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Territorial Autonomy in the Shadow of Ethnic Rebellion

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ABSTRACT

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This dissertation examines two related questions: why do some minority groups rebel after having been granted territorial autonomy while others do not? If autonomy does not reduce ethnic rebellion, why do governments grant it in the first place? By developing a game-theoretic model, I argue that internal divisions within minority groups play an important role in determining which groups get autonomy and how much, and how the autonomy affects ethnic rebellion in the end. As for autonomy granting, within-group divisions do not reduce the chances that ethnic groups get autonomy, but internally divided groups receive smaller amounts of autonomy than unitary ones. As for ethnic rebellion, the effect of territorial autonomy is conditional on the internal structures of ethnic groups. I argue that territorial autonomy is more likely to reduce the occurrence of ethnic rebellion only for more unified groups. However, for internally divided groups, territorial autonomy reduces the intensity of ethnic rebellion rather than its occurrence. Thus, governments use territorial autonomy not only as a means to achieve peace, but also as a means to select into small conflicts which yield higher payoffs than costly peace. In order to evaluate the theory, I conduct a quantitative study of self-determination disputes from 1985 to 2003. The analysis reveals that the internal structure of minority groups has a systemic effect on both autonomy settlements and conflict. Autonomy granting reduces the occurrence
of large-scale ethnic rebellions rather than all rebellions.
Dedicated to my dear parents, Lexiu Zhang and Zhonghua Sun!
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Contents

Abstract ii
Acknowledgments v
Figures x
Tables xi

1 Introduction 1
1.1 Research Questions 1
1.2 The Popularity of Territorial Autonomy in Divided Societies 4
1.3 Territorial Autonomy As a Cure or Curse? 7
  1.3.1 TA Mitigates Ethnic Conflict 8
  1.3.2 TA Intensifies Ethnic Conflict 9
  1.3.3 Effects of TA On Ethnic Conflict Are Conditional Or Zero 12
1.4 Why Some Groups Have More Autonomy Than Others? 14
  1.4.1 Incentive-based Approach 15
  1.4.2 Bargaining Approach 16
1.5 Shortcomings in Existing Studies 17
1.6 My Approach And Arguments 19
1.7 Definitions: Ethnicity, TA, Ethnic Conflict 20
1.8 Outline of the dissertation 22
1.9 Figures 23

2 A Bargaining Model of TA And Ethnic Rebellion 25
2.1 The Model 25
2.2 Equilibrium Analysis 29
3 Empirical Analysis I: Why Some Ethnic Groups Get More Autonomy than Others 68
3.1 Hypotheses on Within-group Divisions and TA Granting 69
3.2 Research Design 75
3.3 Empirical Analysis 84
3.4 Summary 88
3.5 Figures 90
3.6 Tables 95

4 Empirical Analysis II: The Impact Of TA On Ethnic Rebellion 98
4.1 Hypotheses on TA and Ethnic Rebellion 98
4.2 Research Design 101
4.3 Empirical Analysis 104
4.4 Sensitivity Analysis 107
4.5 Summary 108
4.6 Figures 110
4.7 Tables 113

5 Conclusion 116
Figures

1.1 Countries with At Least One Autonomous Region ........................ 23
1.2 Territorial Autonomy and Ethnic Rebellion ............................ 24

2.1 A Game of Autonomy Granting and Ethnic Rebellion .................... 51

3.1 Distribution of Self-Determination Groups in the World ............... 90
3.2 Distribution of Degrees of Territorial Autonomy ....................... 91
3.3 Distribution of Within-group Divisions ................................. 92
3.4 The Substantive Effect of Group Militancy on Rebellion Occurrence 93
3.5 Predicted Probability of Different Degrees of Autonomy ............... 94

4.1 Territorial Autonomy for SD groups and Ethnic Rebellion (1985-2003) 110
4.2 Predicted Probability of Rebellion Occurrence: TA vs. No TA .......... 111
4.3 Substantive Effects of TA on Rebellion Intensity ...................... 112
# Tables

2.1 Model Notation .................................................. 52
2.2 $H_M, L_M$ and $G$’s Payoffs in the $T_A$ Subgame .......... 53
2.3 $H_M, L_M$ and $G$’s Payoffs in the $T_A$ Subgame .......... 53
2.4 $T_A$ Subgame Equilibrium Conditions ................... 56
2.5 $T_A$ Subgame Equilibrium Conditions ................... 58

3.1 Descriptive Statistics of the Variables ....................... 95
3.2 Regressions on Occurrence and Degrees of Territorial Autonomy . 96
3.3 Predicted Probability of TA of Different Degrees ............. 97

4.1 Effects of Territorial Autonomy on Rebellion Occurrence and Intensity 114
4.2 Effects of Territorial Autonomy on Rebellion Occurrence and Intensity (Instrument Models) 115
Chapter 1

Introduction

1.1 Research Questions

States should favorably consider such territorial devolution of power...particularly where it would improve the opportunities of minorities to exercise authority over matters affecting them.


Devolution (of power) is the Trojan horse that will lead to friction, frustration, and the demand for full independence.

*(Former British Prime Minister John Major. November 13, 1997)*

Territorial autonomy of India, where many of states are formed along ethnic lines after passing the States Reorganization Act of 1956, is considered key to holding this vast and diverse country together by giving ethnic minority groups a certain degree of self-rule. In Northern Ireland, the 1998 Good Friday Agreement, which included provisions of restoring an autonomous Northern Ireland Legislative assembly within the United Kingdom, was an important step toward ending thirty years of
fighting between forces for and against British rule. In Indonesia in 2005, the central government and the Islamist Free Ace Movement signed an accord in which the rebels agreed to give up their long-time armed struggle for independence in return for the right to establish a form of regional self-government. In October 2005, the Iraqi government ratified a draft constitution that emphasized giving rebellious regions autonomy as a means to accommodate the state’s different ethnic and religious groups. Although there are differences across and within these states, they all have in common that in order to reduce ethnic tensions power is shared among central and ethnic sub-state units, letting the groups enjoy a certain degree of self-governance and allowing for the preservation of specific cultures, languages, forms of living, etc.

Recently, Libya, Syria, and Ukraine joined a large number of ethnically divided societies and conflict-ridden states where, at least for some, hopes for long-term stability and peace are pinned on territorial autonomy. In March 2012, five months after the violent fall of the country’s dictator Muammar Gaddafi, the Libyan city of Benghazi was the scene of clashes between supporters and opponents of regional autonomy by federalizing the country. While the supporters argued that regional autonomy would prevent the eastern parts of the country from being marginalized, opponents claimed that regional autonomy would be a slippery slope toward state disintegration.\textsuperscript{1} A few months later, in the midst of a civil war, the Kurds voiced

\textsuperscript{1}Sean Kane, “Federalism and Fragmentation in Libya? Not so Fast....” \textit{Foreign Policy}, the Middle East Channel, March 20, 2012.
in Syria that if should the Assad regime fall, they would like to see a federal Syria with greater autonomy for Kurdish majority areas. In the spring of 2014 in the wake of Russia’s annexation of Crimea, the idea of giving regional autonomy to eastern Ukraine appeared to gain momentum, at least among outside observers, as tensions between Kiev and the eastern regions increased.

It is hoped that territorial autonomy can be “peace-preserving,” serving as a compromise between central governments concerned about the state’s territorial integrity and ethnic minority groups in pursuit of great autonomy. Yet territorial autonomy is not a panacea for ethnically divided and conflict-ridden states. For some ethnic groups such as Mali’s Tuaregs, Moldova’s Gagauz, and Nicaragua’s Miskito Indians, territorial autonomy seems to offer a way out of conflict. For other groups autonomy granting either failed to end the conflict, such as Philippines’ Moros, Ethiopia’s Afars, and Sri Lankan’s Tamils, or could not prevent the onset of armed conflicts after autonomy was implemented as in the cases of India’s Sikhs, Sudan’s Southerners, and Pakistan’s Baluchis. According to the statistics, among the ethnic groups who sought self-determination, groups with autonomy were almost as violent as groups without autonomy (See Figure 1.2 in the appendix). For both types of groups, about 44%

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4I analyzed the data myself. Rebellion is defined as at least one organized anti-
of the group-years saw anti-government ethnic rebellion occurring. This is puzzling. To address this puzzle, two specific questions are asked in this dissertation: Why does territorial autonomy as a way of transferring power and resources reduce ethnic rebellion in some cases but not in other cases? If it does not reduce ethnic rebellion, why do governments grant autonomy in the first place?

Given the tremendous effect civil wars have been shown to exert on human development and the popularity of territorial autonomy (Collier et al., 2003; Justino, 2007; Bundervoet et al., 2009), it is very important to understand the conditions under which autonomy is likely to provide useful tools for settling the ethnic tensions it is meant to address. Without understanding this, some countries may pin their hopes on a system that may make the situation worse or have no chances of mitigating ethnic conflict, or fail to adopt a system that may. The study will expand our understanding of the application of territorial autonomy to manage conflicts in ethnically divided societies, which will be valuable for academics and practitioners involved in designing and implementing territorial autonomy for ethnic conflict management.

1.2 The Popularity of Territorial Autonomy in Divided Societies

Internal wars became a major concern of policy makers and political scientists since the end of World War II, as the number of interstate conflicts was decreasing and government attack in a given year, i.e., rebel score \( \geq 1 \) (MAR).
as the human costs of civil strifes appeared to be so horrific. Within the field of
civil wars, particular attention has been paid to ethnic wars because there is substan-
tial evidence that ethnic war is the most common form of internal armed conflicts
(Sambanis, 2001; Fearon and Laitin, 2003; Collier and Hoefler, 2004; Miguel et al.,
2004). In many of the internal conflicts, the warring parties are central governments
and territorially concentrated minority groups in pursuit of self-determination, that
is, greater autonomy within the borders of the existing state or sometimes outright
independence. To name a few here, the secessionist Acehnese movement in Indoneisa,
the Basques’ and Kashmiri’s long pursuits of independence, and the Kurd’s quest
for self-governance in Turkey are all examples. Since 1950, about seventy such armed
conflicts have taken place in the world, and more than eighty ethnic groups have
pursued greater autonomy or independence through nonviolent or militant tactics
(Marshall and Gurr, 2003). Scholars have theorized and state leaders have tried out
different ways for containing conflicts in ethnically divided societies. While not al-
ways morally acceptable, common strategies include coercion, partition, assimilation,
and power-sharing, each of which has a mixed record of success. Granting territorial
autonomy is one of the most often adopted strategies for ethnic conflict management.

Territorial autonomy is not a new phenomenon. Historically, in the decolonization
context, it was seen to be a tool of state construction. Outside of that context, self-

5For a discussion of typologies of various forms of conflict regulation, see O’Leary and
McGarry (1993), and Schneckener (2004).
determination discourse was viewed with great suspicion by governments, who saw it as a first step onto that slippery slope that inevitably leads towards irredentist or secessionists claims (Weller and Wolff, 2005). Thus, autonomy was widely regarded as a somewhat dangerous concept that a state would only employ at its own peril. This climate gradually changed, especially since the end of the World War I. In response to ethnic armed conflicts, autonomy was rediscovered as a potential tool in accommodating self-determination claims without endangering the territorial integrity of an existing state. What appears at first sight to be a disintegrative solution is extolled by politicians and scholars alike for its integrative effect by some transfer of powers from the center to the regions.

Europe has been the cradle of ethnic regional autonomy since Finland created the first modern autonomy system in 1921 on the Aland Islands, which were mostly inhabited by Swedish people. Later, several European states including Spain, Switzerland, and Belgium adopted regional autonomy as a means of solving ethnic conflicts, of accommodating ethnic minorities, and of enhancing regional democracy. In Africa, regional autonomy exists in Tanzania, in South Sudan, and in Nigeria. Asia has become another hub of regional autonomy solutions. Under the 5th schedule of its Constitution which is meant to protect the interests of smaller tribal peoples, India created 14 sub-state autonomies. China is one of the biggest practitioners of such a political arrangement. In 1997, President Jiang, Ze’min declared ethnic regional autonomy as one of China’s fundamental political institutions. Up until now, there are
more than 300 autonomous regions dispersed in more than 40 countries in the world (See Figure 1.1). Territorial autonomy is not only used in the western countries (e.g., Belgium, Switzerland, Canada, and Spain) but also in the developing world (e.g., Brazil, India, Indonesia, Bosnia-Herzegovina, and Nigeria). Furthermore, these institutional solutions enjoy widespread support from the international community, which seeks to create sustainable domestic peace. In 1991 when establishing conditions for the recognition of the new states of Central and Eastern Europe, the European Community (EC) endorsed autonomy as a means to address minority issues and ethnic conflict. Moreover, the United Nations General Assembly addressed this topic in the Liechtenstein Initiative on Self-determination Through Self-administration in 1995, which highlights autonomy as a way to mitigate self-determination secessionism.

1.3 Territorial Autonomy As a Cure or Curse?

More widespread implementation of autonomy regimes as mechanisms to address self-determination conflicts have been accompanied by a lively debate among politicians and scholars about whether territorial autonomy will mitigate ethnic conflicts or promote them. Yet, opinions are far from a unified view. The section below attempts to briefly present this debate.
1.3.1 Territorial Autonomy Mitigates Ethnic Conflict

A set of studies has argued that minorities with autonomy are less likely to initiate conflict (Lijphart, 1977; Horowitz, 1985; Kaufmann, 1996; Gurr, 2000). For a long time, this was the dominant view in the scholarly literature on ethnic conflict. For instance, based on a study of 233 politically active minority groups covering the period 1945-1989, Ted (Gurr, 1994) claims that “negotiated regional autonomy has proven to be an effective antidote for ethnonational wars of secession in Western and Third World states.” Many of the studies which focus specifically on autonomy concessions as a part of post-conflict settlements confirm that negotiated civil war settlements that include territorial autonomy provisions have a positive and significant effect on settlement stability, because they constitute a signal of moderate intent from the victor (Hartzell et al., 2001; Hoddie and Hartzell, 2005; Jarstad and Nilsson, 2008).

Proponents of territorial autonomy tend to think it alleviates ethnic conflict by giving ethnic groups control over their political, economic, and social affairs, which reduces the sense of threat that groups feel from other groups in a country or from the government (Lijphart, 1977; Tsebelis, 1990; Ornstein and Coursen, 1992; Narang, 1995; Kaufmann, 1996; Stepan, 1999). Ethnic conflicts often occur when groups feel discriminated against by other groups or threatened by them in some way. Granting autonomy may allow participation by minority groups (who are often excluded from power at the national level) in political processes in their immediate environment, thereby potentially reducing conflicts. The Bolivian case may be illustrative. The
Popular Participation Law introduced in 1994 provided an opportunity for native groups to voice their political demands through participation in local politics. One of the most excluded native groups, the Guaranis, has taken this opportunity to enter local government assemblies.

Territorial autonomy may also reduce the urgency of central political competition, providing multiple points of power that can be shared among the different communities. If ethnic minorities control or have great influence over subnational governments, this may help them resist discriminatory central policies and defend themselves. Local government may also serve as a training ground in cooperation and compromise, and as an incubator for small ethnic parties that may choose to form multi-ethnic coalitions to contest national elections (Hoddie and Hartzell, 2005; Jarstad and Nilsson, 2008). In all these ways, territorial autonomy may at times alleviate ethnic conflicts.

1.3.2 Territorial Autonomy Intensifies Ethnic Conflict

Territorial autonomy may reduce the sense of threat that groups feel by giving them more influence over their own affairs. Even so, many people argue that despite its good intentions, territorial autonomy may actually exacerbate ethnic conflict and secessionism rather than abate it (e.g., Brubaker and Budapest (1995); Kymlicka (1998); Snyder (2000); Bunce and Watts (2005)). Evidence from the partly violent breakup of the Soviet Union and Yugoslavia in the early 1990s (Hale, 2004), the disintegration of Czechoslovakia (Bunce, 1999), and separatist violence in Russia and
the successor states of the Soviet Union (Cornell, 2002; Bunce and Watts, 2005) and in the ethnic federations of Nigeria, India, and Indonesia, constitutes a “terrible track record” of autonomy (Snyder, 2000). Saxton and Benson (2005) examine seventeen regions of Spain from 1977 to 1996 and find that political devolution, instead of appeasing regional ethnic groups, can have the opposite effect. There are at least four different reasons why people believe that territorial autonomy may have this unfortunate effect on society.

The first reason relates to the effect that territorial autonomy has on ethnic identities (Diamond and Plattner, 1994; Kymlicka, 1998). Some argue that territorial autonomy may intensify ethnic conflicts by reinforcing the identities of ethnic groups in countries. It grants groups political power, thereby giving them political recognition and legitimacy. Subnational governments may do this by passing laws that promote the use of certain languages, religions, or customs in countries at the expense of others (Roeder, 1991; Bunce, 1999).

The second reason that territorial autonomy may exacerbate ethnic conflicts is that it may enable local majorities to abuse local minorities and inflame ethnic cleavages that are salient at the local but not the national level. If several groups live in the same region, the dominant ethnic group in a region may pass laws that threaten or harm other groups in the region (Nordlinger and Huntington, 1972; Lijphart et al., 1993; Suberu, 1994). Many sub-national governments have used their political power to pass laws that prevent other groups from using their own language in public places.
or from being schooled in their own languages. Some sub-national governments have also tried to use their political power to exclude groups from voting and participating in the government.

A third way that territorial autonomy may promote ethnic conflicts is by whetting the appetites of groups for more and more autonomy until they finally demand complete independence from the state (Gleason, 1990; Kymlicka, 1998). Giving regions some autonomy may lead to them eventually demanding complete independence because it may make regions realize that they can manage their own affairs better than the state. Giving regions some autonomy may also give rise to regional elites, who may demand more autonomy for their regions, not because they believe that their regions can manage their own affairs better than the state, but because more autonomy would increase the elites’ own personal power (Meadwell, 1993).

Last but not least, by transferring control over local governance, autonomy can “arm” minorities with resources to challenge the state (Riker, 1964; O’Leary, 2001; Snyder, 2000; Leff, 1999; Snyder, 2000). Territorial autonomy may make it easier for minority groups to engage in ethnic conflicts by providing them with various material resources, including separate military or police forces, separate form of media, and separate regional governments, etc. Separate military and police forces would obviate the need for groups to raise their own military. Separate forms of media, meanwhile, would make it easier for groups to communicate with each other and to mobilize actions against other groups or government. Regional governments would also make
it easier for groups to engage in ethnic conflicts because they would give regional elites a platform to promote ideas in favor of ethnic conflicts. They would also give regional leaders experience in governing so that they would know how to run their own governments should their regions ultimately secede from a country.

1.3.3 Effects of Territorial Autonomy On Ethnic Conflict Are Conditional

Some scholars attempt to resolve this apparent paradox by highlighting conditional relationships and by making nuanced threshold arguments about the point after which increasing territorial autonomy yields decreasing returns to the state (Jolly, 2006; Brancati, 2003; Elkins and Sides, 2007; Miodownik and Cartrite, 2010). Several cross-country evaluations of the effectiveness of territorial autonomy as a means to mitigate ethnic conflicts found that it is conditional on certain country-level factors (e.g. absence of regional parties, or economic development) and ethnic group-level factors (e.g. degree of spatial concentration, or group size) (Cornell, 2002; Saideman et al., 2002; Bakke and Wibbels, 2006; Brancati, 2006; Siegle and OMahony, 2006; Tranchant, 2008). In an effort to understand these conditional effects, researchers offer a variety of explanations.

Sambanis (2001) contrasts the effect of ethnic federalism with respect to the degree of groups’ spatial concentration. The study finds that the probability decreases with federalism, but this is true only for spatially concentrated groups. By looking at western democracies, Brancati (2006) argues that the key to the varying degrees of
success of territorial autonomy in reducing ethnic conflict from country to country is to be found in variation in an intervening factor: regional parties. Territorial autonomy encourages the growth of regional parties, which in turn increase ethnic conflict and secessionism “by reinforcing regionally based ethnic identities, producing legislation that favors certain groups over others, and mobilizing groups to engage in ethnic conflict and secessionism” (Brancati, 2005). Tranchant (2008) argues territorial autonomy could promote peace conditional on groups’ demographic characteristics. Typically, it will empower minorities which are small at the national level while representing a critical mass of the population in the region they live in. Therefore, it reduces ethnic conflict for groups spatially concentrated enough and/or for groups having a local majority. In contrast, it fuels rebellion for groups lacking one. While agreeing that territorial autonomy in civil war settlements can be an effective solution for ethnically divided societies, Lake and Rothchild (2005) and Roeder and Rothchild (2005) assert that this is so only under very restrictive conditions, such as a robust democracy, moderate group leaders, mixed settlement patterns, and the absence of dominant ethnic groups, although these conditions are unfortunately very unlikely to be present after civil wars.

