of the organizational-network model are discussed more in the chapter conclusion.) Overall, many factors explain the specific ending of the AUC, but organizational and network factors offer important explanatory power regarding the longevity of both it and the FARC.

4.3 NORTHERN IRELAND: IRISH REPUBLICAN ARMY (IRA) AND ULSTER DEFENSE ASSOCIATION (UDA)

“I always felt the only way to beat terrorism was to terrorize the terrorist – and be better at it.” – Andy Tyrie, Ulster Defense Association member (Taylor 1999, 97)

“Officials believe that the IRA attacks on British servicemen have been carried out with ‘indispensable’ West German terrorist assistance...” (Owen and Evans 1988).

The terrorist groups of Northern Ireland killed more than 3,000 people over several decades, justifiably drawing a great deal of international attention.¹²⁵ That this scale of violence occurred in a developed country, the United Kingdom, is perhaps what makes it the most shocking. The Provisional Irish Republican Army, demanding independence from the U.K.’s rule, is the most infamous organization for having killed the most people, but 11 other groups carried out campaigns of violence as well. The back-and-forths between these groups, as well as intra-group fighting, contributed greatly to the death toll, and probably extended the duration of the conflict – and the very existence of the groups – substantially.

This section discusses the historical context behind the Troubles, and the terrorist groups involved. It then provides an overview of the attributes of all the terrorist groups. The case studies of the two terrorist groups, the Provisional Irish Republican Army (IRA)¹²⁶ and the Ulster Defense Association (UDA), follow this contextual information. These organizations are

¹²⁵ More than 3,500 people were killed between 1969 and 2001, when the bulk of the violence occurred. Over 3,000 of the fatalities are attributed to terrorist organizations.

http://cain.ulst.ac.uk/sutton/tables/Organisation_Responsible.html [Accessed September 11, 2011.]

¹²⁶ When authors use the term “IRA,” they are usually either referring to the Irish Republican Army of the early-1900s civil war, or the Provisional IRA. For more information see <http://cain.ulst.ac.uk/othelem/organ/iorgan.htm#ira> [Accessed September 11, 2011.]

important to understand because they both survived for decades in spite of substantial differences. The former was a nationalist group, cooperating with many other terrorist groups and in adversarial relationships as well, although it ended in 2005. The latter was a loyalist group that had many adversaries and few cooperative partners, but it survived five years longer than the IRA. These groups are in many ways representative of the 10 other groups in Northern Ireland, some of which are also discussed below in less detail.

The IRA and UDA cases permit exploration of a number of the hypotheses of this dissertation. Table 4.6 shows the hypotheses that are examined in detail during the Northern Ireland cases, since one or both of the analyzed groups have the attributes described in the hypotheses. (As with the Colombian cases, the groups and their attributes are discussed in more detail below, in each group's section.) The cases explore the same hypotheses as were explored in the Colombian cases, with the addition of the hypotheses on ethnic motivation (H1) and state sponsorship (H3). The only assertions of Chapter 2 that are not explored with the Northern Ireland groups are the idea that ethnic motivation should contribute to longevity more than religious motivation (H2) and the interaction hypothesis asserting that intergroup ties matter more in more autocratic states (H12).¹²⁷ As noted above, the hypotheses of Table 4.6 are not necessarily "tested" here, in the sense that I, for example, do not compare an ethnically motivated group with a non-ethnically motivated group to evaluate H1. Instead, I look at two ethnically motivated groups to see if this motivation helped them survive through the mechanisms described in the theory chapter. This is illustration. Other hypotheses are more directly tested. For example, regarding the hypothesis about drugs (H6), the IRA was not involved in the drug business, while the UDA was.

¹²⁷ These hypotheses are explored in the case studies of Pakistan terrorist groups.

Table 4.6. Hypotheses explored in Northern Ireland group cases

Hypothesis number	Hypothesis
	<i>Organizational hypotheses</i>
1	A terrorist group with an ethnic or religious motivation is less likely to end than a group with another type of motivation.
3	A terrorist group with a state sponsor is less likely to end than a group without a state sponsor.
4	A terrorist group involved in the drug business is less likely to end than a group not involved in the drug business.
5	A larger terrorist group is less likely to end than a smaller terrorist group.
	<i>Network hypotheses</i>
6	A terrorist group is less likely to end if it is involved in more relationships with other terrorist groups (higher degree centrality).
7	A terrorist group is less likely to end if there are fewer other terrorist groups in the same country (lower organizational density).
8	A terrorist group is less likely to end if it is has relationships with groups that are themselves connected to many groups (higher eigenvector centrality).
9	A terrorist group is less likely to end with each additional terrorist group cooperative ally.
10	A terrorist group is less likely to end if it is involved in an adversarial relationship with another terrorist group.
	<i>Network hypotheses, conditional on state attributes</i>
11	The survival-enhancing impact of relationships on terrorist group survival will increase in more capable states.

4.3.1 Northern Ireland background: Contested territory and identity

In the analyses of the previous chapter, terrorist groups in Northern Ireland were considered to be in the United Kingdom, because of incomplete country-level data on Northern Ireland. However, in this chapter I can consider how the Northern Ireland context, as well as the wider United Kingdom context, affected the groups of that area.

Northern Ireland is one of the four entities¹²⁸ of the United Kingdom. It is a small piece of territory, about the size of Connecticut.¹²⁹ Its population was only about 1.5 million during the years sampled in the quantitative study. This makes it less populous than almost every other country in the quantitative study.¹³⁰ The territory is within the United Kingdom, which is about average in terms of population. In terms of per-capita income, Northern Ireland is not as wealthy as the United Kingdom generally, but it is richer than most countries in the world, with a per-capita income of about \$17,000 in 1995. Furthermore, the United Kingdom focused considerable resources toward the security situation in Northern Ireland, making the government there especially equipped in terms of counterterrorism capabilities. In addition to Northern Ireland being more developed than most countries, it is also more democratic, with the United Kingdom as a whole rated very highly by both Freedom House and Polity.

In spite of Northern Ireland's high level of development and democracy, it has been an especially violent corner of Europe. Thousands of its inhabitants have been killed during several 20th-century episodes, as residents have fought over whether the proper identity of the territory is with the Republic of Ireland or the United Kingdom. Part of this dispute is based on geography, as Northern Ireland is located on the island of Ireland. Northern Ireland, long under British rule, experienced substantial English and Scottish immigration over the years (Kennedy-Pipe 1997, 2), and these immigrants – who tended to be Protestant – came to outnumber the Catholics.

¹²⁸ The other three are England, Scotland, and Wales. See the first footnote of this chapter for more discussion.

¹²⁹ Statistics for Northern Ireland come from the University of Ulster's Conflict Archive on the Internet (CAIN). <http://cain.ulst.ac.uk/ni/index.html> [Accessed September 10, 2011.]

¹³⁰ The only exceptions are Suriname, Cyprus, and Swaziland.

Those in Northern Ireland identifying with the Republic of Ireland are typically described as republicans or nationalists, while those preferring the status quo as part of the United Kingdom are called loyalists or unionists.¹³¹ Republicanism is highly associated with the Catholic community, and loyalism with the Protestant community, because these are the dominant religions in the Republic of Ireland and the United Kingdom respectively. It is important to note, however, that most analysts describe this violence as more “ethnic” than “religious.”¹³² For example, when Gallaher (2007, 30-31) discusses the term “loyalist,” she says that it refers to Protestants “in an ethnic sense.” This is because the violence is generally not carried out in the name of religion, but in the defense of one’s “community.” There have been religion-related consequences, such as loyalist terrorists attacking random Catholics, but these victims were chosen more for ease of target identification than because of a hatred of the religion or disagreement about the role of religion in government.¹³³

The debate over identity has turned violent repeatedly over the years, with the Irish Civil War in 1922-1923 killing several thousand, and more than 3,000 died during the final three decades of the 20th century in the so-called Troubles. In the late-1960s, the Catholic community began protesting its treatment as a minority group. Protests led to counter-protests by Protestant groups, protests became riots, and in August 1969, the British government sent the military into

¹³¹ Gallaher (2007, 30-31) distinguishes between the terms loyalist and unionist, saying that the former is more associated with the lower class, while the latter is used more for the middle class. Also, “loyalist” has more of an air of acceptance of violence, according to Gallaher. Most authors, however, use the terms interchangeably.

¹³² There are exceptions. For example, Juergensmeyer (2003) includes Northern Ireland in his study of religious terrorism. However, he also describes religious terrorists as “pious people dedicated to a moral vision of the world” (7), which does not correspond to most of the justifications for violence given by groups in Northern Ireland. Additionally, studies that have attempted to classify global samples of terrorist groups have generally classified these groups as nationalist (Jones and Libicki 2008) or ethnonationalist (Asal and Rethemeyer 2008).

¹³³ For example, a member of the Ulster Volunteer Force justifies his group’s targeting of Catholic civilians by arguing that republicans could attack security forces, but loyalists had a harder time identifying targets. “[I]t was much easier for the IRA to identify people in uniform than it was for the UVF or any other loyalist organization to actually identify IRA men” (Taylor 1999, 90)

Northern Ireland to restore order. This exacerbated problems, as both nationalists and loyalists exploited government mistakes to stir up support for their respective causes. In 1971, the British started internment (jailing suspected militants without trial) and one then-active military officer said this about its results: “It has in fact increased terrorist activity, perhaps boosted [IRA] recruitment, polarized further the Catholic and Protestant communities, and reduced the ranks of the much needed moderates” (Hamill 1985, 65). The violence of the Troubles waned in the mid-1970s, but then increased again in the 1980s.

A series of negotiations, particularly the 1998 Good Friday accords, helped end the majority of the political violence in Northern Ireland. The IRA gave up armed struggle, apparently permanently, in 2005. Some other groups followed suit. The negotiations were ultimately effective, but many factors explain why the terrorist groups involved lasted as long as they did – and while some gave up violence and others have not.

4.3.2 Northern Ireland terrorist groups overview

Northern Ireland had 12 terrorist groups operating in its territory between 1987 and 2005. This is rather phenomenal when one considers its population and geographical size. Furthermore, Northern Ireland is unique because all 12 of its groups were involved in the Troubles – the country had no Islamist groups, environmental groups, purely leftist groups, or any other type of group. These organizations were especially resilient. Because the conflict had started in the late 1960s, the Northern Ireland groups in the 1987-2005 sample were on average much older than terrorist groups elsewhere. However, as violence wended down in the 1990s, this did not mean the end of terrorist organizations in Northern Ireland. Groups there were only about half as

likely as groups in any other country to end, a 33 percent failure rate compared to the global average of 61 percent (review Table 4.2).

The terrorist groups of Northern Ireland had a good deal in common. They were unusually likely to have ties to other groups, cooperative but especially adversarial. Two-thirds of the groups had an adversary, compared to the global average of 15 percent. Furthermore, most of the groups have *multiple* adversaries. Interestingly, however, the groups tend to have low values for eigenvector centrality, the notion of how well-connected are a group's relationship partners. This is likely because most of the groups were relatively insulated – they mostly interacted with other groups in Northern Ireland.

All of the Northern Ireland terrorist groups are considered ethnically motivated, although religion played a role in the ethnic differences, and some groups were also substantially leftist. A quarter of the groups had a state sponsor, with some republicans armed by Libya (Mallie and McKittirck 2001, 67), and some loyalists armed by South Africa (e.g., United Press International 1989).¹³⁴ This is slightly higher than the average for groups in the total sample. The percent of groups involved in drug sales is higher than the global average, although lower than that of Colombia. The organizations were smaller, in terms of membership, than those in Colombia or Pakistan, but were about average globally.¹³⁵

In terms of the organizational-network model, the above attributes mostly suggest high likelihood of survival for these groups. Dense network connections (including having an

¹³⁴ Unlike in the Pakistan or Colombia situations, none of the groups were helped substantially by their own state (United Kingdom). Investigations suggest that there was some “turning a blind eye” toward loyalist groups, especially by low-level members of the security forces, but no substantial material support (Bruce 1992, chapter 8; 1993).

¹³⁵ This size difference could be in part due to Northern Ireland's small geographical area or population, and that the groups there were simply proportionate to these values. Alternatively, it is possible that the government's counterterrorism efforts prohibited the groups from growing any larger.

adversary) should help the groups. These ties are likely to be especially beneficial given the extremely capable state that the groups face. Ethnic motivations and state sponsorship should contribute to organizational longevity. The main factor that seems to work against the survival of these groups is the relatively high number of groups in the country – organizational density above the global average. However, there is also the issue of groups with multiple adversaries, which the tests in the quantitative chapter suggested could be a liability.

In order to examine the groups of Northern Ireland in more detail, I explore how these factors affected several specific terrorist organizations. First, I look at the Provisional Irish Republican Army and the Ulster Defense Association, two of the longest-surviving groups in the area. One is a republican group, the other loyalist. The Provisional Irish Republican Army essentially ended in 2005, after negotiations. The Ulster Defense Association appears to have given up violence in 2010. Table 4.7 shows attributes of the groups.

Table 4.7. IRA and UDA attributes, 1987-2005

	Global average	Irish Republican Army (IRA)	Ulster Defense Association (UDA)
<i>Group attributes</i>			
Ties (count)	1.43	7	5
Allies (count)	1.20	3	4
Adversary	.15	1	1
Eigenvector centrality	.016	.017	.012
Ethnic	.37	1	1
Religious	.26	0	0
State sponsorship	.17	1	1
Drugs	.06	0	1
Size (0-3 categorical)	.61	1	2
Age (count), maximum	10.1	38	35
Failure	.61	1	0^
<i>State attributes</i>			
State capability (GDPPC)	\$9,352	\$24,897*	\$24,897*
Regime type (FH 1-7)	4.12	6.71*	6.71*
Groups in country	3.84	9.63*	9.63*

* State attributes for Northern Ireland are actually from the whole UK.

^ UDA appears to have ended in 2010.

4.3.3 Terrorist group case study: IRA

The Provisional Irish Republican Army (IRA) was founded in 1969.¹³⁶ The IRA was responsible for more deaths than any other group in the Troubles, killing more than 1,700 people

¹³⁶ The organization split off of what was called the Irish Republican Army, but the latter group quickly declined in relevance – in part because the “Provos” used more violence. It called itself the Official IRA to differentiate itself from the Provos, and declared a ceasefire in 1972. For more information see <http://cain.ulst.ac.uk/othelem/organ/iorgan.htm#ira> [Accessed September 11, 2011.]

between 1969 and 2011, about half of all Troubles-related fatalities.¹³⁷ It is one of the longest-lasting groups in the sample, surviving 38 years. The case study gives us the opportunity to look at why the group survived so effectively – and also why it ended. Attributes of the organizational-network model help explain survival through the years, and partially explain the group’s specific demise, but a larger context of negotiation further explains the precise termination of the group.

