

# Shared Space: Ethnic Groups, State Accommodation, and Localized Conflict<sup>1</sup>

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Why does ethnic violence occur in some places but not others? This paper argues that the *local ethnic configuration* below the national level is an important determinant of how likely conflict is in any particular place. Existing studies of ethnicity and conflict focus on national level fractionalization or dominance, but much of the politics surrounding ethnic groups' grievances and disputes takes place at a more local level. We argue that the existence of multiple ethnic groups competing for resources and power at the level of sub national administrative regions creates a significant constraint on the ability of states to mitigate ethnic groups' grievances. This in turn increases the likelihood of conflict between ethnic groups and the state. In particular, we argue that diverse administrative regions dominated by one group should be most prone for conflict. Using new data on conflict and ethnic group composition at the region level, we test the theory and find that units with one demographically dominant ethnic group among multiple groups are most prone to conflict.

There are over 800 ethnic groups around the world today, most of which do not engage in violent conflict with their government.<sup>2</sup> When ethnic groups do challenge the state violently, these disputes tend to be incredibly costly and difficult to resolve. Why do relations between states and minority populations degenerate into violent conflict in some places but not others? Current scholarship focuses on a myriad of factors ranging from identity to opportunity, but contrasting evidence from these studies and the continued relevance of ethnic conflict in the international system suggests that our understanding of how ethnicity affects conflict propensity remains inadequate.

In this paper, we argue that ethnicity's effects on conflict are context-conditional: whether ethnic diversity is conflict-provoking depends on the configuration of ethnicity within local level political boundaries where politicians and ethnic groups interact.<sup>3</sup> This focus on the role of *local ethnic heterogeneity* and its

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<sup>2</sup> Fearon (2003) lists 822 ethnic groups in 160 countries.

<sup>3</sup> "Local" refers to the largest administrative region below the national level.

effect in limiting the ability of states to pursue different strategies in response to minority demands is novel. Theoretically, this paper introduces a new set of constraints on state behavior toward minority groups based on the role that ethnic heterogeneity plays at the local level. Diverse groups sharing the same political space (that is, residing within the same administrative boundaries that create local political units) create a scenario in which the local ethnic configuration affects the ability and willingness of elites at the center to accommodate minority groups. In ethnically heterogeneous regions within countries, local politics can become a zero-sum game, where state accommodation of one group disadvantages another. States facing demands from minority ethnic groups in this situation may be unwilling or unable to use accommodative strategies in response to minority demands because they will inflame other ethnicities in the shared space. Local ethnic heterogeneity thus constrains the use of concessions or negotiated deals that the government can pursue with aggrieved minorities, limiting the possibility of resolving a dispute short of violence. In particular, the existence of “local majorities” can lead to more grievances in a region as these groups work to maintain their dominance. Both limitations on the ability of governments to address minority grievance with positive concessions and the potential for additional grievances created by local majorities make violent conflict more likely to break out in these places.

This framework moves beyond the existing literature, which focuses on the interplay of grievance, opportunity, and constraints associated with ethnic fractionalization at the national level. These national-level studies of ethnic fractionalization have yielded contrasting results, and social scientists are divided over whether ethnicity matters for civil conflict (Collier, Elliot, Hegre, Hoeffler, Reynal-Querol, and Sambanis 2003; Cederman and Girardin 2007; Fearon, Kasara, and Laitin 2007; Salehyan and Heger 2007). A crucial missing piece in studies of ethnic fractionalization at the national level is the lack of causation, that is, *how* ethnicity plays a role in engendering conflict in different settings. These studies explore the role of ethnic heterogeneity within states, but give little attention to the political context of bargaining between governments and ethnic minority groups internally. Because governments and minorities interact and bargain within existing political institutions, the *local* configuration of ethnic groups created by internal boundaries can matter more than the national level of fractionalization. We explicitly examine variation in local heterogeneity, which can differ markedly from the country as a whole, and explain how ethnicity engenders conflict in some places but not others. In doing so, we produce a parsimonious model of ethnic violence based on the local configuration of ethnic groups and introduce a significant new stream of data to complement state-level cross-national and micro-level research designs on ethnicity and conflict.

We organize this article as follows. We first explain the challenges posed by minority populations and the ways that states can respond to them. Next, we introduce the concept of local ethnic heterogeneity and develop a theory of how local heterogeneity affects the propensity for aggrieved minorities to resort to violence. This theory leads to a central hypothesis that we test quantitatively through a set of analyses at the sub-national regional level, after which we report our findings. We conclude with an interpretation of our central results and a discussion of avenues for further research.

### **Challenges Posed by Minorities and States’ Responses**

Disputes between ethnic minorities and states break out over a number of issues. In a general sense, these disputes are based on disagreement over the distribution of power or goods, a sense of insecurity, or because of limitations on the free exercise of cultural distinction (such as linguistic or religious autonomy).

For example, in Thailand, the Malay demand greater autonomy in addition to increased public funds and greater civil liberties. Dissatisfaction over representation in security forces and the right to use its mother tongue in higher education has led to a dispute between the Albanian minority and the government of Macedonia. The Buryat in Russia and the Baloch in Pakistan have both challenged the state over a lack of control over natural resources in the territory they occupy and dissatisfaction with their share of the benefits from those resources.

Many explanations of ethnic violence have focused on the existence of some grievance as the mechanism leading to conflict (Hechter 1975; Gurr 1993). The existence of a grievance clearly matters for violent conflict as it provides a key motivation for people to take action against the state. However, grievance alone is not a sufficient explanation, because we see much more grievance in the world than violent conflict. Others have suggested that opportunity to engage in violence, enhanced by factors such as rough terrain (Gurr 1970, 2000; Gurr and Moore 1997), lootable resources (Le Billon 2001; Ross 2003; Collier and Hoeffler 2004), geographic concentration (Toft 2003; Weidmann 2009), or political instability (Fearon and Laitin 2003) can explain why these grievances translate into violence in some places but not others. Yet few explanations take into account the role of the state in mitigating grievance (or opportunity) and the effect that ethnicity has on the state's ability to do so.