Consistent with the studies mentioned above and the advice of Amoretti and Bermeo (2004), this dissertation engages the debate by exploring the conditions under which territorial autonomy preserves peace, rather than asking whether it does so. This shift of focus is important for two reasons. First, as the cure/curse debate stands,
the evidence is indeterminate. Both sides make theoretically sound claims backed up with empirical evidence. Second, this debate does not shed light on the divergent record of conflict in ethnic divided states. Rather, the main lesson from diverging views on territorial autonomy’s impact on ethnic rebellion is that there is no single formula for peace in divided societies (Tranchant et al., 2007).

1.4 Why Some Groups Have More Autonomy Than Others in the First Place?

While the existing literature on territorial autonomy has emphasized its potential value as a conflict management tool, the question of exactly how the institutions of territorial autonomy are first formed has been largely unexplored. The fledgling literature that explores territorial autonomy as an individual phenomenon has been dominated by scholars with backgrounds in law and jurisprudence (Lapidoth, 1997; Suksi, 1998). Despite the important contribution of these works in describing and clarifying the concept of autonomy and its use in international and domestic law, these studies show little systematic empirical examination of the origins of autonomy. The more recent wave of scholarship can be roughly categorized into two approaches: the incentive-based approach and the bargaining approach.
1.4.1 Incentive-based Approach

A number of scholars examine the motivations for *minority groups* to demand a change in governance. Several have argued a serious of economic factors affect the demand of minority groups for more or less local control (Bolton and Roland, 1997; Bolton et al., 1996; Fearon and Van Houten, 2002). For example, Gourevitch (1979) and Hechter (1977) argue that relatively wealthy or relatively deprived minorities will demand greater self-determination; Alesina and Spolaore (2005) argue that a group’s demand for a larger or smaller state is driven by the trade-off between the preference heterogeneity of the state and the efficiency of centralization. In addition, minority groups will be unlikely to settle their claims with the state when there are clear benefits to continued contestation, such as easy access to finance or lootable resources in the territory (Le Billon, 2001; Ross, 2003; Collier and Hoeffler, 2004; Fearon and Laitin, 2003). Political or strategic factors such as political instability or rough terrain may also reduce the likelihood of autonomy settlements because they make insurgency easier or more likely (Gurr and Moore, 1997).

Moreover, several scholars address the motivations for *states* to accommodate groups seeking self-determination. For example, some scholars argue that current and future reputations about a government’s willingness to accommodate challenges to the state affect incentives for an autonomy settlement (Toft, 2005; Walter, 2006; Chiozza and Choi, 2003). Also, nonviolent movements are found to be more effective at achieving territorial autonomy than ethnic groups that employ violence, as peaceful
tactics serve to advance their interests without generating the animosity and suspicion caused by violence (Shaykhutdinov, 2010).

1.4.2 Bargaining Approach

In contrast to incentive-based theories, scholars in the bargaining and conflict literature take the occurrence of ethnic rebellion as a bargaining failure to achieve an autonomy settlement which could prevent conflict beforehand. The literature addressing bargaining failure focuses on the process of bargaining, enumerating the conditions under which an autonomy agreement is more or less likely. It has identified several prominent reasons for bargaining failure between disputants (Fearon, 1995; Powell, 2004). Primary among these are three factors to explain bargaining failure: the existence of private information and incentives to misrepresent it which lead one or both parties to overestimate their probability of victory, the inability of either party to commit credibly to a new agreement, and the issue indivisibility which makes compromise an implausible option (Fearon, 1995). When information about the relative capabilities is not certain, both parties have an incentive to overstate their own strength in order to get the best deal possible, but in doing so they run the risk of provoking conflict. For two sides to agree to a bargain, they both need to believe that whatever autonomy concessions are made will not be used to create a stronger challenge over the same issue in the future once their relative capabilities have changed. Finally, bargaining failure is possible when the issue on the table is
fundamentally indivisible (Hassner, 2003; Toft, 2006; Sosis, 2011). Incomplete information, commitment problems and issue indivisibility all reduce the chances of reaching autonomy agreements among disputants.

1.5 Shortcomings in Existing Studies

There are a number of shortcomings in the existing literature which I would like to address in this dissertation. First, most studies on ethnic conflict typically either focus on the outbreak of conflict as an indicator of failure, or focus on when territorial arrangements are more or less likely to be agreed upon. Little theoretical and empirical work has looked at these two related processes at the same time; in particular, how autonomy is granted in the first place affects its effect on ethnic rebellion in the future. Ethnic conflicts are often the result of a failed political process in which governments are unable to reach an agreement to manage the demands of the groups while trying to maintain the unity of the state. Also, when granting territorial autonomy is considered as a policy tool in the shadow of an ethnic conflict environment, it is generated endogenously as a result of a government’s strategic actions in response to ethnic tensions. If the causes of territorial autonomy are systematically related to the prospects of war and peace, the effect of territorial autonomy on risks of ethnic conflicts cannot be treated independently of the origins of such arrangements. Therefore, it is better to study autonomy granting and ethnic rebellion in a unified framework.
Second, as a whole, the literature on the effects of autonomy mainly focuses on the outbreak or recurrence of rebellion. Few studies pay attention to the intensity of conflict. As a result, we are unable to clearly evaluate the role that autonomy plays in mitigating ethnic and nationalist tensions across varying level of disputes. As I argue later in this dissertation, autonomy granting influences the intensity of conflict as well as the occurrence. In fact, not all autonomy granting aims to eliminate conflict. Under some circumstances, governments actually use it as a tool to select themselves into small conflicts. We need to rethink the goals of territorial autonomy policy in more subtle terms.

In addition, the existing literature often assumes that actors in ethnic disputes are unitary. This assumption is less problematic for governments, because in general governments are more capable of enforcing their decisions as unitary actors. However, minority groups are much more fragmented (Cunningham, 2013; Kalyvas and Balcells, 2010). An ethnic group typically is comprised of several “factions,” which are organizations that claim to represent the interests of the entire group (Cunningham, 2013). Often they are connected only through a shared ethnic identity, and are able to act on their own. What they demand from the government and how they pursue their goals may be quite different. Within the Serbs in Croatia in early 1990, for instance, the Banja Luke faction wanted greater autonomy, while the Knin faction demanded inde-

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6 The unitary actor assumption may be inappropriate for weak states in which within-state divisions create large constraints for the government.
Even if factions have the same goals, they may have different preferences over strategies to achieve the goals. For example, within the Albanians in Macedonia in 1995, the radical faction led by Arben Xhaferi and Menduh Thaci relied heavily on violent strategies, while other factions chose to work within the political system and achieve their goals through compromise. Some studies have acknowledged the role of within-group divisions in intergroup relations (Caspersen, 2008; Cunningham et al., 2012; Mitchell et al., 2009), however, few systematically analyze how group fragmentation affects the effectiveness of specific institutional arrangements such as territorial autonomy.

1.6 My Approach And Arguments

Building on the bargaining and conflict literature, this dissertation develops a game-theoretic model of autonomy granting and ethnic rebellion that aims to address the issues raised above. By assuming that minority groups are factionalized, the model shows that opening the black box for minority groups’ decision-making greatly affects the strategic interactions between the actors involved in ethnic politics. First, within-group divisions affect the probability of granting territorial autonomy and its scope. Specifically, the existence of violent ethnopolitical organizations in a minority group increases its chances of getting territorial autonomy. However, divided groups get less

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This differentiation could be due to their hawkish leadership, or due to the unique characteristics of their members such as stronger ethnic affiliation.
autonomy than unified groups. Second, because of the existence of internal divisions of minority groups, territorial autonomy does not always reduce ethnic rebellion. Conditional on how costly it is to achieve peace with different factions, governments strategically choose the minimum amount of autonomy to maximize their payoffs. The reason is that there are two purposes of autonomy granting. One is for preventing conflict, which usually happens when the minority group is more unified. The other is for achieving a better outcome in conflict. When groups are divided, governments have incentives to grant a limited autonomy because it reduces the size of the war even though it does not fully resolve the underlying conflict. Therefore, in general, autonomy granting reduces the intensity of ethnic rebellion, but does not always reduce its occurrence. Therefore, the results of autonomy granting could be no ethnic rebellion at all, or a rebellion only by the more resolved faction which is more likely to rebel. As such, autonomy granting reduces the intensity of ethnic rebellion, but does not always reduce its occurrence. The model yields important implications about the occurrence of territorial autonomy, the size of autonomy and the effect of autonomy on ethnic rebellion. I conduct a study of 122 self-determination groups between 1985 and 2003 which provides strong support to the predictions.

1.7 Definitions: Ethnicity, TA, Ethnic Conflict

Several terms used throughout this dissertation merit clarification.

*Ethnicity.* Defining ethnicity has been difficult (Sollors, 1996). Nevertheless, efforts
have been made to define this concept. I draw on a well-accepted conceptualization given by Horowitz (1985), which is based on the ascribed differences among the groups, “whether the indicium is color, appearance, language, religion, some other indicator of common origin, or some combination thereof” (Horowitz, 1985).

Territorial autonomy (TA). Territorial autonomy refers to the granting of internal self-governance to a region, thus recognizing a partial independence from the influence of the national or central government, which can be determined by the degree of actual as well as formal independence enjoyed by the autonomous entity in its political decision-making process. Under the arrangements of territorial autonomy, the regional authorities are granted the power to exercise direct control over agreed-upon issues of special concern to them. At the same time, these arrangements allow the central state to exercise power over other policies of concern to the whole state (Sohn, 1981).

Ethnic conflict and rebellion. Ethnic conflict refers to organized acts of violence perpetrated by one group against another. It may range from minor instances of conflict between two or three people, to violent protests and rioting, to all-out civil war. Ethnic conflict consists of two forms of ethnic violence, namely rebellion and communal violence. Rebellion stands for violent anti-regime activities, and communal violence refers to inter-group violence between rivalries. My main focus in this dissertation is on sizable ethnic rebellion.
1.8 Outline of the dissertation

This dissertation includes five chapters. Chapter One is an introduction of my research question and a literature review about it. In Chapter Two I present a game-theoretic model to show the dynamics of autonomy granting and ethnic rebellion. I illustrate my main arguments with cases in India. Chapter Three evaluates the hypotheses about when territorial autonomy is granted and its scope. Chapter Four evaluates the hypotheses with regards to the relationship between territorial autonomy and ethnic rebellion. Finally, the concluding chapter summarizes my findings and places them into broader contexts.
1.9 Figures

Figure 1.1: Countries with At Least One Autonomous Region
Figure 1.2: Territorial Autonomy and Ethnic Rebellion
Chapter 2

A Bargaining Model Of Territorial Autonomy And Ethnic Rebellion

In this chapter, I present a game-theoretical model of autonomy granting and ethnic rebellion, which aims to examine how within-group divisions influence the occurrence of territorial autonomy and the effect of territorial autonomy on relieving ethnic tensions. There are three actors in the model—a government and two factions of a minority group. After the government chooses the amount of autonomy to grant to the minority group, the two factions decide whether to rebel or not simultaneously. In equilibrium, to what extent autonomy granting decreases rebellion depends on which faction(s) that the government uses autonomy to buy off. Taking the internal dynamics of minority groups into account, my formalization allows us to have a better understanding of when territorial autonomy occurs and the conditions under which autonomy reduces ethnic rebellion.

2.1 The Model

Suppose a government and a minority group bargain over the distribution of a unit of a pie—the control of an ethnic region of a country. Control here is defined as choosing the policies that would affect the lives of the ethnic minority, such as their
access to political positions, economic opportunities, preserving their own culture, etc. Let \( G \) denote the government. For the minority group, I assume that there are two factions, \( LM \) and \( HM \). While \( LM \) and \( HM \) come from the same minority group, they have different costs of fighting. The faction \( LM \) has a lower cost of war, \( c_L \), while the faction \( HM \) has a higher cost of war \( c_H \) (\( c_H > c_L \)). Because the value of the pie is normalized to 1, \( c_i \ (i = H, L) \) is \( i \)'s relative cost of fighting. That is, \( c_i \) not only captures each faction’s cost of war, but also the value it places on the issue at stake. Therefore, \( c_i \) can be interpreted as the level of resolve for fighting. Faction \( HM \) is equivalent to a less resolved faction or moderate faction, while faction \( LM \) is equivalent to a more resolved faction or radicalized faction. In addition to their different levels of costs of war, the two factions differ in their strength as well, which is conceptualized as their probability of winning a war against the government. Assume that the strength of the minority as a whole is \( p \), while the strength of the government is \( 1 - p \), \( p \in [0, 1] \). Let \( \lambda \) be faction \( HM \)'s contribution to the minority group’s chance of winning, and the remainder \( 1 - \lambda \) be faction \( LM \)'s contribution. So individually, \( HM \) wins a war against the government with probability \( p\lambda \) and \( LM \) with probability \( p(1 - \lambda) \).

— Figure 2.1 about here —

The sequence of the game is as follows. The government, \( G \), moves first, and it has two choices. One is not giving any territorial autonomy (\( TA \)). The other is giving \( x \) portion of autonomy to the minority group (\( TA \) with \( x \)). The degree of the auton-
omy, $x \in (0, 1]$, is continuous. It represents the relative weight of policies designed by the minority group itself vis-à-vis the central government. If $x$ is close to zero, then almost all decisions are made by the central government. If $x=1$, then the minority group enjoys complete independence, that is, the group governs itself. In between no autonomy and complete independence, there are various levels of autonomy that the minority group can have, and they are captured by $x \in (0, 1]$. After the government’s decision, the minority group decides to fight ($F$) or not fight ($\overline{F}$). Because the minority group consists of two factions, the decision in response to the government is a simultaneous game played by $LM$ and $HM$.\footnote{This setup not only reflects the uncertainty that one faction is not sure about the other faction’s action, but it also avoids making an assumption about forming a credible coalition between the two factions.} If neither faction fights, then the game ends in peace. If at least one faction decides to fight, then the game ends with an ethnic rebellion.

--- Table 2.1 about here ---

Now we turn to the payoffs. I assume if one faction wins the conflict, all members of the minority group can benefit from it, irrespective of who fought against the government. That is, a successful rebellion is assumed to be a public good. For the minority, a victory would mean independence or incorporation into some other political entity that it desires. For the government, a victory means its ability to impose whatever policy it wishes on the minority group. Therefore for both sides,
the utility of prevailing in a fight is 1, losing is 0. In addition, each participant of the conflict pays a cost of war. The payoffs for $HM$, $LM$ and $G$ in the $TA$ Subgame are summarized in Table 2.2.

In the $TA$ subgame I assume that the government will not retract the autonomy even if the minority initiates the conflict. Territorial autonomy granting is irrevocable in two ways. First, the minority has to see the autonomy put into practice before changing their attitude toward the government, otherwise, it could just be an empty promise. The autonomy granting, furthermore, involves ex-ante transfers of physical resources, power, and rights. If a government were to retract the transfers, it would need to justify the retraction by amending laws or the constitution to justify the retraction, which can be costly. Second, given that the government in this model is reactionary, i.e., it is responding to the minority group who initiated the conflict, it is possible that the government’s intention in the conflict is to defend the status quo instead of recovering a previously made concession. In reality, only in a very few historical cases has a government retracted autonomy when rebellion broke out. Especially after World War II, autonomy retraction due to rebellion was quite rare. With the assumption that territorial autonomy is not retractable, the $TA$ subgame is identical to the $\overline{TA}$ subgame, except that the stake being fought over is not a unit of pie but rather $1 - x$. Table 2.3 shows the payoffs for $HM$, $LM$ and $G$ in the $TA$ subgame.
This is a game of complete but imperfect information.\(^2\) For subgame perfect equilibria (SPE), there are two tie-breaking rules: when a faction of the minority group is indifferent between rebelling and not rebelling, it does not rebel; when the government is indifferent between granting autonomy and not granting autonomy, it does not grant it.

### 2.2 Equilibrium Analysis

By backward induction, I first consider the two subgames, which are simultaneous games between factions \(HM\) and \(LM\). The results can be summarized into two lemmas.\(^3\)

**Lemma 1.** *Without autonomy, the high cost faction rebels if \(c_H < p\lambda\); the low cost faction rebels if \(c_L < p(1 - \lambda)\).*

Lemma \(1\) characterizes the behavior of the two factions in the \(\overline{TA}\) subgame, which is played when the government does not grant autonomy. Whether the faction will rebel or not depends on the relationship between its respective cost of war and the benefit of a unilateral war.\(^4\) The benefit of a unilateral war equals to the faction’s

\(^2\)In particular, the players have no uncertainty about each others’ payoffs but the two factions have uncertainty about each other’s action.

\(^3\)All proofs are found in the appendix.

\(^4\)Unilateral war refers to a war initiated by a single faction of a minority group.
probability of winning the war if it fights alone, given that the issue at stake is assumed to be a unit. Depending on which faction(s) poses a credible threat to the government, there are four possible Nash equilibria (see Table 2.4 in the appendix). A *credible threat* is defined as that a faction chooses to rebel if the government does not grant any autonomy. It is possible that neither faction, or only one faction, or both factions have credible threats of rebellion. Let $c_H^{(1)} = p\lambda$, denoting the cut point that $HM$ is indifferent between fighting and not fighting. Let $c_L^{(1)} = p(1-\lambda)$, denoting the cut point that $LM$ is indifferent between fighting and not fighting. When $c_H < c_H^{(1)}$ and $c_L < c_L^{(1)}$, fighting is profitable for both factions, therefore, both $HM$ and $LM$ will rebel. This is the situation in which both factions have credible threats to rebel. However, when $c_H \geq c_H^{(1)}$ and $c_L \geq c_L^{(1)}$, neither $HM$ nor $LM$ would rebel because war is not profitable for either faction. Due to the lack of credible threats, the government can impose whichever policy it wishes on the group. The government’s favorite policy would be keeping the whole “pie,” giving the minority group nothing. Therefore, if neither of the factions fights, both of them will get a payoff of zero.

The other two Nash equilibria represent the situations in which only one faction has a credible threat. We may take it for granted that $LM$ would always be the “fighter” and $HM$ would always be the “onlooker.” This is true only if $c_H \geq c_H^{(1)}$ and $c_L < c_L^{(1)}$. Given that $c_H > c_L$, when $\lambda \leq \frac{1}{2}$, both of the conditions are met. This implies that when $LM$ is stronger than $HM$, $HM$ always has an incentive to free ride by not participating in rebellion. However, there is a possibility that $HM$ is the
“fighter” while “LM” is the “onlooker.” It occurs when \( c_H < c_H^{(1)} \) and \( c_L \geq c_L^{(1)} \). As \( c_H > c_L \), to meet these two conditions, it requires that \( \lambda \) has to be larger than \( \frac{1}{2} \). This means that the only case in which the low cost faction can free ride is when the high cost faction is very strong.

Furthermore, the analysis of the \( \mathcal{T} \mathcal{A} \) subgame implies that the existence of multiple factions within ethnic groups may reduce the probability of ethnic rebellion by creating collective action problem. Each faction not only has an incentive to free ride, but also is worried about being free-ridden. When \( c_i < p \) \( (i = H, L) \), if both factions rebel, then both of them will be better off by fighting. However, with the concerns of free riding and being free-ridden, \( HM \) rebels if and only if \( c_H < c_H^{(1)} \) and \( LM \) rebels if and only if \( c_L < c_L^{(1)} \). It is easy to see that \( c_i^{(1)} < p \) \( (i = H, L) \), which implies the the concerns of free riding and being free-ridden reduce a faction’s probability to engage in ethnic rebellion.

In the next lemma, we are looking at the right side of the game tree where the government grants some level of autonomy. The reason that the government has an incentive to grant autonomy in such cases is that at least of one of the factions has a credible threat of rebellion. Lemma 2 characterizes the factions’ behavior conditional on the amount of autonomy granted by the government.