The IRA has always had ties to other groups. Since its inception it was an adversary of the loyalist Ulster Volunteer Force (Bruce 1992, 14-19; Coogan 1995, 131), and it started fighting the loyalist Ulster Defense Association (UDA) once it was founded in 1971. Cooperative ties to other terrorist groups came shortly after, with Spain’s ETA and the IRA reportedly teaming up as early as 1972 (Martinez-Soler 1984). Links to continental Europe proved valuable to the IRA. For example, it used its connections to the West German Red Army Faction to kill off-duty British troops in West Germany (Owen and Evans 1988). These cooperative ties helped the IRA carry out acts that would have been more difficult to accomplish in security-heightened Northern Ireland. The IRA’s ties were global. In the early 2000s, for example, its members trained with the FARC in Colombia (Seper 2002).

While the IRA benefitted from cooperative relationships throughout the world, its adversarial relationships – at home in Northern Ireland – were always a central part of the group’s existence. The creation of the IRA was in some ways a response to loyalist attacks. When the republicans were not as violent, in the late 1960s, graffiti in Northern Ireland suggested that IRA stood for “I Ran Away,” because there was no violent response to loyalist

¹³⁷ Fatality numbers come from Malcolm Sutton’s updated database (Sutton 1994). The IRA is attributed with 1,711 deaths between 1969 and 2001 out of a total 3,529, and supplementary data attribute several possible deaths to them in 2003 and 2005. <http://cain.ulst.ac.uk/sutton/> [Accessed September 11, 2011.]

attacks (Taylor 1999, 73). This changed with the split off of the (Provisional) IRA. One member of the group describes why he participated:

“Every day [violence] was being acted upon my community, every day. . . . What I needed was to think how can I stop what is happening to my community, and the lesson was that might be right, whoever inflicts the most (Zurawski 2002).

In 1971, one of the deadliest bombings of the Troubles, the bombing of McGurk’s bar that killed 16 people, occurred in the middle of a tit-for-tat between the IRA and the Ulster Volunteer Force (UVF) (Coogan 1995, 131). The UVF had destroyed McGurk’s in retaliation for the IRA bombing of another bar. The bombing of McGurk’s, in spite of its death toll, did not bring an end to the violence (as my argument suggests). One week later, the IRA took revenge by bombing a furniture company, killing four people, including two babies. Within a week of that attack, the UVF responded, bombing a bar in nationalist West Belfast (Taylor 1999, 87-93). These attacks consistently inspired Catholics to join nationalist groups, and Protestants to join loyalist groups, in order for each type of person to protect their community and/or carry out revenge (e.g., Taylor 1999, 91; Zurawski 2002).

In addition to adversarial relationships carried out on third parties – such as the Protestant civilians at various bars – the IRA also directly attacked leaders of groups such as the UVF and the Ulster Defense Association (UDA). During 1993, “for months, hardly a week passed without IRA gangs attempting to gun down or blow up those they believed to be associated with the UDA or UVF” (McKittrick and McVea 2000, 192). The UDA and UVF responded with similar attacks on IRA leadership, but decades of such attacks had proved unable to actually destroy

most of these organizations. “Even the best ‘hits’ disrupt the IRA’s structure for only a few weeks before new leaders fill the vacancies” (Bruce 1992, 288).

Regarding the groups with whom the IRA had its ties – its eigenvector centrality – it had some ties to highly connected groups, but the number of such ties decreased over time. This was especially true after the Cold War ended, as most of its continental Europe allies disappeared. By the late 1990s, the only groups outside of Northern Ireland that the IRA was in relationships with were ETA – no longer as powerful as it used to be – and the FARC. The IRA’s help in earlier decades from groups such as the Red Army Faction was valuable, suggesting the importance of having well-connected ties, but as some of these groups ceased to exist, the remaining ties were insufficient to help the IRA survive.

The strength of the state likely conditioned the impact of network relations, meaning that the ties were especially helpful to the IRA because it was facing an especially capable state. Its ties to continental European groups, as discussed above, enabled the IRA to attack British troops in Germany and other continental states. Hitting these softer targets was easier for the IRA than attacking troops in Northern Ireland or England, as these areas were under high security in anticipation of IRA attacks. Network ties seem to have been especially important since the IRA was facing an unusually capable state, which is consistent with my argument.

In addition to Northern Ireland being unusually capable state, it is also unusually democratic. This poses a challenge for my argument because I argue that network ties should matter more in less-democratic states. This is because groups in democracies should generally be more likely to survive, given the constraints on the state.¹³⁸ Taking both capability and

¹³⁸ The quantitative tests did not find support for the argument that terrorist group survival depends on state regime type. It is likely that regime type has multiple and contradictory effects on group survival.

regime type into consideration, it could be that the conditioning effects of each state attribute washes the other out, meaning that the impact of relationships on group survival is near the global average. This is difficult to assess.

Beyond relationships, the IRA had other factors in the organizational-network model working in its favor. Its ethnic motivation meant that it had a wider community that it could turn to for support and recruitment, and this occurred especially when the Catholic population was pressured by either government forces or loyalist terrorism as discussed above. Furthermore, Kennedy-Pipe (1997, 147) argues that the IRA and other nationalists had the advantage of having “a coherent target, to destroy British rule in Ireland and unite the Irish peoples,” while the loyalists had only “negative ambition,” which was to keep the status quo.

The IRA also benefitted substantially from state sponsorship. In particular, Libya sent four separate arms shipments to the organization in the mid-1980s, bringing about 1,000 rifles, as well as plastic explosives, heavy machine guns, anti-aircraft guns, and even flamethrowers. This left the IRA better armed than it had ever been (Mallie and McKittirck 2001, 67). In addition to support from Libya, the IRA received substantial funding from the Irish-American community in the United States. These resources meant the IRA had to rely less on criminal activity to fund its terrorism than did the loyalist groups (Gallagher 2007, 178).

The IRA’s survival also was helped by its size, although as its membership decreased with time, which likely hastened its eventual failure. It had as many as 1,500 members in the 1970s,¹³⁹ so any newer competing group automatically had a substantial recruitment hurdle. The IRA’s many members helped it carry out attacks throughout Northern Ireland, and indeed

¹³⁹ This number comes from the Conflict Archive on the Internet (CAIN).
<http://cain.ulst.ac.uk/issues/violence/paramilitary2.htm> [Accessed Sept. 23, 2011.]

Europe, which kept it visible and therefore relevant.¹⁴⁰ Membership declined at times, however, with about 750 members reported in the 1980s. The IRA's substantial membership (especially earlier in its lifetime) helped it endure in the face of hundreds of arrests, but the group apparently had a difficult time replacing all of its members as the years continued.

Regarding the number of groups in the country, as discussed, Northern Ireland has been an especially dense terrorist group environment, and the organizational density increased in the late-1990s. (See Figure 4.3.) Originally, the IRA was the "only game in town" as far as nationalist terrorism in Northern Ireland, but starting in the mid-1970s, and then even more so in the 1980s and 1990s, the IRA's support base was diffused among the various other nationalist groups. Nationalists of the political left-wing could support the Irish National Liberation Army (INLA, founded 1974) and nationalists who felt the IRA were too moderate could switch their support to the Continuity IRA (founded 1986) or the Real IRA (founded 1998). Increased organizational density likely hurt the IRA and increased the chances it would give up violence.

¹⁴⁰ Hoffman (2006, 248) succinctly describes the importance of effective attacks to visibility: "The terrorists' ability to attract – and moreover, to continue to attract – attention is most often predicated on the success of their attacks."

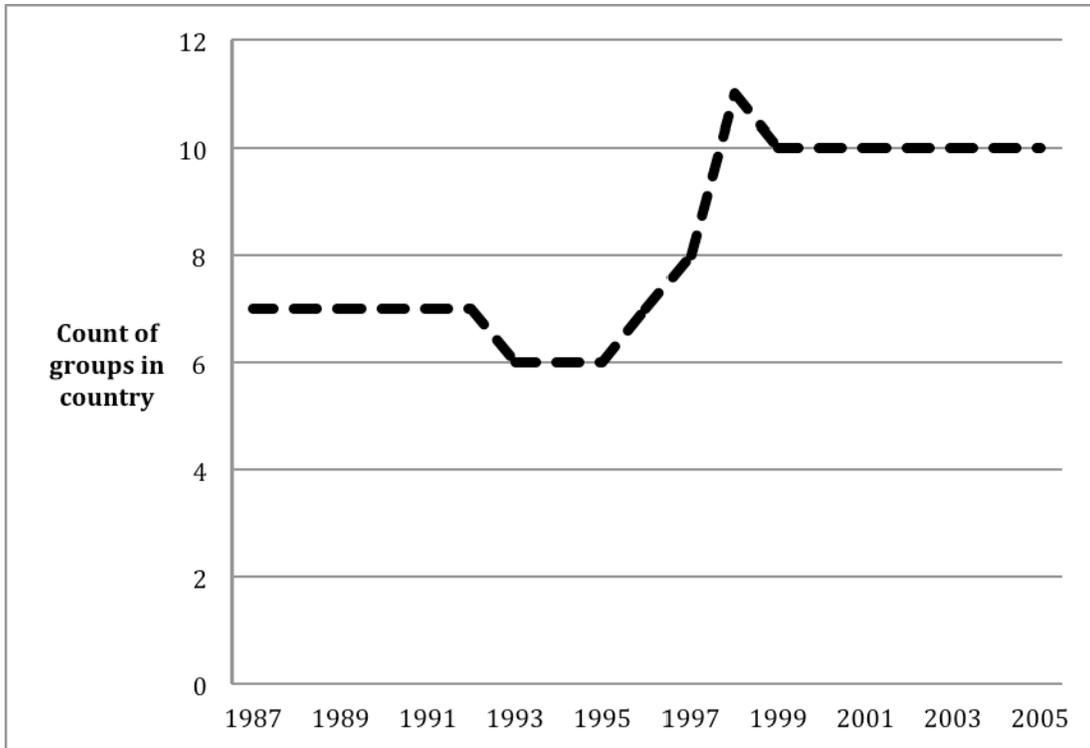


Figure 4.3. Northern Ireland terrorist group organizational density, 1987-2005

In the end, many factors explain the IRA’s longevity and failure. Its survival for decades was a function of many elements of the organizational-network model. Its relationships, ethnic motivation, state sponsorship, and size all contributed. Changes in some of the same factors, along with changing international conditions, came together to pressure the IRA to finally give up violence for good, as it ultimately did in 2005. More specific aspects of the negotiations, and their ultimate success, are beyond the organizational-network and are therefore discussed in the conclusion.

4.3.4 Terrorist group case study: UDA

The Ulster Defense Association (UDA) was founded in 1971. It was formed to defend Protestants from the IRA, yet the IRA ended in 2005 and the UDA continued to be armed until at least 2010.¹⁴¹ The UDA's survival can be explained in large part through the organizational-network model. The group is similar in many ways to the half-dozen or so other loyalist groups that have existed in Northern Ireland in recent decades, so exploring the UDA's longevity can help us understand the other loyalist groups, as well as terrorist groups generally.

The UDA was a prominent organization from the very beginning, largely because of the environment of sectarian violence and IRA-dominated headlines. It was the largest terrorist group (in terms of membership) in Northern Ireland. Loyalists joined the UDA as a direct reaction to IRA violence (Bruce 1992, 216), which was at its peak in the early 1970s. Billy McQuiston, for example, witnessed the aftermath of an IRA bombing in 1971, and immediately went to enlist in the UDA. After his swearing-in ceremony, he describes his emotions as this: "I remember when I came out, my heart was swollen with pride that I was going to do something. I was going to fight back" (Taylor 1999, 91). This source of motivation kept the UDA mobilized in the early 1970s, but how did the organization manage to stay relevant when IRA violence decreased substantially starting in the mid-1970s?

The UDA's supposed reason for existence was to defend the Protestant community from the IRA. However, it started engaging in retaliatory attacks on Catholics after IRA killings, and the tit-for-tat of sectarian violence became difficult to stop. Part of the spiral of violence can be

¹⁴¹ The Global Terrorism Database contains attacks suspected to have been perpetrated by the UDA through 2007. <http://www.start.umd.edu/gtd/search/Results.aspx?perpetrator=628> [Accessed September 23, 2011.] In 2010, the UDA announced that it was decommissioning its weapons.

explained by how people react to attacks on their community. One study of residents of Northern Ireland finds that being a victim of political violence, or having a friend or family member victimized, makes a person much more likely to support paramilitary groups and oppose decommissioning of weapons (Hayes and McAllister 2001). This suggests that even if violence was at low levels, the back-and-forth could continue for years. Some group members said that they thought their violence could defeat opposing groups. “I always felt the only way to beat terrorism was to terrorize the terrorist – and be better at it,” said one UDA member (Taylor 1999, 97). This strategy seemed to be counterproductive.

Even when the IRA was considering a ceasefire in the early 1990s, the UDA kept up its end of the adversarial relationship. In other words, the UDA did not follow the IRA’s peace efforts in a tit-for-tat fashion.¹⁴² On the contrary, it used the opportunity to attack more. UDA leader Johnny Adair vocalized his reason for continuing violence, in spite of the IRA’s 1994 ceasefire:

“These people had slaughtered our people and gotten away with it, and here we are, where we’re getting it right, where we’re taking the war right to their doorstep... from Sinn Fein to the IRA, scoring big time – why call a cease fire?”
(Mallie and McKittirck 2001, 170)

While the UDA’s early existence largely was based around its adversarial relationship with the IRA, relations with other groups affected it as well. As new nationalist groups appeared, such as the INLA and the Irish People’s Liberation Organization (IPLO), the UDA

¹⁴² The UDA did at times declare ceasefires, such as six weeks after the August 1994 IRA ceasefire (McKittirck and McVea 2000, 179, but these usually did not last long. One group would break a ceasefire, and the other would respond.

fought with them all. It also sometimes violently feuded with other loyalist groups, such as the UVF in the early 1970s (Coogan 1995, 56) and multiple groups in the late 1990s and early 2000s (McKittrick and McVea 2000, 228-229; Gallaher 2007, 13). These violent rivalries gave additional purpose to the UDA, consistent with the purposive incentive argument in Chapter 2.