Explanations that focus on the bargaining process which include the role of the state explicitly assume that parties' disputes bargain more or less in a vacuum (Fearon 1995; Powell 2004; Hensel and Mitchell 2005; Toft 2006).<sup>4</sup> States and ethnic groups seek an *ex ante* settlement over the contentious issue, but actors are constrained in their ability to find and make an agreement, which leads them into violent conflict. When the state bargains with an ethnic group residing in an ethnically diverse region of the country, however, the government has an incentive not to make concessions if doing so will exacerbate tension in the region.<sup>5</sup> States will, by and large, try to avoid policies that exacerbate the likelihood of further local challenges while trying to alleviate existing grievances.<sup>6</sup> This provides a key limitation on state behavior toward their minority ethnic groups. By not considering the local ethnic make-up in states, existing explanations have missed a key factor that helps us understand why violent conflict breaks out in some places but not others.

States dealing with aggrieved minority groups can respond by giving them concessions or repressing them. Policies of accommodation are negotiated between state and minority group elites, but this process is also influenced by the existing political situation of minority groups. Most concessions that states use take place within the context of sub-national administrative regions, such as sub-national states or provinces. When groups receive greater autonomy, policy control, or direct monetary transfers, these take place within the defined administrative structures of local government. States sometimes redraw internal borders in response to minority demands (such as creating new autonomous units or regional governments); however, these changes are still negotiated within pre-existing boundaries that shape local politics in the regions. Thus, we assume that much of the negotiating between ethnic minorities and states takes place within clearly defined and

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<sup>4</sup> The key mechanisms in these approaches are the existence of private information with incentives to misrepresent, an inability to make credible commitments, and issue indivisibility. Ethnically divided societies pose a number of challenges in all of these areas. Diverse societies tend to include systematically disadvantaged groups. Moreover, a distinct identity provides a focal point for coordination if there appears to be expanded opportunity and motivation for challenging the state. Governments in multi-ethnic states also face unique constraints on bargaining with minorities, especially with respect to committing credibly to protect minority rights and opportunities.

<sup>5</sup> States may also consider the possibility of violence from other groups in this decision (Toft 2003; Walter 2006).

<sup>6</sup> Boone (2003) demonstrates this in her analysis of decentralization in West Africa.

somewhat stable internal administrative structures. Positive accommodation of minority groups can take the form of region-specific goods (i.e. public goods to the region they reside in) or group-specific goods directed just at the minority group. There are advantages and disadvantages to both these types of accommodation, but we argue below that the use of each is affected negatively by the local context of ethnic heterogeneity created by sub-national units.<sup>7</sup>

In focusing on sub-national units, we make some general claims about what it means for different ethnic groups to “share space.” The mechanisms we advance here address the relationship between groups, focusing on the perceived differences in the costs and benefits of government accommodation across them and differences in group status relative to one another. Empirically, we acknowledge that the realities of sharing space in different sub-national units will vary based on the type of governance provided both by the state as a whole and at the unit level to citizens. Indeed, the effects of different types of decentralized units have been variable, which suggests that they are not uniform either by design, in some cases, or by happenstance in others (Boone 2003). Our goal in addressing these sub-national units in such a general way is not to suggest that they are functionally identical, but that in many cases, they create meaningful boundaries that structure political interaction and expectations and thus set the stage for interaction between minority populations and their parent states.

In addition to accommodation, states also attempt to address minority demands by limiting them through repression at times. We assume repression is a sub-optimal response to minority demands as violence is costly and can create a host of problems for states. Repression frequently leads to increased conflict against the state (Lichbach 1987; Moore 1998; Marshall and Gurr 2003).<sup>8</sup> Moreover, repression of minorities has led to sanctions and international condemnation, in addition to being used to justify foreign intervention. In this paper, we focus on the effects of local ethnic heterogeneity on government attempts to alleviate minority discontent through positive means such as region or group-specific concessions. Before explaining the effects of local ethnic heterogeneity, we briefly define the concept in the next section.

#### *Assessing Local Ethnic Heterogeneity*

The debate over how and if ethnicity matters has generated a number of approaches to measuring and understanding ethnic heterogeneity.<sup>9</sup> We conceptualize ethnic heterogeneity as the number and relative size of ethnic groups in a region and the degree to which one particular ethnic group dominates the region demographically. We distinguish the level of *ethnic dominance* in regions based on the relative size of the two largest groups in the region. At one extreme are homogenous units, which are totally dominated by one group making up almost the entire population. It is unlikely that any region will be totally homogenous; however, those regions with one group that comprises the vast majority of the population are those that we consider to have high degrees of domination. For example, the Kurds make up the vast majority of the population in the Hakkari region of Turkey. At the other extreme are regions which we consider

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<sup>7</sup> Region-specific accommodation is an attractive strategy for dealing with minority discontent. By trying to increase general welfare, the minority is not singled out for special treatment. Group-specific accommodation is attractive because it allows states to directly address minority issues at the local level.

<sup>8</sup> We can also think about repression as a form of negative accommodation. In places where the state applies repression, it is likely to exacerbate grievances and lead to the same kind of conflict behavior by groups as a failure to use positive accommodation.

<sup>9</sup> These include the Ethno-linguistic fractionalization measure (Roeder 2001), Reynal-Querol's (2002) polarization measure, the Soviet Atlas Narodov Mira (Bruk and Apenchenko 1964), and Cederman and Girardin's N\* (2007).

un-dominated, where there is near demographic parity among two or more ethnic groups in the region.<sup>10</sup> The Punjab region of Pakistan is home to six ethnic groups, two of which have comparably large populations (the Punjab and Awan) such that no single minority group demographically dominates the territory.<sup>11</sup>

Between these two extremes are cases with varying degrees of domination by one ethnic group over another, which we refer to as regions with an intermediate degree of domination. This could be two populations where one is substantially larger than the other or a region with multiple groups where one is substantially larger than the rest. For example, the Tigray are the largest group in the Tigray region of Ethiopia, but share the space with five other ethnic groups.<sup>12</sup> These middle cases are the locations where ethnic heterogeneity has created “local majorities,” which we argue below play a key role in both limiting accommodation by the state and exacerbating grievance in the region.