**Lemma 2.** With autonomy, whether factions will rebel or not depends on the size of the autonomy, \( x \). The high cost faction will rebel if \( x < 1 - \frac{c_H}{p\lambda} \); the low cost faction
will rebel if \( x < 1 - \frac{c_L}{p(1-\lambda)}. \) \(^5\)

Different from the TA subgame, the size of the pie that each faction can get through war is \( 1 - x \). As we discussed earlier, autonomy is irrevocable, thus, \( x \) is guaranteed for the group. In the TA subgame, the risk of ethnic rebellion not only depends on the faction’s capability and its cost of war, but also depends on how large the autonomy already granted by the government is. Again, there are also four possible Nash equilibria (see Table 2.5 in the appendix). When the benefit of a successful unilateral rebellion, \( p\lambda(1-x) \), is larger than \( HM \)’s cost of war (i.e., \( x < 1 - \frac{c_H}{p\lambda} \)), even though an \( x \) amount of autonomy is granted to the minority group, faction \( HM \) still prefers to rebel. Let \( x^{(H)} = 1 - \frac{c_H}{p\lambda} \) denote the minimum amount of autonomy that could pacify the high cost faction. Similarly, when \( x < 1 - \frac{c_L}{p(1-\lambda)} \), faction \( LM \) also has an incentive to fight given \( x \) amount of autonomy already granted by the government. Let \( x^{(L)} = 1 - \frac{c_L}{p(1-\lambda)} \) denote the corresponding amount of autonomy which could pacify the low cost faction. Depending on \( \lambda \) and \( c_i \) \((i = H, L)\), the relationship between \( x^{(L)} \) and \( x^{(H)} \) is indeterminate. When \( \lambda \) is small, which means the low cost faction is strong, it is always more difficult to pacify the

\(^5\)The condition \( x < 1 - \frac{c_H}{p(1-\lambda)} \) contains the requirement that \( c_H \leq p\lambda \) for \( HM \). Because \( x \in (0,1] \), to make the inequality \( x < 1 - \frac{c_L}{p(1-\lambda)} \) makes sense, it is required that \( 1 - \frac{c_L}{p(1-\lambda)} \geq 0 \). Therefore, we can get \( c_H \leq p\lambda \), which implies that \( HM \) has a credible threat. Similarly, \( x < 1 - \frac{c_L}{p(1-\lambda)} \) contains the requirement that \( c_L \leq p(1-\lambda) \), which implies that \( LM \) has a credible threat.
low cost faction because it not only has high resolve, but also has strong capability. However, as $\lambda$ increases, although the high cost faction has less resolve to fight, it can contribute more to the fighting. As a result, $HM$ becomes more and more difficult to be satisfied by granting autonomy. If $\frac{c_H}{c_L} \geq \frac{\lambda}{1-\lambda}$, that is, the ratio of cost is no less than the ratio of strength among factions, then $x_L(\lambda) \geq x(H)$, which implies that $LM$ has a stronger incentive to rebel than $HM$. As such, faction $LM$ is more difficult to be pacified. On the other hand, if $\frac{c_H}{c_L} < \frac{\lambda}{1-\lambda}$, then $x_L(\lambda) < x(H)$. In this case, $HM$ has a stronger incentive to rebel than $LM$.

Building on these two lemmas, we can now analyze the entire game which includes the government’s decision. Four results are presented in the next section, corresponding to which factions pose credible threats of rebellion to the government. The four related propositions provide a full characterization of all possible scenarios in which the factions may or may not present a credible threat of rebellion. We can thus analyze the government’s optimal policy and the factions’ responses.

**Scenario 1: Absence of Credible Threat from Either Faction**

**Proposition 1 (No-TA Peace Equilibrium).** If $c_H \geq c_H^{(1)}$, and $c_L \geq c_L^{(1)}$, then neither faction has a credible threat of rebellion. The government has no incentive to grant autonomy. In equilibrium there is no ethnic rebellion.

As Lemma 1 shows, when $c_H \geq c_H^{(1)}$, and $c_L \geq c_L^{(1)}$, even if the government does not grant autonomy, neither $LM$ nor $HM$ rebels because war is not profitable for either faction. Since peace can be automatically achieved, the government’s best response
is not making any concession by granting autonomy. This scenario can be called the
No-TA Peace Equilibrium. It usually is the case when the minority group has very
low capabilities relative to the government.

**Scenario 2: Existence of Credible Threat from One Faction**

The second scenario of what would happen if the government does not grant
autonomy is that one faction rebels, but the other does not. In other words, only
one faction poses a credible threat of rebellion to the government. This game then
resembles one in which the minority group is assumed to be a unitary actor. The
government’s best response is always to reach an ex-ante autonomy agreement to
eliminate ethnic rebellion in the future.

**Proposition 2 (Partial Pacifying TA Peace Equilibrium).** There are two cases
in which only one faction has a credible threat of rebellion; in each case, the govern-
ment offers just enough autonomy to pacify the violent faction.

1. If \( c_H \geq c_H^{(1)} \) and \( c_L < c_L^{(1)} \), then only the low cost faction has a credible threat
   of rebellion. The government offers \( x^{(L)} \) to the faction and the faction does not
   rebel.

2. If \( c_H < c_H^{(1)} \) and \( c_L \geq c_L^{(1)} \), then only the high cost faction has a credible threat
   of rebellion. The government offers \( x^{(H)} \) to the faction and the faction does not
   rebel.

In equilibrium there is no ethnic rebellion.
In the two cases of Proposition 2, if there is no autonomy, only one faction of the minority group has an incentive to rebel while the other chooses to free ride. For example, if \( c_H \geq c_H^{(1)} \), and \( c_L < c_L^{(1)} \), even though the government does not grant any autonomy, only the low cost faction will fight against the government. To pacify the low cost faction, the government needs to offer \( x^{(L)} \). To ensure that making such an offer is a best response for the government, the government’s cost of fighting cannot be below \( 1 - p(1 - \lambda) - \frac{c_L}{p(1-\lambda)} \), otherwise, the government would prefer fighting with \( LM \) rather than granting autonomy to the ethnic region. This condition is always met.\(^6\) Similarly, if \( c_H < c_H^{(1)} \), and \( c_L \geq c_L^{(1)} \), \( HM \) chooses to rebel, while \( LM \) not. In this case, the government’s cost of war cannot be smaller than \( 1 - p - \frac{c_H}{p\lambda} \), otherwise, the government would just let \( HM \) rebel. This condition is always met as well.\(^7\) The two cases of Proposition 2 capture the empirical cases in which an ethnic group only has one vocally violent faction. The factions that are satisfied with the status quo usually do not voice their opinions, especially when they can be free riders and enjoy

\(^6\)\( c_G \geq 1 - p(1 - \lambda) - \frac{c_L}{p(1-\lambda)} \) can be transformed into \( c_L \geq (1 - p(1 - \lambda) - c_G)p(1 - \lambda) \).

Given that \( p(1 - \lambda) \geq c_L \), we can get that \( (1 - p(1 - \lambda) - c_G)p(1 - \lambda) \leq (1 - c_L - c_G)c_L \).

As \( 1 - c_L - c_G \) is smaller than 1, \( (1 - c_L - c_G)c_L < c_L \) is true. Therefore, the condition that \( c_L > (1 - p(1 - \lambda) - c_G)p(1 - \lambda) \) is always met.

\(^7\)\( c_H \geq 1 - p - \frac{c_H}{p\lambda} \) can be transformed into \( c_H \geq (1 - p\lambda - c_G)p\lambda \). Given that \( p\lambda \geq c_H \), we can get \( (1 - p\lambda - c_G)p\lambda \leq (1 - c_H - c_G)c_H \).

As \( 1 - c_H - c_G \) is smaller than 1, \( (1 - c_H - c_G)c_H < c_H \) is true. Therefore, the condition that \( c_H \geq (1 - p\lambda - c_G)p\lambda \) is always met.
the benefit gained through the rebellion initiated by the violent factions. Such ethnic groups behave like unitary actors. The government’s best response in such cases is to offer some autonomy to prevent conflict occurrence. Autonomy granting in this situation only changes the warring faction’s conflictual behavior. The nonviolent faction remains nonviolent not because of autonomy granting, but because fighting is never a better option than accepting the status quo in the first place. I call this scenario the *Partial Pacifying TA Peace Equilibrium* to distinguish it from the next case where both factions have credible threats of rebellion.

**Scenario 3: Existence of Credible Threats from Both Factions**

When \( c_H < c_H^{(1)} \), and \( c_L < c_L^{(1)} \), then both factions choose to fight against the government if the government does not grant territorial autonomy. The consequence of not granting autonomy will be an ethnic rebellion with the entire group uprising. Given the factions’ credible threats, the government has an incentive to buy peace from some faction(s) through autonomy granting. However, the optimal amount of autonomy that the government offers depends on how strong the factions’ incentives to rebel are, which is determined by their costs of war and capabilities. The existence of within-group divisions provides the government a “divide and concede” strategy, that is, the government buys off a specific faction by granting autonomy while lets the other faction rebel. Here, “divide” refers to the government capitalizing on existing divisions and treating the factions discriminately.\(^8\) Cunningham (2011) argues

\(^8\)In this study, I assume factions are given. When I say “divide,” it does not refer to the
that governments play the “divide and concede” strategy to address the information problem by making the preferences of minority groups clearer, flushing out strategic separatists, and bolstering their preferred faction(s) so they can rein in other factions.

In the following, I argue that even when information is complete, and inter-faction coordination or policing is not available, governments still have incentives to play such a strategy.

More precisely, whether the government grants autonomy to pacify one faction rather than the other depends on its own cost of war, and the relative strength of each faction’s incentive to rebel. If the low cost faction has a stronger incentive to rebel (see the first case of Proposition 3 and Proposition 4), then the government will be better off by buying off $HM$ rather than $LM$ when $c_G \geq c_G^{(1)}$ in which $c_G^{(1)} = [1 - p(1 - \lambda)] \frac{c_H}{p\lambda} - \frac{c_L}{p(1 - \lambda)}$. Similarly, if the high cost faction has a stronger incentive to rebel (see the second case of Proposition 3 and Proposition 4), then the government will better off by buying off $LM$ rather than $HM$ when $c_G \geq c_G^{(2)}$ in which $c_G^{(2)} = (1 - p\lambda) \frac{c_L}{p(1 - \lambda)} - \frac{c_H}{p\lambda}$. The “divide and concede” strategy allows the government to engage in a smaller conflict with a specific faction.

**Proposition 3 (Complete Pacifying $TA$ Peace Equilibrium).** There are two cases in which both factions have credible threats of rebellion; in each case, the government offers enough autonomy to pacify both factions.

insinuation in which governments induce new divisions among minority group, although it happens sometimes.
1. If $\frac{c_H}{c_L} \geq \frac{\lambda}{1-\lambda}$, $c_H < c_H^{(1)}$, $c_L < c_L^{(1)}$, and $c_G \geq c_G^{(1)}$, then the low cost faction has a stronger incentive to rebel. The government offers $x^{(L)}$ and both factions are satisfied.

2. If $\frac{c_H}{c_L} < \frac{\lambda}{1-\lambda}$, $c_H < c_H^{(1)}$, $c_L < c_L^{(1)}$, and $c_G \geq c_G^{(2)}$, then the high cost faction has a stronger incentive to rebel. The government offers $x^{(H)}$ and both factions are satisfied.

In equilibrium there is no ethnic rebellion.

The equilibrium is called the Complete Pacifying TA Peace Equilibrium: it is complete in the sense that the government offers autonomy which is large enough to buy peace from both factions; it is pacifying in the sense that by granting autonomy the whole minority group will give up rebelling; thus, autonomy granting produces peace. For this pacifying equilibrium to emerge, first it must be the case that $c_H < c_H^{(1)}$ and $c_L < c_L^{(1)}$, that is, the probability of each faction’s winning a unilateral war is higher than its cost of war. As a result, if there is no autonomy, both $LM$ and $HM$ will rebel. However, anticipating the rebellion, the government prefers to buy off both factions. How much autonomy will be enough to satisfy both factions depends on how costly it is to pacify the faction that has a stronger incentive to rebel. The price to pay for peace for the low cost faction is $x^{(L)}$, while for the high cost faction it is $x^{(H)}$.

As we discussed earlier, it is not the case that it is always more expensive to pacify the low cost faction. If $\frac{c_H}{c_L} \geq \frac{\lambda}{1-\lambda}$, then $x^{(L)} \geq x^{(H)}$, which implies that $LM$ has more incentives to rebel than $HM$. On the other hand, if $\frac{c_H}{c_L} < \frac{\lambda}{1-\lambda}$, $HM$ is more likely to
rebel than $LM$. As long as the government pacifies the faction that has a stronger incentive to fight, the faction with a weaker incentive will be peaceful as well. The following analysis focuses on territorial autonomy granting in the situation when the low cost faction is the one that has a stronger incentive to fight. The situation when the high cost faction has more incentive to rebel can be analyzed in a similar way.

If $\frac{c_H}{c_L} \geq \frac{\lambda}{1-\lambda}$, that is, the low cost faction is more likely to rebel than the high cost faction, when would the government prefer to pacify both factions? For this, $c_G$ has to be no less than $1 - p - \frac{c_L}{p(1-\lambda)}$, which is the cut point that makes the government indifferent between fighting with both factions and pacifying both of them. It is possible to show that this condition is always met, which implies that it is always possible to reach an agreement that could prevent an all-out ethnic war.\footnote{\(c_G \geq 1 - p - \frac{c_L}{p(1-\lambda)}\) can be transformed into \(c_L \geq (1 - p - c_G)p(1 - \lambda)\). Given that \(p(1-\lambda) \geq c_L\), we can get \((1 - p - c_G)p(1 - \lambda) \leq (1 - p - c_G)c_L\). As \(1 - p - c_G\) is always smaller than 1, \(c_L \geq (1 - p - c_G)c_L\) is true. Therefore, the condition \(c_L \geq (1 - p - c_G)p(1 - \lambda)\) is always met.} Furthermore, the government also prefers to not only pacify $HM$, but also pacify $LM$, which is constrained by the condition, $c_G \geq c_G^{(1)}$. $c_G^{(1)}$ is the cut point that makes the government indifferent between pacifying both factions and only pacifying the faction $HM$. In the condition $c_G \geq c_G^{(1)}$, the difference of the costs of war of the two factions is very important. $c_G^{(1)}$ is a function of $c_H - c_L$. As this difference gets smaller, $c_G \geq c_G^{(1)}$ is more likely to be true, that is, the more likely the government
would like to buy off both factions. In this situation, although the minority group consists of two factions, within-group division is very limited. The limited division reduces the government’s options from three to two: either satisfying both or fighting with both, eliminating the option of buying off one while letting the other rebel. The next proposition addresses the conditions for the latter case.

**Proposition 4 (Partial Pacifying TA Conflict Equilibrium).** There are two cases in which both factions have credible threats of rebellion; in each case, the government offers just enough autonomy to pacify the “cheaper” faction.  

1. If \( \frac{c_H}{c_L} \geq \frac{\lambda}{1-\lambda} \), \( c_H < c^{(1)}_H \), \( c_L < c^{(1)}_L \), and \( c_G < c^{(1)}_G \), then the low cost faction has a stronger incentive to rebel. The government offers \( x^{(H)} \) and \( HM \) is satisfied while \( LM \) is not.

2. If \( \frac{c_H}{c_L} < \frac{\lambda}{1-\lambda} \), \( c_H < c^{(1)}_H \), \( c_L < c^{(1)}_L \), and \( c_G < c^{(2)}_G \), then the high cost faction has a stronger incentive to rebel. The government offers \( x^{(L)} \) and \( LM \) is satisfied while \( HM \) is not.

In equilibrium there is an ethnic rebellion by the faction that is not satisfied with the government’s offer.

In these cases, the equilibrium outcome is that the government grants a minimum amount of autonomy that is just enough to satisfy the faction that has a weaker incentive to rebel. If the government does not grant autonomy, then both factions

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10By cheaper I meant the faction is easier to be pacified.
rebel, as fighting is profitable for both of them. With the expectation of rebellion by both factions, when does the government offer an amount of autonomy that is just enough to pacify $HM$ but not $LM$? In the following, I take the first case in which the low cost faction has more incentive to rebel as an example.

First, pacifying $HM$ makes the government better off than not granting autonomy, which requires that $c_H \geq c_H^{(2)} = \frac{(1-p)p\lambda}{1-p(1-\lambda)}$. If the government does not grant autonomy, then it has to fight a war initiated by both factions. However, if the government offers $x^{(H)}$ to satisfy $HM$, then it only needs to fight a war initiated by $LM$. Since in both situations the government has to fight a war, the government’s cost of war does not matter in this comparison. However, $HM$’s cost of war plays an important role in determining the government’s decision. Because $c_H$ determines how much that the government needs to pay for purchasing peace from $HM$. The lower $c_H$ is, the more the government has to pay in order to pacify $HM$. When $HM$’s cost of war equals to $c_H^{(2)}$, the government is indifferent between fighting against $LM$ and fighting against both factions. Faction $HM$ cannot be above $c_H^{(2)}$, otherwise, fighting against $LM$ plus granting $x^{(H)}$ to pacify $HM$ actually makes the government worse off. It is possible to show that the condition that $c_H \geq c_H^{(2)}$ is always met, which implies that an autonomy agreement which prevents an all-out ethnic war always exists.\footnote{The reason is that I assumed the government pays the same amount of cost in both wars.\footnote{Given that $p\lambda > c_H$, we can get $\frac{(1-p)p\lambda}{1-p(1-\lambda)} > \frac{(1-p)c_H}{1-p(1-\lambda)}$. As $\frac{(1-p)}{1-p(1-\lambda)}$ is smaller than 1, $\frac{(1-p)c_H}{1-p(1-\lambda)} < c_H$ is always true. Therefore, $c_H \geq \frac{(1-p)p\lambda}{1-p(1-\lambda)}$ is always met.}}
Second, the government does not want to pacify the low cost faction of the minority group, which requires that $c_G < c_G^{(1)}$. The government’s cost of war has to be very low, otherwise it will increase its incentive to avoid any ethnic rebellion, even if the rebellion is initiated just by one faction of the minority group. As we discussed earlier, $c_G^{(1)}$ is a function of the difference between $c_H$ and $c_L$. The bigger this difference, the more likely that $c_G < c_G^{(1)}$ to be true, that is, the government is more likely to play the “divide and concede” strategy. It implies that within-group divisions increase governments’ opportunity to pursue different strategies to each faction.

If all these conditions for each case hold, the unique SPE will be that the government offers a minimum amount of autonomy to ensure the faction with less incentive to fight does not rebel. The intuition behind this result is: if it is so costly to satisfy the entire group, then the government prefers to make a smaller offer to only pacify the faction that is easier to buy off. At the same time, it fights a war with the other faction. We often observe cases in which territorial autonomy succeeded in satisfying some faction(s) but failed to end ethnic rebellion by others. For example, the establishment of the Serbian Autonomous Oblast of Krajina in Croatia in August 1990 pacified the moderate Banja Luke faction, but it did not stop the Knin factions from declaring independence from Croatia in 1991.

The above analysis partly explains the phenomenon of ethnic rebellion under autonomy. Rebellion may occur, not because the autonomy fails, but because the government strategically chooses a small amount of autonomy which is only large
enough to buy off some portion of the minority group. That is the reason why this scenario is called the *Partial Pacifying TA Conflict Equilibrium*. It is pacifying in the sense that it induces one faction to peace; it is partial in the sense that it still could not eliminate the conflict between the government and the other faction. Territorial autonomy in this case is only helpful to avoid a full-scale ethnic rebellion. As such, autonomy granting reduces the intensity of ethnic rebellion rather than the probability of its occurrence. This equilibrium also comes back to support the assumption that governments do not retract autonomy after ethnic rebellion. In this context, territorial autonomy is not a promise that governments make in exchange for peace. Instead, governments have already expected a certain level of rebellion under territorial autonomy beforehand. They know that the amount of autonomy they choose to grant is not enough to make the more resolved faction(s) committed to peace. With this expectation, if governments still grant autonomy, they will have no incentives to retract it after ethnic rebellion. This is partly why there exist few historical cases in which governments retracted autonomy after the breakout of ethnic rebellion.

Comparing the *Partial Pacifying TA Peace Equilibrium* with the *Partial Pacifying TA Conflict Equilibrium*, an unintuitive implication arises. That is, if the less resolved faction does not rebel, the government always has an incentive to pacify the more resolved faction, because an autonomy agreement is always more preferable than fighting. However, if both factions have incentives to fight in the status quo, under
certain circumstances (i.e. when the price difference to buy off both factions exceeds the cost of engaging a small war), the government prefers to grant a small amount of autonomy than make a big concession to achieve complete peace. Although a small amount of autonomy cannot eliminate ethnic rebellion completely, it helps to avoid an all-out ethnic war (i.e. the government fights with both factions). The model assumes complete information. If uncertainty is introduced, an entire group uprising is possible (Fearon 1995). I choose to exclude this possibility in order to see more clearly how internal divisions within groups determine autonomy granting and its effect on ethnic rebellion.