While most of its ties to other groups were adversarial, the UDA also benefitted from a few cooperative relationships. During the 1980s and the 1990s, it was aligned with the UVF. For example, in 1989, British police reported that the two groups were “jointly planning assassinations” (Dettmer 1989). The groups also shared arms shipments that they arranged from Libya (The Guardian 1988).

The case of the UDA does not provide much support for the importance of eigenvector centrality. The UDA’s longevity does not seem to have been explained by the number of ties that its allies and adversaries had. The most-connected group with whom it had ties was the IRA, and this group’s many ties might have contributed to the UDA’s survival, since the UDA survived in large part because of the IRA threat. However, it seems likely that the UDA would have survived just as long by fighting with other nationalist groups such as the INLA and allying with other loyalists such as the UVF. None of these groups was especially well connected.

Regarding the interaction of state attributes with network ties, it seems likely that the relationships had an especially strong impact on survival because the groups were facing an unusually strong state. Just as with the IRA, the loyalist groups also likely benefited more from relationships than did groups in less-capable states.¹⁴³ Regarding the interaction of regime type

¹⁴³ One should not assume that loyalist groups did not have to worry about counterterrorism. While there were some UDA members with ties to officials, this could also be a disadvantage. For example, Kennedy-Pipe (1997, 143-144) points out that since the authorities and loyalists come from the same community, it can be easier for the

and relationships, since Northern Ireland was a democracy, my argument suggests that relationships should not have mattered as much here. As suggested regarding the IRA, it could be that between the strong state and the permissive regime type, one effect “washes out” the other, and terrorist group ties matter about as much in this state as they did on average elsewhere.

Beyond network ties, a number of other factors helped the UDA survive. The salience of its ethnic motivation contributed substantially to mobilization efforts. Many group members joined the group because they feared for the very safety of their community. They wanted to “protect their country and people from republican terrorists” (Bruce 1992, 216). Andy Tyrie, an early UDA recruit and later a leader, said he joined “because I felt that Protestants in these areas were in danger and they needed all the help they could possibly get” (Taylor 1999, 83-84). The sense of community and common identity between group members contributed to loyalty, and paradoxically led many to oppose the peace process, out of fear of being labeled a “traitor” by the community (Gallaher 2007, 16). Ethnic goals helped the UDA survive.

State support also helped the UDA. The South African government sold arms to the UDA and its loyalist counterparts in the late 1980s (United Press International 1989; McDonald 2004). These new weapons were at least part of the reason, according to one journalist and expert on Northern Ireland, that the UDA and UVF killed more people in 1993 than the IRA did (McDonald 2004). The UDA at times benefitted from British security forces “turning a blind eye,” or a few junior soldiers providing assistance such as lists of suspected IRA members, but

state to find and convict loyalists. Conviction rates for loyalists were often higher than those for republicans. See also Bruce (1992, 222-224).

there was not substantial or official British support for the UDA (Bruce 1992, esp. Ch. 8).¹⁴⁴ In this sense, the loyalist groups did not have the advantage offered to many Pakistani groups, or the self-defense groups in Colombia, of support from some elements of its government. South African aid, however, was helpful while it lasted.

The UDA also supported itself with drug dealing (Young and McHugh 2010). There are no reports of UDA involvement in drug trafficking until the 1990s, which is interesting because this is when the organization's political relevance declined as the republican threat diminished. This is consistent with my suggestion that drug trafficking is a (poor) substitute for popular support. The UDA was "heavily involved" in criminal activity, including drug dealing, and this seemed to be crucial to its funding in recent decades (Young and McHugh 2010). By the early 2000s, the UDA and UVF were attacking each other over control of the illegal drug market (Clarke 2000, 2002). Both groups were also heavily involved in extortion. The UVF justified extortion, even in the relative peace after 1998, by saying that it still needed guns – and argued that the IRA had better access to arms dealers than loyalists did (Gallaher 2007, 178).

The UDA's size also likely played a role in helping it survive. It was not only the largest *loyalist* terrorist group, but the largest terrorist group in Northern Ireland, with tens of thousands of members (Phillips 1989). This helped it weather the arrest and killing of its members, as well as the splintering that crippled smaller groups such as the IPLO and the INLA (e.g., Scotsman 1994).

An additional factor contributing to the longevity of the UDA was its adjustment of political goals – the perception of threats from non-White immigrants, for example. The UDA

¹⁴⁴ McKittrick (1987) notes that of the thousands of loyalists that passed through jails in Northern Ireland, "fewer than half a dozen" attempted to claim that the security forces were involved with their crimes – in spite of the fact that this could reduce their own culpability. "None of the claims has stood up to scrutiny."

was “formed to defend our communities” (Young and McHugh 2010), which is a rather general motivation, but this of course implicitly referred to defense from the *republican* attacks so prominent in the early 1970s. With almost no republican violence in recent years, the UDA has found new threats.¹⁴⁵ In 2009, the youth wing of the UDA sent a letter to immigrant community centers in Belfast, which included the following declaration:

“No sympathy for foreigners, get out of our Queen's country before [a Protestant holiday]. Other than that your building will be blown up. Keep Northern Ireland white. Northern Ireland is only for white British” (Sonwalkar 2009).

This particular threat was not followed with actual bombs, but there have been frequent attacks on immigrants in Protestant communities, such as the African, Asian, Polish, and Roma/gypsies (McDonald 2011; Pogatchnik 2009). The loyalist groups have taken a lead role in the violence, even explicitly comparing immigrants to the IRA. One UVF flier claimed that the Asian immigrants had done to a Protestant community “more damage than 35 years of the IRA's [violence]” (Gallagher 2007, 177). Organizations often adjust their missions to stay relevant – this is consistent with basic Weberian organizational survival – and terrorist groups are no different. The UDA's shifts in this regard have helped it stay somewhat relevant in the post-IRA years.

Overall, the UDA survived almost 40 years, outliving the IRA, for a variety of reasons. One of the most important factors explaining the group's longevity was its adversarial relationships. Fighting republican groups (originally, only the IRA) was its first mission, but the

¹⁴⁵ This is consistent with Bruce's (1992, 286) statement: “A major impetus to pro-state terrorism is the sense of being under threat...”

group also kept occupied in later years by fighting its fellow loyalist groups as well. Its ethnic motivation was important, as the loyalist community provided a support base. State sponsorship and the group's size helped as well. Finally, the UDA's willingness to update its mission – from attacking the IRA to attacking all republicans, from attacking republicans to attacking non-White immigrants – also kept its members motivated.

4.3.5 Northern Ireland cases conclusion

The IRA and the UDA provide interesting illustrations of how organizational and network attributes helped two different groups stay mobilized for decades. While hypotheses were not “tested” in a controlled environment as they were in the large-n studies, the case studies provided the opportunity to see if causal mechanisms functioned as described in the theory chapter. Table 4.8 repeats the hypotheses explored in these case studies, and indicate to what extent their causal mechanisms found support here.

Table 4.8. Hypotheses explored in Northern Ireland group cases, and extent of support found

Hypothesis number	Hypothesis	Support for causal mechanisms?	Note
	<i>Organizational hypotheses</i>		
1	A terrorist group with an ethnic or religious motivation is less likely to end than a group with another type of motivation.	Yes	
3	A terrorist group with a state sponsor is less likely to end than a group without a state sponsor.	Yes	
4	A terrorist group involved in the drug business is less likely to end than a group not involved in the drug business.	Yes	
5	A larger terrorist group is less likely to end than a smaller terrorist group.	Yes	
	<i>Network hypotheses</i>		
6	A terrorist group is less likely to end if it is involved in more relationships with other terrorist groups (higher degree centrality).	Yes	
7	A terrorist group is less likely to end if there are fewer other terrorist groups in the same country (lower organizational density).	Yes	
8	A terrorist group is less likely to end if it has relationships with groups that are themselves connected to many groups (higher eigenvector centrality).	Mixed	IRA received benefits from highly-connected allies, but UDA survived longer without any such ties
9	A terrorist group is less likely to end with each additional terrorist group cooperative ally.	Yes	
10	A terrorist group is less likely to end if it is involved in an adversarial relationship with another terrorist group.	Yes	
	<i>Network hypotheses, conditional on state attributes</i>		
11	The survival-enhancing impact of relationships on terrorist group survival will increase in more capable states.	Yes	

The cases suggested that both groups benefitted substantially from their ethnic motivations. State sponsorship also helped both groups, while the state assistance lasted. Profits from drug business also appears to have contributed to the longevity of the UDA, although it is unclear if this income source would have been sufficient for the group's survival. Large group membership (size) helped both groups, with the UDA larger than the IRA. As the IRA declined in size over time, it was weaker relative to the state, contributing to its ultimate end. Intergroup relationships contributed to the longevity of both organizations. The IRA in particular benefitted from cooperative ties, but both groups thrived on adversarial relationships. The IRA also drew advantages from its ties to well-connected groups, in terms of eigenvector centrality. For both organizations, intergroup relationships were especially helpful given that they faced such a capable state. Finally, regarding organizational density, the crowded terrorist group environment starting in the 1990s seems to have put pressure on both groups, contributing to the end of the IRA at least.

During the 1990s and 2000s, for a number of reasons, these groups weakened. The IRA eventually ended, in 2005. Years of bargaining involving international participants played a role. As the UDA's popular support declined with time, it attempted to supplant this resource with drug money. It also adopted new motivations by identifying new threats; instead of Catholics or republicans, it turned its sights on immigrants from Asia and elsewhere. These substitutions appear to be insufficient for its survival as a terrorist group, as it announced in 2010 that it was giving up violence. Time will tell if there is a relapse. Overall, the IRA and UDA were unusual among the world's terrorist groups in that they survived for decades. This longevity seems to be in large part a result of factors from the organization-network model.

4.4 PAKISTAN: JAMMU AND KASHMIR LIBERATION FRONT (JKLF) AND LASHKAR-E-TAIBA (LET)

“Rivalries soon developed among these groups for financial and political reasons, but for Pakistan it was a 'healthy' competition that led to increased subversive operations against Indian forces in Kashmir” (Abbas 2004, 202).

“LeT... stepped up its terrorist campaign against the Indian mainland from 2005 onwards. The majority of these attacks were done in concert with locally based actors” (Tankel 2009).

The terrorist groups of Pakistan are perhaps the most important in the world to understand. As the host of al-Qaeda since late 2001, this country has been the primary locus of the Fourth Wave of terrorism.¹⁴⁶ Pakistan’s support of terrorist groups extends back decades, and its use of terrorist groups for proxy wars has created a setting where terrorist groups thrive. Additionally, the terrorist group environment is critical to international politics, as terrorist activities could easily trigger an international war, including nuclear conflict with India (Cronin 2009, 161-162).

This section discusses the importance of Pakistan generally. It then discusses attributes of the Pakistani sub-sample of terrorist groups. After this contextual information, the case studies are presented on two terrorist groups: the Jammu and Kashmir Liberation Front and Lashkar-e-Taiba. These groups are important to understand because at different times each was considered the most important group in Kashmir – the territory claimed by both Pakistan and

¹⁴⁶ Rapoport’s (2004) four waves of terrorism are anarchist, anti-colonial, new left, and religious.

India. The analysis of these groups and their survival shows overall support for the organizational-network model. There are some exceptions, such as a lack of a strong role of adversarial relationships in these two cases (although this can be explained by the conditioning impact of state factors). Additionally, the cases show that other factors, such as the Islamicization of the Kashmir conflict, played a role as well.

Unlike the previous case studies, the studies of JKLF and LeT include exploration of *all* of the hypotheses of this dissertation. Table 4.9 repeats the dissertation's 12 hypotheses. All of the attributes of the hypotheses are present in at least one of the two terrorist groups. However, note that H1 is not "tested" in the sense that an ethno/religious group is not compared with a group that is neither ethnically nor religiously motivated. Both JKLF and LeT have ethnic motivations. However, as with the IRA and UDA cases, the Pakistani group cases provide the opportunity to illustrate how ethnic and religious motivations played a role for these groups' longevity. Overall, the JKLF and LeT cases include many interesting elements, including those absent in previous case studies, such as the ability to observe intergroup relationships in the face of an autocratic government (H12).

Table 4.9. Hypotheses explored in Pakistan group cases (all dissertation hypotheses)

Hypothesis number	Hypothesis
	<i>Organizational hypotheses</i>
1	A terrorist group with an ethnic or religious motivation is less likely to end than a group with another type of motivation.
2	The impact of ethnic motivation on terrorist group survival is stronger than the impact of religious motivation on terrorist group survival.
3	A terrorist group with a state sponsor is less likely to end than a group without a state sponsor.
4	A terrorist group involved in the drug business is less likely to end than a group not involved in the drug business.
5	A larger terrorist group is less likely to end than a smaller terrorist group.
	<i>Network hypotheses</i>
6	A terrorist group is less likely to end if it is involved in more relationships with other terrorist groups (higher degree centrality).
7	A terrorist group is less likely to end if there are fewer other terrorist groups in the same country (lower organizational density).
8	A terrorist group is less likely to end if it is has relationships with groups that are themselves connected to many groups (higher eigenvector centrality).
9	A terrorist group is less likely to end with each additional terrorist group cooperative ally.
10	A terrorist group is less likely to end if it is involved in an adversarial relationship with another terrorist group.
	<i>Network hypotheses, conditional on state attributes</i>
11	The survival-enhancing impact of relationships on terrorist group survival will increase in more capable states.
12	The survival-enhancing impact of relationships on terrorist group survival will increase in more autocratic states.

4.4.1 Pakistan background: Partition, religion, and Afghanistan

Pakistan is a young state, created in 1947. It is also relatively small, not even in the top 30 states in terms of geographic size. It is one of the poorest countries in the world, with a current per capita GDP of about \$2,500. However, Pakistan remains an important focus of international politics. Its population is the sixth largest of any state, its border issues with India have turned into international wars, and its intelligence service has supported terrorist groups in both India and Afghanistan. Pakistan's regime type fluctuations have also caused concern, as it has shifted from democracy to military dictatorship several times in recent decades. (See Figure 4.1.) These issues greatly influence the terrorist group context in Pakistan.