### How Local Ethnic Dominance Affects Accommodation of Minorities

Regardless of the governing arrangements in sub-national units, there are three major challenges to minority accommodation in regions with local ethnic heterogeneity.<sup>13</sup> First, the perceived costs and benefits of accommodation will differ from group to group and can cause discontent and resistance to accommodative policies. If a group pays into the benefit (such as through the provision of public goods), but does not see itself as a primary beneficiary, it will be more likely to resist the policy. Second, competition among ethnic groups and zero-sum thinking about their relationship to each other can lead groups to oppose accommodation when another group is clearly favored by it. Third, when the local configuration of ethnic groups makes a minority group the “local majority,” there are incentives for this group to try to maintain its position through discrimination against other groups, which both increases the level of grievance for other groups in the region and can lead the largest group to oppose accommodation of any smaller groups.

#### *Differential Costs and Benefits of Accommodation*

Accommodation of aggrieved minorities can be costly to other groups in the region if it redistributes wealth and goods away from them.<sup>14</sup> All accommodation of minority groups entails some redistribution of resources from others to the aggrieved group.<sup>15</sup> In some cases, this comes predominantly from outside the region that includes the minority. This is likely to be the case when the minority being accommodated makes up most of the population in the region,

<sup>10</sup> This is purely a demographic classification. We are not considering political dominance in the region at this point.

<sup>11</sup> It is common for an ethnic group to span multiple administrative regions and consequently for one ethnic group to be dominant in one place but not in another. Our approach is designed to deal with exactly this type of variation by examining local ethnic configurations and conflict at that local level.

<sup>12</sup> The majority population in these two regions—*homogenous* and *demographically dominated*—can be by either a minority ethnic group or the state’s majority population (such as the Spanish in regions in Spain). We address this distinction in our empirical analysis.

<sup>13</sup> Without specifying certain types of participatory or other political processes that take place in local regions, we argue that there are some generalities about how ethnic groups will relate to one another within the context of sub-national units that create challenges for the management of ethnic claims. Some political institutions (both at the national and local level) may fare better in the management of minority nationalist claims, yet it is unclear that there are certain types of sub-national units that lead to predictable responses to minority demands. For example, we see violence related to ethnic group demands in both new and established democracies, as well as in relatively decentralized states.

<sup>14</sup> Horowitz (1971) argues that this is likely to occur, but suggests that it will be less of a problem in what he calls “dispersed” societies, where many small ethnic groups exist and are not politically active at the center.

<sup>15</sup> This can be the redistribution of money or power.

or when the region as a whole is equally disadvantaged across groups. At other times, the costs of accommodating the minority are borne, in part, by other ethnic groups in the region. This is likely to occur when accommodation entails the provision of goods or services that are funded through locally run programs or services typically associated with public goods.

Just as the costs of accommodation come in part from other ethnic groups, accommodation can benefit groups in the region to a greater or lesser extent. Whether accommodation of a minority group occurs through region-specific goods, group-specific goods, or both, it is likely that different ethnic groups in society will experience different costs and benefits from the accommodation policies. Accommodation that is group-specific provides no benefit to other groups. For example, the creation of new schools in the group's mother tongue will benefit only the group being accommodated. Accommodation that is region-specific (such as regional provision of public goods) can provide varying levels of benefit for other ethnic groups in the area relative to the costs they pay for these goods. The most disadvantaged groups will pay the least and receive the most benefits of public goods.

Because the costs and benefits of accommodation are not shared equally across groups, ethnic groups that are less advantaged, or not at all advantaged, have incentives to oppose such accommodation. Specifically, groups are unlikely to support group-specific goods not directed at them and region-specific goods wherein the benefits predominantly go to another group. Empirically, we know that the provision of public goods to regions with heterogeneous populations is difficult (Alesina, Baqir, and Easterly 1999; Miguel 2004; Habyarimana, Humphreys, Posner, and Weinstein 2007; Sengupta and Sarkar 2007), and this has been attributed to discontent about differential costs and benefits of these policies (Alesina et al. 1999). This difference in costs and benefits in this context makes accommodation in any form more likely to be opposed by some ethnic group in the area where groups share space.

#### *Competition and Zero Sum Local Politics*

In addition to the problems local ethnic heterogeneity creates for accommodation related to differential costs and benefits, accommodation of one group can create a sense of relative disadvantage or decline for other groups (Rabushka and Shepsle 1972). Advantaging one group and not others, or unevenly advantaging groups through accommodation by the state, will engender competitive zero-sum politics when relative gains matter.<sup>16</sup> Rising economic or political status of other groups will create concern over whether an ethnic group will retain its current status. This kind of zero-sum thinking about relative status is more likely to matter in the local context, where individuals compete for the same resources, business, and social goods. A clear increase in the status or local power of one minority can increase feelings of exclusion, exacerbate a security dilemma, or diminish the influence of another group. Even the threat of not maintaining their current status is enough to engender violent behavior in these contexts (Gurr 1968). Ethnic politics in locally heterogeneous regions is likely to be characterized by these security and status concerns. Because of this, ethnic groups not advantaged by accommodation have an incentive to oppose it for others.

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<sup>16</sup> The issue of relative gains is distinct from that of relative deprivation. An ethnic group may perceive harm through the relative gains of others, but still remain better off than other groups. Relative deprivation, in contrast, describes a position of destitution in comparison with others.

*Discrimination by a Local Majority*

Even when concessions are designed not to disadvantage other groups, increasing the power or status of one group relative to another can cause commitment problems within diverse regions. It is difficult for the advantaged group to make a commitment not to actively work to diminish the status of other groups in the future, which could put others at ease regarding current concessions to the group. This is most likely to be a problem when a minority group constitutes a “local majority.” This kind of group exists in regions that include multiple ethnic groups but are demographically dominated by one group, which constitutes a majority of the population. If the demographically dominant group is also politically dominant, it will have incentives to maintain this dominance through assimilationist policies that degrade the identity of other groups (as the Assamese in India did while working to maintain their demographic dominance (Horowitz 1985)). These groups occupy a prized position and have incentives both to oppose accommodation of other groups that might change their relative status and to use their position to more actively decrease the status of others. Empirically, a number of groups have used increased local power to generate policies that discriminate against other groups in their territory (see Nordlinger 1972; Horowitz 1991; Brancati 2006).