2.3 Cases: Autonomy Granting to the Mizos and Nagas in India

The game-theoretical model yields important predictions about the establishment of territorial autonomy and its relations to the risk of ethnic rebellion. As for autonomy granting, all minority groups have some chance to get territorial autonomy no matter if they are unitary and divided. However, given the existence of varying levels of internal divisions, groups should achieve different degrees of autonomy. Facing unitary groups, governments have incentives to design an autonomy policy that that could possibly satisfy the entire group; facing internally divided groups, governments have incentives to design an autonomy settlement to satisfy only the moderate faction(s). With respect to the effect of autonomy on rebellion, the model implies that territorial
autonomy granting reduces the intensity of ethnic rebellion initiated by minority groups, but does not always reduce its occurrence. The more factionized the minority group, the less likely that autonomy granting will reduce the occurrence of ethnic rebellion initiated by the group, because the government is more likely to play the “separating” strategy, that is, pacifying some while letting others rebel.

In the following, I compare two cases in India in order to illustrate the dynamics of bargaining between a government and divided ethnic groups. I have chosen the Nagas and the Mizos which face similar bargaining environments in the Assam State in Northeastern India. They vary in their internal structures, but are similar along a number of other dimensions thought to affect their bargaining with the Indian government. I selected the Nagas and Mizos to compare for the following reasons. First, both of them made autonomy and independence demands and engaged in some degree of violent activity against the government associated with their demands. Second, both the Nagas and Mizos are relatively small compared to India as a whole; the Mizos population are .07% and the Nagas are .1% based on census data in 1990. Third, both groups concentratedly reside in the Assam State in the strategically important Northeastern border region of India; therefore, they have a similar institutional context for their bargaining with the government. A comparative examination of these groups allows me to explore how variation in divisions within these groups affects their ability to bargain for autonomy from the government and the effect of autonomy on ethnic rebellion afterward.
Since independence, the Indian government has faced persistent challenges from minority self-determination movements throughout the country. The central government of India demonstrated a clear willingness to accommodate demands for self-determination by passing the States Reorganization Act of 1956. The autonomy concessions available to minority groups in India can be divided into three types ranging from smallest to largest in terms of autonomous power: District Council, Union Territory, and State. The smallest autonomous unit used to address groups’ self-determination demands is the District Council. Local autonomy through district level councils can be conferred by state governments, or through the central government using the “Sixth Schedule” designation. Greater autonomy can be granted by the creation of a Union Territory, which exempts the contested territory from the control of a specific state and allows for a more autonomous local administration under the authority of the central government. Finally, the State has the greatest autonomous powers including its own legislature that governs over a set of policy areas. The ability of the Mizos and the Nagas to secure autonomy concessions and the magnitude of these concessions has differed across cases over time.

The Mizos began as a divided group. After Indian independence, the group was dominated by the Mizo Union (MU), which called for local autonomy. At the same time the more radical United Mizo Freedom Organization (UMFO) demanded an independent country for the Mizos. After the Indian government announced plans to reorganize the state along linguistic lines in 1956, a number of other Mizo regional
parties and organizations emerged with varying demands over self-determination. One of the most important organizations was the Mizo National Front (MNF). The organization was led by Pu Laldenga, who aimed to establish a Mizo nation. The MNF and MU differed in their preferences (independence versus autonomy) and their tactics (insurgency versus mainly conventional political participation).

Seeing the Mizo movement’s divisions, the central government offered a limited concession in 1971. The MU accepted the concession of Union Territory status from the government. This settlement was contested by the MNF, who continued to seek independence through sporadic urban terrorism. The MNF not only organized a series of armed campaign against the government, but also ran a parallel administration whose reach was reported to be greater than that of the local government run by the Congress party (initially led by the MU). In early 1980s, the central government started to negotiate with the extreme MNF. On June 20, 1986, Laldenga signed an accord to create the State of Mizoram, and to serve as interim Chief Minister of the State. State governments have an elected legislature and numerous powers delineated in the “state list.”

In August, 1986, the State of Mizoram Bill was passed in the lower and upper house, which made changes to the constitution to protect Mizo culture. The MNF was successfully incorporated into the Mizoram State government after the accord and abandoned its demand for independence by violence. After 1986 conflict did not resume in the Mizoram state.

13 For the lists, see the Indian constitution at http://lawmin.nic.in/coi/coiason29july08.pdf
The Nagas began as a highly cohesive movement for independence. The Nagas were near uniformly supportive of a demand for independence. The Naga National Council (NNC) was recognized as the single legitimate representative of the Naga people. It won an early success with the negotiation of the Hydari agreement in 1948. It was decided that the Nagas would be granted judicial, executive, and legislative powers, as well as autonomy in land-related matters. However, the Indian Constituent Assembly refused to ratify the Hydari accord and concluded that the Agreement guaranteed only a “district autonomy within the Indian Constitution.”

On March 22, 1956, the hardline NNC leader Angami Zapu Phizo formed the “Naga Central Government,” which was later renamed to “Federal Government of Nagaland” (FGN) in 1959. The new organization had a military wing to counter the Indian soldiers, who were accused of human rights violations by the separatists. After that, there were splits within the Naga movement with the creation of the Naga Peoples Convention (NPC) by the NNC moderate faction. In 1960, the central government successfully co-opted the NPC members to sign an autonomy deal, leading to the creation of a Naga state within India. After this, the Naga movement became even more divided between moderates who accepted this new status quo autonomy and militant extremists who sought independence through insurgency such as the National Socialist Council of Nagaland (NSCN). There has not been any evidence showing that the Indian government is going to make more autonomy concessions in the near future in order to pacify these small but violent organizations.
The comparison of two cases illustrate some important dynamics of ethnic bargaining shown in the model. First, the Nagas were much more cohesive than the Mizos when they achieved the statehood status. The cohesion of the Nagas played an important role in the central government’s decision to accommodate the group before many others. The Nagas was the first minority group gaining autonomy in the country after the restructuring of the federal government. The Mizos were at their most highly divided when the groups were granted the Union Territory status in 1971, through which the Indian government used autonomy strategically to co-opt the moderate MU. Once the MU was incorporated into local governance and disarmed, the extreme faction MNF was the only faction posed a credible threat to the government. After Laldenga regained power in October 1978, the MNF became much stronger under his leadership. The achievement of statehood in 1987 was attained as the MNF became dominant in the group. These two cases illustrate that governments have incentives to grant autonomy to unitary groups as well as divided groups.

Second, the status of autonomous statehood satisfied the entire Mizos while failing to make the radical faction of the Nagas give up rebelling. The creation of the Nagas state did not completely eliminate the violence initiated by the Nagas: the NPC accepted the statehood status of the Nagas while several Naga factions continued the insurgency. A faction led by Isak, Muviah, and SS Khaplang broke away from NNC to form the NSCN, which continued the secessionist activities. However, the scale of violence decreased considerably, which is consistent with the implication from the
model that autonomy granting reduces the intensity of anti-government violence.

### 2.4 Summary

The model in this chapter provides an explanation for why territorial autonomy reduces the occurrence of ethnic rebellion sometimes, while not in other circumstances. The main reason behind this mixed observation is that autonomy granting serves different purposes for governments depending on the internal structures of minority groups. Minority groups are internally divided in the sense that factions of various strength within groups value their stakes in the dispute differently. Governments can use such divisions to their advantage to achieve different goals by granting autonomy. When groups are more unified, governments grant territorial autonomy aiming to eliminate ethnic conflict. However, when groups are more divided, governments can use autonomy to limit conflict to a specific faction of the minority group. If it is too costly to pacify the entire group from fighting against the government, granting a small amount of autonomy can at least buy peace from some factions, which helps to prevent an all-out ethnic war. The model generates predictions about the effect of territorial autonomy on rebellion occurrence and its intensity. The next two chapter are going to evaluate these predictions globally.
2.5 Figures

Figure 2.1: A Game of Autonomy Granting and Ethnic Rebellion
2.6 Tables

Table 2.1: Model Notation

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$x$</td>
<td>Degree of autonomy granted to the ethnic region by $G$, $x \in (0, 1]$</td>
</tr>
<tr>
<td>$p$</td>
<td>Minority’s probability of winning a war if both $LM$ and $HM$ fight, $p \in [0, 1]$</td>
</tr>
<tr>
<td>$\lambda$</td>
<td>$HM$’s contribution to winning the war against $G$, $\lambda \in (0, 1]$</td>
</tr>
<tr>
<td>$c_H$</td>
<td>$HM$’s cost of war</td>
</tr>
<tr>
<td>$c_L$</td>
<td>$LM$’s cost of war</td>
</tr>
<tr>
<td>$c_G$</td>
<td>$G$’s cost of war</td>
</tr>
</tbody>
</table>
Table 2.2: HM, LM and G’s Payoffs in the T\( \bar{A} \) Subgame

<table>
<thead>
<tr>
<th></th>
<th>HM</th>
<th>LM</th>
<th>( \bar{F} )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( p - c_H )</td>
<td>( p - c_L )</td>
<td>( p\lambda - c_H )</td>
</tr>
<tr>
<td></td>
<td>( 1 - p - c_G )</td>
<td>( 1 - p - c_G )</td>
<td>( 1 - p\lambda - c_G )</td>
</tr>
<tr>
<td>( F )</td>
<td>( F )</td>
<td>( \bar{F} )</td>
<td></td>
</tr>
<tr>
<td>( \bar{F} )</td>
<td></td>
<td></td>
<td>( p(1 - \lambda) )</td>
</tr>
<tr>
<td></td>
<td>( p(1 - \lambda - c_L) )</td>
<td>( 0 )</td>
<td>( 0 )</td>
</tr>
<tr>
<td></td>
<td>( 1 - p(1 - \lambda - c_G) )</td>
<td>( 1 )</td>
<td></td>
</tr>
</tbody>
</table>

Note: the cells list the payoffs for HM, LM and G.

Table 2.3: HM, LM and G’s Payoffs in the TA Subgame

<table>
<thead>
<tr>
<th></th>
<th>HM</th>
<th>LM</th>
<th>( \bar{F} )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( p + (1 - p)x - c_H )</td>
<td>( p\lambda + (1 - p\lambda)x - c_H )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>( p + (1 - p)x - c_L )</td>
<td>( p\lambda + (1 - p\lambda)x )</td>
<td>( (1 - p\lambda)(1 - x) - c_G )</td>
</tr>
<tr>
<td></td>
<td>( (1 - p)(1 - x) - c_G )</td>
<td>( (1 - p\lambda)(1 - x) - c_G )</td>
<td></td>
</tr>
<tr>
<td>( F )</td>
<td>( \bar{F} )</td>
<td>( \bar{F} )</td>
<td></td>
</tr>
<tr>
<td>( \bar{F} )</td>
<td></td>
<td></td>
<td>( p(1 - \lambda) + [1 - p(1 - \lambda)]x )</td>
</tr>
<tr>
<td></td>
<td></td>
<td>( x )</td>
<td>( x )</td>
</tr>
<tr>
<td></td>
<td>( p(1 - \lambda) + [1 - p(1 - \lambda)]x - c_L )</td>
<td>( 1 - x )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>( [1 - p(1 - \lambda)](1 - x) - c_G )</td>
<td>( 1 - x )</td>
<td></td>
</tr>
</tbody>
</table>

Note: the cells list the payoffs for HM, LM and G.
2.7 Proofs

Proof of Lemmas 1 and 2

Lemma 1. Without autonomy, the high cost faction rebels if \( c_H < p\lambda \); the low cost faction rebels if \( c_L < p(1 - \lambda) \).

Proof. In the \( TA \) subgame, there are four possible combinations of \( HM \) and \( LM \)'s strategy: \((F,F), (F,F), (F,F), (F,F)\). Conditional on the parameters, all of them can be a unique Subgame Nash equilibrium under certain circumstances.

In order for \((F,F)\) to be a subgame Nash equilibrium, first, faction \( HM \) prefers \( F \) to \( F \), which requires

\[
p - c_H > p(1 - \lambda) \tag{2.1}
\]

\[
\Rightarrow c_H < p\lambda
\]

Second, faction \( LM \) prefers \( F \) to \( F \) as well, which requires

\[
p - c_L > p\lambda \tag{2.2}
\]

\[
\Rightarrow c_L < p(1 - \lambda)
\]

In order for \((F,F)\) to be a subgame Nash equilibrium, first, it requires that

\[
p\lambda - c_H > 0 \tag{2.3}
\]

\[
\Rightarrow c_H < p\lambda
\]
Second, it requires

\[ p - c_L \leq p\lambda \]
\[ \Rightarrow c_L \geq p(1 - \lambda) \]  (2.4)

In order for \((F, F)\) to be a subgame Nash equilibrium, first, it requires that

\[ p - c_H \leq p(1 - \lambda) \]
\[ \Rightarrow c_H \geq p\lambda \]  (2.5)

Second, it requires that

\[ p(1 - \lambda) - c_L > 0 \]
\[ \Rightarrow c_L < p(1 - \lambda) \]  (2.6)

In order for \((F, F)\) to be a subgame Nash equilibrium, first it requires that

\[ 0 \geq p\lambda - c_H \]
\[ \Rightarrow c_H \geq p\lambda \]  (2.7)

Second, it requires

\[ 0 \geq p(1 - \lambda) - c_L \]
\[ \Rightarrow c_L \geq p(1 - \lambda) \]  (2.8)

The equilibrium analysis of the \(T\) subgame is summarized in Table A1. It is easy to see that the equilibrium is unique. 

\[ \square \]
Table 2.4: $T\bar{A}$ Subgame Equilibrium Conditions

<table>
<thead>
<tr>
<th>$T\bar{A}$ Subgame EQ</th>
<th>$FF$</th>
<th>$F\bar{F}$</th>
<th>$\bar{F}F$</th>
<th>$FF$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition 1</td>
<td>$c_H &lt; p\lambda$</td>
<td>$c_H &lt; p\lambda$</td>
<td>$c_H \geq p\lambda$</td>
<td>$c_H \geq p\lambda$</td>
</tr>
<tr>
<td>Condition 2</td>
<td>$c_L &lt; p(1 - \lambda)$</td>
<td>$c_L \geq p(1 - \lambda)$</td>
<td>$c_L &lt; p(1 - \lambda)$</td>
<td>$c_L \geq p(1 - \lambda)$</td>
</tr>
</tbody>
</table>

Note: $FF$: $HM$ fights and $LM$ fights; $F\bar{F}$: $HM$ fights but $LM$ does not fight; $\bar{F}F$: $HM$ does not fight but $LM$ fights; $F\bar{F}$: $HM$ does not fight, and $LM$ does not fight either.

Lemma 2. With autonomy, whether factions will rebel or not depends on the size of the autonomy, $x$. The high cost faction will rebel if $x < 1 - \frac{c_H}{p\lambda}$; the low cost faction will rebel if $x < 1 - \frac{c_L}{p(1-\lambda)}$.

Proof. In the $TA$ subgame, there are also four possible combinations of $HM$ and $LM$’s strategy: $(F,F)$, $(F,\bar{F})$, $(\bar{F},F)$, $(\bar{F},\bar{F})$. In the following, it shows all these strategy combinations can be a unique Subgame Nash equilibrium under certain circumstances.

In order for $(F,F)$ to be a subgame Nash equilibrium, first, faction $HM$ prefers $F$ than $\bar{F}$ which requires

$$p + (1 - p)x - c_H > p(1 - \lambda) + [1 - p(1 - \lambda)x]$$

$$\Rightarrow x < 1 - \frac{c_H}{p\lambda}$$
Second, faction $LM$ prefers $F$ than $\bar{F}$ as well which requires

$$p + (1-p)x - c_L > p\lambda + (1 - p\lambda)x$$

$$\Rightarrow x < 1 - \frac{c_L}{p(1-\lambda)}$$

(2.10)

In order for $(F, F)$ to be a subgame Nash equilibrium, first, it requires that

$$p\lambda + (1 - p\lambda)x - c_H > x$$

$$\Rightarrow x < 1 - \frac{c_H}{p\lambda}$$

(2.11)

Second, it requires

$$p\lambda + (1 - p\lambda)x \geq p + (1 - p)x - c_L$$

$$\Rightarrow x \geq 1 - \frac{c_L}{p(1-\lambda)}$$

(2.12)

In order for $(\bar{F}, F)$ to be a subgame Nash equilibrium, first it requires that

$$p(1 - \lambda) + [1 - p(1 - \lambda)]x \geq p + (1 - p)x - c_H$$

$$\Rightarrow x \geq 1 - \frac{c_H}{p\lambda}$$

(2.13)

Second, it requires that

$$p(1 - \lambda) + [1 - p(1 - \lambda)]x - c_L > x$$

$$\Rightarrow x < 1 - \frac{c_L}{p(1-\lambda)}$$

(2.14)

In order for $(\bar{F}, \bar{F})$ to be a subgame Nash equilibrium, first, it requires that

$$x \geq p\lambda + (1 - p\lambda)x - c_H$$

$$\Rightarrow x \geq 1 - \frac{c_H}{p\lambda}$$

(2.15)
Table 2.5: TA Subgame Equilibrium Conditions

<table>
<thead>
<tr>
<th>TA Subgame EQ</th>
<th>FF</th>
<th>F F</th>
<th>F F</th>
<th>F F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition 1</td>
<td>$x &lt; 1 - \frac{c_H}{p\lambda}$</td>
<td>$x &lt; 1 - \frac{c_H}{p\lambda}$</td>
<td>$x \geq 1 - \frac{c_H}{p\lambda}$</td>
<td>$x \geq 1 - \frac{c_H}{p\lambda}$</td>
</tr>
<tr>
<td>Condition 2</td>
<td>$x &lt; 1 - \frac{c_L}{p(1-\lambda)}$</td>
<td>$x \geq 1 - \frac{c_L}{p(1-\lambda)}$</td>
<td>$x &lt; 1 - \frac{c_L}{p(1-\lambda)}$</td>
<td>$x \geq 1 - \frac{c_L}{p(1-\lambda)}$</td>
</tr>
</tbody>
</table>

Note: FF: $H_M$ fights and $L_M$ fights; F F: $H_M$ fights but $L_M$ does not fight; F F: $H_M$ does not fight but $L_M$ fights; F F: $H_M$ does not fight, and $L_M$ does not fight either.

Second, it requires

$$x \geq p(1-\lambda) + [1 - p(1-\lambda)x] - c_L$$  \hspace{1cm} (2.16)

$$\Rightarrow x \geq 1 - \frac{c_L}{p(1-\lambda)}$$

The equilibrium analysis of the TA subgame is summarized in Table A2. Depending on the values of the parameters, the equilibrium is unique as well.

**Proof of Propositions 1 through 4**

**Proposition 1 (No-TA Peace Equilibrium).** If $c_H \geq c_H^{(1)}$, and $c_L \geq c_L^{(1)}$, then neither faction has a credible threat of rebellion. The government has no incentive to grant autonomy. In equilibrium there is no ethnic rebellion.

**Proof.** When $c_H \geq p\lambda$ (let $c_H^{(1)} = p\lambda$), and $c_L \geq p(1-\lambda)$ (let $c_L^{(1)} = p(1-\lambda)$, both
HM and LM have a dominate strategy — $\overline{F}$, because neither of them can benefit from fighting. In other words, their expected payoff on fighting with the government is always smaller than not fighting. Therefore, both HM and LM are satisfied with the status quo. In this case, the government does not need to make any autonomy concessions to pacify anybody. So $G$’s best response is $\overline{T\overline{A}}$.

**Proposition 2 (Partial Pacifying $TA$ Peace Equilibrium).** There are two cases in which only one faction has a credible threat of rebellion; in each case, the government offers just enough autonomy to pacify the violent faction.

1. If $c_H \geq c_H^{(1)}$ and $c_L < c_L^{(1)}$, then only the low cost faction has a credible threat of rebellion. The government offers $x^{(L)}$ to the faction and the faction does not rebel.

2. If $c_H < c_H^{(1)}$ and $c_L \geq c_L^{(1)}$, then only the high cost faction has a credible threat of rebellion. The government offers $x^{(H)}$ to the faction and the faction does not rebel.

In equilibrium there is no ethnic rebellion.