Many sources of conflict in Pakistan are historical and regional issues. First is its relationship with India. When the British left India, they carved off the majority-Muslim area of the subcontinent to be its own state, Pakistan, to avoid problems inside majority Hindu India. Ethnic partition often simply converts domestic conflict into international conflict (Kumar 1997), and this is what has happened between India and Pakistan. The two states have fought each other repeatedly, and Pakistan supports terrorist groups that attack Indian targets (e.g., Saigol 2006, 33-34; Hussain 2010, 58). The disputed territory of Jammu and Kashmir (hereafter simply Kashmir) is a particular source of conflict.

A second and related historical problem that Pakistan grapples with is its identity as a Muslim state. A number of contradictions underlie this identity, from its many relatively secular leaders¹⁴⁷ to its ethnic cleavages that have been unable to be resolved in spite of a common

¹⁴⁷ Muhammad Ali Jinnah, Pakistan's first leader, reportedly drank, smoke cigarettes, and was not a practicing Muslim. Pervez Musharraf, who led the country from 1999-2008, reportedly drank whisky, owned a dog named

religion.¹⁴⁸ Beyond ethnic divides, Pakistan has a Sunni-Shia split, with about 75 percent of the Muslims being Sunni. A spiral of tit-for-tat violence between Sunni and Shia groups started in the late 1980s (Abbas 2004, 204-206). More recently, and more consequentially for Pakistan-India relations, religion has played an increasingly important role in the conflict over Kashmir (Saigol 2006, 26).

The third issue that continues to plague Pakistan is its unresolved Western border with Afghanistan. In particular, the border cuts in half the ethnic Pashtun population, which is the support base of the Taliban.¹⁴⁹ The border area is an extremely rugged environment, far from the more industrialized Pakistani South. Pakistan has never made much of an effort to govern this region, the so-called frontier and tribal areas. The remoteness of the area has made it a perfect hiding spot for groups such as the Taliban and al-Qaeda.

The final historical phenomenon affecting Pakistan today is its involvement in conflicts in Afghanistan. Between 1979 and 1989, the Pakistani Inter-Services Intelligence trained and armed perhaps 100,000 fighters to resist the Soviet occupation (Riedel 2011, 23-25). The United States and other countries paid for this mission. The war was framed as a religious battle, drawing fighters, the Mujahedin, from throughout the Muslim world (Hussain 2010, 18). When the Soviets withdrew in 1989, Mujahedin including Osama bin Ladin would go on to found or

Whisky, looked up to Turkey's secular icon Ataturk, and occasionally sent out Christmas cards (Riedel 2011, 4-5, 62-63)

¹⁴⁸ Saigol (2006, 17-18) argues that a consistent problem has been a "near-total conflation of Pakistani with Punjabi identity," when ethnic Punjabs make up only about 45 percent of the population. It is a plurality, but other substantial ethnic groups are the Pashtuns and Sinhdis, each of which comprises about 15 percent of the population.

¹⁴⁹ The Pakistan/Afghanistan border, the so-called Durand line created by the British in 1893, has never been acknowledged by Afghanistan (Reidel 2011, 22).

join terrorist groups.¹⁵⁰ The fighters remaining in the Afghanistan-Pakistan area, as well as the surplus of weaponry, laid the groundwork for violence that continues today. The 2001 U.S. invasion of Afghanistan, prompted by Taliban support for al-Qaeda, has reinitiated many of the same dynamics, as fighters again travel to Afghanistan and Pakistan to battle a foreign superpower.

4.4.2 Pakistan terrorist groups overview

The issues discussed above have apparently made Pakistan fertile ground for the emergence of terrorist groups. With 17 terrorist groups operating in Pakistan at some point between 1987 and 2005, Pakistan presents a much more dense terrorist group environment than most other countries. (Review Table 4.2.) These groups are also much more durable than groups elsewhere. Of the 17 groups operating in Pakistan during this period, only four, or about 24 percent of the groups, ended. This is substantially different from the average failure rate for all countries. Of the global sample, 61 percent of groups fail.

While having a below-average failure rate, Pakistani groups are above average in almost every other category of the organizational-network model. They are much more likely than other groups to have ties to other groups, religious or ethnic motivations, a state sponsor, or to be larger in terms of group membership. In particular, relationships, eigenvector centrality, religious motivations, and state sponsorship are far above the global averages. Additionally, as mentioned above, the number of terrorist groups in Pakistan is much higher than the global

¹⁵⁰ Pakistani journalist Imtiaz Gul describes the shift from anti-Soviet Mujehdin to wider terrorism as similar to "...putting the Afghans and their Muslim brothers across the world on the drug of jihad and then asking them to self-detoxify..." (Gul 2009, 162).

average. According to my argument, the relationships, ethnic motivations, and larger size should help these groups survive, but the density of groups in the country should be harmful to them. This mixed prognosis is examined in more detail in the analyses of specific groups.

Another way to view the terrorist organizations of Pakistan, collectively, is to consider groups that operate substantially in the country but are not considered to operate “primarily” in Pakistan. The country is unique, compared to most other states, in that there are many groups that operate in Pakistan almost as much as they do in a neighboring country. While the quantitative analysis did not take such issues into consideration, here I can briefly view the attributes of “Pakistani” groups, where Pakistani is more liberally defined. Table 4.2 shows descriptive information for the 33 groups that operated in Pakistan, with the 17 “primarily” in Pakistan and 16 others that I have determined also operate substantially in Pakistan.¹⁵¹ Interestingly, the attributes of this larger sample are similar to 17-group sample. The one exception is that the larger sample includes groups involved in illegal drugs. Overall, this peek at the characteristics of the Pakistani groups, more broadly defined, illustrates that Pakistani terrorism is indeed a regional issue, and the attributes of these groups suggest they are not likely to be short-lived.

Below I examine two of the most prominent Pakistani groups, the Jammu and Kashmir Liberation Front and Lashkar-e-Taiba. Each group was considered the most powerful group in the Kashmiri region at one time or another. However, the JKLF disintegrated in 1994, while LeT seems to have only gotten stronger. These groups differ in important ways – their motivations, their relationship with Pakistan, and their network connections – so they make interesting cases to compare. The overall characteristics of the groups are shown in Table 4.10.

¹⁵¹ Of the 16 groups, 11 are primarily located in India, four in Afghanistan, and one in Uzbekistan.

Table 4.10. JKLF and LeT attributes, 1987-2005

	Global average	Jammu and Kashmir Liberation Front (JKLF)	Lakshar-e-Taiba (LeT)
<i>Group attributes</i>			
Ties (count)	1.43	4	9
Allies (count)	1.20	2	9
Adversary	.15	1	1
Eigenvector centrality	.016	0	.140
Ethnic	.37	1	1
Religious	.26	0	1
State sponsorship	.17	1	1
Drugs	.06	0	1
Size (0-3 categorical)	.61	2	1
Age (count), maximum	10.1	13	17
Failure	.61	1	0
<i>State attributes</i>			
State capability (GDPPC)	\$9,352	\$2,691	\$2,691
Regime type (FH 1-7)	4.12	3.26	3.26
Groups in country	3.84	9.92	9.92

4.4.3 Terrorist group case study: JKLF

The Jammu and Kashmir Liberation Front (JKLF) was founded in 1977, intent on the creation of an independent state of Jammu and Kashmir between Pakistan and India. In the late 1970s and 1980s, JKLF was the dominant terrorist group in Kashmir. It was probably the first Kashmiri separatist terrorist group (Brown 2001), and its ethnonationalist motivation appealed to many, helping it to build up a substantial group membership. In 1990, it was described as the “most popular” Kashmiri militant group (Landay 1990). Four years later, however, it essentially ended.

The JKLF lasted longer than an average group in the global sample, 14 years. However, the fact that it did end puts it among the minority of Pakistani groups in this study – those that are no longer in existence. It is also unusual in that its motivation was more secular ethnonationalism than the goals of its Islamist peers. Related to its motivations, it was less willing than other groups to take orders from Pakistan's Inter-Services Intelligence (ISI). Disagreements between Pakistan and the JKLF led Pakistan to eventually isolate it – forbidding other groups from associating with it. This isolation made operations difficult for the JKLF, which splintered into several groups in 1994, and the rump organization retaining the name abandoned terrorism.

The demise of the JKLF can be explained by several factors. The end of the anti-Soviet war in Afghanistan brought many Mujahedin east, in search of continuing the jihad. Some extant groups, such as Harakat al-Jihad Islami, transferred part and parcel from Afghanistan, while other Mujahedin groups, such as Hizbul Mujahedin, were created in Kashmir. This influx of Islamist fighters transformed the Kashmiri struggle from a relatively secular nationalist struggle to a religious one (Saigol 2006, 26). The increase in groups in the area corresponds to the notion of organizational density (see Figure 4.4), and the argument in Chapter 2 suggests that the increased organizational density can lead to mobilization problems. This is what happened in Kashmir, as the JKLF struggled to compete in the face of the recruitment drives of other groups (Indian Express 2003), and it lost members to the other groups. In 1994, Pakistan had eight terrorist groups co-existing, while the typical country in the global sample had fewer than four.

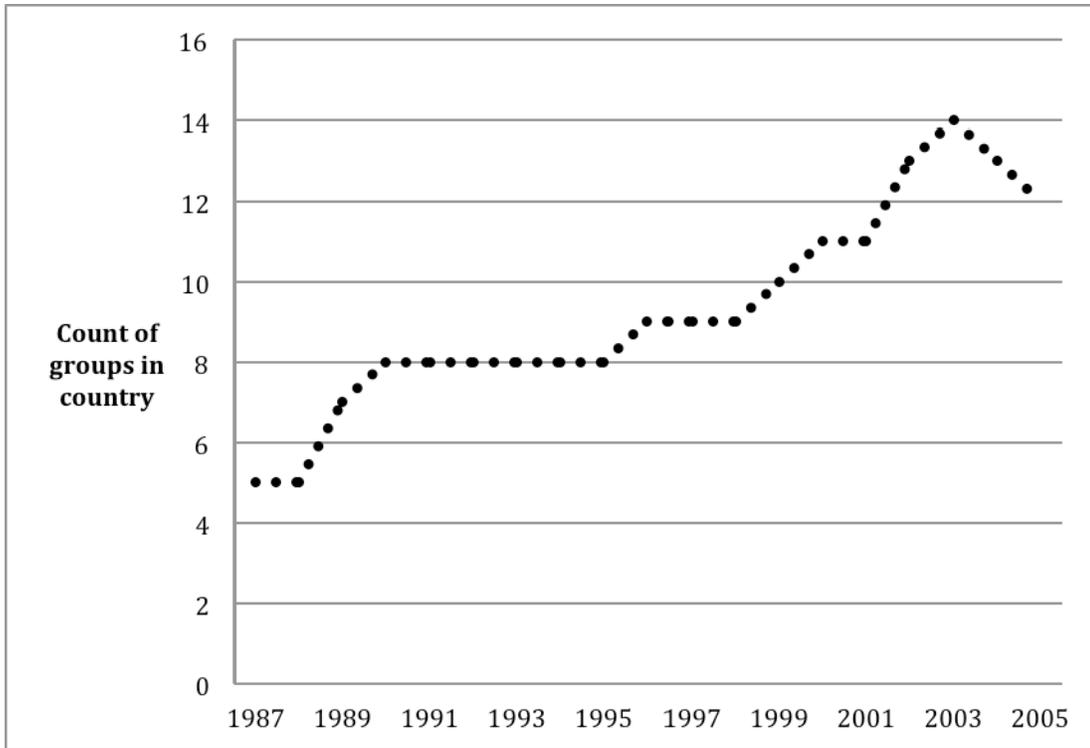


Figure 4.4. Pakistan terrorist group organizational density, 1987-2005

An additional factor that affected the JKLF was that it favored independence from India and Pakistan, while the newer groups generally wanted the territory to be a part of Pakistan (Riedel 2011, 39-40).¹⁵² This led to several issues. The JKLF was hesitant to accept money from Pakistan’s ISI, but eventually did in 1987 (Riedel 2011, 26). However, as more Pakistan-friendly groups appeared on the scene, the ISI cut off funding to the JKLF. This suggests the sort of mixed support that state sponsorship can provide to groups, as discussed by Carter (2012). Sponsorship can help a group, but it can also make it dependent, and if the support ends, it can be devastating to the group.

¹⁵² Other groups had wider goals. Lakshar-e-Taiba, for example, “intends to Islamicize Kashmir and India, then embark on global conquest with the goal of restoring the Caliphate” (Abou Zahab and Roy 2004, 35). Regardless, this is still very different from the relatively simple goal of an independent Kashmir.

The goals of the JKLF – independence, as opposed to joining Pakistan – hurt it in an additional way. It remained relatively isolated, unable to tie into the network of Pakistani groups, or the more generally jihadist groups that were developing in the early 1990s.¹⁵³ The JKLF only cooperated with two groups, al-Barq and Hizbul Mujahedin, but as other Islamist groups appeared, these groups cooperated with each other more, and less with the nationalist JKLF. These relationships proved crucial, as groups joined together to more effectively intimidate the Indian government. For example, seven Islamist terrorist groups released a joint press release announcing a “ban” on Hindu pilgrimages to Kashmir (Agence France Presse 1994). Reidel suggests that what really crippled the JKLF was that the ISI worked to “unite the pro-Pakistani elements” (Riedel 2011, 40), while intentionally isolating the JKLF from the benefits that come from allying with the other terrorist groups. This role for a state – coordinating some terrorist groups, while isolating others – is unusual. Normally states do not have such an influence on terrorist group relationships.

While the JKLF lacked a substantial number of cooperative relationships, it did have adversaries – as many as four other terrorist groups. Hizbul Mujahedin, for example, had been an ally of the JKLF, but the two began fighting in 1991. These were not isolated spats. In 1993, there were more than 120 battles between them, resulting in at least 75 deaths (Press Trust of India 1994a). The following year, the JKLF leader survived two assassination attempts in a day, both reportedly by Hizbul Mujahedin (Press Trust of India 1994b). The JKLF also had an adversarial relationship with al-Umar Mujahedin, which became especially serious in 1992 when

¹⁵³ It has an eigenvector centrality score of basically 0, because the few groups to which it was connected were not well-connected (at the time). It seems likely that if it were connected to al-Qaeda, for example, this would have helped it with substantial resources. Other than al-Qaeda, interacting with well-connected Indian groups (the many ethnoseparatist groups of India) could have been a help as well – tying it into a network of groups that already attack the Indian government. These are examples of ways that LeT was successful.

al-Umar members raised a Pakistani flag over an important Kashmiri mosque. The gun battle that followed was described as “the first time that competing factions have played out their rivalries in the region's largest city in full view of the residents they claim to represent” (United Press International 1992).