*Linking the Mechanisms to Conflict*

The overall effect of these three mechanisms is to increase grievance and decrease the ability of states to use accommodative policies in response to it. The first two mechanisms—differences in the costs and benefits of minority accommodation and concerns about the relative status of ethnic groups—both increase the difficulty of using accommodative strategies to deal with minority discontent because they generate incentives for some groups to resist accommodative policies. The degree to which these mechanisms will operate depends on the extent to which a region is demographically dominated. Those regions that are totally dominated (that is, homogenous) will not generate local resistance to accommodation because there are no other significant groups to oppose accommodation of a minority population there. The middle range of cases (those where one group dominates others) are likely to have problems with cost/benefit concerns and may have difficulty with relative status issues between groups. This is also where the third mechanism—discrimination by the “local majority”—is likely to increase grievances of other groups and set the stage for substantial opposition to accommodation of small groups. With one demographically dominant group, there is a clear opportunity for leaders of the dominant group to garner a majority in support of local policies that disadvantage smaller groups or in resistance to national policies that advantage these groups.

The context of local ethnic heterogeneity produces incentives for some ethnic groups in a region to oppose accommodation of others. The culmination of frustration among ethnic groups created by unaddressed grievances in these situations will lead individuals and groups to use violence (Horowitz 1973). Even if the source of frustration is not simple or easy to attack, individuals will release frustration in acts of violence.<sup>17</sup> We expect that when states are unable to manage ethnic minority demands through accommodation, discontent and grievance will manifest more frequently in the use of violence in these areas. We do not

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<sup>17</sup> Horowitz bases this argument in the psychological study of aggression.

make any strong assumptions here about how violence will emerge, or about how it is likely to spread.<sup>18</sup> In some areas, strategic elites may facilitate well-coordinated acts of violence; in others, spontaneous riots may break out. Others have addressed the multitude of ways that grievance translates to violence; here, we allow that any of these pathways are plausible when states are unable to address minority grievances.<sup>19</sup>

In sum, the conflict generating mechanisms advanced here relate primarily to the relationship of minority ethnic groups to one another, but situated in the context of a larger relationship between these groups and the central state. Negotiations for greater accommodation occur between these groups and the state. Grievance against the state by minority groups requires some response by the state if it hopes to avoid domestic conflict. Further discrimination by a “local minority” can exacerbate these grievances. Competition among groups, distributional disagreements related to possible accommodation, and the existence of a local majority that can generate substantial opposition to concessions all make effectively responding to minority grievance through positive accommodation by the state less likely. This, in turn, should increase the chance that these groups resort to violence.<sup>20</sup>

#### *Accounting for the Center*

Although we focus our attention away from the national level toward local ethnic politics in this study, we acknowledge that the ethnic dynamics at the center also matter. We start with the assumption here that repression is a sub-optimal strategy for managing the difficulties of ethnic heterogeneity, yet there are specific conditions related to ethnic diversity in which we might expect governments to be more likely to use abusive policies toward ethnic minorities. For example, if governments pursue a policy of encouraged internal migration to alter ethnic balances, this can provoke “sons of the soil” disputes (Fearon 2004). If leaders in the center actively undermine ethnic groups in a region, this will also lead them to resort to violence.

The use of these tactics by governments does not suggest that the logic here does not apply. Although many factors may play into elite decisions at the center to pursue such aggressive policies, the difficulties of using positive policies that we have addressed here is likely to be one of them. The more difficult it is for governments to successfully manage ethnic tension through accommodative policies, the less likely governments are to use such policies and therefore they will be more likely to use negative or repressive policies instead.

Moreover, we assume that the local population (even if comprised of members of the national majority at the center) matter in predictable ways. Clearly, members of the majority population could resist accommodation of minorities despite being geographically distant from them (which occurs to some extent in Sri Lanka where Sinhalese resist accommodation of Tamils). Yet, the population sharing space with the aggrieved minority has greater incentives to resist accommodation policies because of the costs/benefit differences identified earlier, and because they are more likely to complete locally both economically and

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<sup>18</sup> An interesting extension to this project would be to identify the location in which conflict breaks out first, and to explain the spread of conflict to other regions with similar ethnic balances, but this is beyond the scope of this study.

<sup>19</sup> See Laitin (1985), Posen (1993), Gagnon (1994–1995), and Kaufman (2001) for a selection of authors that address the emergence of violence.

<sup>20</sup> The local configuration of ethnic groups is also likely to affect their capacity to mobilize for violence within regions. If the groups are geographically concentrated within the regions, mobilization will be easier (Toft 2003). Unfortunately, the data we have does not allow us to test propositions about the concentration of groups *within* regions.

politically. Thus, we focus on the potential obstacles that local ethnic heterogeneity can create for the management of ethnic grievance, acknowledging that resistance to accommodation of these demands could also emanate from outside the local region.

If the center is controlled by a minority group rather than the majority, the regional dynamics between ethnic minorities and a demographic majority ethnic group may differ. Local accommodation of members of the ethnic minority in power should be much easier than if the group does not control the center. However, the mechanisms we specify here that lead ethnic groups to oppose accommodation of others should still be relevant in these regions if there are other groups beyond the one that controls the center. We address the link between local heterogeneity and national-level political dominance in our analysis by controlling for whether the unit's largest group is politically excluded at the center (that is, for whether the local conflict is simply a reflection of the one at the national level).

### *Predictions*

Our theory focuses on one central factor, local ethnic domination, to explain variation in the occurrence of ethnic violence. We argue that regions with intermediate degrees of demographic domination should be most prone to conflict. Our indicator of demographic domination is a continuous measure of the difference between the population shares of the largest and the second largest group in a region. In regions where this difference is low, we have two or more equally strong groups. Very high values indicate that there is clear preponderance in favor of one group, such that there are no competitors. According to our theory, violence should be less likely in both cases. Rather, intermediate values of domination should give rise to conflict. Our hypothesis is therefore:

**Hypothesis 1:** *Violence is more likely to occur in regions with intermediate degrees of demographic dominance, where there is a "local majority".*

In other words, what we expect is an inverted-U-shaped relationship between domination and conflict risk. Regional units with low values of domination (where the groups have roughly the same population share) and units with high values of domination (where one group basically makes up the population of the entire unit) should be less prone to conflict. Those cases in the middle, where there is ethnic diversity but a locally dominant group, are most likely to experience conflict. The following section describes our empirical test of this hypothesized relationship.