**Proof.** When $c_H \geq p\lambda$, and $c_L < p(1-\lambda)$, even there is no autonomy granted, only LM will fight with the government. Knowing this, for G, if G does not grant autonomy, it has to fight a war with LM, getting a payoff of $1 - p(1-\lambda) - c_G$. If it offers autonomy with $x \in (0, x^{(L)})$ ($x^{(L)} = 1 - \frac{c_L}{p(1-\lambda)}$) which is not enough to satisfy LM, G still has to fight with LM. At the same time, it gets a lower payoff $[1 - p(1-\lambda)](1-x)] - c_G$. 
Another option is that the government offers the minimal amount of autonomy that could pacify LM, therefore living peacefully with both HM and LM. In this case, the minimal autonomy is $x^{(L)}$. As a result, the government will get $\frac{c_L}{p(1-\lambda)}$. When would the government like to pacify LM by granting $1 - \frac{c_L}{p(1-\lambda)}$ instead of fighting with LM? It requires that

\[
1 - x^{(L)} \geq 1 - p(1 - \lambda) - c_G \\
\Rightarrow \frac{c_L}{p(1 - \lambda)} \geq 1 - p(1 - \lambda) - c_G \\
\Rightarrow c_L \geq (1 - p(1 - \lambda) - c_G)p(1 - \lambda) \\
\Rightarrow c_G \geq 1 - p(1 - \lambda) - \frac{c_L}{p(1 - \lambda)}
\]

$c_G \geq 1 - p(1 - \lambda) - \frac{c_L}{p(1 - \lambda)}$ can be transformed into $c_L \geq (1 - p(1 - \lambda) - c_G)p(1 - \lambda)$. As $p(1 - \lambda) \geq c_L$, we can get $(1 - p(1 - \lambda) - c_G)p(1 - \lambda) > (1 - p(1 - \lambda) - c_G)c_L$. As a result, $c_L \geq (1 - p(1 - \lambda) - c_G)c_L$ is always true. Therefore, the condition $c_G \geq 1 - p(1 - \lambda) - \frac{c_L}{p(1 - \lambda)}$ is always met.

Therefore, if $c_H \geq c_H^{(1)}$, and $c_L < c_L^{(1)}$, the government’s best response is to offer $1 - \frac{c_L}{p(1-\lambda)}$ to induce peace.

When $c_H < p\lambda$, and $c_L \geq p(1 - \lambda)$, even though there is no autonomy granted, only HM will fight with the government. Knowing this, for G, if G does not grant autonomy, it has to fight a war with HM, getting a payoff of $1 - p\lambda - c_G$. If it offers an autonomy with $x \in (0, x^{(H)})$ ($x^{(H)} = 1 - \frac{c_L}{p}$), HM still is not satisfied. Therefore, G has to fight with HM, and get a lower payoff $[1 - p\lambda](1 - x)] - c_G$. A third option
is that the government offers autonomy which is just enough to satisfy \( HM \). In this case, the minimal autonomy is \( x^{(H)} \). As a result, the government will get \( \frac{c_H}{p\lambda} \). When would the government like to pacify \( HM \) by granting \( 1 - \frac{c_H}{p\lambda} \) instead of fighting with \( HM \)? It requires that

\[
1 - x^{(H)} \geq 1 - p\lambda - c_G
\]

\[
\Rightarrow \frac{c_H}{p\lambda} \geq 1 - p\lambda - c_G
\]

\[
\Rightarrow c_H \geq (1 - p\lambda - c_G)p\lambda
\]

\[
\Rightarrow c_G \geq 1 - p - \frac{c_H}{p\lambda}
\]

\( c_G \geq 1 - p - \frac{c_H}{p\lambda} \) can be transformed into \( c_H \geq (1 - p\lambda - c_G)p\lambda \). Since that \( p\lambda \geq c_H \),

\( (1 - p\lambda - c_G)p\lambda > (1 - p\lambda - c_G)c_H \). As a result, \( c_H \geq (1 - p\lambda - c_G)c_H \) is always true.

Therefore, condition \( c_G \geq 1 - p - \frac{c_H}{p\lambda} \) is always met.

Therefore, if \( c_H < c_H^{(1)} \), \( c_L \geq c_L^{(1)} \), the government’s best response is to offer \( 1 - \frac{c_H}{p\lambda} \) to induce peace.

\[\Box\]

**Proposition 3 (Complete Pacifying TA Peace Equilibrium).** There are two cases in which both factions have credible threats of rebellion; in each case, the government offers enough autonomy to pacify both factions.

1. If \( \frac{c_H}{c_L} \geq \frac{\lambda}{1-\lambda} \), \( c_H < c_H^{(1)} \), \( c_L < c_L^{(1)} \), and \( c_G \geq c_G^{(1)} \), then the low cost faction has a stronger incentive to rebel. The government offers \( x^{(L)} \) and both factions are satisfied.
2. If \( \frac{c_H}{c_L} < \frac{\lambda}{1-\lambda}, \ c_H < c_H^{(1)}, \ c_L < c_L^{(1)}, \) and \( c_G \geq c_G^{(2)} \), then the high cost faction has a stronger incentive to rebel. The government offers \( x^{(H)} \) and both factions are satisfied.

In equilibrium there is no ethnic rebellion.

Proof. When \( c_H < p\lambda, \) and \( c_L < p(1-\lambda), \) if \( G \) chooses to not grant \( TA \), both \( HM \) and \( LM \) will choose \( F \). The game will then end in ethnic rebellion. In this case, \( G \)'s payoff is \( 1 - p - c_G \). The government’s payoffs from choosing granting \( x \) to \( M \) depend on the relationship between \( x^{(L)} \) and \( x^{(H)} \) (the corresponding price to purchase peace from each faction). When \( \frac{c_H}{c_L} \geq \frac{\lambda}{1-\lambda}, \ x^{(H)} \leq x^{(L)}, \) that is, the minimum amount of autonomy to pacify \( LM \) is higher than that to pacify \( HM \), if \( G \) chooses an \( x < x^{(H)} \), both \( HM \) and \( LM \) will choose \( F \) as well because the autonomy is not enough to pacify either of them. \( G \) will get a payoff \( (1-p)(1-x) - c_G \), which is even worse than not granting \( TA \). If \( G \) offers a \( x^{H}, \) \( LM \) will fight but \( HM \) will not. The expected utility for \( G \) is \( [1 - p(1 - \lambda)](1 - x^{(H)}) - c_G \) in which \( x^{(H)} = 1 - \frac{c_H}{p\lambda} \). If \( G \) offers \( x^{(L)} \), neither \( HM \) nor \( LM \) will rebel. The game ends in peace. \( G \) will get a payoff of \( 1 - x^{(L)} \) in which \( x^{(L)} = 1 - \frac{c_L}{p(1-\lambda)} \).

When \( x^{(H)} \leq x^{(L)} \), when does \( G \) prefer to choose \( x^{(L)} \) to pacify both factions? It
requires that \( G \) gets more than not granting \( TA \). That is,

\[
1 - x^{(L)} \geq 1 - p - c_G
\]

\[
\Rightarrow \frac{c_L}{p(1 - \lambda)} \geq 1 - p - c_G
\]

\[
\Rightarrow c_L \geq (1 - p - c_G)p(1 - \lambda)
\]

\[
\Rightarrow c_G \geq 1 - p - \frac{c_L}{p(1 - \lambda)}
\]

\( c_G \geq 1 - p - \frac{c_L}{p(1 - \lambda)} \) can be transformed into \( c_L \geq (1 - p - c_G)p(1 - \lambda) \). Given that \( p(1 - \lambda) \geq c_L \), we can get \( (1 - p - c_G)p(1 - \lambda) \leq (1 - p - c_G)c_L \). As \( 1 - p - c_G \) is always smaller than \( 1 \), \( c_L \geq (1 - p - c_G)c_L \) is true. Therefore, the condition \( c_L \geq (1 - p - c_G)p(1 - \lambda) \) is always met.

Also, it requires \( G \) is better off than offering a minimal offer \( x^{(H)} \) to only pacify \( HM \). That is,

\[
1 - x^{(L)} \geq [1 - p(1 - \lambda)](1 - x^{(H)}) - c_G
\]

\[
\Rightarrow \frac{c_L}{p(1 - \lambda)} \geq [1 - p(1 - \lambda)] \frac{c_H}{p(1 + \lambda)} - c_G
\]

\[
\Rightarrow c_G \geq [1 - p(1 - \lambda)] \frac{c_H}{p(1 + \lambda)} - \frac{c_L}{p(1 - \lambda)}
\]

Let \( c_G^{(1)} = [1 - p(1 - \lambda)] \frac{c_H}{p(1 + \lambda)} - \frac{c_L}{p(1 - \lambda)} \).

Therefore, if \( \frac{c_H}{c_L} \geq \frac{\lambda}{1 - \lambda} \), \( c_H < c_G^{(1)} \), \( c_L < c_G^{(1)} \), \( c_G \geq c_G^{(1)} \), \( G \)'s best response is offering \( x^{(L)} = 1 - \frac{c_L}{p(1 - \lambda)} \) to induce complete peace.

However, when \( \frac{c_H}{c_L} < \frac{\lambda}{1 - \lambda} \), i.e., \( x^{(H)} > x^{(L)} \), the minimum autonomy to pacify \( HM \) is larger than that to pacify \( LM \). When does the government choose to offer the more
expensive offer \( x^{(H)} \) rather than \( x^{(L)} \)? Similarly, first, it requires that \( G \) is better off than not offering \( TA \). That is,

\[
1 - x^{(H)} \geq 1 - p - c_G
\]

\[
\Rightarrow \frac{c_H}{p\lambda} \geq 1 - p - c_G
\]

\[
\Rightarrow c_H \geq (1 - p - c_G)p\lambda
\]

\[
\Rightarrow c_G \geq 1 - p \frac{c_H}{p\lambda}
\]

\( c_G \geq 1 - p - \frac{c_H}{p\lambda} \) can be transformed to \( c_H \geq (1 - p - c_G)p\lambda \), which is always true given that \( p\lambda > c_H \).

Also it requires \( G \) is better off than offering \( x^{(L)} \) to only pacify \( LM \). That is,

\[
1 - x^{(H)} \geq [1 - p\lambda](1 - x^{(L)}) - c_G
\]

\[
\Rightarrow \frac{c_H}{p\lambda} \geq [1 - p\lambda]\frac{c_L}{p(1 - \lambda)} - c_G
\]

\[
\Rightarrow c_G \geq [1 - p\lambda]\frac{c_L}{p(1 - \lambda)} - \frac{c_H}{p\lambda}
\]

Let \( c_G^{(2)} = [1 - p\lambda]\frac{c_L}{p(1 - \lambda)} - \frac{c_H}{p\lambda} \).

Therefore, if \( \frac{c_H}{c_L} < \frac{\lambda}{1-\lambda} \), \( c_L < c^{(1)}_{L} \), \( c_H < c^{(1)}_{H} \), \( c_G \geq c^{(2)}_{G} \), \( G \)'s best response is offering \( x^{(H)} = 1 - \frac{c_H}{p\lambda} \) to induce complete peace.

Proposition 4 (Partial Pacifying \( TA \) Conflict Equilibrium). There are two cases in which both factions have credible threats of rebellion; in each case, the government offers just enough autonomy to pacify the “cheaper” faction.
1. If $\frac{c_H}{c_L} \geq \frac{\lambda}{1-\lambda}$, $c_H < c_H^{(1)}$, $c_L < c_L^{(1)}$, and $c_G < c_G^{(1)}$, then the low cost faction has a stronger incentive to rebel. The government offers $x^{(H)}$ and HM is satisfied while LM is not.

2. If $\frac{c_H}{c_L} < \frac{\lambda}{1-\lambda}$, $c_H < c_H^{(1)}$, $c_L < c_L^{(1)}$, and $c_G < c_G^{(2)}$, then the high cost faction has a stronger incentive to rebel. The government offers $x^{(L)}$ and LM is satisfied while HM is not.

In equilibrium there is an ethnic rebellion by the faction that is not satisfied with the government’s offer.

Proof. When $c_H < p\lambda$ (Let $c_H^{(1)} = p\lambda$), and $c_L < p(1 - \lambda)$ (Let $c_L^{(1)} = p(1 - \lambda)$), if $G$ chooses to not grant TA, both HM and LM will choose $F$. When does $G$ prefer to offer a smaller autonomy that can only pacify one faction? First, let’s consider the case in which $x^{(H)} \leq x^{(L)}$. In this case, it is more expensive to pacify LM. $G$ would prefer to only pacify HM when, first, $G$ gets more by offering $x^{(H)}$ than it does not grant any autonomy. That is,

$$[1 - p(1 - \lambda)](1 - x^{(H)}) - c_G \geq 1 - p - c_G$$

(2.23)

$$\Rightarrow [1 - p(1 - \lambda)] \frac{c_H}{p\lambda} - c_G \geq 1 - p - c_G$$

$$\Rightarrow c_H \geq \frac{(1 - p)p\lambda}{1 - p(1 - \lambda)}$$

Let $c_H^{(2)} = c_H \geq \frac{(1 - p)p\lambda}{1 - p(1 - \lambda)}$. Given that $p\lambda \geq c_H$, it is easy to prove that $\frac{(1 - p)p\lambda}{1 - p(1 - \lambda)} > \frac{(1 - p)c_H}{1 - p(1 - \lambda)}$. As a result, $c_H \geq c_H^{(2)}$, which is always true. Therefore, the condition $c_H \geq c_H^{(2)}$ is always met.
Second, $G$ is better off than offering a larger offer $x^{(L)}$ to induce complete peace. That is,

$$[1 - p(1 - \lambda)](1 - x^{(H)}) - c_G > 1 - x^{(L)}$$

$$\Rightarrow [1 - p(1 - \lambda)]\frac{c_H}{p\lambda} - c_G > \frac{c_L}{p(1 - \lambda)}$$

$$\Rightarrow c_G < [1 - p(1 - \lambda)]\frac{c_H}{p\lambda} - \frac{c_L}{p(1 - \lambda)}$$

Given that $c_G^{(1)} = [1 - p(1 - \lambda)]\frac{c_H}{p\lambda} - \frac{c_L}{p(1 - \lambda)}$. Equation 24 can be written as $c_G < c_G^{(1)}$.

Therefore, if $\frac{c_H}{c_L} \geq \frac{\lambda}{1 - \lambda}$, $c_H < c_H^{(1)}$, $c_L < c_L^{(1)}$, $c_G < c_G^{(1)}$, $G$’s best response is offering a cheaper offer $x^{(H)} = 1 - \frac{c_H}{p\lambda}$ to only induce peace from $HM$ but not from $LM$. The game ends in a unilateral rebellion initiated by $LM$.

Now let’s consider the case when $x^{(H)} > x^{(L)}$. In this case, it is more expensive to pacify $HM$. $G$ would prefer to only pacify $LM$ when, first, $G$ gets more by offering $x^{(L)}$ than it does not grant autonomy at all. That is,

$$[1 - p(1 - \lambda)] - c_G \geq 1 - p - c_G$$

$$\Rightarrow (1 - p\lambda)\frac{c_L}{p(1 - \lambda)} - c_G \geq 1 - p - c_G$$

$$\Rightarrow c_L \geq \frac{(1 - p)p(1 - \lambda)}{1 - p\lambda}$$

Since $p(1 - \lambda) \geq c_L$, $\frac{(1 - p)p(1 - \lambda)}{1 - p\lambda} > \frac{(1 - p)c_L}{1 - p\lambda}$. As a result, $c_L \geq \frac{(1 - p)c_L}{1 - p\lambda}$, which is always true. Therefore, the condition $c_L \geq \frac{(1 - p)c_L}{1 - p\lambda}$ is always met.

Second, $G$ has to be better off than offering a larger offer $x^{(H)}$ to induce complete
peace. That is,

\[(1 - p\lambda)(1 - x^{(L)}) - c_G > 1 - x^{(H)} \quad (2.26)\]

\[\Rightarrow (1 - p\lambda) \frac{c_L}{p(1 - \lambda)} - c_G \geq \frac{c_H}{p\lambda}\]

\[\Rightarrow c_G < (1 - p\lambda) \frac{c_L}{p(1 - \lambda)} - \frac{c_H}{p\lambda}\]

Given that \(c_G^{(2)} = [1 - p\lambda] \frac{c_L}{p(1 - \lambda)} - \frac{c_H}{p\lambda}\), Equation 26 can be expressed as \(c_G < c_G^{(2)}\).

Therefore, if \(\frac{c_H}{c_L} < \frac{\lambda}{1 - \lambda}\), \(c_H < c_H^{(1)}\), \(c_L < c_L^{(1)}\), \(c_G < c_G^{(2)}\), G’s best response is offering a cheaper offer \(x^{(L)} = 1 - \frac{c_L}{p(1 - \lambda)}\) to only induce peace from LM but not from HM.

The game ends in a unilateral rebellion initiated by HM.
Chapter 3

Empirical Analysis I: Why Some Ethnic Groups Get More Autonomy Than Others

This chapter examines the causes of ethnic territorial autonomy granting: why do some minority groups successfully negotiate an autonomy agreement with governments while others do not? Why do some groups have more autonomy than others? Based on the game-theoretical model presented in the previous chapter, I propose three hypotheses regarding how internal divisions of minority groups affect the probability of disputants to reach an agreement over autonomy. A key component relevant to the bargaining process is the divisions of factions within groups, that is, the difference in terms of how much each faction cares about the stakes in the dispute, which reflects the diversity of preferences within the groups. Such within-group divisions play an important role in determining when autonomy is granted and how much is granted to minority groups. In order to evaluate this theory, I collected data on the occurrence of autonomy and degrees of autonomy for 122 self-determination groups. The following empirical analysis provides significant support to my theory.
3.1 Hypotheses on Within-group Divisions and Territorial Autonomy Granting

Generally ethnic politics are ongoing political contests over the site of governance between self-determination groups and their host states. Minority groups and governments bargain over the level and scope of autonomy that the group will have. At the extreme they negotiate over whether the group will remain part of the state. Some self-determination contests degenerate into secessionist wars, while others simmer at low levels of violence or remain non-violent. Behind each contest is an implicit threat of rebellion, which demands the attention of governments. Given the risk of violence and its costliness, governments will attempt to settle demands when possible in order to minimize the potential for violence.

When governments and minority groups negotiate an autonomy deal, the objective for both parties is to achieve the best agreement possible. They want a settlement that concedes the least to their opponent. Internal divisions of minority groups affect the negotiations as they try to achieve this. In particular, ethnopolitical organizations, even those claiming to represent the same ethnic group, value the issues in dispute differently. As a result, they cannot be satisfied with the same amount of concession through granting territorial autonomy. Empirically, there are a variety of autonomy solutions and governance related demands made by ethnic groups. The range of demands related to governance span from minimal autonomy over specific policy areas, such as language, to full independence. For example, while the Walloons in
Belgium exclusively seek autonomy through a federal structure, the Turkish Cypriots are divided between those who demand independence and those who want federal autonomy. Other movements vary their demands over time, such as the Crimean Russians who demanded both independence and autonomy until 2000, when they dropped their call for statehood. The existence of such within-group divisions affects the possibility of reaching an autonomy agreement and the scope of the autonomy.

First, whether governments grant autonomy or not depends on the existence of credible threats that ethnopolitical organizations of minority groups could pose to governments. Proposition 1 suggests that if neither of the two factions has a credible threat of rebellion, the government will not grant autonomy. Because the government knows that it is not profitable for either of them to rebel, even if the government does not make any concessions to the minority group, ethnic rebellion is not going to happen anyway. However, as long as there is one faction having a credible threat, the government will have an incentive to grant autonomy. Proposition 2 suggests that if there is only one faction preferring to rebel when there is not autonomy granted, the government’s best response is always to buy off this faction by granting autonomy.

The costliness of war opens the bargaining range for the disputants. The government uses autonomy as a strategy to achieve peace from the violent faction. When there is more than one faction having a credible threat of rebellion, the government also has incentives to grant autonomy. However, depending on the circumstances, there are two different uses of granting autonomy. As suggested in Proposition 3, if the “prices”
to buy off both factions are similar, the government will grant autonomy to satisfy the entire group aiming to achieve ethnic peace. On the contrary, if a big difference exists between the “prices” to buy peace from each faction, the government prefers to play the “separating” strategy—satisfying the moderate faction and letting the radicalized faction rebel. The purpose of granting autonomy in this situation is not to achieve complete peace, but to reduce ethnic violence into a limited magnitude.