Because the JKLF fell apart in 1994, just a few years after developing these rivalries, this seems to contradict my hypothesis about having an adversary. Instead of an adversary helping with mobilization, in the case of the JKLF adversaries likely contributed to the group's downfall.¹⁵⁴ It is important to note that Hypothesis 11 is about having a *single* adversary. Additionally, the JKLF situation is consistent with the results shown in the quantitative chapter (especially Models 12 and 13, the models with the adversary count variable and the squared term, respectively), that there are declining benefits to increasing numbers of adversaries. Overall, adversarial relationships might have provided new impetus to members of the JKLF, as my argument suggests, but any such benefits were negated by the unusual intensity of the adversarial relationships, the multiple adversaries, and the fact that these occurred at the same time that the group had lost its state sponsor and had barely an ally to turn to for support.

The JKLF had few relationships, and these ties were *not* to well-connected groups. In other words, it did not have a high value for eigenvector centrality. This could have helped the JKLF, as a connection to a group such as al-Qaeda or Fatah could have provided the organization with considerable resources. It was not only the group's lack of relationships that contributed to its downfall, then, but its lack of ties to important terrorist groups.

¹⁵⁴ There is evidence of benefits of the adversarial relationships. For example, the JKLF gained defectors from its rival, al-Umar. Newspaper reports indicate that 168 members of al-Umar joined the JKLF in February 1992 (United Press International 1992). Most defections, however, went the other way, from the JKLF to Islamist groups.

The state likely played a conditioning role on the impact of the JKLF'S ties on its chances of survival. My hypotheses suggested that both cooperative and adversarial ties should matter more in more-capable states and in less-democratic states. This is because terrorist groups especially benefit from these ties when facing a strong (in terms of capabilities or a government less constrained by democracy) state. Pakistan in the late 1980s and early 1990s was less capable than most states, and fairly democratic. My hypotheses suggest that relationships should *not* be especially helpful to group survival in Pakistan during this period. This might offer part of the explanation for why the JKLF fell apart in spite of some cooperative and adversarial relationships.

There are many reasons the JKLF failed. A substantial number of the factors – loss of state sponsorship, declining membership, fewer allies than most terrorist groups in the area, a country dense with other terrorist groups – fit into the organizational-network model. Other aspects of the model, such as its ethnic motivation and size, might help explain why the group lasted longer than average. However, it is important to note that the analysis of the JKLF case shows that other factors also played a role. The end of the Soviet occupation of Afghanistan was indirectly consequential, and Pakistan's support for particular terrorist groups was important. The emergence of Islamist terrorism in the early 1990s made it more difficult for a secular group to survive. In the end, regional and historical shifts combined with organizational-network factors to turn a robust group of the late 1970s and 1980s into a failure in the 1990s.

4.4.4 Terrorist group case study: LeT

Lashkar-e-Taiba (LeT)¹⁵⁵ was created in 1989, as the Soviet occupation of Afghanistan was ending and conflict in Kashmir was heating up. LeT was among the first and most innovative of the Kashmiri Islamist groups, and continues today, after more than 20 years. It owes its success in this regard to a number of factors, including a vast network of relationships, Pakistani support, and the salience of its religious message.

LeT was popular from the start. Mujahedin, primarily Pakistani, came from Afghanistan and set up the group in Kashmir, making it among the first groups not indigenous to the area. It also had broad goals, not only independence of Kashmir from India, but Islamicizing India and the wider region (Abbas 2004, 212; Clarke 2010a, 396-398).¹⁵⁶ The boldness of its attacks and its audacious goals brought it immediate support. The ISI saw potential and provided financial backing, as did Osama bin Ladin (Riedel 2008, 43).

In its early stages, LeT did not draw support from relationships with other terrorist groups. It initially rejected offers of alliances with other Kashmiri groups (Clarke 2010a, 395). This rejection of cooperation by a young group is interesting for two reasons. First, it suggests that younger terrorist groups have the opportunity to form relationships with other groups – and therefore relationships are not only the domain of older, more established groups. Second, it shows that “stronger” terrorist groups sometimes choose *not* to align with other groups,

¹⁵⁵ LeT changed its name to Jamaat ud Dawa in 2001 when it was outlawed. Most scholars continue to refer to it as LeT (e.g., Fair 2011).

¹⁵⁶ The editor of the LeT newspaper indicated these wider religious goals when he proclaimed that the first priority was Kashmir, but that “[Jihad]... is against the oppression, against the occupying forces in Afghanistan, in Kashmir, in Iraq, in Chechnya, in Palestine, in the Philippines” (Baldauf 2003).

suggesting that it is not only powerful groups that have relationships with other groups.¹⁵⁷ These observations allow us to have more confidence that the apparent impact of group ties on group survival is not simply the result of older and stronger groups having more ties. In other words, any endogeneity of terrorist group relationships seems to bias the results away from supporting my hypotheses, and not toward supporting them.

Through the 1990s, LeT did eventually develop ties to other terrorist groups. This occurred as it increased its presence in Kashmir, and attempted operations in other areas. In 1993, it became the first group to bring foreign fighters into Kashmir (Clarke 2010b, 9). By 1998, it was estimated that 90 percent of its members were not originally from Kashmir (Jha 1998). It eventually forged relationships with groups in Afghanistan, Bosnia, the Palestinian territories, and Kashmir, in order to “pool resources, share experience, and to improve the effectiveness of their attacks” (Clarke 2010b, 5). These ties appeared to have paid off. By the time of the 9/11 attacks, LeT was “the most effective, prolific, and fearsome jihadi force” in Kashmir (Tankel 2009, 5).

The 9/11 attacks and war in Afghanistan brought pressure on LeT and other groups, but also provided new opportunities. On January 12, 2002, at the insistence of the United States, Pakistan banned LeT and four other groups, although this was never fully enforced by the Musharraf government (Hussain 2010, 28-29). The U.S.-led war in Afghanistan caused al-Qaeda and Taliban members to flee into Pakistan, and LeT was a “key facilitator” in helping with this process, providing fake passports, safe houses, guards, and fixers (Tankel 2009, 9). This became clear when a senior al-Qaeda lieutenant was captured in a LeT safe house in

¹⁵⁷ There are many examples of powerful terrorist groups that rejected alliances, such as the Shining Path and, to a lesser extent, the FARC during some periods.

Pakistan in 2002 (Stern 2003, 31). The relationships apparently provided benefits to LeT in return. For example, starting in 2002, LeT and other Pakistani groups began carrying out better-organized attacks using new methods, which they seemed to have learned from al-Qaeda (Abou Zahab and Roy 2004, 65).

LeT's work with other groups in the 2000s was not limited to helping al-Qaeda and the Taliban set up in Pakistan. For example, LeT is said to have cooperated with Jaish-e-Mohammed on an attack on the Indian parliament in December 2001 (Cronin 2009, 160). According to Clarke (2010b, 6), this was the result of the groups wanting to "share risk in what was likely somewhat of an experiment."¹⁵⁸ This demonstrates the importance of cooperation. Additionally, as India began to focus more attention on the Kashmiri border area in the early 2000s, LeT sought new ways to enter India. It transferred militants through Bangladesh, which required cooperation from Harakat ul-Jihad al-Islami-Bangladesh (Clarke 2010b, 20; Tankel 2009, 22). To further facilitate attacks in India, LeT also started working with groups primarily located in the country, such as the Student Islamic Movement of India (Clarke 2010b, 20). These cooperative relationships have been crucial as LeT continues to carry out more and larger attacks within India.¹⁵⁹ Additionally, starting in late 2006, LeT started working more with Afghan groups, as the insurgency there increased in intensity (Tankel 2010).

The LeT's widespread cooperative relationships were important to its survival in part because its allies were well connected themselves, consistent with the notion of eigenvector

¹⁵⁸ This attack was noteworthy for several reasons. It marked a substantial departure from attacks that had been primarily in the Kashmir region. It also helped to draw attention away from the Afghanistan border, reigniting Pakistan-India tensions. This provided relief to al-Qaeda, suggesting possible al-Qaeda support for the mission (Riedel 2011, 69-70). Finally, the parliament attack was in some ways a preview of the 2008 Mumbai hotel attack.

¹⁵⁹ This cross-border cooperation is similar to what was observed in the IRA case study, when the IRA cooperated with groups in continental Europe to attack "softer" British targets such as troops abroad.

centrality. LeT's relationship with al-Qaeda in particular has been helpful in this regard. Because al-Qaeda has so many ties itself, it has more resources to offer LeT.

Regarding adversarial relationships, LeT was not engaged in vicious sectarian strife to the same degree that JKLF and other groups were (Goldenberg 1995). LeT apparently was attacked by Hizbi-i-Islami in 1991, but there is no evidence of an adversarial relationship extending past the early 1990s.¹⁶⁰ It is also unclear what impact the violence had on the mobilization efforts of either group, although more generally some observers argue that intergroup rivalries were viewed by the Pakistani government as "healthy competition" that led to more terrorism (Abbas 2004, 202). Overall, there does not appear to be evidence that having an adversary helped LeT survive. The impact of adversaries is discussed more below in the context of how state attributes likely conditioned the effect of relationships, including adversaries.

It is worth considering if attributes of Pakistan conditioned the impact of LeT's network ties on its survival. Compared to other states, Pakistan has low capabilities (in terms of GDPPC), and my argument suggests that relationships, while helpful, should be less helpful in such weak states. However, Pakistan gained more counterterrorism capabilities after 9/11, as U.S. intelligence and money rolled in. That LeT did not end in spite of this challenge might be in part due to its many ties. The four Pakistani groups that ended between 1987 and 2005 all failed in 2000 or later, and only one of them had ties to other groups – two cooperative relationships. The failure of these four groups, which did not have many ties, when Pakistan was at its most capable lends support to the interactive hypothesis.

¹⁶⁰ The Global Terrorism Database has a report of the attack, with the victim listed as Jamaat-e-Dawa, which is an alias of LeT. <http://www.start.umd.edu/gtd/search/IncidentSummary.aspx?gtidid=199109300003> [Accessed August 7, 2011.]

Regarding regime type, Pakistan went from being fairly democratic in the late 1980s to autocratic after Musharraf's 1999 coup, and my argument suggests that ties should matter more in this situation – autocracy. This is because groups *ex ante* might have a more difficult time surviving a regime that has no constraints on its use of counterterrorism. The LeT case provides some evidence for this idea as the group, with its nine cooperative ties, did not end during the autocratic era. (Furthermore, the four Pakistani groups that failed did so when Pakistan was its most capable and its most autocratic.) It is important to note, however, that the Pakistani government's permissiveness of terrorism, to say the least, played a role in any "counterterrorism" efforts and complicates the case.

Some observers might think that LeT draws its strength mostly from Inter-Services Intelligence (ISI) sponsorship and therefore network and other factors are not as important. LeT does receive ISI support, but its diverse resource base allows it substantial independence. Markets throughout Pakistan contain donation boxes for the group (Clarke 2010b, 3). Donations also come from abroad, particularly from the Pakistani community in the Persian Gulf and Great Britain (Gul 2009, 164). It is also engaged in the drug trade (Clarke 2010b, 27-28). Its connections to terrorist groups in other countries, as discussed above, allow it to carry out its increasingly bold attacks in India. With this substantial support base, LeT likely would not fit the pattern of terrorist groups that end when cut off from state sponsorship. Clarke (2010b, 78, 79) argues that LeT is "beyond Pakistan's control," and that if the ISI were to cut off support, the LeT would continue to thrive multinationally. Instead of being dependent on the ISI, it is possible that the ISI now depends on LeT. According to one scholar, the ISI "cannot stop its support because LeT is the only, or at least the best-equipped, organization for inflicting damage on India" (Tankel 2009, 27).

Overall, the LeT case provides some support for the mechanisms described in Chapter 2. It has survived much longer than the typical group, and it had many of the attributes that should be important for survival, according to my argument. Regarding organizational factors, LeT claimed both ethnic and religious motivations. It also was state sponsored, profited from drugs, and had a substantial size in terms of group membership. Regarding network factors, LeT had ties to many other terrorist groups, and qualitative evidence suggests these ties were helpful toward LeT's core mission – attacking India. The impact of having an adversary was not clearly helpful, but LeT only had an adversary in the early years of its existence.

Regarding organizational density, Pakistan was increasingly dense with terrorist groups, suggesting a lower chance of survival for its groups. However, all the other factors seem to have helped LeT overcome the indirect competition that such an environment often fosters. Finally, regarding conditional effects of state attributes on the effect of relationships, the evidence is not as clear. There appears to be some evidence for the interactions, since ties seem to be especially beneficial in the early 2000s – when Pakistan was autocratic and had higher counterterrorism capabilities than it had previously. Since the autocracy and higher capabilities occurred almost contemporaneously, it is difficult to know which played a greater role. Overall, the LeT case shows that many or most attributes of the organizational-network model helped the group survive.

4.4.5 Pakistan cases conclusion

The cases of the JKLF and LeT provide sketches of how two terrorist groups managed to survive – and why the JKLF eventually failed. Table 4.11 shows the hypotheses of the dissertation, and indicates whether or not the causal mechanisms argued to be behind each hypothesis found

support in these cases. Both groups benefitted from their ethnic motivations, and the LeT's membership is especially motivated due to its religious goals. However, H2 suggests that ethnic motivations should be more beneficial to group survival than are religious motivations, and the religious LeT has outlasted the JKLF. In these cases, H2 is not supported. This contradicts the large-n tests, and is worthy of future investigation. It could be that there is something unique about Kashmir or Pakistan, because the quantitative data suggest this pattern is unusual.

Both groups benefitted from state sponsorship, from their own state. The JKLF appeared to be dependent on the state for support, however, and when Pakistan decided to not support the group, it did not survive much longer. This is consistent with other research that suggests state sponsorship has disadvantages for terrorist groups (Carter 2012). The Pakistani case is unique in that it sponsors groups that operate substantially on its own soil; more typical is the case of IRA and its Libyan support. The chapter conclusion discusses state sponsorship in more detail. Drug profits have helped LeT survive. Perhaps if the JKLF were involved in the drug business, it could have weathered shifting political changes, as did the FARC and AUC. Both groups benefitted from their relatively large size. The JKLF was bigger than LeT, yet still failed, which is a reminder that size is not deterministic.