### **Quantitative Testing**

We now turn to the quantitative analysis which is a cross-national study of trends in conflict. Using new data on local ethnic heterogeneity and the location of conflict, we test our hypothesis on a global cross section of ethnic groups observed in the 1990s.

### *Unit of Analysis*

The basic unit of analysis in our study is a local administrative region in a country.<sup>21</sup> The regions are taken from the ESRI GIS data and maps collection, version 1998 (ESRI 1998), a collection that includes the first level sub-national entities of states along with their geographic extent. We backdated this data set to the

<sup>21</sup> We exclude small states with a population of 500,000 or less in 1991.

1991 status, the first year of our study period.<sup>22</sup> This backdating was performed using the Statoids database of administrative regions, which provides information about units and their location throughout the twentieth century (Law 1999). By using the first sub-national administrative region as our unit of analysis, we are making the assumption that these internal boundaries constitute an appropriate unit of analysis for understanding the dynamic of local ethnic heterogeneity. This assumption warrants some attention because if these boundaries are not meaningful in the ways we assume, then the mechanisms we advance here about how local ethnic heterogeneity can lead to conflict would be undermined.

To argue that these units create a meaningful context for negotiations between states and minority groups, we must establish that they are, to some degree, stable. That is not to say that governments do not change internal boundaries, for a myriad of reasons. Empirically, we see some degree of change (ranging from changing the status of a capital city to redesigning all units) sometime in the 1990s in about a third of countries in our data set.<sup>23</sup> Many of these changes do not appear to be related to minority group grievances, but the possibility of changing the administrative unit as a pre-emptive strategy for states must be acknowledged. This possibility of unit change, however, does not undermine the importance of the administrative region as our unit of analysis unless these regional boundaries are so fluid that they do not constitute meaningful political boundaries. Only two countries experience such rapid and widespread change in administrative units that we could call their internal boundaries fluid.<sup>24</sup> Still, changes of administrative boundaries could constitute a problem for our analysis in that they give rise to a possible endogeneity problem with our phenomenon of interest—conflict. In order to exclude this problem as much as possible, we need to make sure that the units we study exist *prior* to the occurrence of conflict, which is what we do by backdating the administrative region data set as described earlier.

Moreover, although there are smaller political units in most countries in our study (such as counties or city administrations), we use the largest sub-national administrative unit because we believe this will be the most politically relevant internal boundary for many ethnic groups. Empirically, these units are politically important in many countries. In approximately 65% of countries, the first sub-national level of government is a site of electoral competition.<sup>25</sup> Moreover, demands by ethnic minorities for greater power often center on the largest sub-national political unit. For examples, the Afars in Ethiopia have fought for the creation of an Afar state as have the Bodos in India for their own state there.

There may be cases where these boundaries do not constitute meaningful political demarcations, but are instead an artifice of colonial history or some other process. Yet even if we look at a region where internal boundaries are most likely to fit this characterization and sub-national boundaries could be argued to be least meaningful (Africa), we still find ethnic groups making demands related to these boundaries. Demands for new states or decentralization along these larger internal boundaries have been made in Angola, Cameroon, Democratic Republic of Congo, Djibouti, Ethiopia, Mali, Niger, Nigeria, Senegal, South Africa, Sudan, Zambia and Zimbabwe.<sup>26</sup>

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<sup>22</sup> We use 1991 as the start year as this is when most of the post-Soviet states came into existence. Armenia and Azerbaijan were dropped from the data set, as we could not obtain reliable maps for the relevant administrative regions in 1991.

<sup>23</sup> This is based on our own collection of data from the CIA World Factbook on administrative changes occurring in the 1990s (CIA 1990–2000).

<sup>24</sup> These include Cambodia (three changes in 4 years) and Nicaragua (five changes in 6 years).

<sup>25</sup> Based on decentralization data from Treisman (2007). Available at <http://www.sscnet.ucla.edu/polisci/faculty/treisman/>.

<sup>26</sup> Based on assessments from the MAR project.

### *Dependent Variables*

Our study employs a new dependent variable measuring conflict against the state at the sub-national regional level for a set of ethnic groups identified by the *Atlas Narodov Mira* (Bruk and Apenchenko 1964), as given by the GREG dataset (Weidmann, Rød, and Cederman 2010). This *state directed violence* variable is coded as 1 if conflict between the state and at least one ethnic minority population occurred within specific administrative regions. This variable was coded by the authors using several sources including the Minorities at Risk (MAR) data and profiles, the Cunningham, Gleditsch, and Salehyan (2009) data and the UCDP database (Gleditsch et al. 2002). To identify ethnic groups from our data set engaged in civil conflict, we used the Cunningham et al. data set of actors in civil conflict and the MAR data set which identified minorities in rebellion against the state. We then use the MAR reports and Uppsala reports to identify the location of conflict (based on the administrative boundaries in our data set). For example, violence in Chechnya took place in both the Chechen and Dagestan regions.

Because the state is the primary potential source of accommodation, we expect these dynamics to lead to outbursts of violence against the state, and measure this as such.<sup>27</sup> Yet, communal violence is also likely in areas with local ethnic heterogeneity, and this will contribute to the grievance minorities feel against the state for failing to provide protection from other groups in the area. Thus, we create a second measure of violence, *combined violence*, which includes both acts against the state and acts of communal violence against other ethnic groups. The communal violence component of this variable is coded using the MAR variable for communal conflict between groups and our geocoding technique described earlier to locate where communal violence occurred. Thus, to account for multiple ways that violence could manifest, *combined violence* receives a value of 1 if there was either violence against the state or communal violence occurring in the region.