Nevertheless, no matter what purpose governments use territorial autonomy for, as long as a faction representing the minority group poses a credible threat to the government, the government is motivated to grant territorial autonomy to the minority group. In reality, governments may not have enough information about the credibility of such threats. This uncertainty of threat credibility could reflect a disagreement about power, or a disagreement over resolve, willpower, or the intensity of preferences over the issue. Uncertainty has long been understood to be a cause of conflict; wars begin when actors disagree about their relative power, and they end when actors agree again (Blainey, 1988; Fearon, 1995). Therefore, communication is the key to preventing (or instigating) conflict. The problem is that simple verbal statements are often not credible, because actors frequently have incentives to lie and bluff. By saying “We are strong” and “We are resolved,” the Palestine Liberation Front (PLF) and the The Islamic National Front (INF) cannot persuade Israel to make concession to the Palestinianans. In reality, they had to fight for a long and costly war to prove their point.
How can ethnopolitical organizations make governments believe that their threats are credible? An important task for any ethnopolitical organization is to persuade the government that it is strong and resolute enough to win a conflict and/or inflict serious costs, so that the government yields to its demands. Because talk is cheap, ethnopolitical organizations can influence the behavior of the governments through costly signals. Costly signals are actions so costly that bluffers and liars are unwilling to take them (Riley, 2001). Violence itself, or the willingness to conduct violence, can serve as a forceful signal of resolve and provide believable information about power and capabilities (Reiter, 2003; Powell, 2004). Costly signals separate the wheat from the chaff and allow honest communication, although sometimes at a terrible price. Through violence organizations display publicly just how far they are willing to go to obtain their desired results. The Irish Republican Army (IRA) bombed pubs, parks, and shopping districts in London because its leadership believed that such acts would convince Britain to relinquish Northern Ireland. Attacks by Hezbollah and Hamas against Israel, particularly during the second intifada, also appear to be guided by this strategy. In a letter written in the early 1990s to the leadership of Hamas, the organizations master bomb maker, Yahya Ayyash, said, “We paid a high price when we used only sling-shots and stones. We need to exert more pressure, make the cost of the occupation that much more expensive in human lives, that much more unbearable” (Brown, 2010). Therefore, groups with some faction that previously committed violent acts or possesses violent means (explosives, armaments, etc.) are
perceived to pose a more credible threat to governments; thus, these groups have a higher probability of receiving a transfer of autonomy. I call these groups “militant groups.” This discussion yields the following hypothesis.

**Hypothesis 3.1.** *All else equal, militant groups are more likely to get autonomy.*

Second, the degree of autonomy that minority groups retain is determined by their internal structures. According to the analysis of the game-theoretical model, the existence of such within-group divisions does not affect the occurrence of territorial autonomy. As long as there is a credible threat by the group, for unitary groups, the government has an incentive to grant autonomy to satisfy the entire group; for divided groups, the government has an incentive to grant autonomy to satisfy some faction. Both divided groups and unitary groups are likely to receive territorial autonomy, although the purposes and degrees of granting autonomy are different. The government is incentivized to make concessions based on the strength of the group and its costs of war (*Fearon, 1995*). The existence of internal divisions affects the degree of autonomy that minority group could get in two ways. First, they reduce the bargaining power of minority groups by exacerbating the collective action problem. When the group is unified, it bargains with the government as a whole, which could pose a larger threat to the government. However, when there are multiple competing factions within the same groups, factions are uncertain about each other’s actions. Given that rebellion is costly, the existence of uncertainty and lack of coordination disincentivize the factions to rebel. In other words, it is easier for the government to
make them not rebel by “paying” autonomy. As shown in the analysis of the game, the amount of autonomy that is enough to satisfy each faction is moderated by how much contribution they can make to winning an ethnic war.

In addition, divisions among factions provide an opportunity for governments to implement the “separating” strategy which buys off one faction and lets the other rebel. Whether the government would like to play this strategy depends on the difference in the amount of autonomy that is needed to satisfy each faction. As shown in Proposition 3, when the difference is very small which makes the condition \( c_G \geq c_G^* \) easier to be met, the government will grant autonomy to satisfy both factions. However, when the “prices” to buy off both factions are highly diverged, the government prefers to implement the separating strategy (see Proposition 4). Governments pursue this strategy by offering an autonomy deal that satisfies only moderate factions. The greater the degree of internal divisions in minority groups, the easier this strategy is for governments to pursue. The most highly factionalized movements have a wider range of preferences over governance and a greater number of factions. When governments face such an internally divided group, governments can strategically offer autonomy deals that only a subset of factions would agree to.

Therefore, unitary groups are the most costly to accommodate because the government needs to fully satisfy their demands in order to achieve peace. Autonomy granted to the divided groups should be narrower in scope than that granted to the unitary groups. Because they are designed to satisfy only the moderate orga-
nizations, limited autonomy concessions are likely to be contested by organizations with more extreme preferences. Governments can satisfy moderate organizations with lesser concessions for highly-divided groups than would be necessary for more cohesive groups, because there are more potential organizations to buy off across a diversity of demands. This discussion yields the following hypotheses.

**Hypothesis 3.2.** Divided groups are as likely as unitary groups to receive territorial autonomy.

**Hypothesis 3.3.** All else equal, the more divisions within ethnic groups, the less autonomy they will receive.

### 3.2 Research Design

In order to evaluate the hypotheses presented above, I have created a dataset of self-determination (SD) groups from 1985 to 2003.\(^1\) The sample for this study is drawn from the Center for International Development and Conflict Management (CIDCM), which publishes a list of self-determination movements in their Peace and Conflict report (Marshall and Gurr, 2003). This report includes minority groups from the Minority at Risk (MAR, (Davenport, 2003)) dataset that made claims for greater self-determination.\(^2\) For example, the Tamils in Sri Lanka, and the Tibetans in China are

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\(^1\)The period of analysis is dictated by the data availability on ethnic rebellion.

\(^2\)For inclusion in the list, the group must demonstrate concern in one of the following areas: general concern for autonomy, union with kindred groups, political independence,
included. The timeframe for the dataset is 1985 to 2003. There is, however, variation in which years are included for each self-determination movement/government dyad. A dyad is included only in years when the self-determination movement was actively making demands for self-determination. For example, some of the movements started after 1960 (such as the Bodos in India), while others were concluded before 2003 (such as the East Timorese in Indonesia). Moreover, in some cases, the country within which the group resides was not independent until after 1960 (such as the Croats in Bosnia). These cases have a correspondingly limited timeframe.

Based on the CIDCM list, 122 groups (out of 285 groups identified by MAR) made claims for self-determination in 69 different countries, which span all regions of the world. The majority of the ethnic groups in the world did not make claims for self-determination. The unit of analysis in this study is state-group-dyad-year. Figure 3.1 shows the global distribution of SD groups. Both of the number of SD groups and the number of states facing such challenges have increased steadily.

— Figure 3.1 about here —

There are two dependent variables used to evaluate the hypotheses about autonomy granting: the occurrence of autonomy granting and the degree of autonomy. Although a number of country case studies offer detailed information on autonomy for a specific group, there are no existing datasets that provide cross-national data on the autonomy status of ethnic groups over time. I systematically collected information on greater regional autonomy, limited autonomy, or other autonomy issues.
the autonomy status between self-determination movements and their parent states. This data was coded on a yearly basis using information from the Minorities At Risk group profiles, the Ethnic Power Relations (EPR) group profiles, Keesings Record of World Events, Lexis-Nexis News Wires and regional World News Reports, and other relevant publications and government documents. The operational definition of autonomy in this study refers to an institutional arrangement that delimits an ethnically distinct, self-administering entity within a state as having explicit policy-making responsibilities in one or more cultural, economic, or political spheres (Rothchild and Hartzell, 2000). The occurrence of autonomy granting is a dichotomous measure of whether the group in question enjoys autonomy or not. About 13% of the group-years have territorial autonomy. Examples of autonomy include the creation of the South Tyrol autonomous region in Italy, the Bodoland Autonomous Council in India, and the Gagauz autonomous region in Moldova.

The degree of autonomy is operationalized as policy scope. Policies are grouped into three areas: cultural, economic, and political. Cultural autonomy refers to the

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3The territory needs a jurisdictional base in the form of being enshrined in the constitution or it should have an autonomy act of its own in order to be regarded as having special status. This territory is a part of a greater political and judicial entity, but the autonomy granted confers the political freedom to regulate certain specific internal affairs without influence from the central government (Sohn, 1981).

4In a few cases, groups even have certain degree of autonomy on military issues. For example, the 2005 Iraqi Constitution allowed the Kurdistan Regional Government to main-
rights of minority people to enjoy and develop their culture and language and to practice their religion (General Comment on Article 27 of the Human Rights Council). Economic autonomy broadly means that the minority group has the discretion to make economic policy such as the taxation rate, regional development, land usage, etc. Political autonomy, which is equivalent to the representation dimension of Regional Authority Index proposed by Hooghe et al. (2010), evaluates whether the regional government has an independent legislature or executive. I differentiate its own internal security forces and the KRG has the right to approve the deployment of Iraqi federal troops in the region (Stansfield and Anderson, 2009; Gunter, 2011). Since these types of autonomy are very rare, this project counts them as autonomy on political issues.

5https://tavaana.org/sites/default/files/G9416261.pdf. Some examples include: in 1980 in Nicaragua, a bilingual education law was passed, which states that the indigenous peoples have the right to be educated in their own language; in 1994, restrictions on language use was eased in Azerbaijan and Lezgins were allowed to publish news in their own language.

6For instance, in 1989 three autonomous districts were created in the Hill Tracts region in Bangladesh. The powers of the district council include power to regulate transfer and sale of land rights in the area as well as coordination of development works, education, health, fisheries, agriculture, forestry, and farming. The Councils can formulate their own budgets and have some taxation power.

7Some examples include: in 1992, the autonomy agreement constitutionally established Gagauz-Yeri as a territorial autonomy unit in Moldova in which Gagauz-Yeri was granted its own elected legislative and executive authorities; in 2001, a special autonomy law for
ate among minority groups that exercise autonomy in none, one, or more than one of these policy areas. Figure 3.2 shows the distribution of the degrees of autonomy granted to minority groups in the world. Of groups which have territorial autonomy, the numbers of groups with limited and moderate amounts of autonomy are similar, while slightly fewer groups have extensive autonomy.

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Degrees of Autonomy

- Limited autonomy: the regional government has autonomy in one of the following areas: cultural, economic, and political;

- Moderate autonomy: the regional government has autonomy in two of the following areas: cultural, economic, and political;

- Extensive autonomy: the regional government has autonomy in all of the following areas: cultural, economic, and political.

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Assessing the hypotheses requires detailed data on the degree of internal divisions within SD groups before conflict has broken out. In particular, how much does each Aceh was passed in Indonesia which allows the direct election of the local government and implementation of Sharia Law.
faction care about self-determination? In this study, I use the number of factions as a proxy for internal divisions. According to the median voter theorem, when there are only two candidates, their policy positions will be similar in order to win the elections. When the numbers of candidates increases, their policy positions diverge. Therefore, given that different factions have different preferences with regard to the status of the ethnic group, I assume that the more factions the group has, the more internally divided it is. Cunningham (2013) identified factions actively making demands over self-determination in every year for each group. She defined an SD faction as an organization (such as social pressure organizations, political parties, and armed militants) that claims to represent the group and makes demands for self-governance. Of the 122 SD groups in my sample, there are 1,188 factions identified according to Cunningham (2013)’s data. Empirical examples of SD factions include the Liberation Front of Air and Azawad, the Armed Resistance, the Popular Front for the Tuaregs in Niger, the Basque Nationalist Party, the Euskadi Ta Askatasuna (ETA), and the Batasuna for the Basques in Spain.

— Figure 3.2 about here —

If we look at the internal structures of these SD groups, the assumption that they are unitary is empirically problematic most of the time. Of all observations in this study, SD groups are unitary only in about 30% of the group-years. Over 60% of the SD groups in the sample are characterized by more than one faction at some point during the dispute. Moreover, over 80% of these SD groups experience changes in
the number of internal factions over time. The number of internal factions within a movement over the length of the observation ranges from 1 to 39. On average, each minority has three factions. Figure 3.3 shows the frequency for different values on the number of factions for all SD groups. Using these data on internal divisions in SD groups, I construct a logged count variable of the number of SD factions active in each year of a dispute because the effect of an additional faction when movements are unitary or slightly divided should not be the same as that of an additional faction in a highly divided movement.

Whether a minority group is militant or not is coded by myself drawing on information from the variables about ethnic organizations in the MAR dataset. A group is coded as militant if one of its organizations is militant by either committing violent acts or possessing violent means (explosives, armaments, etc.). Once an organization has been coded as militant, it continues to be coded as militant until it explicitly revokes the use of violence (i.e. I continue to code it as militant even for years when the organization does not commit a violent act). About 26% percent of SD groups have militant organizations.

In addition to these variables, I employ two sets of control variables to account for other factors thought to affect the likelihood of autonomy. One set of control variables focuses on state-level confounders, which includes GDP per capita, democracy, federalism, the number of other ethnic groups in the states, state territory, and whether the state is a former colony of the UK. I use GDP per capita a proxy measure
for resources that are available to the government for bargaining (Gleditsch, 2002). This is not an ideal measure of state resources because it does not account for political resources that the state may use to bargain with SD groups. However, this information would be difficult to gather in one state, let alone in multiple states that would allow for a systematic comparison. Even though GDP per capita is a crude measure, it is a reasonable proxy to make comparisons cross-nationally. I include Polity score as a measure of democracy (Marshall et al., 2002) and a dummy for federal states (Smith and Stam, 2004). Democracies and federal states both may be more willing to accommodate groups seeking self-determination through autonomy because of the principle of rule by the people underpinning the regime type. The number of ethnic groups in the state is included because the number of groups facing the government may affect the government’s willingness to devolve autonomy to self-determination groups. Walter (2006) finds that governments will be less willing to grant political autonomy to separatists when they may face future challenges from other groups in the state. Some scholars argue that large countries are more likely to have autonomy regimes. Therefore, I include the size of state territory (in thousand square kilometers) as a control. Whether or not a country is a former colony of the UK is included because the UK used decentralization in colonial times to control its territories through a strategy of “divide and rule” (Calori et al., 1997; Lange, 2004).

The other set of control variables deals with the group-level confounders, which includes group concentration, the size of the minority population (logged), whether
the minority has kin in an adjoining state, and the group’s autonomy status in the past three years. The size and concentration of the ethnic group and whether the group has kin in an adjoining state are likely to affect both the degree of fractionalization of self-determination movements and the likelihood of gaining autonomy. Large and concentrated groups have a greater number of individuals with potentially disparate demands, and may provide a stronger challenge to the state. Those with kin in an adjoining state are also likely to have greater fractionalization as kin in the home state may seek to influence autonomy bargaining as well (Vendina et al., 2007). The existence of a neighboring state with ethnic kin of the self-determination group may also affect the government’s decision to try to accommodate them with autonomy if they fear a pan-ethnic nationalist movement. Finally, I include a variable capturing the autonomy status for the group in the past five years. Although the analysis treats all yearly observations as independent from each other, the political process that leads to a autonomy arrangement cannot be divorced from the past. I expect that dyads are more likely to have autonomy when they had it in the recent past. To deal with the temporal dependence, in logit models I include a variable indicating whether the government granted autonomy or not to the group in the last three years; in the ordered logit models, I include a variable indicating the average degree of territorial autonomy that the group had in the previous three years. Table 3.1 presents the descriptive statistics for all variables used in the study. I use logit models for modeling the occurrence of autonomy granting, and ordered logit models
for modeling the degree of autonomy⁸. The standard errors are clustered on the SD-state dyad.

— Table 3.1 about here —

3.3 Empirical Analysis

Based on the game-theoretical model, I generated three hypotheses on which groups get territorial autonomy and how much. To evaluate these hypotheses, I generated four statistical models (see Table 3.2). The first two models examine the effects of group violence and within-group divisions on the occurrence of territorial autonomy (aiming to test Hypothesis 3.1 and Hypothesis 3.2). The last two models examine to what extent within-group divisions affect the degree of territorial autonomy (aiming to test Hypothesis 3.3).

— Table 3.2 about here —

The results of Model 1 & Model 2 provide support for my hypotheses about the occurrence of territorial autonomy. To assess the substantive effects of group militancy, I plotted the difference in simulated predicted probabilities of autonomy occurrence over the range of levels of within-group divisions, which is measured by the number of factions (Figure 3.4). The graph was produced using the CLARIFY program for

⁸In the ordered logit models, groups without autonomy are put into the baseline “No autonomy” category.
predicted probability based on Model 2. The dot represents the average difference in the predicted probability of ethnic rebellion if a group is militarized versus not militarized; the lines represent ninety-five percent confidence intervals for the predicted difference. In order to interpret the substantive significance of the effects of group military and within-group divisions on autonomy bargaining, we also need to recognize that the probability of reaching an autonomy agreement in any given year is low. There are two important findings with respect to autonomy granting. First, the coefficients on the faction term and its squared terms indicate an insignificant relationship between within-group divisions and autonomy occurrence. Figure 3.4 shows clearly that there is no identifiable linear or quadratic pattern between them. In other words, there is no evidence suggesting that divided groups are less likely to receive territorial autonomy or vice versa. Thus, Hypothesis 3.1 is empirically supported. Second, consistent with Hypothesis 3.2, the existence of military organizations significantly increases the likelihood that the group has territorial autonomy. On average, if the group is militant, which means that there is at least one militant organization claiming to represent the group, the group has an additional 9% chance to get autonomy from the government.⁹

--- Figure 3.4 about here ---

I analyze another set of models that examine the effect of within-group divisions

⁹The result is derived based on CLARIFY estimation holding all continuous variables at their mean and all discrete variables at medians.
on the degrees of autonomy (see Models 3 and 4 in Table 3.2). I include the same controls from the autonomy occurrence analysis as well as a term of the average size of autonomy in the past three years. The results are fairly consistent across the two models. Coefficients on the number of factions and its square are significant and negative, which implies that the number of factions existing in the group has a significant negative relationship with the degree of autonomy that the group gets. Thus, Hypothesis 3.3 is supported. In order to assess the substantive significance of my finding that within-group divisions have a negative relationship with the magnitude of autonomy, I plotted the predicted probability of each degree of autonomy over different numbers of factions (see Figure 3.5). As for the occurrence of the three different degrees of autonomy, first, as the number of factions increases, the probability that groups get limited autonomy (autonomy over one policy area) increases markedly. At the same time, as the level of within-group divisions increases, the probabilities that groups get moderate autonomy (autonomy over two policy areas) or extensive autonomy (autonomy over three policy areas) both decrease significantly.

— Table 3.3 about here —

In Table 3.3, I compare three minority groups which differ from each other along levels of internal divisions but are similar in all other aspects.\textsuperscript{10} For an extremely unified group which only has one representative organization, the average chance

\textsuperscript{10}The values of other continuous variables are set at their means and the values of other discrete variables are set at medians.
that it gets autonomy in one policy area is about 7.5%, while both the chances that it gets autonomy in two policy areas or three policy areas are as high as 11%. For a relatively unitary group which has three factions, the average chance that it gets autonomy in one policy area increases to 10%, its chance of getting autonomy in two policy areas slightly reduces by 1%, and its chance of getting autonomy in all three areas is reduced to 7%. For an even more divided group which has ten factions, its chance of getting limited autonomy is about 15%, its chance of getting moderate autonomy is reduced to 8%, and its chance of getting extensive autonomy is as low as 4.7%.

These findings suggest that the effects of the strategic interaction between governments and groups seeking self-determination plays an important role in the bargaining process: unitary groups are more likely to get more autonomy than divided groups, because the existence of within-group divisions provides governments an opportunity to use the “separating strategy” to only settle with moderates. In addition, the effects of group militancy on autonomy occurrence and autonomy size are quite different. The existence of representative military organizations significantly increases a minority group’s chance to get autonomy. However, it is not the case that militant groups always get more autonomy than nonmilitant groups.

In addition to my theoretically motivated variables, several others achieve statistical significance. The democracy dummy variable yields a positive and significant coefficient. This suggests that ethnic groups in democratic countries are more likely
to receive territorial autonomy and higher degrees of autonomy. The coefficient on
logged gross domestic product per capita (my proxy for government resources) is pos-
itive and significant at the .1 level (i.e. the p-value is smaller or equal to .1). This
indicates that higher levels of GDP are associated with a higher likelihood of auton-
omy occurrence and a higher level of autonomy transfer. Model 2 also indicates that
the existence of autonomy in the past three years increases the chances of autonomy
at any given time, which to to some extent supports the assumption that territorial
autonomy is irrevocable. Similarly, Model 4 also indicates the current level of auton-
omy that a group has is highly correlated with the previous level of autonomy that
the group enjoyed recently.