Table 4.11. Hypotheses explored in Pakistan group cases (all dissertation hypotheses), and extent of support found

Hypothesis number	Hypothesis	Support for causal mechanisms?	Note
	<i>Organizational hypotheses</i>		
1	A terrorist group with an ethnic or religious motivation is less likely to end than a group with another type of motivation.	Yes	
2	The impact of ethnic motivation on terrorist group survival is stronger than the impact of religious motivation on terrorist group survival.	No	Religious LeT outlasted secular JKLF
3	A terrorist group with a state sponsor is less likely to end than a group without a state sponsor.	Yes	JKLF illustrates sponsorship dependency. When cut off, it soon failed.
4	A terrorist group involved in the drug business is less likely to end than a group not involved in the drug business.	Yes	
5	A larger terrorist group is less likely to end than a smaller terrorist group.	Mostly yes	JKLF was bigger than LeT, but failed. But size helped both groups.
	<i>Network hypotheses</i>		
6	A terrorist group is less likely to end if it is involved in more relationships with other terrorist groups (higher degree centrality).	Yes	
7	A terrorist group is less likely to end if there are fewer other terrorist groups in the same country (lower organizational density).	Mostly yes	JKLF failed as org. density increased. Yet LeT survives a denser environment.
8	A terrorist group is less likely to end if it has relationships with groups that are themselves connected to many groups (higher eigenvector centrality).	Yes	
9	A terrorist group is less likely to end with each additional terrorist group cooperative ally.	Yes	
10	A terrorist group is less likely to end if it is involved in an adversarial relationship with another terrorist group.	Mixed	JKLF illustrates problem of multiple adversaries.
	<i>Network hypotheses, conditional on</i>		

	<i>state attributes</i>		
11	The survival-enhancing impact of relationships on terrorist group survival will increase in more capable states.	Yes	
12	The survival-enhancing impact of relationships on terrorist group survival will increase in more autocratic states.	Yes	

Regarding network hypotheses, both groups both groups were helped by cooperative relationships, although the LeT has had far more of them. Additionally, the LeT has ties to highly-connected terrorist groups such as al-Qaeda (eigenvector centrality), which is also an advantage. As far as adversarial ties, there is not a great deal of evidence that these organizations benefitted from combative relationships with other groups. LeT had one minor adversary, but it did not seem to provide additional motivations to the group's existence, as occurred with the groups of Colombia and Northern Ireland. The JKLF seems to have been motivated by its adversaries, but it had four – and the large-n tests suggest that multiple adversaries can be more of a liability than a benefit. The cases showed some support for the organizational density hypothesis, because the JKLF seemed unable to survive in an increasingly terrorist-group-dense Pakistan.

The hypotheses about interactions between intergroup ties and state attributes found support in these case studies as well. Pakistan's capabilities increased in the 2000s as U.S. resources rolled in, and LeT seemed to benefit more from ties in this period. Pakistan's regime type became more autocratic in this period as well. However, it is difficult to determine whether capabilities or regime type mattered more. Overall, the causal mechanisms behind the hypotheses of the dissertation found substantial support in the Pakistan case studies.

A number of factors other than those of the organizational-network model were important to the survival of the JKLF and LeT, and to the eventual failure of the JKLF as well. International factors were important, such as the Afghanistan civil wars and Indian-Pakistani relations. Regarding domestic factors, state sponsorship is a part of the organizational-network model, but Pakistan's ties to its terrorist groups are unusual and consequential. Pakistan's sponsorship of both the JKLF and LeT was important, and Pakistan's end of sponsorship was a crucial part of the JKLF's downfall.¹⁶¹ This case is unique, then, in the centrality of the state in the survival and failure of its groups – and that Pakistan is not trying to end most of the terrorist groups that operate in its territory. These dynamics, and the importance of factors outside of the organizational-network model, are discussed more in the chapter conclusion.

In spite of the complex regional issues and the differences between the groups of Pakistan and those in Colombia and Northern Ireland, we also see support for the organizational-network model in Pakistan. Both the JKLF and LeT had important organizational and network attributes, and they both survived longer than an average group. The cases illustrate how these attributes played a role. In the end, a number of organizational-network attributes (or their absence), international and domestic factors brought about the end of the JKLF. The LeT endures.

¹⁶¹ It is worth repeating that Pakistan used not only money, but also intergroup ties, in its management of terrorist groups. It encouraged ties between groups it supports, and when it decided to shut down the JKLF, it forbid other groups from associating it. Network ties mattered, but in this case, the state played a role in those ties. This is unusual. Additionally, while the JKLF was apparently dependent on the state, LeT does not seem to be. Clarke (2010a) argues that LeT is not actually subservient, and therefore it can be considered a relatively independent terrorist group.

4.5 CASE STUDY CONCLUSIONS

The purpose of this chapter is to illustrate the mechanisms of my model by looking at a diverse set of terrorist groups. This section offers general conclusions drawn from the analyses above. First, the section discusses how the cases provide support for the organizational-network model. I also discuss when my argument does not seem to work, and differences across groups and countries. Then, I consider additional causal factors and phenomena that became apparent in the case studies.

4.5.1 General support for organizational-network model

Overall, the case studies found support for the organizational-network model. I start with network attributes, since they are the most novel to the study of terrorist group survival. All terrorist groups examined here drew support from terrorist group relationships. The cases illustrated examples of where having an adversary helped groups in Colombia and Northern Ireland in particular. (Several groups with multiple adversaries failed, suggesting the downside to more than one adversary, as discussed in previous chapters.) Cooperative ties were shown to have helped terrorist organizations in all three countries, especially the FARC, the IRA, and LeT. The JKLF was the one case with few relationships, and it failed in 1994. Regarding eigenvector centrality, the notion that ties to well-connected groups are especially helpful; the FARC, IRA, and LeT showed examples of this.

Regarding organizational density, the number of terrorist groups in a country, the cases showed some evidence that higher levels make it hard for terrorist groups to survive. In Colombia, both the ELN (not a central case) and the AUC were negatively affected by other

groups in the country, regardless of whether or not they had direct relationships with them. The IRA and the JKLF were negatively affected by an increasing number of terrorist groups in their countries as well. Groups such as the FARC and LeT survived dense terrorist group environments, but they have had many other factors working in their favor, such as many cooperative ties and drug profits.

There is mixed support for the impact of the interaction of ties to terrorist groups and state attributes – capability and regime type. In Colombia, it appears that ties offered more benefits to groups as the state got stronger (in the 2000s). Similarly, as Pakistan got stronger (in terms of capabilities and autocracy) in the same decade, ties seemed to offer more value to the groups that had them. However, Northern Ireland did not experience substantial temporal variation of capabilities or regime type, and its groups do not provide clear support for the interactive hypotheses. Northern Ireland has been highly capable and democratic, so my hypotheses suggest that ties should matter more because of the first attribute but less due to the second attribute. Overall, in the case studies of Colombian and Pakistani terrorist groups there is support for interactive hypotheses, but evidence is mixed or unclear regarding the groups in Northern Ireland.

Regarding organizational attributes, the Northern Ireland case clearly showed how ethnic motivations helped the groups there mobilize and stay mobilized. Pakistani groups benefited from ethnic motivations as well, but the LeT benefitted more from its religious goals. The Colombian groups, without such sources of inspiration, turned to drug profits perhaps as a substitute for popular support. The ethnically-based UDA, however, also turned to drugs – once its base felt less threatened by other groups. This points to the power of ethnic and religious motivations, but suggests that they are not permanent. Their salience depends on underlying

political conditions, as the JKLF and IRA discovered.¹⁶² The cases did *not* show that ethnic goals are more helpful to mobilization than religious goals, because the one religious group in the study, LeT, lasted longer than its relatively secular co-national group, the JKLF. This contradicts H2, but there was only one religious group in the study, so the sample is likely too narrow to make an inference about this hypothesis in particular.¹⁶³ The quantitative tests consistently showed that ethnic motivations help groups survive, while a measure of religious motivations was usually statistically insignificant in the large-n models.

The cases showed the importance of state sponsorship, and also how damaging its loss can be to a terrorist group. The IRA and the UDA directly benefited from sponsors in the 1980s, which helped them to be more violent in a period that might otherwise have been quieter. Pakistan's support to the JKLF and the LeT helped them, but the ending of support to the JKLF contributed to its failure. The Colombian groups survived without state sponsors, but the AUC had support from parts of the Colombian military, and in some ways this is comparable to sponsorship. This is discussed below. The cases showed both advantages and disadvantages of state support. This is likely why most of the large-n studies of the previous chapter failed to find a statistically significant relationship between state sponsorship and terrorist group survival.

Most of the groups in the study were involved in the drug trade, and it helped them fund operations – but had drawbacks for some groups. The FARC got into the business in the late 1970s or early 1980s, and the AUC was born into it. The AUC attracted attention because of its substantial drug involvement, which could have helped lead to its downfall. The UDA started

¹⁶² The importance of wider political conditions is discussed below.

¹⁶³ Indeed, the Pakistan groups seem to directly contradict the hypothesis that ethnicity should matter more than religion. This is one country of many, however, and overall ethnic groups have lasted longer than religious groups in the global sample.

trafficking illegal drugs relatively late in its lifetime, likely in part to substitute for declining popular support. The LeT profited from the drug trade as well. When groups get involved in illegal drugs they can alienate their political base, so this might be a cynical tradeoff of survival for achievement of political goals. As with state sponsorship, the cases showed both benefits and costs associated with drug business. This is consistent with the lack of a statistically significant relationship between drugs and group survival in the quantitative analyses.

Finally, simple group membership size had an impact on group survival. The groups in the study tended to be large, so they could withstand the cost of lost members. This is somewhat counterintuitive, as the government might try to single out the largest groups for elimination, or might be able to mostly easily infiltrate the largest groups. This happened in Northern Ireland and Colombia.

Overall, the organizational-network model found a substantial amount of support in these cases. They illustrated the plausibility of the mechanisms described in the hypotheses, showing that these various group and network attributes have helped terrorist organizations endure. The next sub-sections explore additional causal factors and phenomena that became apparent during the case studies, and are worthy of future investigation.

4.5.2 State willingness to negotiate – and the bargaining environment

The cases showed how organizational-network attributes helped groups survive, and, when those attributes diminish, the group might fail. The cases also showed that there are additional reasons why some terrorist groups end at in a particular year, regardless of how long they had survived until that point. The AUC and especially the IRA arguably should have kept surviving,

according to my model, yet both groups ended. State strategies and the bargaining environment played important parts in each group's termination.

Both Colombia and the United Kingdom decided to negotiate with terrorist groups. This is contrary to the policies of many countries, particularly the stated policies of many developed democratic countries. There were preconditions to the talks, particularly for the United Kingdom, which demanded ceasefires before talks. However, the willingness of each group to talk to terrorists seems to have been a necessary step to ending each group's violence.

Negotiations usually do not work (Cronin 2009, 71). Colombia has attempted to coax the FARC, the ELN, and other groups to give up violence, as the British have tried the same with various other actors in Northern Ireland. Most of these organizations remain active terrorist groups. The cases of the AUC and the IRA, and to a lesser extent the UDA (which appears to be honoring its 2010 demobilization), show that negotiations can work.

A number of conditions, the bargaining environment, helped make the negotiations possible. With both the AUC and the IRA, international pressure and sponsors helped. Furthermore, periods of intense violence seem to have led to "hurting stalemates" (Zartman 1985) that increased the willingness of both sides to reach some sort of accommodation. With the IRA, the global environment (declining support for ethnonationalist movements), probably contributed as well. Finally, the post-9/11 increased opposition to terrorism seems to have played a part, as this contributed to changing U.S. opinion of the AUC, and likely affected domestic support for both groups. These aspects of the bargaining environment have not been substantially considered in other studies of terrorist group survival, so they are worthy of future research, and inclusion in other models.

4.5.3 Negotiations often fail: The case of the FARC

Negotiations occurred between Colombia and the FARC, but they ultimately fell apart. This section briefly analyzes why talks failed in this case, as they often do. The “bargaining environment” existed for talks to start, but apparently was insufficient for their success. Colombia negotiated with some of its terrorist groups in the 1980s and 1990s, offering them a simple deal of amnesty for demobilization. This “small agenda” led to the end of weaker groups such as M-19 (Waldmann 2007). However, the FARC, with more bargaining power than other groups, demanded more than amnesty – they wanted a broader agenda, including reforms to the neoliberal economic system. This led to breakdowns in talks in the 1990s, as well as the end of the three-year peace process initiated in 1999 (Leech 2011, 34-35, 84).

An additional aspect of the bargaining environment played a role in the FARC’s continued fighting. It somewhat entered nonviolent politics in the 1980s, when many of its members and supporters joined the Patriotic Union (UP) party. However, the visibility of UP members made them easy targets for the “self-defense” groups, which killed two of the UP’s presidential candidates, four of its members of Congress, and as many as 2,000 supporters (Watson 1992, 91, 99; Leech 2011, 31-32). The viciousness of the self-defense groups, combined with the lack of protection offered by the weak Colombian state, encouraged FARC members to stay in the jungle and stay armed.¹⁶⁴ This is another illustration of how the existence

¹⁶⁴ Indeed, “hundreds, if not thousands” of UP members joined the FARC because they considered themselves safer among the rebels than unarmed in traditional politics. “In contrast to what the army and paramilitary leaders believed, destroying the guerrillas’ political party has proved to be a horrible long-term strategy” (Dudley 2004, 171).

of anti-leftist paramilitaries – contrary to their intentions – ultimately contributed to the survival of the violent leftist groups.

4.5.4 Negotiations sometimes work: How the IRA and AUC ended

Both the IRA and the AUC gave up terrorism, after years of negotiations with their respective governments. This is an unusual way for a terrorist group to end,¹⁶⁵ but a number of high-profile terrorist organizations have ended in this manner, so it is worth exploring. Why did the negotiations eventually succeed, in terms of getting a terrorist group to give up terrorism?