Our measures of violence against the state and the combined measure of state-directed and communal violence capture a range of intensity of violence. For *state directed violence*, the unit received a positive coding if it met the Cunningham et al. (2009) threshold of 25 deaths across all regions, or if MAR coded the group as using violence more extensively than their first level of rebellion (“banditry/scattered terrorism”). MAR indicates no death threshold for communal violence, which factors into the *combined violence* measure. We do not impose an exogenous threshold on the level of conflict in a region to merit a positive coding for two reasons. First, it is difficult to assess the scope of violence at this level of aggregation because we are limiting each coding to reported violence in a specific area. Second, a measure that includes low levels of violence is appropriate for our analysis. The inability of states to accommodate minorities in heterogeneous regions will not necessarily lead to large-scale conflict, and low levels of violence are an indicator of a failure to manage ethnic tension.

The coding of the location of violence is an important contribution of the study. However, there are several potential sources of bias in this coding that need to be discussed. To code the conflict data for each region, we needed to match the group designation used in the GREG data set (Weidmann 2010) with the names of groups in our conflict sources (Cunningham et al., MAR, and Uppsala). It is possible that in some cases these sources use different names for the same ethnic group, which might lead to an underreporting of conflict in cases where the GREG group name could not be matched to the other sources. For example, the authors noted a number of cases where rebellion occurred from

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<sup>27</sup> Reports of expressly inter-communal violence were excluded from the measure.

MAR for which no corresponding group could be found in the GREG list. To assess the degree to which this is likely to be problematic, we examined the compatibility of the MAR list with ours (based on GREG). Of the MAR groups designated as ethno-nationalist, 62% are included in our data set.<sup>28</sup> From those that were excluded, there were seven ethno-nationalist groups engaged in some level of rebellion against the state.<sup>29</sup> The violent ethno-nationalist groups in MAR, but not in our data set, include the Zanzibaris in Tanzania, Sikhs in India, Sahawaris in Morocco, Bouganvilleans in Papua New Guinea, Moros in the Philippines, and the Southerners in Sudan. Although there is some degree of mismatch between our list of ethnic groups and the MAR list, our list appears to include a large percentage of the relevant groups from MAR that display violence. Our measure focuses on ethnic violence, and thus, we exclude many interesting cases where the primary identity of the group is religious. Religious heterogeneity may cause similar problems as ethnic heterogeneity at the local level, but in order to maintain consistent coding criteria, we limit the study to ethno-linguistic groups.

Another potential source of bias is a lack of reporting on the conflict location. Because our unit of analysis is the region, we only measure violence when we can locate it geographically. By using several sources to code the location of violence, we were able to find reports on locations of conflict for most groups. There were eight groups we had designated as engaging in violence, but we were not able to locate the conflict as occurring in a specific region.<sup>30</sup> There are several reasons this may be the case. First, some reporting on this kind of conflict is limited by repressive governments (two missing data cases are in Iran, for example). In other cases, it may be that violence was so limited in scope that there are few reports (such as the Basque in France). Moreover, if the group engaged in violence against the state exclusively at the center, it will not be coded as occurring in a region that the group resides in.

#### *Independent Variables*

The independent variables for these analyses require information about the population shares of groups within an administrative region as well as the ethnic groups in the area. Whereas country-level population shares for groups can be obtained from existing data sets (for example, Fearon 2003), this is not the case for group shares at the level of administrative regions. Therefore, we utilize a geographic approximation of population figures. The population of ethnic groups within these regions is derived from the GREG data set (Weidmann et al. 2010), a new geographic data set on the location of ethnic groups. For each group, GREG gives the spatial extent of a group's settlement area as a polygon. We use the population estimation procedure as illustrated in Weidmann et al. (2010), which works as follows. We first combined information on GREG settlement regions of ethnic groups with administrative boundaries, by clipping the group polygons along the administrative boundaries in order to obtain smaller polygons covering a group population in a region. We then computed population estimates for the clipped group polygons by overlaying them with a high-resolution raster data set on population, *Gridded Population of the World* (CIESIN 2005). This data set gives population counts for very small cells (approx. 5 × 5 km) and different years, from which we selected the 1990 edition. By

<sup>28</sup> The MAR data includes the designations of communal contender, religious sect, national minority, indigenous, ethnoclass, and ethnonationalist.

<sup>29</sup> To determine violent groups, we examined the 1995 rebellion score for the MAR groups. We considered any groups with a score of 2 or higher as a group involved in conflict. This includes all levels of rebellion except no rebellion and banditry/scattered terrorism (0 and 1 on the scale, respectively).

<sup>30</sup> These include the Bankoya and Wambuela in Angola, the Somalis in Ethiopia, the Basques in France, the Baloch and Kurds in Iran, the Jordan and Palestine Arabs in Israel, the Mayas in Mexico, and the Acholi in Uganda.

summing up the population values for all cells covered by a polygon, we obtain an estimate for the clipped group polygons and thus for the group population in an administrative region. Using this estimation procedure, we code our main independent variable, the region-level indicator of group domination. This indicator is measured by computing the difference between the two largest groups in the unit, or is coded as 1 if there is only one group. For example, in the Assam state of India, the Assamese make up about 0.59 of the population, according to our estimates. The Bengalis constitute the second largest group and have a population share of about 0.24. Consequently, the value of our domination indicator for Assam is 0.35.

The occurrence of conflict in a region depends both on region characteristics and also on the properties of the state the region is part of. We therefore include two kinds of control variables: region-level and country-level controls. At the region level, we control for whether the region's largest group is politically excluded (that is, the largest ethnic group does not wield substantial power at the national level in the state). This control is necessary to distinguish the regional conflict-promoting dynamics that we aim to study from national-level processes of ethnic competition and conflict. Controlling for whether a group is politically excluded at the national level helps us identify cases where an ethnic group would be coded as conflictive because of political exclusion in general, and not because of the demographic configuration of a unit, as we propose. The political exclusion variable is taken from Cederman, Buhaug, and Rød (2009) and codes political exclusion based on the government participation of groups. More precisely, the original exclusion variable is coded as "0" if the group's leaders serve in senior governmental positions and "1" otherwise. We aggregate this variable to the unit level and code if the largest ethnic group is politically excluded according to the Cederman et al. (2009) coding.

