

**DRAFT—Pls do not quote without author's permission**

**Hell is Other People? An Empirical Test of Ethnicity and  
Political Repression, 1980–2003<sup>1</sup>**

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<sup>1</sup> The line 'hell is other people' appears at the end of the existentialist play entitled 'No Exit' by Jean Paul Sartre, which was first published in 1944 as *Huis clos* in French.

**Abstract:**

Recent studies in economics find that ethnic fragmentation produces serious social frictions that hamper development. Theorists of ethnic conflict, both instrumentalists and primordialists, argue that ethnicity causes civil violence because of interethnic distrust and recrimination. Frictions occur because one or another group suffers discrimination. Usually, a majority tramples on the rights of minorities, and the demands of weaker groups are met with repression. Civil wars, thus, are the only recourse for some ethnic groups who overcome collective action problems because ethnicity can bridge an effective tie with a cause. In empirical studies of civil war, however, this important mechanism is never directly tested. This study tests ethnic fragmentation and a measure of ethnic exclusion from state power directly on a measure of physical integrity rights and political terror. The results show that high ethnic fragmentation correlates with lower levels of political terror. If ethnic difference is a source of aggravation leading to civil war, it does not happen through repression. The only statistically significant effect is for ethnic polarization, but the substantive impact is comparatively small. The results taken together are supportive of those who argue that fragmentation can reduce opportunities for ethnic mobilization. Policymakers will do well to focus efforts on political democracy, preventing violence, and promoting development, rather than focus on cultural differences, to promote decent governance.

Focus on ethnic diversity as a cause of socio-economic failure has intensified in recent years. Some find that ethnic fragmentation causes social frictions, apparently explaining the African ‘tragedy’ (Chua 2003; Easterly and Levine 1997; Kimenyi 1997). Others find that ethnic and nationalist demands hamper good governance, public goods provision, and democratization (Ades and Di Tella 1999; Alesina, Baqir, and Easterly 1999; Diamond and Plattner 1994). As the Prime Minister (founding father) of Singapore, Lee Kuan Yew, is fond of saying, ‘economic development requires discipline,’ which is harder under conditions of ethnic fragmentation. Others find that ethnicity explains civil war (Ellingsen 2000; Gurr and Harff 1994; Sambanis 2001; Wimmer et al. 2004), many of which spillover borders (Moynihan 1994; Saideman 2001). Some, however, find little evidence for ‘ethnic conflict’ (Fearon and Laitin 2003; Mueller 2000). Yet again, some others argue that it is not fragmentation but polarization that matters and that high fragmentation may even reduce opportunity for organizing large-scale violence (Collier and Hoeffler 2004; Horowitz 2000; Montalvo and Reynal-Querol 2005; Welch 1998). High fragmentation may increase preferences for market solutions that lower public involvement in the economy, generally a good thing for development—North Korea is ethnically homogenous (Collier 2001). Others criticize the focus on group size. They argue that what matters is the exclusion of ethnic groups from government, an objective basis of grievance that causes ‘ethnonationalist’ mobilization and violence (Cederman and Girardin 2006). Using this debate as a backdrop, I test directly the issue of fragmentation and exclusion on the dissent-repression nexus that most ‘ethnic conflict’ theories state is a prior to larger violence.

The question is not just ‘academic’; knowing whether and how ethnic difference matters is an urgent policy issue. Using a measure of respect for physical integrity rights and a measure of political terror to gauge the level of dissent and repression (serious social frictions), I find that ethnic fractionalization predicts higher levels of respect for physical

integrity and lower levels of political terror. These results are robust to several specifications of the model, alternative testing methods for pooled data, and different measures of ethnic and cultural fractionalization. The measure of ethnic exclusion, apparently a theoretically better-specified measure of ethnic salience, does not seem to matter. There is some support for the view that equally sized groups (polarization) are problematic, but the effect is small comparatively. Moreover, polarization seems to matter when the level of democracy is high, a finding that places grievance-based arguments on somewhat shaky ground.

The implications of the findings are twofold: first, the widely-accepted belief that ethnic difference and exclusion push minorities to rebel over objective sources of grievance is not supported, if state violations of human rights capture some level of dissent and state response to dissent. Secondly, the issue of fragmentation as cause for disorder, which states would then seek to place a lid on, seems also to be highly exaggerated. In fact, higher fragmentation predicts the opposite—kinder states! The results also suggest that those who find fragmentation to be better for civil peace than ethnic dominance are not in fact finding a repression effect rather than real peace. Peacemakers might do well to pay heed to the constructed nature of perceived grievance in so-called ‘ethnic conflicts’ and build institutions that maintain diversity, a benefit of which might be the reduction of opportunities for states and social groups to organize violence. These findings are even more evidence suggesting that opportunity rather than objective sources of grievance matter for generating civil war.

### **Why Ethnicity?**

John Stuart Mill argued that for democracy to be stable, a country had to be homogenous, a theme that pervades the work of many current theorists of democracy (Dahl 1982). Lord Acton, a critic of Mill, asserted the opposite. He viewed the advance of ‘liberty’ due to the presence of diverse opinion—power corrupts and absolute power corrupts absolutely. These visions of how ethnicity matters infuse current discussions of the subject. I focus on ‘ethnic

conflict' as an outcome because conflict is consequential, carrying implications for all other arenas of life.<sup>2</sup> There is no theory of ethnic conflict, but ethnicity is used as an analytical concept to understand violence, democratic and economic failure, and a host of other ills.<sup>3</sup> Not all violent conflicts have an ethnic dimension, but it is true that in some conflicts, it is ethnically-distinct groups that fight. Does the fact that an armed opponent of a state is ethnically distinct mean that something about identity itself matters? Or is ethnicity simply a convenient vehicle for the organization of narrow objectives? But why is this identity alone more salient?