Regarding the IRA, secret negotiations were initiated by the government as early as 1972 (Cronin 2009, 43). The scale of the violence likely brought parties to the table. Additionally, the clear goals of the IRA – independence of Northern Ireland from Britain – were perhaps easier to negotiate around than the goals of groups that want, for example, global communism or for a government to be replaced entirely (Hoffman 2006, 243). The British government, however, initially only offered ethnically-based power-sharing. The violence continued.

Cronin (2009, 63-64) argues that negotiations are most likely to occur, and be successful, when the terrorist group perceives itself to be losing ground. This can be caused by a number of scenarios, such as increased competition, government infiltration, and loss of support. This was the IRA's situation. As discussed earlier, the number of terrorist groups in Northern Ireland increased in the 1990s, and newer nationalist groups split the IRA's support base and undercut its

¹⁶⁵ Cronin (2009, 212-214) examines the terrorist groups in existence in the world between 1968 and 2006, and finds that about 18 percent of the groups entered into negotiations with the government. For about 30 percent of these groups, the negotiations resolve the conflict. This means about 5 percent of groups ended as a result of negotiations.

negotiating ability.¹⁶⁶ Government infiltration, which increased over the years, further hurt the IRA. Finally, the IRA lost a number of funding sources by the early 2000s. Libyan arms were helpful in the 1980s, but Libyan support declined after that (Associated Press 1991). Additionally, after the 9/11 attacks in the United States, Irish-Americans were less willing or able to support the IRA. All these factors – some of which are directly from the organizational-network model – led to a hurting stalemate (Zartman 1985) that pressured the IRA to accept terms that it had turned down in earlier decades.

Beyond stalemate, a number of international factors also led to the IRA's 2005 end. Foreign countries contributed to the peace process. The 1985 Anglo-Irish agreement brought Ireland into talks, and a related 1987 extradition treaty made it harder for militants to hide in Ireland (Kennedy-Pipe 1997, 132). The involvement of the Irish and U.S. governments played a crucial role in bringing about the 1998 Good Friday agreement.¹⁶⁷ The inclusion of foreign states in the process helped assure the IRA and other actors of the credibility of British promises, particularly that subnational groups would be safe if disarmed (Walter 2002). Additionally, the global environment of liberation movements at the time played a role, as leftist groups were closing up shop and victory seemed further than ever for other ethnic groups such as ETA.¹⁶⁸ The IRA felt that perhaps history was not on its side (Cronin 2009, 48). Overall, the

¹⁶⁶ Causing splintering can be an intentional goal of governments as they negotiate (Cronin 2009, 67-68). The existence of a divided front, however, often sabotaged peace efforts. For example, some loyalists groups were considering a ceasefire in the mid-1990s, but the murder of a UVF leader by the INLA soured the loyalists' peaceful attitude (Mallie and McKittirck 2001, 171-172). Smaller groups frequently sabotaged the peace process (McKittrick and McVea 2000, 218).

¹⁶⁷ The Clinton administration was directly involved in this process, and a former U.S. senator chaired the talks. For the U.S. perspective, see Mitchell (1999).

¹⁶⁸ The post-9/11 atmosphere likely contributed, as there was less moral support in the West for terrorism, regardless of its motivation.

organizational-network model substantially explains why the IRA lasted as long as it did, but additional factors are helpful for explaining why the IRA eventually ended, and when it did.

Regarding the AUC, the Colombian government's desire and capability to negotiate an end to this group came from several sources. First, there was a history of negotiations with terrorist groups, and the talks had been successful at getting some groups, such as M-19, to disarm. Second, the violence of the late 1990s and early 2000s was so intense that this likely increased the salience of finding a way to end it. Third, pressure from the U.S. was important.¹⁶⁹ Washington had resisted serious criticism of the AUC and other self-defense groups for years, but more visible human rights violations and increased drug involvement by the group caused a shift in U.S. positions in 2000 and 2001 (Rochlin 2003, 149). (Human rights groups played an important role in publicizing the crimes of the AUC.) The AUC was added to the State Department's list of terrorist groups in 2001.¹⁷⁰ The AUC's leaders, fearing extradition to the United States, were more willing to work with the Colombian government in hopes of a deal (Van Dongen 2004; Wilson 2001b). Finally, the closeness of the AUC to some military elements might have worked against the group. Connections to security forces made it easier for the state to identify group members, when they wanted to act against them. This is similar to what happened in Northern Ireland with loyalist (pro-state) groups there (Kennedy-Pipe 1997, 143-144).

¹⁶⁹ Financing from the United States was crucial as well. As mentioned earlier, demobilization was estimated to cost \$8,500 per person demobilized. Colombia asked the "international community" to pay \$5,700 of that (Wood 2005, 54). Furthermore, with the billions of dollars that the United States had been providing through Plan Colombia, it had unusual influence over the state.

¹⁷⁰ The FARC and the ELN had already been on the list.

4.5.5 Domestic vs. internationalist motivations

Related to the bargaining environment, Colombia and Northern Ireland were able to negotiate with their terrorist groups, and offer them protection if they disarmed (at least in the U.K. case), because these were fundamentally domestic terrorist organizations. The groups in Colombia and Northern Ireland had domestic grievances, and primarily operated in their own country.¹⁷¹ It is unclear how Pakistan or India could have similar discussions with LeT, which operates in both countries and has goals for political change to the region or beyond. It is even more difficult to imagine how talks between the United States and al-Qaeda could even begin, or how either side would think the other as able to credibly commit to promises. For largely domestically oriented terrorist organization, such as the Afghanistan Taliban, negotiations could bear fruit.¹⁷²

4.5.6 Aid from state actors that falls short of “state sponsorship”

Finally, the cases discussed in this chapter shed some light on the consequences of state sponsorship, but also on the gray-area phenomenon of aid from some elements of the state, such as the military. A number of scholars have examined state sponsorship of terrorist groups (Byman 2005), including how this affects the groups’ duration (Carter 2012). Byman’s earlier and most well-known work (2005) originally considered the state to be a unitary actor, but he later argues that “state support” usually refers to aid from the “central government,” and not

¹⁷¹ On domestic vs. transnational terrorism, see Enders and Sandler (2006, 6-7)

¹⁷² Of course, this sets to the side the discussion about to what extent negotiating with terrorists encourages more terrorism. Many or most countries do in fact negotiate with terrorists, in spite of stated policies to the contrary (Cronin 2009, 35). A great deal of research examines this subject, and the wider notion of democratic counterterrorism (e.g., Art and Richardson 2007; Neumann 2007; Wilkinson 1986, 2006; Lapan and Sandler 1988).

bureaucracies or interest groups within the state (Byman 2008, 4-5). This raises questions about the phenomenon of members of the military supporting a terrorist group – as happened in Colombia with the AUC.¹⁷³ It is unclear to what extent military leadership knew of or authorized this support, and to what extent the national leadership (executive, legislature, courts), knew of this support. This phenomenon has occurred repeatedly with pro-status quo or right-wing groups, as discussed in Chapter 2 regarding adversarial relations.

The AUC is not considered to have been state sponsored by authorities such as Byman, but clearly the group had some degree of aid that the FARC (for example) did not. In Northern Ireland, low-level military and police support or “turning a blind eye” did not reach Colombian levels, but occurred (Bruce 1992, esp. Ch. 8). This connection to the state is worth considering further, in terms of to what extent it helps these groups.

One interesting finding of the case studies, however, is that this closeness to state actors can also harm the groups – if and when the state decides to crack down on the group.¹⁷⁴ Colombia was able to dismantle the AUC while the UK seems to have had a more challenging time with the UDA and other status quo groups in Northern Ireland. One explanation is that the connections between Colombian security forces and the AUC worked to the state’s advantage as it tried to end the group. This is a disadvantage that loyalist or “status quo” groups faced in Northern Ireland (Kennedy-Pipe 1997, 143-144), but since the connections were stronger in Colombia, it makes sense that the state could better take advantage of them. Using these connections, Colombia could identify and capture AUC leaders easily. U.S. authorities were

¹⁷³ The situation in the Pakistan, with aid from the ISI, is so institutionalized and authorized by high-level government officials that it is considered sponsorship (Byman 2008).

¹⁷⁴ This discussion refers to groups that are receiving aid from elements of their own government, not a foreign government.

able to indict and issue extradition orders for AUC members, and even get Colombia to extradite some, while the same has not happened with the left-wing groups.

4.5.7 Concluding remarks

This chapter sought to provide illustrations of the mechanisms outlined in Chapter 2, demonstrating the plausibility of the inferences drawn from the quantitative tests of Chapter 3. A diverse set of terrorist groups were examined, from a diverse set of countries. The cases illustrated the mechanisms discussed behind the organizational-network model, that these attributes can help groups with mobilization issues and therefore survival. Relationships between terrorist groups, an under-studied area of terrorism research, were given particular attention and shown to be consequential. These cases were helpful because they allowed us to look at groups and countries in detail not possible in the quantitative study. The cases also shed light on additional explanatory factors that have not yet been adequately studied, such as the terrorist group bargaining environment. Overall, organizational and network attributes contribute substantially to terrorist group survival. The next chapter concludes the dissertation by providing conclusions about the dissertation as a whole, including directions for future research and policy suggestions.

5.0 CHAPTER 5: CONCLUSION

This dissertation asks why some terrorist groups last so much longer than others. This important question is beginning to be examined by political scientists, but has not yet been adequately addressed. This dissertation attempts to fill the gap in the literature, and this chapter summarizes the efforts of the thesis and its implications. First, I review the argument I presented, the organizational-network model of terrorist group survival, and the empirical evidence evaluating it. Then I discuss the contribution of the dissertation to the literature and its policy implications. I conclude by discussing future research that can build on the findings of the dissertation.

5.1 REVIEW OF ARGUMENT AND EMPIRICAL RESULTS

5.1.1 The organizational-network model of terrorist group survival

Most explanations of terrorist groups survival, as discussed in the first chapter, focus on state attributes. This is consistent with most explanations of terrorism in general, which usually attempt to explain cross-national variation in terrorist attacks. The argument presented in Chapter 2 of this dissertation is that terrorist group organizational and social network attributes offer an important and as-of-yet largely unexplored part of the explanation of terrorist group longevity.

The foundation of the argument is that understanding terrorist *organizations* is important to understanding terrorism. With this assumption in mind, any attempt to understand terrorist group behavior, such as survival, should consider organizational attributes. Fortunately for the study of terrorism, there exists a great deal of investigation into organizations, such as firms, which can be applied to the study of terrorist groups. In particular, the argument considers incentives that groups need to provide to members for mobilization, the number of organizations in a geographic area (organizational density), and intergroup relationships.

While a general organizational approach is used to understand terrorist groups, there are certain aspects of terrorism that require modification of traditional business-based organizational models. Terrorist groups by definition engage in illegal violence, which can mean that there are unusually high sanctions for group members (Lichbach 1995). This suggests recruitment challenges, but I argue that terrorist groups benefit from non-material incentives (a sense of purpose, inter-member bonds) as much as or more than material incentives such as money. Terrorist groups are also political. This further suggests that they are not simply motivated by profit. It also suggests that specific political motivations of the group are important, as well as attributes of the state. Finally, and related to their political motives, terrorist groups compete for general public and government attention, which is different from competing for a share of a specific market.

Joining organizational literature with terrorism literature, the argument leads to a number of testable propositions about terrorist group survival. First, groups with ethnic or religious motivations should survive longer than other terrorist groups. This is because of the non-material incentives that their members get from participation. Second, ethnic motivation should be more helpful than religious motivation in terms of mobilization, and therefore group survival.

Ethnically motivated groups have the benefit of kinship ties, relative permanence of identity, and other attributes that religious groups do not have to the same degree. The third and fourth organizational hypotheses consider sources of material incentives, and suggest that state sponsorship and illegal drug business, respectively, should contribute to group longevity. Finally, groups that are larger in membership size should have survival advantages, as these groups are better able to absorb the costs of members lost to arrest or other types of attrition.

In addition to organizational attributes, the argument considers social network attributes. The first network hypothesis is that intergroup relationships, ties, in general should contribute to group survival. This is because groups can cooperate, learn from each other, and compete with each other – spurring innovation. This hypothesis is simply a first cut into network attributes. Second, terrorist groups survival should be associated with *lower* numbers of other terrorist groups in the same country, lower organizational density. This hypothesis suggests that while direct relationships are helpful, indirect relationships (coexistence) divide government and public attention, without offering the benefits of direct relationships. Third, terrorist groups should benefit from being connected to groups that are themselves highly-connected. This is the notion of eigenvector centrality.

The argument then considers specific types of intergroup relationships. The fourth hypothesis suggests that cooperative relationships should help terrorist groups endure. The fifth hypothesis is less intuitive, suggesting that adversarial ties – when terrorist groups physically attack each other – should also offer benefits to groups. This is related to non-material incentives, and implies that having an adversary offers a new sense of purpose to group members, a new mission beyond the original political goal.

The final set of network-related propositions of the dissertation are interactive hypotheses, suggesting an impact of network ties that is conditional on state attributes. I argue that intergroup ties should contribute to group survival more in environments where the groups have an ex ante harder time enduring. In particular, terrorist groups should draw greater benefits from intergroup relationships in more capable states, and in more autocratic states.

5.1.2 Quantitative analysis

Chapter 3 described the quantitative analysis of the organizational-network model on a new global data set of terrorist groups and their relationships, 1987-2005. The total sample is 622 terrorist organizations from all regions of the world. The data have some variation over time, which is a substantial innovation over other terrorist group data sets, most of which include a single observation on each terrorist group, and therefore no variation over time. The chapter used hazard models to determine which factors are associated with terrorist group failure in a particular year.

The quantitative models showed support for the organizational-network model, although the organizational hypotheses found less support than the network hypotheses. Ethnic motivation and group size were consistently associated with a reduced risk of a terrorist group ending in a given year. However, there was not consistent support for the assertions that religious motivation, state sponsorship, or drugs are associated with terrorist group survival. It is interesting to note that neither of the hypotheses representing material incentives – those of state sponsorship and drugs – found empirical support. The support for ethnic motivations and group size, however, suggest that some organizational attributes are important to terrorist group longevity.