Additionally, we know from existing research that larger populations usually "attract" more conflict (Hegre 2008). Consequently, we add the logged population of the region as a control variable and expect a positive effect. At the country level, we control for economic performance of a country using logged GDP per capita measures obtained from Kristian Gleditsch's Trade and GDP data set (Gleditsch 2002). We also add a Polity IV indicator for democracy (Marshall and Jaggers 2000) and expect that more democratic countries should be less prone to conflict. Because larger countries tend to have more potential cultural cleavages and thus a higher risk of ethnic violence in general, we add the logged country population as a control and expect a positive effect. Lastly, we include a dummy for whether a country has federal institutions, taken from the Institutions and Elections Project (Regan, Frank, and Clark 2009). In these countries, administrative divisions are more strongly protected through explicit institutionalization and thus are less likely to be changed by the central state. Moreover, federal states typically devolve more substantial powers to the subunits by design. By including a measure for federal countries, we attempt to account for some variation across sub-national units in the data set. All country-level variables are for 1991 and cover 150 countries. Table 1 shows descriptive statistics of all variables included in the analysis.

### *Results*

In the following, we present our test of the hypothesized inverted-U-shaped relationship between unit domination and conflict, employing a cross-sectional design. As our dependent variable is dichotomous, we estimate logit regression models with standard errors clustered by country to account for the dependence of observations in the same country. We include our main independent variable—domination—both as a linear and squared term. If the hypothesized

TABLE 1. Descriptive Statistics

<i>Variable</i>	<i>Mean</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Region level variables				
State directed violence	0.03	0.17	0	1
Combined violence (state directed and communal)	0.04	0.02	0	1
Domination	0.67	0.31	0	1
Largest group politically excluded	0.15	0.36	0	1
Population (log)	5.67	0.69	2.92	8.15
Country level variables				
GDP p.c. (log)	3.59	0.48	2.65	4.45
Democracy	1.97	7.05	10.00	10.00
Population (log)	7.17	0.68	5.53	9.05
Federalism	0.34	0.47	0	1

inverted-U-shaped relationship bears out empirically, we should observe a positive effect of the linear term and a negative effect of the squared term.

We estimate our model both for different operationalizations of conflict (the state-directed measure and the combined violence measure). As an additional robustness check, we also estimate models based on a reduced sample of countries that have a significant distribution of power at the local level. This check is done to address the issue that the importance of administrative sub-divisions varies across countries. As our theory relies on the assumption of politically salient administrative regions, it might thus apply in particular to states where the importance of these units is high. In order to determine whether administrative regions constitute meaningful political units in a country, we coded whether states had elected governments at the first tier administrative level, which corresponds to our level of analysis. This coding is based on Treisman's Decentralization data set (Treisman 2007). Treisman codes whether there are elections to select regional council members and/or a regional executive. Regions where one or both of these offices are selected through elections are places where the internal boundaries are more likely to be meaningful to citizens because they demarcate a unit where the government represents the interests of those constituents directly.

The regression results provide support for our hypothesis (Table 2). Across all four models, domination receives a positive coefficient, whereas its squared transformation has a negative effect. With state-directed violence as the dependent variable, there is not much difference between the effects we observe in the full and the reduced sample. However, when we analyze our aggregate conflict variable in Models 3 and 4, we see that the only marginally significant effect in Model 3 becomes stronger in Model 4, which is some indication that our theory can explain conflict better in decentralized countries. Figure 1 illustrates the effect of domination graphically. We plot the predicted conflict risk according to our model across the range of domination values (from 0 to 1) for units dominated by a national-level excluded group, keeping all continuous variables at their means and the federalism dummy at 0. As the regression results indicate, multi-ethnic regions with a clearly dominant group have the highest risk of conflict, whereas mixed regions with equal groups (low domination score), and mono-ethnic regions (high domination score) have a significantly lower risk. In all models, increasing domination from 0 to 0.5 roughly doubles the predicted conflict risk.

The control variables in the four models largely turn out as expected. Regions where the largest group is politically excluded have a significantly higher risk of conflict, and the expected positive effect of unit population on conflict risk receives confirmation in Models 2–4. At the country level, we see a strong

TABLE 2 Logit Regression Results

<i>Sample</i>	<i>Model 1</i>		<i>Model 2</i>		<i>Model 3</i>		<i>Model 4</i>	
	<i>b</i> (SE)	<i>p</i>	<i>b</i> (SE)	<i>p</i>	<i>b</i> (SE)	<i>p</i>	<i>b</i> (SE)	<i>p</i>
			<i>State-directed violence</i>		<i>All</i>		<i>Decentralized</i>	
<i>Dependent variable</i>								
<i>Region level variables</i>								
Domination	3 598 (2 175)	049	4 076 (2 492)	051	2 643 (2 032)	097	4 139 (2 430)	044
Domination (squared)	-4 059 (1 814)	013	-4 620 (2 012)	011	-2 825 (1 869)	065	-4 319 (2 118)	021
Largest group politically excluded	1 299 (0 551)	009	1 441 (0 572)	009	1 695 (0 564)	002	2 028 (0 467)	000
Unit population (log)	0 444 (0 364)	111	0 669 (0 389)	043	0 903 (0 417)	015	1 153 (0 458)	006
<i>Country level variables</i>								
GDP p c (log)	-2 243 (0 733)	001	-2 256 (0 887)	006	-2 207 (0 779)	002	-2 120 (0 906)	010
Democracy	0 075 (0 059)	109	0 037 (0 061)	269	0 061 (0 055)	135	0 008 (0 060)	445
Country population (log)	0 390 (0 382)	154	0 028 (0 444)	475	0 335 (0 360)	175	-0 040 (0 429)	463
Federalism	-0 863 (0 707)	111	-1 163 (0 754)	062	-0 794 (0 698)	128	-0 998 (0 782)	101
Constant	-1 779 (3 314)	296	0 018 (4 038)	498	-4 083 (3 185)	100	-2 920 (3 947)	230
<i>N</i>	2,290		1,534		2,290		1,534	

(Notes: One-tailed tests. Standard errors clustered by country.)