3.4 Summary

The quantitative analysis presented above tests a number of the hypotheses yielded
by the game-theoretical model in Chapter 2. Broadly speaking, the results support
my claim that internal divisions do not affect the likelihood of autonomy transfer, but
do affect the magnitude of autonomy transfer. The analysis of autonomy occurrence
shows that the number of factions within ethnic groups does not determine whether
groups receive territorial autonomy or not. Cohesive and divided groups appear to
have similar probabilities of having territorial autonomy. However, internal division is
a statistically significant determinant of the degree of the autonomy. Highly-divided
groups are much more likely to receive less autonomy than unitary groups. The
high probability of accommodation to highly-divided groups supports my claim that
governments are acting strategically. Divisions within these groups allow governments
to buy off moderates with relatively few concessions. These results are robust to the
inclusion of a number of control variables to account for alternative explanations.
3.5 Figures

Figure 3.1: Distribution of Self-Determination Groups in the World
Figure 3.2: Distribution of Degrees of Territorial Autonomy
Figure 3.3: Distribution of Within-group Divisions

Average no. of faction within groups = 4
Figure 3.4: The Substantive Effect of Group Militancy on Rebellion Occurrence
Figure 3.5: Predicted Probability of Different Degrees of Autonomy
### 3.6 Tables

Table 3.1: Descriptive Statistics of the Variables

<table>
<thead>
<tr>
<th></th>
<th>Observation</th>
<th>Mean</th>
<th>S.D.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group militancy</td>
<td>2396</td>
<td>.26</td>
<td>.44</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>No. of factions</td>
<td>2194</td>
<td>3.22</td>
<td>2.98</td>
<td>1</td>
<td>39</td>
</tr>
<tr>
<td>GDP/capita</td>
<td>2396</td>
<td>7.37</td>
<td>1.39</td>
<td>3.89</td>
<td>10.59</td>
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<tr>
<td>Democracy</td>
<td>2396</td>
<td>.40</td>
<td>.49</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Federalism</td>
<td>2396</td>
<td>.35</td>
<td>.48</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>No. of groups in the state</td>
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<td>5.30</td>
<td>3.21</td>
<td>1</td>
<td>13</td>
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<tr>
<td>State territory ( (km^2 \text{ Logged}) )</td>
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<td>10.41</td>
<td>1.58</td>
<td>6.91</td>
<td>16.65</td>
</tr>
<tr>
<td>Former UK colony</td>
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<td>.61</td>
<td>.37</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Group size</td>
<td>2088</td>
<td>7.07</td>
<td>1.35</td>
<td>3.79</td>
<td>10.22</td>
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<tr>
<td>Group concentration</td>
<td>2324</td>
<td>2.50</td>
<td>.80</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Ethnic kin in adjoining state</td>
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<td>.63</td>
<td>.48</td>
<td>0</td>
<td>1</td>
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</table>
Table 3.2: Regressions on Occurrence and Degrees of Territorial Autonomy

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1 Occurrence</th>
<th>Model 2 Occurrence</th>
<th>Model 3 Degrees</th>
<th>Model 4 Degrees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group militancy</td>
<td>1.001**</td>
<td>.852**</td>
<td>-.201</td>
<td>-.219</td>
</tr>
<tr>
<td></td>
<td>(.332)</td>
<td>(.296)</td>
<td>(.530)</td>
<td>(.682)</td>
</tr>
<tr>
<td>No. of factions (Logged)</td>
<td>-1.480</td>
<td>-1.232</td>
<td>-2.495**</td>
<td>-2.567**</td>
</tr>
<tr>
<td></td>
<td>(.861)</td>
<td>(.771)</td>
<td>(1.353)</td>
<td>(1.440)</td>
</tr>
<tr>
<td>No. of factions squared</td>
<td>.492</td>
<td>.451</td>
<td>-.826</td>
<td>-.894</td>
</tr>
<tr>
<td></td>
<td>(.218)</td>
<td>(.187)</td>
<td>(.339)</td>
<td>(.707)</td>
</tr>
<tr>
<td>State-level controls</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP/capital</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.180)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democracy</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.442)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federalism</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.340)</td>
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<td></td>
<td></td>
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<tr>
<td>No. of groups in the state</td>
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<td>.053</td>
<td></td>
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<tr>
<td></td>
<td>(.071)</td>
<td></td>
<td>(.064)</td>
<td></td>
</tr>
<tr>
<td>State territory (Logged)</td>
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<td></td>
<td>.194</td>
<td></td>
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<tr>
<td></td>
<td>(.142)</td>
<td></td>
<td>(.24)</td>
<td></td>
</tr>
<tr>
<td>Former UK colony</td>
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<td>1.024***</td>
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</tr>
<tr>
<td></td>
<td>(.340)</td>
<td></td>
<td>(.355)</td>
<td></td>
</tr>
<tr>
<td>Group-level controls</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group size (Logged)</td>
<td>.239</td>
<td></td>
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<td></td>
<td>(.181)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Group concentration</td>
<td>.435</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>(.315)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic kin in adjoining state</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.455)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TA in previous 3 years</td>
<td>2.522***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average degree of TA in previous 3 years</td>
<td>3.572***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.42)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.64</td>
<td>3.644</td>
<td>4.44</td>
<td>4.58</td>
</tr>
<tr>
<td>Cutpoint 1</td>
<td></td>
<td>-3.459</td>
<td>-4.592</td>
<td></td>
</tr>
<tr>
<td>Cutpoint 2</td>
<td></td>
<td>-2.226</td>
<td>-3.326</td>
<td></td>
</tr>
<tr>
<td>Cutpoint 3</td>
<td></td>
<td>-1.472</td>
<td>-2.032</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>2396</td>
<td>2088</td>
<td>2396</td>
<td>2088</td>
</tr>
<tr>
<td>Loglikelihood</td>
<td>-734</td>
<td>-706</td>
<td>-1109</td>
<td>-1087</td>
</tr>
</tbody>
</table>

* p <= .1; ** p <= .05; *** p <= .01

Models 1 and 2 are logit models of occurrence of territorial autonomy. Models 3 and 4 are ordered logit models of degrees of territorial autonomy.
Table 3.3: Predicted Probability of TA of Different Degrees

<table>
<thead>
<tr>
<th></th>
<th>No. of Factions</th>
<th>Limited Autonomy</th>
<th>Moderate Autonomy</th>
<th>Extensive Autonomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>An extremely unitary group</td>
<td>1</td>
<td>7.5%</td>
<td>11.1%</td>
<td>12.0%</td>
</tr>
<tr>
<td>A relatively unitary group</td>
<td>3</td>
<td>10.0%</td>
<td>10.1%</td>
<td>7.3%</td>
</tr>
<tr>
<td>An extremely divided group</td>
<td>10</td>
<td>14.8%</td>
<td>8.2%</td>
<td>4.7%</td>
</tr>
</tbody>
</table>
Chapter 4

Empirical Analysis II: The Impact Of Territorial Autonomy On Ethnic Rebellion

This chapter analyzes the effect of territorial autonomy on ethnic rebellion onset and its intensity. Based on the equilibrium analyses of the game-theoretical model in Chapter Two, I propose several hypotheses with respect to why territorial autonomy reduces the occurrence of ethnic rebellion sometimes while not in other circumstances. I predict that the effect of territorial autonomy on rebellion occurrence depends on the level of divisions with minority groups: the more divided the minority group, the less likely that autonomy granting will reduce the occurrence of ethnic rebellion initiated by the group. However, as long as groups get territorial autonomy, the intensity of ethnic rebellion will decrease. I conduct a large-N study to evaluate these predictions.

4.1 Hypotheses on Territorial Autonomy and Ethnic Rebellion

First of all, the model suggests that whether autonomy granting reduces rebellion occurrence or not depends on the internal structures of minority groups. When the group only has one faction able to pose a credible threat to the government, autonomy granting always reduces ethnic rebellion. However, when there are multiple factions
who can credibly threaten the government to grant autonomy, the effect of granting territorial autonomy on reducing the occurrence of ethnic rebellion depends. As minority groups becomes more divided, in other words, as the difference of factions’ costs of war gets larger, the low cost faction becomes the one who has stronger preference to rebel. There are two possible equilibria that could occur under this circumstance: the Partial Pacifying TA Conflict Equilibrium and the Complete Pacifying TA Equilibrium. But which one is more likely? When $\frac{\lambda}{1-\lambda} < \frac{c_H}{c_L} \leq \frac{c_G\lambda}{c_L(1-p-p\lambda)} + \frac{\lambda}{1-\lambda}$, the Complete Pacifying TA Equilibrium occurs. However, when $\frac{c_H}{c_L} > \frac{c_G\lambda}{c_L(1-p-p\lambda)} + \frac{\lambda}{1-\lambda}$, the Partial Pacifying TA Conflict Equilibrium occurs. Comparing the requirements for $\frac{c_H}{c_L}$ for these two equilibria, we can draw the following conclusion: when $\frac{c_H}{c_L}$ increases, i.e., the minority group becomes more divided, the Complete Pacifying TA Equilibrium in which the government grants autonomy to induce complete peace becomes less likely to occur, but the Partial Pacifying TA Conflict Equilibrium in which the government grants territorial autonomy to pacify only one violent faction becomes more likely to occur. This implies that within-group divisions facilitate governments to play the strategy of “buying off one faction but letting the other rebel.” Because the “price” to satisfy the entire group is too high, the government would like to make a small concession to satisfy the the “cheaper” faction. As governments know that

1Combing the conditions $\frac{c_H}{c_L} \geq \frac{\lambda}{1-\lambda}$ and $c_G \geq c_G^{(1)}$, together, we can get $\frac{\lambda}{1-\lambda} < \frac{c_H}{c_L} \leq \frac{c_G\lambda}{c_L(1-p-p\lambda)} + \frac{\lambda}{1-\lambda}$.

2Combing the conditions $\frac{c_H}{c_L} \geq \frac{\lambda}{1-\lambda}$ and $c_G < c_G^{(1)}$, together, we can get $\frac{c_H}{c_L} > \frac{c_G\lambda}{c_L(1-p-p\lambda)} + \frac{\lambda}{1-\lambda}$.
they only need to fight with part of the minority group, war is bearable or it is more preferable compared to achieving complete peace. As such, small-scale ethnic rebellion by some factions is less likely to be prevented when the group is more divided. This discussion yields the following hypothesis:

**Hypothesis 4.1.** *All else equal, the more internally divided the minority group, the less likely that autonomy granting will reduce the occurrence of ethnic rebellion initiated by the group.*

Second, if we assume that an anti-government rebellion initiated by both factions is more intense than one initiated only by one faction, the model implies that territorial autonomy reduces the intensity of ethnic rebellion, although it does not necessarily reduce its occurrence. In the *Complete Pacifying TA Peace Equilibrium* and *Partial Pacifying TA Peace Equilibrium*, autonomy granting does lead to the elimination of rebellion outbreak, i.e., both factions do not rebel. However, in the *Partial Pacifying TA Conflict Equilibrium* in which governments strategically choose to grant less autonomy to achieve partial peace, territorial autonomy only reduces the occurrence of ethnic rebellion by the less violent faction. Nevertheless, if governments grant autonomy, the intensity of the ethnic rebellion afterward should be reduced, since at least some faction(s) of minority groups is(are) satisfied. Therefore, the model suggests the following hypothesis:

**Hypothesis 4.2.** *All else equal, autonomy granting reduces the intensity of ethnic rebellion initiated by ethnic groups.*
4.2 Research Design

I conduct a large-N study of all self-determination (SD) groups on a yearly basis from 1985-2003. The unit of analysis in this study is group-state dyad year. The measurements of my main independent variables—autonomy granting and within-group divisions—are the same as in the previous research design in Chapter 3.

There are two dependent variables used to evaluate the effect of territorial autonomy on ethnic rebellion: the occurrence of ethnic rebellion and the intensity of ethnic rebellion. I draw data from the MAR dataset rebellion index (variable name REB) from 1985 to 2003. Ethnic rebellion is defined as organized anti-regime violent behavior mobilized and organized by organizations or elites to force a government to change its policy toward an ethnic group (MAR). The REB variable is an annual score from 0 to 7 specifying increasing levels of scope and intensity of political violence.\(^3\) In this study, I summarize ethnic rebellion into three categories according to its intensity: no ethnic rebellion (REB=0, i.e., no violence is reported), small-scale

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\(^3\)0.None; 1.Political banditry, sporadic terrorism (fewer than 6 violent attacks); 2.Campaigns of terrorism (6 or more violent attacks); 3.Local rebellions: armed attempts to seize power in a locale; 4.Small-scale guerrilla activity. Small-scale guerrilla activity has all these three traits: fewer than 1,000 armed fighters, sporadic armed attacks (less than 6 reported per year), and attacks in a small part of the area occupied by the group or in one or two other locales); 5.Intermediate-scale guerrilla activity. Intermediate-scale guerrilla activity has one or two of the defining traits of large scale activity and one or two of the defining traits of small scale activity; 6.Large-scale guerrilla activity. Large-scale guerrilla activity
rebellion (REB ∈ [1, 4], i.e., sporadic violence), and large-scale rebellion (REB ≥ 5, i.e., a guerrilla war\textsuperscript{4}). The occurrence of ethnic rebellion is defined as whether a small-scale or large-scale rebellion occurred or not. Ethnic rebellion is very common for SD groups, with 50% (63 out of 122 groups) of them having engaged in violence against their government at some point in time.

To isolate the effect of territorial autonomy on ethnic rebellion, I control for factors likely to influence both autonomy granting and ethnic rebellion. First, I include three country-level variables as controls: democracy, state capacity, and state population. I include Polity score as a indicator of democracy (Marshall and Jaggers, 2002). I measure state capacity using gross domestic product (GDP) per capita (log-transformed) (Gleditsch, 2002). State population is log-transformed as well (World Bank Development Indicators 2001). Second, I include five group-level variables as controls: group size, group concentration, whether the group has geographically close kin, level of political exclusion, and economic grievance. Group size measures the relative group population using data on state population from Gleditsch (2002) and a measure of group population drawn from MAR and the Ethnic Power Relations (Cederman et al.,

\textsuperscript{4}A guerrilla war is defined as an organized anti-government attack with more than 1,000 fighters which affects a large part of the area occupied by the group.

\textsuperscript{7}Protracted civil war (regional division of the country), fought by rebel military with base areas.
data. The variable is a measure of the state population divided by the group population (log-transformed). Group concentration uses the MAR measure of geographic concentration, which is on an ordinal four-point scale varying from dispersed to concentrated. Transitional kin uses the MAR measure of whether the SD group has kin in a nearby state. Political exclusion is a dichotomous measure of whether the SD group was excluded from power at the center, using the excluded variable from the EPR dataset (Cederman et al., 2010). The level of economic discrimination the group faces, drawn from the MAR, measures economic grievance from less to more on a four-point scale.

I use logit models for modeling the occurrence of ethnic rebellion, and ordered logit models for modeling the intensity of ethnic rebellion. The standard errors are clustered on groups (122 SD groups in total). Pooled cross-sectional time-series (TSCS) data are well suited to study the dynamics of change over time in different units. However, the assumption of independence of observations across space and time is easily violated (Sayrs, 1989). The outbreak of ethnic rebellion is likely to be dependent on previous conflicts in the same state-SD movement dyad. To deal with the temporal dependence of recurrent conflict, I include a variable indicating whether there is a rebellion in the past three years.
4.3 Empirical Analysis

In my sample, less than twenty percent of the group-years are coded as that there is ethnic territorial autonomy granted by the corresponding central government. Figure 4.1 compares the conflictual behavior of these two types of groups. First, groups with autonomy are almost as violent as groups without autonomy. For both types of groups, ethnic violence occurred in about 44% of the group-years. However, without taking other factors into consideration, groups with autonomy are more likely to have small-scale rebellions while groups without autonomy are more likely to have large-scale rebellions, which is consistent with what my theory expects.

— Figure 4.1 about here —

— Table 4.1 about here —

Table 4.1 reports the empirical results. Models 1 and 2 are logit models for the occurrence of ethnic rebellion. The results from Model 1 indicate no statistical association between autonomy granting and the occurrence of ethnic rebellion. The coefficient is negative but not statistically significant. Based on the analysis of the game-theoretic model presented earlier, the effect of territorial autonomy on the occurrence of rebellion is conditional upon the internal structures of ethnic groups. When ethnic groups are widely divided, governments are more likely to use autonomy granting to achieve partial peace; when they are more unified, governments are more likely to use it to achieve complete peace. As stated in Hypothesis 1, autonomy
granting is more likely to reduce the occurrence of ethnic rebellion for less divided
groups. To test this argument, Model 2 includes the interaction term between au-
tonomy granting and number of factions within groups. The results suggest internal
divisions reduce the pacifying effect of territorial autonomy, which provides support
for Hypothesis 1. To shows these interactive effects more clearly, I used CLARIFY to
generate predicted probabilities of rebellion outbreak under autonomy and without
autonomy, while holding the other variables constant (King et al., 2000). As shown
in Figure 4.2, when the number of factions is less than three, groups with territorial
autonomy have a lower probability of engaging in ethnic rebellion than groups with-
out autonomy. However, as groups get more internally divided, it is hard to say that
groups with autonomy are significantly more peaceful than groups without autonomy.
According to the statistics of my sample, less half of the groups have two or fewer
factions. Meanwhile, about fifty percent of the groups have three to ten factions,
which is the area in which we cannot find supportive evidence for autonomy’s paci-
fying effect. This explains why we observe groups with autonomy are as violent as
groups without autonomy in Figure 4.1.

— Figure 4.2 about here —

Model 3 and 4 are ordered logit models for the intensity of ethnic rebellion. Con-
sistent with my Hypothesis 2, territorial autonomy has a significant negative effect
on the intensity of ethnic rebellion. In other words, if autonomy is granted, even

\footnote{Categorical variables are at their mode and interval variables are at their means.}
if rebellion occurs afterwards, its scope will be smaller. Figure 4.3 shows the substantive effect of autonomy granting on rebellion occurrence of different intensities. As my theory expects, autonomy granting increases ethnic peace—the probability of no rebellion. However, this positive effect gradually dies out as the group gets more divided. At the same time, it reduces the outbreak of large-scale rebellion. With respect to the occurrence of small-scale rebellion, the effect of autonomy granting is not very clear. When there are few factions, it reduces its occurrence. However, when there are more factions within groups, SD groups actually become more likely to initiate rebellion of small scope.

— Figure 4.3 about here —

Some of the control variables yield predictions on rebellion occurrence and its intensity. First, the results show that SD groups in democracies are more likely to engage in ethnic rebellion and more intensive rebellion than groups in non-democracies. This positive effect does not suggest support for the argument that democratic states are likely to have more channels for SD groups to pursue their agenda through peaceful means. Second, greater state capacity (measured by GDP per capita) is associated with a lower chance of rebellion occurrence over self-determination and a lower chance of more intensive rebellion. This result is consistent with many studies that indicate that stronger states are better able to avoid domestic violence. Third, the findings on political exclusion support the existing argument that political exclusion increases the chances of rebellion occurrence and rebellion intensity (Cederman et al., 2010).
Lastly, the occurrence of rebellion in the previous three years is a positive and significant predictor of rebellion over self-determination in current year. This suggests that there is some path dependence in violence from year to year.

### 4.4 Sensitivity Analysis

Thus far, however, the statistical analysis has not addressed the concern of endogeneity, that is, governments may grant territorial autonomy to certain groups in anticipation of future conflict. As is shown in the analysis of the game, whether the government grants autonomy or not and how much depends on the conflict propensity of the factions in a given group. Depending on whether opportunistic governments attempt to prevent anticipated conflict by appeasing potential “troublemakers” or excluding potential “troublemakers” through self-governance, a naive analysis may underestimate or overestimate the effect of territorial autonomy. I use an instrumental variables regression to address the concern of endogeneity. The instrumental variables estimation helps to correct for the problem of endogeneity because the new variables are not related to the error terms of the other variables in the model. I use whether or not a country is a former colony of the United Kingdom (UK) as an instrument for territorial autonomy because the UK used decentralization in colonial times to control its territories through a strategy of “divide and rule” (Calori et al., 1997; Lange, 2004). Those colonies continued to use decentralization as their state structure once they gained independence. Once the endogeneity concern is taken
into account, the estimates derived from instrumental variables regressions are very similar to those derived from simple regressions (see Table 4.2).

Another way of measuring ethnic rebellion is based on the coding scheme in the ACD2EPR dataset, which builds directly on the UCDP/PRIO Armed Conflict Dataset (ACD) and the Ethnic Power Relations dataset. Each ethnic conflict onset is mapped to the corresponding ethnic group, provided that the rebel organization expresses an aim to support the ethnic group and members of the group in question participate in the combat (Wucherpfennig et al., 2012). In the ACD2EPR dataset conflict (this study calls it rebellion) is defined as “a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths.” I use 1000 battle-related deaths as the threshold to make a clear comparison between large-scale rebellion and small-scale rebellion. The results provide strong support for the hypotheses as well.