Regarding hypotheses about network attributes, most of them found consistent support in the quantitative tests. The more intergroup ties (cooperative or adversarial) that a terrorist group has, the lower its risk of ending. The greater the terrorist group density in a country, the higher the risk of groups located there ending. These results together suggest that direct relationships help groups, while simple coexistence – what I call indirect competition – can harm groups. Beyond aggregated ties, the empirical tests show support for the idea that additional cooperative relationships help terrorist groups survive. There is also support for the assertion that a terrorist group having one adversary contributes to its survival. However, additional analysis of adversarial ties suggests that *multiple* adversaries seem to be harmful to terrorist groups. This does not contradict the hypothesis, but it is an interesting note. The one non-interaction network hypothesis that did not find full support in the quantitative tests was that of eigenvector centrality. There is some support for the notion of eigenvector centrality contributing to group survival, but overall, a terrorist group's number of ties seems to be more important than how well-connected are those ties.

Hypotheses about the interaction of state attributes and network ties found mixed results. Cooperative ties seem to have a greater longevity-enhancing impact on terrorist groups in more capable states, consistent with my argument. There is also evidence that cooperative ties have more longevity-enhancing impact in more autocratic states, consistent with the hypothesis – but this support is not as robust as that for the capability interaction. Interestingly, the hypotheses about adversarial ties being conditional on state attributes found no support. This suggests that cooperative ties and adversarial ties affect terrorist groups through different mechanisms, as my argument asserts, and that these two types of relationships are worthy of further disaggregated research. Regardless, adversarial ties do not seem to be conditional on state attributes in the way

my argument suggests. Overall, a great deal of the organizational-network model found support in the quantitative tests, with more support for network components.

5.1.3 Case studies

Chapter 4 explored case studies of six terrorist groups: Colombia's Revolutionary Armed Forces of Colombia (FARC) and United Self-Defense Forces of Colombia (AUC), Northern Ireland's Irish Republican Army (IRA) and Ulster Defense Association (UDA), and Pakistan's Jammu and Kashmir Liberation Front (JKLF) and Lashkar-e-Taiba (LeT). The case studies were not designed to test the hypotheses, but instead to illustrate the mechanisms outlined in the argument, and show the plausibility of support for the hypotheses in a diverse set of conditions. In addition to this elucidation, the cases shed light on other causal processes, suggesting hypotheses not considered in my theory chapter, and underexplored in the literature in general.

Overall, the cases illustrated many examples of the causal mechanisms discussed in Chapter 2. They also showed interesting details unable to be seen in the large-n studies. For example, neither state sponsorship nor drug sales found support in the quantitative tests, and the case studies showed how there are both advantages and disadvantages to these attributes. This could be why results "washed out." Regardless, I argued that sources of material incentives are often poor substitutes for non-material incentives, and the cases seem to show this. Furthermore, the cases made clear how having an adversary can be beneficial to group longevity for some groups (FARC, AUC, IRA, UDA), but how multiple adversaries can have the opposite effect (JKLF). Consequences of multiple adversaries were not hypothesized, but became apparent in both the quantitative and qualitative analyses. Finally, the cases provided the opportunity to explore how a perhaps abstract concept, organizational density, seems to have had a substantial

impact on groups in all three countries. “Crowded” terrorist group environments, in spite of the opportunity for more intergroup ties, presented challenges to terrorist organizations. Interesting variation in organizational density over time and across countries helped in exploring this concept.

Beyond factors of the organizational-network model, the case studies illustrated the importance of other dynamics as well. One issue that became apparent in the cases was the importance of whether a state was willing to negotiate with its terrorist groups – in spite of the fact that many states have a policy of refusing to do so. Colombia and Northern Ireland repeatedly bargained with terrorist organizations, which led to the end of groups in both countries. A related issue was to what extent negotiations were actually *successful* in getting a terrorist group to give up violence. Negotiations with terrorist groups usually fail (Cronin 2009, 71), but certain factors seem to be associated with negotiation success, and this is worthy of further investigation. The cases provided the opportunity to look at failed negotiations (FARC, earlier attempts with AUC and IRA), as well as successful talks (AUC, IRA).

An additional issue in the case studies, but not in the organizational-network model, was state aid for terrorist groups that falls short of actual sponsorship. Pakistan sponsors terrorist groups in its own state, making it relatively unique, but state sponsorship is included in my model. The more unusual condition explored in the case studies was when lower-level elements of the state provide some aid to a terrorist group, including turning a blind eye toward the group. This occurred with the AUC in Colombia, and to a much lesser extent with the UDA and other loyalist groups in Northern Ireland. This phenomenon is not only interesting because it is a grey-area version of state sponsorship, but also because of its potential disadvantages for terrorist groups. When state actors such as police or military officials have ties to a terrorist group, this

makes cracking down on the group that much easier if and when the state decides to do so. Overall, the case studies illustrated the plausibility of the organizational-network model, and showed how other causal processes were important as well.

5.2 LITERATURE CONTRIBUTION AND POLICY IMPLICATIONS

5.2.1 Contribution to the literature

This dissertation contributes to the literature in a number of ways. First, it is among a growing group of studies that use systematic global studies to understand terrorist *groups* (e.g., Asal and Rethemeyer 2008; Jordan 2009; Blomberg et al. 2011), and not simply the occurrence of terrorism at the country level. Country-level analyses are necessary for understanding cross-national variation in terrorist attacks. However, this line of research usually overlooks important group dynamics, ignoring the fact that most terrorist acts are not independent events, but part of campaigns by terrorist organizations with particular organizational attributes and patterns of behavior. Scholars conducting country-level analyses of terrorism can draw on terrorist group studies to complement their research with country-level variables measuring terrorist group and network attributes. This is discussed more below.

This research also addresses a theoretical lacuna by contributing to understanding terrorist group survival in particular. This outcome is puzzling because it is not explained by the factors said to explain terrorist acts generally. The determinants of terrorist acts seem to be substantially different from the determinants of terrorist organization longevity, and scholars are beginning to understand what factors are behind longevity. These causal processes are important

to understand because as long as a terrorist group exists, it is a threat to the state and its citizens. Before this dissertation, much of the research on this topic either left things to be desired in terms of empirical testing (e.g., Crenshaw 1991; Cronin 2006, 2009; Jones and Libicki 2008), explored different types of group failure instead of group failure generally (Cronin 2006, 2009; Jones and Libicki 2008), or provided an empirical “first cut” without much theoretical framework (Blomberg et al. 2010; Vittori 2009). Some very recent articles are moving past these issues (Blomberg et al. 2011; Carter 2012), and my research is on the forefront of such studies with its organizational-network approach.

Regarding the organizational approach, this dissertation is among the relatively small number of terrorism studies to explicitly incorporate ideas from organizational theory (e.g., Crenshaw 1985; Oots 1989; Asal and Rethemeyer 2008; Jordan 2009). It focused on incentives in ways that other studies have not, arguing and to some extent showing that non-material incentives seem to be more important to terrorist groups than material incentives. Additionally, I applied the concept of organizational density to the study of terrorism for what is apparently the first time. The quantitative results showed that terrorist groups are affected differently by density than are other types of organizations (a linear relationship instead of an inverse U), consistent with my argument. Future analyses of terrorist groups can benefit from incorporating these and other ideas from the rich organizational literature.

Perhaps the most substantial contribution to the literature made by this dissertation is its emphasis on relationships between terrorist groups. Social networks analysis is increasingly being used in political science as scholars recognize that actors are not independent, but that they impact each other in important ways. Some terrorism studies have used social networks approaches (Perliger and Pedahzur 2011), but most of these analyses have looked at ties between

individual terrorists (e.g., Sageman 2004). Only a handful of other studies have considered ties between terrorist groups and systematically evaluated related assertions (Asal and Rethemeyer 2008; Horowitz 2010). This dissertation is the first to study *adversarial* terrorist group relationships and test the assertions quantitatively, and results suggest that they have important consequences. Additionally, beyond counts of ties, it considers the more intricate network concept of eigenvector centrality. It also offers a more rigorous test of the impact of network ties by taking into consideration the number of groups in a country, which could represent the ex ante opportunity for ties. Finally, it considers how state attributes condition the impact of ties on group survival, showing that the consequences of cooperative ties in particular depend on state attributes.

Related to the emphasis on social networks, the dissertation offers an additional contribution by presenting a global data set of terrorist groups and their relationships. These data, an extension with modifications of Asal and Rethemeyer (2008), illustrate how the global network of terrorist groups changed between the Cold War era and the so-called religious terrorism era (Rapoport 2004). They provide important descriptive information, showing how common ties are between terrorist groups, and illustrating interesting patterns of cooperative and adversarial ties. Other scholars can use these data for a variety of purposes, some of which are discussed below in the future research section.

5.2.2 Policy implications

Beyond theoretical and data contributions, this dissertation suggests some guidance for policymakers. Overall, it suggests that the longevity of terrorist groups is not “random,” but in

fact is associated with certain factors. Observers can look to these factors to have more informed expectations about the likely survival of terrorist groups over time.

One specific example of how this information could be helpful is as governments consider negotiations with terrorist groups. Negotiations are most likely to be successful when there is a “hurting stalemate,” that is, when both the government and the group are especially weak from fighting (Zartman 1985). In order to evaluate when a terrorist group is weak, analysts could consider its attributes as proposed in the organizational-network model. The variables provide specific metrics that can be evaluated to determine if a terrorist group is likely to endure, if it is weaker and therefore relatively willing to negotiate, or if it is likely to fail in the near future and therefore not worth joining in discussions. Social science cannot be expected to predict the future, but it can help explain patterns of behavior, which in turn can provide some expectations about the likelihood of future behavior.

The case studies, as discussed above, suggested that negotiations can be successful in certain conditions beyond group weakness. One condition seems to be if the terrorist group has primarily domestic goals. This suggests that U.S. negotiations with the Taliban, for example, offer potential that negotiations with more internationalist terrorist groups do not. Negotiations were not a primary focus of the dissertation, but the case studies suggested an important role for talks, depending on organizational and network attributes.

The dissertation, overall, highlighted the importance of relationships between terrorist groups. Governments are already concerned about cooperative ties between terrorist groups, but the research provided evidence that these relationships are perhaps more beneficial to terrorist groups than previously thought. This suggests that if a state cannot eliminate one terrorist group, it could instead focus on that group’s allies to weaken it indirectly.

Beyond cooperative relationships, the dissertation explained why a policy a number of states have employed – supporting or turning a blind eye to one terrorist group, hoping that it destroys another terrorist group – usually does not work. Having an adversary can actually help a terrorist group survive, as the quantitative and qualitative evidence suggests. Governments are often tempted to deal with terrorist organizations through proxy reactionary groups, but this behavior, like direct state repression, can lead to unintended consequences. Even if the government leadership rejects such behavior, the state should carefully monitor the security forces to make sure lower-level government agents are not encouraging adversarial ties between terrorist groups. In Colombia, the AUC had substantial assistance from elements of the state, and in Northern Ireland the UDA and other loyalist groups received at least passive assistance at times.

5.3 FUTURE RESEARCH

The dissertation suggests a number of paths for future research. One avenue of investigation involves asking what explains terrorist group relationships in the first place. Regarding cooperative relationships, one could think of the inter-state military alliance literature, which has sought to explain not only consequences of alliances, but also why states align (e.g., Walt 1987, 2009). Research on criminal organizations has also sought to understand intergroup cooperation (Williams 2002). Similarly, to fully understand cooperative ties between terrorist groups, we should understand their patterns of formation. A few studies have explored terrorist group cooperation, qualitatively (Karmon 2005) or with formal theory (Bapat and Bond Forthcoming), but much remains to be understood about the subject. Some specific lines of inquiry could

include the following questions: Is terrorist group cooperation simply capabilities aggregation by weak groups against strong states? When do terrorist groups align with groups who have different political motivations than their own? What are the different types of terrorist group cooperative ties? To what extent is terrorist group cooperation a response to international counterterrorism cooperation?

Future investigation can also look into what explains adversarial ties. Anecdotal evidence suggests that sources of adversarial relationships are largely domestic. Why do terrorist groups in the same country attack each other? Are the political institutions of the state more important, or attributes of the terrorist groups? Patterns of formation of antagonistic relationships are likely to be different from those of cooperative ties. A glance at the global data set used for Chapter 3 suggests that religious terrorist groups are the most likely to cooperate with each other, but ethnically motivated terrorist groups are the most likely to be adversaries. What explains this difference? An initial conjecture is that because religious groups often fight for goals that are beyond domestic politics, they are not as concerned about how the domestic “pie” is divided up. Ethnic terrorist groups, however, challenge the state for specific policy concessions relating to territory or rights, and terrorist groups claiming to represent the same ethnic community often disagree about bargaining positions relative to the state.

An additional direction for future research is to apply aspects of the organizational-network model to the study of the cross-national determinants of terrorist attacks. There are some challenges with this effort relating to the unit of analysis. However, terrorist group network attributes in particular can be applied at the country level. One example of potential application comes from the crime literature. Marselli and Vannini (1997), in a study of crime in Italy, found that when they statistically controlled for the presence of criminal organizations in a

geographic area, their model of crime returned markedly different results from standard econometric models of crime. Similarly, country-level attributes of the terrorist group environment can take into consideration terrorist group density or the level of connectedness of the terrorist groups in the country (network density). Regarding organizational factors, a model could include the dominant political motivations of terrorist groups in a country.¹⁷⁵

Another line of research that this dissertation could inform is the study of criminal organizations. A number of studies show interesting similarities between terrorist and criminal groups, or suggest that differences between them are of degree, not type (Dishman 2001; Makarenko 2004; Shelley and Picarelli 2002). Political groups often rely on sources of income such as drug sales, but they can earn a great deal of support through ideological affinity – and this can increase when the group’s potential membership is threatened by the state or other groups. Criminal groups are primarily business organizations, but benefit from having the community and politicians on their side. This suggests a political dimension. Terrorist and criminal groups interact with other groups and the state in different ways, and this should lead to some divergent outcomes. Adversarial relationships, for example, could lead to different effects for the two types of groups. Additionally, it would be interesting to see if criminal groups are affected by organizational density in the same way that licit firms are – which is different from how density affects terrorist groups. This could help shed light on important distinctions between terrorist and criminal organizations. Overall, the dissertation suggests a number of directions for future research.

¹⁷⁵ Some countries do not have terrorist groups, suggesting problems with estimation. However, a zero-inflated negative binomial (zinb) model first estimates why some observations are zeroes (why some countries have no terrorism), and the second stage of the model estimates the count of terrorist acts in the non-zero countries. The organizational or network attributes could be used in the second stage of the zinb.

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