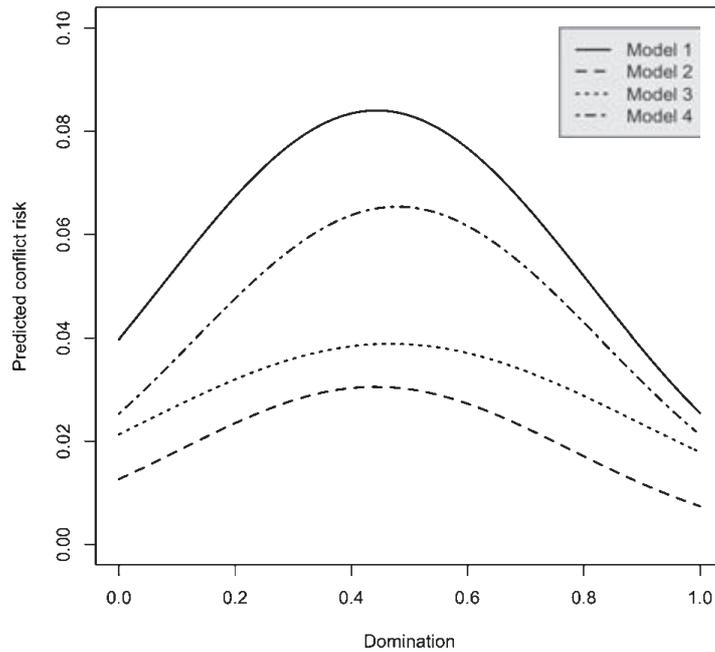


FIG 1. Predicted Conflict Risk Across the Range of Domination Values, According to Model 1 4

negative effect of economic performance, such that poorer states have a higher conflict risk. The other country-level controls—level of democracy, country population and federalism—have no clearly discernible effect on conflict risk.<sup>31</sup>

### Conclusions

In this paper, we have provided a theory about how local ethnic heterogeneity creates incentives for ethnic groups to oppose accommodation of others, which we then argue leads to increased grievance and a greater likelihood that groups will resort to violence against the state. We provide empirical support for this using new data at the sub-national region-level on ethnic groups and conflict. Our hypothesis is that conflict is more likely to occur in local units that are ethnically heterogeneous and when one group is demographically dominant. The logic underpinning this is that it is more difficult for states to accommodate groups in this context because it may incite a negative response from other ethnic groups in the area. In our empirical analysis, we examine the effect of local ethnic heterogeneity on the likelihood of conflict at the unit level using multiple measures of the outbreak of violence. While the use of sub-national regional data is an important advance in the study of ethnicity and conflict, this is an imperfect test of our theory. Ideally, we could demonstrate empirically that states fail to accommodate groups in these contexts and that this creates more grievances. Yet, the first step of this causal chain is a dog that did not bark. It is not possible to systematically show in a large-n study the occurrence of a nonevent. This link in the theory would be better suited to qualitative analysis, which would provide an interesting study but is beyond our scope here. The second step, that grievance is related to this failure to accommodate, is easier to defend, if not to show

<sup>31</sup> In addition to results shown earlier, we re-estimate the four models while controlling for prior conflict. We add a dummy variable for whether the country experienced an onset of ethnic civil war in the two decades prior to our study period, taken from Fearon and Laitin (2003). In none of the models does this change our substantive findings.

with this analysis. Many of these groups cite the failure of the government to respond to them as a central grievance.

Given these limitations, what we have done here is to show that conflict is occurring where we expect it to—in ethnically heterogeneous units with a local majority. We also infer support for the mechanisms we advance here through our comparison of different types of units with politically excluded populations. In the analysis, we control for the political exclusion of groups in all kinds of units. This allows us to compare homogenous units where the population is politically excluded from power at the center of the state with units populated by a nonexcluded group. If states were just unwilling to address the demands of excluded minority groups, we would expect conflict to be just as likely in units populated by a single excluded group. But we do not find this; homogenous units with excluded ethnic groups are not more conflict prone than those populated by the group in power. This provides more support for our theory that states are uniquely constrained in responding to ethnic group demands in heterogeneous regions.

Although we have demonstrated that local ethnic heterogeneity is conflict generating, our study also raises some further questions about the local dynamics of ethnic politics and conflict. First, we suggest here that states will be “unwilling or unable” to accommodate ethnic groups in places where this accommodation will inspire conflict from other groups. Yet states must make a tradeoff here. On the one hand, accommodation may lead to conflict now. On the other hand, ignoring demands from these groups can lead to violence against the state as well, as we demonstrate here. We assume here that states will tend toward deferring open conflict, especially because accommodation can entail political costs at the center at times as well. Yet, how states manage this tradeoff may vary from state to state, and some states may have an innate preference for either trying to accommodate or not. Further work should address the propensity of states to use accommodation beyond the constraints that local ethnic heterogeneity creates for them. Moreover, better data at the regional level on the capacity of these groups to challenge the state would allow future researchers to assess which groups the state may be unwilling to aggravate through accommodation of others. These groups are unlikely to pose a similar threat to the stability of the state, and this difference may matter for the state in determining whether to risk conflict now or later.

A second question raised by this study, but only partially dealt with here, is the relationship between demographic and political dominance. We argue that the demographic dominance in the region will create incentives for the largest group to discriminate against others in order to maintain dominance. We suggest that this occurs when the group that is demographically dominant is also politically dominant in the region, but do not directly measure this. To address this empirically, we reproduce our analysis on a subset of cases where the regional government is elected, because this is where we expect demographic dominance to translate into political dominance most easily. Our findings show again that demographically dominated regions in this sample are more likely to experience conflict. Further work in this vein could address the question of political dominance more directly, for example by looking at local political parties to see whether the demographically dominant group is also successful in political competition.

Despite the limitations of the study, this paper makes a key advance in understanding the role of ethnicity in conflict. We offer a casual story about the effects of ethnicity grounded in the insights of comparative studies of inter-ethnic group relationships. We then explain how this matters in the larger framework of the relationship between ethnic groups and the state. Moreover, we explicitly incorporate the context of political institutions and the

local boundaries that they create. While studies of federalism have addressed this issue, to our knowledge, this is the first study to systematically examine the role these internal borders play in shaping ethnic politics across a large set of countries.

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