4.5 Summary

Taking internal structures of ethnic groups into consideration, this chapter shows that territorial autonomy reduces the intensity of ethnic rebellion, but does not always reduce the occurrence of ethnic rebellion. According to the equilibrium analysis of the game-theoretical model, there are two different aims of autonomy granting conditional on the internal structures of ethnic group. For unitary groups, autonomy granting
usually aims to eliminate violence completely. However, for divided groups, autonomy granting can be used by governments to shape violence into a bearable range by playing the strategy of “satisfy some factions and let others rebel.” By looking at the conflictual behavior of self-determination groups between 1985 and 2003, I have examined my claims that autonomy concessions made to highly divided groups are more likely to be internally contested as moderates separate from extremists. The empirical analysis of ethnic rebellion after autonomy granting provide support for my main prediction that granting autonomy will be more likely to be internally contested as the number of group factions increase.
4.6 Figures

Figure 4.1: Territorial Autonomy for SD groups and Ethnic Rebellion (1985-2003)
Figure 4.2: Predicted Probability of Rebellion Occurrence: TA vs. No TA

Note: set other variables at mean
Figure 4.3: Substantive Effects of TA on Rebellion Intensity
4.7 Tables
Table 4.1: Effects of Territorial Autonomy on Rebellion Occurrence and Intensity

<table>
<thead>
<tr>
<th>Model DV</th>
<th>Model 1 Occurrence</th>
<th>Model 2 Occurrence</th>
<th>Model 3 Intensity</th>
<th>Model 4 Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Territorial autonomy (TA)</td>
<td>-0.260</td>
<td>-0.327***</td>
<td>-2.816***</td>
<td>-2.647***</td>
</tr>
<tr>
<td></td>
<td>(.485)</td>
<td>(.021)</td>
<td>(.662)</td>
<td>(.770)</td>
</tr>
<tr>
<td>TA*No. of factions</td>
<td></td>
<td>1.774***</td>
<td></td>
<td>1.353***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(.688)</td>
<td></td>
<td>(.482)</td>
</tr>
<tr>
<td>No. of factions (Logged)</td>
<td>0.648***</td>
<td>0.609***</td>
<td>0.648***</td>
<td>0.637***</td>
</tr>
</tbody>
</table>

**State-level controls**

<table>
<thead>
<tr>
<th></th>
<th>Model 1 Occurrence</th>
<th>Model 2 Occurrence</th>
<th>Model 3 Intensity</th>
<th>Model 4 Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democracy</td>
<td>0.800**</td>
<td>0.902**</td>
<td>0.723***</td>
<td>0.897**</td>
</tr>
<tr>
<td></td>
<td>(.387)</td>
<td>(.378)</td>
<td>(.355)</td>
<td>(.401)</td>
</tr>
<tr>
<td>State capacity (GDP/capita)</td>
<td>-0.500***</td>
<td>-0.561***</td>
<td>-0.686***</td>
<td>-0.755***</td>
</tr>
<tr>
<td>State population (Logged)</td>
<td>-0.034</td>
<td>-0.024</td>
<td>-0.048</td>
<td>-0.127</td>
</tr>
<tr>
<td></td>
<td>(.149)</td>
<td>(.160)</td>
<td>(.052)</td>
<td>(.131)</td>
</tr>
</tbody>
</table>

**Group-level controls**

<table>
<thead>
<tr>
<th></th>
<th>Model 1 Occurrence</th>
<th>Model 2 Occurrence</th>
<th>Model 3 Intensity</th>
<th>Model 4 Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group size (Logged)</td>
<td>-0.189</td>
<td>-0.239</td>
<td>-0.064</td>
<td>-0.170</td>
</tr>
<tr>
<td></td>
<td>(.173)</td>
<td>(.181)</td>
<td>(.051)</td>
<td>(.161)</td>
</tr>
<tr>
<td>Group concentration</td>
<td>0.468</td>
<td>0.435</td>
<td>0.335***</td>
<td>0.332***</td>
</tr>
<tr>
<td></td>
<td>(.322)</td>
<td>(.315)</td>
<td>(.098)</td>
<td>(.121)</td>
</tr>
<tr>
<td>Kin in adjoining state</td>
<td>0.034</td>
<td>0.035</td>
<td>0.018</td>
<td>0.019</td>
</tr>
<tr>
<td></td>
<td>(.481)</td>
<td>(.481)</td>
<td>(.146)</td>
<td>(.439)</td>
</tr>
<tr>
<td>Political exclusion</td>
<td>1.129***</td>
<td>1.189***</td>
<td>1.164***</td>
<td>1.078*</td>
</tr>
<tr>
<td></td>
<td>(.553)</td>
<td>(.517)</td>
<td>(.181)</td>
<td>(.535)</td>
</tr>
<tr>
<td>Economic discrimination</td>
<td>-0.056</td>
<td>-0.032</td>
<td>0.002</td>
<td>-0.018</td>
</tr>
<tr>
<td></td>
<td>(.154)</td>
<td>(.154)</td>
<td>(.050)</td>
<td>(.131)</td>
</tr>
<tr>
<td>Rebellion in last 3 years</td>
<td>1.419*</td>
<td>1.457**</td>
<td>1.906***</td>
<td>1.932***</td>
</tr>
<tr>
<td></td>
<td>(.749)</td>
<td>(.682)</td>
<td>(.252)</td>
<td>(.384)</td>
</tr>
<tr>
<td>Constant</td>
<td>2.64</td>
<td>3.644</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| N                         | 2017               | 2017               | 2017              | 2017              |
| Loglikelihood             | -734               | -706               | -1109             | -1087             |

* p <= .1; ** p <= .05; *** p <= .01

Models 1 and 2 are logit models of rebellion occurrence.
Models 3 and 4 are ordered logit models of rebellion intensity.
Table 4.2: Effects of Territorial Autonomy on Rebellion Occurrence and Intensity (Instrument Models)

<table>
<thead>
<tr>
<th>Model</th>
<th>Model 1 Occurrence</th>
<th>Model 2 Occurrence</th>
<th>Model 3 Intensity</th>
<th>Model 4 Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA (Instrumented)</td>
<td>-.344 (0.570)</td>
<td>-.391*** (0.125)</td>
<td>-3.582* (.934)</td>
<td>-3.447*** (1.421)</td>
</tr>
<tr>
<td>TA*No. of factions</td>
<td>2.023*** (1.384)</td>
<td>2.357*** (1.082)</td>
<td>2.357*** (1.082)</td>
<td>2.357*** (1.082)</td>
</tr>
<tr>
<td>No. of factions (Logged)</td>
<td>.754*** (.347)</td>
<td>.791*** (.387)</td>
<td>.793*** (.243)</td>
<td>.834 (.322)</td>
</tr>
</tbody>
</table>

State-level controls

| Democracy | 1.219** (.787) | 1.409** (.897) | 1.134*** (.433) | 1.504** (.652) |
| State capacity (GDP/capita) | -.553*** (.201) | -.621*** (.221) | -.832*** (.134) | -.900*** (.326) |
| State population (Logged) | -.042 (.176) | -.043 (.182) | -.057 (.077) | .056 (.074) |

Group-level controls

| Group size (Logged) | -.217 (.175) | -.257 (.196) | -.146 (.131) | -.169 (.174) |
| Group concentration | .545 (.363) | .502 (.376) | .441*** (.104) | .447*** (.112) |
| Kin in adjoining state | .054 (.371) | .054 (.377) | .213 (.198) | .220 (.179) |
| Political exclusion | 1.549*** (.657) | 1.567*** (.636) | 1.784*** (.272) | 1.821*** (.285) |
| Economic discrimination | -.125 (.176) | -.213 (.190) | -.015 (.062) | -.014 (.066) |
| Rebellion in last 3 years | 1.941* (.1.001) | 1.997** (.1.022) | 2.674*** (.347) | 2.697*** (.341) |
| Constant | 2.64 3.644 | 2.64 3.644 | 2.64 3.644 | 2.64 3.644 |
| Cutpoint 1 | -4.519 4.572 | -4.519 4.572 | -4.519 4.572 | -4.519 4.572 |
| N | 1531 1531 | 1531 1531 | 1531 1531 | 1531 1531 |
| Loglikelihood | -972 -941 | -1557 -1532 | -1557 -1532 | -1557 -1532 |

* p <= .1; ** p <= .05; *** p <= .01

Models 1 and 2 are logit models of rebellion occurrence.
Models 3 and 4 are ordered logit models of rebellion intensity.
Chapter 5

Conclusion

This chapter summarizes what has been learned about the establishment of territorial autonomy and its effect on ethnic rebellion. It first reviews the theoretical arguments and summarizes their predictions and performance against the empirical record. These conclusions have important implications for the study and practice of autonomy granting. This chapter concludes by a brief discussion of the limitations of this study and where future works should go.

This project started with an empirical puzzle that I identified by looking at the minority groups who recently sought self-determination, that is, why groups with territorial autonomy were as violent as groups without autonomy. To address this puzzle, two related questions were asked in particular. First, why does territorial autonomy as a way of transferring power and resources reduce ethnic rebellion in some cases but not in other cases? Second, if it does not reduce ethnic rebellion, why do governments grant autonomy in the first place?

A large body of literature has studied these questions. However, from my point of view, there are two main shortcomings in the existing literature. First, most studies on ethnic disputes typically either focus on when territorial autonomy arrangements are established, or focus on the outbreak of ethnic conflict. Little theoretical and
empirical work has looked at these two related processes at the same time. Second, many scholars have acknowledged that most minority groups are fragmented in the sense that an ethnic group typically is comprised of several “factions.” These factions may differ substantially in how much they care about the stakes in disputes, what they demand from the government, and how they pursue their goals. Some studies have examined the role of within-group divisions in relations between governments and minority groups; however, few systematically analyze how group fragmentation affects the effectiveness of specific institutional arrangements such as territorial autonomy.

I developed a game-theoretical model of autonomy granting and ethnic rebellion that aims to address the puzzle, questions, and concerns that were raised above. By assuming that minority groups are factionalized, the model shows that opening the black box for minority groups greatly affects the strategic interactions between the actors involved in ethnic bargaining. This model recognizes that bargaining among governments and minority groups happens in the shadow of the threat of ethnic rebellion. The level of territorial autonomy that a government is willing to grant depends on what would happen if the government did not make autonomy concessions. Therefore, the model endogenizes both territorial autonomy and ethnic rebellion. It produces empirical predictions about the conditions under which governments will be willing to grant territorial autonomy to minority groups, what level of autonomy they will be willing to offer, and how minority groups will respond to governments’ decisions in the end.
The key insight from the game-theoretical model is that the internal structure of ethnic groups plays an important role in determining the ability of territorial autonomy to resolve ethnic conflict. Taking within-group divisions into consideration, I argue that territorial autonomy reduces the intensity of ethnic rebellion, but does not always reduce the occurrence of ethnic rebellion. The theoretical model suggests that governments follow a different logic when responding to minority groups of various internal structures. There are two types of autonomy granting which differ in their goals: one aims to prevent violence, and the other one aims to shape violence into a bearable range. When facing unitary groups, autonomy granting is more likely to resolve the underlying dispute. Because the cohesive structure of the groups does not allow governments to play the “buy off somebody but let others rebel” strategy, governments have to make an autonomy concession to satisfy the whole group. However, when groups are divided, autonomy granting can be used to limit the extent of violence rather than to prevent violence. When it is too expensive or impossible to eliminate violence, territorial autonomy becomes instrumental to the attainment of another goal, namely, reducing the intensity of the violence by pacifying part of the population within the group. This use of autonomy granting usually happens when minority groups are internally divided, especially when they are very polarized. The reason that governments have incentives to grant autonomy to divided groups is because it reduces the intensity of war, although it cannot fully resolve the underlying conflict. Internal divisions provide an opportunity for governments to separate dif-
ferent factions and pursue concessions without satisfying the entire group. Although the method of autonomy granting used to achieve these two goals is the same, these goals are fundamentally different, both in terms of content and implications.

In order to evaluate the predictions yielded by the theoretical model regarding territorial autonomy and ethnic rebellion, I conducted a large-N study of 122 self-determination groups in the world between 1985 and 2003. An important step to evaluate my theory is to test the model’s expectations for which groups get autonomy and how much they get, which requires a measure of territorial autonomy granted by governments to minority groups. However, cross-national data on territorial autonomy did not exist. Studies that invoke autonomy concessions in the literature on ethnic conflict rely exclusively on case studies or indirect evidence to support their arguments. I created a measure of degrees of territorial autonomy for minority groups. To generate this measure across the self-determination groups in my sample, I relied on the content of the autonomous agreements, or domestic laws. Many governments formalize their autonomous concessions in the text of these documents, which allowed me to compare the level of autonomous concessions made by governments. The degree of autonomy is operationalized as policy scope in which policies are grouped into cultural, economic, and political areas. Consistent with the theoretical model, the empirical analysis finds that the internal structure of minority groups has a systemic effect on both autonomy settlements and anti-government violence. Specifically, I find within-group divisions do not affect the likelihood of autonomy transfer, but do affect
the magnitude of autonomy transfer; in addition, autonomy granting only reduces
the occurrence of large-scale ethnic rebellions rather than all rebellions.

How has the knowledge generated in this study advanced the existing knowledge
of territorial autonomy as a means to manage conflict in ethnically divided societies?
First, the theory presented in this study provides a unified framework for explaining
the puzzling behavior of governments and minority groups: why is granting autonomy
sometimes conflict-preventing, while sometimes not? If it is not conflict-preventing,
why would a government grant it in the first place? The game-theoretical model of
autonomy granting and ethnic rebellion that I developed in this study suggests that
autonomy granting serves different purposes for the government in different situa-
tions. Sometimes, the government grants territorial autonomy aiming to eliminate
ethnic conflict. However, at other times, given the existence of within-group divisions,
through granting autonomy the government strategically chooses to be in a conflict
with some faction of the minority group. If it is too costly to pacify all minority
people from fighting against the government, granting a small amount of autonomy
can at least buy peace from some factions, which helps to prevent an all-out ethnic
war. Therefore, autonomy granting does not always reduce the occurrence of ethnic
rebellion. In the cases that autonomy granting is not conflict-preventing, the incentive
that governments have to grant autonomy is to reduce anti-government violence into
a more bearable range. I believe this theory and the supporting empirical evidence
will expand our understanding of the application and the evaluation of territorial
autonomy as a means to manage conflicts in ethnically divided societies.

Second, more broadly, this study provides a more general understanding of the occurrence of ethnic rebellion, which yields important policy implications for managing ethnic conflict. It shows that there are at least two factors that when combined determine the severity of the threat that an ethnopolitical organization poses to a government: its capability and its cost of war relative to the disputed “pie.” An insight we can draw from this study is that demand radicalization of ethnopolitical organizations is not equivalent to their behavior radicalization. An organization which makes a radical demand may have a relatively low cost of war. However, it is not necessarily the case that it pursues its goal through radical behavior. Organizations which make extreme demands may not be more violent than moderate organizations if they are weak in terms of capability; moderate organizations may have stronger incentives to rebel if they are strong. Such complexities add more nuances to governments’ accommodations, such as when they should grant autonomy, how much autonomy they should offer, and to whom the autonomy aims to satisfy. It is not necessarily more difficult for governments to stop organizations which make radical demands from fighting. An organization with radical demands but weak capability may be easily satisfied by a small amount of autonomy. However, governments may need to grant a large amount of autonomy to “purchase” peace from organizations with moderate demands but strong capabilities. This study has generated a novel insight which has not been appreciated before; that is, we should not take it for granted
that it is always more difficult for governments to satisfy radical factions of minority groups, although at first glance it appears that is the case.

This study has two primary implications. First, the unitary actor assumption for autonomy bargaining limits our understanding of ethnic politics. The existence of internal divisions within minority groups greatly alters the interactions between governments and groups. On the one hand, within-group divisions can decrease the groups’ bargaining power for autonomy as a whole because they cannot bring their total strength to battle. Unified minorities generally present stronger challenges to governments and thus get larger amounts of autonomy. On the other hand, divided groups provide a unique opportunity for governments to work selectively with specific faction(s) by offering small autonomy concessions. Although these concessions only satisfy some parts of the group, they reduce the cost of conflict without fully resolving it. Thus, when considering the patterns of autonomy accommodation and its effect on ethnic rebellion, we should take internal structures of minority groups into consideration. Previous studies of ethnic conflict often treat governments and ethnic groups as unitary actors wherein war is the result of bargaining failure due to incomplete information, commitment problems, or issue indivisibility (Fearon, 1995). However, when some factions of a minority group achieve bargaining success through satisfying autonomy concessions while others do not, the occurrence of war may be due to governments’ strategic action; that is, governments play the “separating” strategy by granting a limited amount of autonomy to intentionally satisfy specific faction(s)
while fighting with others. As such, the opening of “black boxes” for minority groups expands our understanding of the occurrence of ethnic conflict.

Second, the elimination of rebellion occurrence is too blunt of a measure for understanding the role that territorial autonomy actually plays in ethnic politics. As shown in previous analysis, the goal of granting autonomy is not always to prevent conflict by satisfying the entire group. If autonomy granting does not aim to eliminate conflict in the first place, it is unfair to say the policy fails if we observe rebellion occurrence after its implementation. However, territorial autonomy does influence self-determination movements in a positive way. Autonomy accommodation reduces the intensity of ethnic conflict. Granting autonomy lowers the risk that all factions of minority groups together initiate an all-out ethnic war. The differential effect that autonomy has on violence of different intensities is important. We should not interpret some level of violence after an autonomy concession as a failure. Fully resolving the underlying dispute is an illusive, and probably too harsh criterion to evaluate the effectiveness of territorial autonomy with respect to mitigating ethnic tensions.

As it stands, the project has many shortcomings and limitations that need to be addressed which provide some insights and directions for future research. First, the most obvious direction for future work is to derive more empirical implications from the present theory and test them against new data. The theoretical model produces several comparative statics predictions regarding the conflictual behavior of ethnopolitical organizations which have not been explored in detail here due to data
limitations. With new data available in the future, it is worthwhile to explore how radical and moderate ethnopolitical organizations respond to governments’ autonomy policies respectively. Such an exercise would not only generate more insights about the conditions under which territory autonomy buys peace, but would also point to where the theory needs to be modified. Due to the limits of data availability, the current research design presented in this dissertation looks at the aggregated behavior at the group level in which we do not know much about which ethnic faction actually is not satisfied with the status quo and initiates anti-government violence. Obviously, it is not a direct test of the causal mechanism suggested by the model in which minority groups are assumed to be factionized. A better way to evaluate my theory is to look at the behavior of ethnopolitical organizations. In the future, I would like to look at the 1200 or so ethnic factions more carefully and find out who challenges an autonomy settlement and who does not, which I believe is a more direct way to evaluate my theory.

Second, it is also important to acknowledge that this study relies on several strong theoretical and empirical assumptions. For example, an important theoretical assumption that I made about territorial autonomy is that all minority groups desire as much autonomy as they can get, i.e., the more autonomy the better. It implies that the ideal position that all minority groups want to achieve is to be independent from their current host states. In reality that may not be the case. Some minority groups may not actually want to get full independence especially when they can
benefit from economies of large scale. Some groups may not actually value their own cultures that much if their cultures are not that distinct from the majority groups’ or if they can benefit by adopting majority groups’ cultures such as speaking the majority groups’ languages. An important empirical assumption that I made about territorial autonomy is that minority groups value autonomy in cultural, economic, and political areas equally. This assumption is likely to be challenged for the cases in which minority groups do not desire autonomy in certain policy area(s) or prioritize autonomy in certain policy areas(s). In addition, territorial autonomy and successful rebellions are presumed to be public goods. Cultural autonomy is less questionable to be thought of as such a kind of good. By granting cultural autonomy governments allow minority groups to preserve their own languages, religions, or customs, which can benefit all minority people. However, economic and political autonomy may be more problematic to consider as pure public goods. Political elites from the ethnopolitical organizations which contribute most to successful rebellions or achieve concessions from governments are more likely to get private economic benefits or hold important political positions created by the autonomy settlements or successful wars, even if they may serve the collective interests of the minority groups they affiliate with.

In the future, it is important to know to what extent relaxing these assumptions would challenge the main predictions or findings yielded by the current theoretical and empirical model, which will also increase the complexity of the models.

This study also provides a fruitful direction for research beyond the autonomy lit-
erature. Broadly speaking, this study not only showcases the importance of studying the occurrence of government accommodations in order to understand their effectiveness of relieving ethnic tensions afterward, but also showcases the importance of the internal structure of minority groups in understanding the relationship between government accommodations and anti-government violence. In reality, there are various kinds of concessions that governments can make to minority groups in order to manage conflict, such as affirmative policies, which I believe can be studied in a similar way. This study sheds light on understanding the application and evaluation of these policies as means to resolve ethnic conflict in general.
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