For primordialists (essentialists), groups will necessarily clash since all other affiliations and considerations are subsumed by the ethnic tie. It is not easy for groups to go in and out of other identities, particularly when differences between people are stark; i.e. skin color. There are diminishing returns to ethnicity—there is so much you can do to change. Thus, the more ethnic difference that exists within encompassing state boundaries, the more likely that conflict will erupt, since groupness matters above all, and 'give and take' is less likely. For instrumentalists, or constructivists, ethnic entrepreneurs are crucial. Conflict erupts only in particular times and places because identity is instrumentalized for narrower aims—the salience of identity forms around achieving particular objectives—thus 'give and take' should be more likely. In fact, since violence can be costly to these entrepreneurs (usually elites), ethnic elites have an incentive to 'police' their groups, preventing violence (Fearon and Laitin 1996). The question then is why does coordination sometimes fail?

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<sup>2</sup> The question of what ethnicity actually is and how to measure it is a thorny one (Chandra 2006). I am forced to rely on those whose measures I use in the empirical analysis (Alesina et al. 2003; Fearon 2003). In general, Fearon (2003: 7) defines a 'prototypical' group as one that fits the following criteria: common descent, members are conscious of common ties, members share distinguishing cultural features, these features are valued by the membership, the group has or remembers a homeland, and the group has an identifiable 'shared' history.

<sup>3</sup> See Brubaker and Laitin (1998) for a review of the various approaches in the study of 'ethnic conflict.'

### **How Ethnicity?**

The most frequently-recited argument about how ethnicity matters for generating conflict is ‘grievance,’ but also various models of ‘fear,’ information cascades, and ethnic security dilemmas are also commonly mentioned (Brubaker and Laitin 1998; Fearon and Laitin 2000; Gurr 2001; Horowitz 2000; Lake and Rothchild 1996; Petersen 2001; Posen 1993). Since politicians in ethnic majority parties will have an incentive to play the ‘ethnic card’ (ethnic outbidding), nationalist politicians have incentive to discriminate against others. Ethnic minorities find that governments are not able to credibly commit to agreements (Fearon and Laitin 2000). Thus, some even contend that peace can only be achieved when state borders coincide with ethnic nations (Van Evera 1994). Such views are convinced of the power of ethnicity as a potent cause of conflict and they all point at some aspect of grievance (fear).

The standard story about one of the most widely-studied ethnic conflicts—Sri Lanka—is illustrative of the ethnic grievance perspective. The nationalist leaders, who came together from across the ethnic divides (Sinhala, Tamil, and Muslim) against colonialism could not agree on different visions of a Sri Lankan state after independence. Sinhala nationalist politicians, notably Solomon Dias Bandaranaike, sought to change the constitution in ways that would advantage the majority at the expense of the largest minority, requiring Sinhala to be *the* national language and thereby exclude Tamils from government jobs. Moreover, subsequent reforms of universities and the education system placed Tamils at a disadvantage. These exclusionary policies apparently led to mass unrest and all out rebellion in the North, to which the state responded with repression. Under these conditions, there can hardly be any in-group policing by elites, since these leaders will have no recourse but to condone (and join) in violence in the hope that it changes a majority’s stance. Grievance is sufficient! In fact, many assume that leaders of ethnic rebellions are political elites, despite that fact that those successful in making war in Sri Lanka (the LTTE) are not led by traditional elites! Thus, the standard approach to understanding ethnic conflict, if not all

conflict, is that a justifiable grievance exists, largely due to repressive (unfair) treatment of an ethnic group (most often a minority) by a state (most often representing a majority-ethnic group).

The details of the Sri Lankan case, however, illuminate problematic aspects of the standard ‘grievance’ story. While exclusionary policies were implemented, accommodation was possible for over two decades after initial protests and violence (the tourist industry at home and abroad came to refer to Sri Lanka as ‘paradise,’ a view helped by very high levels of physical quality of life indicators). The subsequent rebellion and civil war was not initiated by elites (economically and politically powerful personalities) but by low-caste Tamils from the very North of the Island, for whom state policies, such as questions of being excluded from a university education, or other factors of more salient life chances, were less important than for Tamils from other parts of the Island, particularly a large concentration of ‘Indian Tamils’ from the hill country in the center of the island. Why the hill-country Tamils have ‘policed’ themselves in the face of discrimination, possibly the ‘lowest’ life chances, and second-class status in terms of socio-economic standing is a mystery. Moreover, those Tamils who have been successful at rebellion and fighting a state through insurgency live in totally Tamil-dominated areas, so that the risk of majority interference in everyday affairs (perceived unfairness), or backlash against communities through pogroms (fear, security dilemmas), is lowest.<sup>4</sup> Judges, policemen, bureaucrats, and other institutions of a democratic state would have been manned almost exclusively by Tamils—their own kind! Why Jaffna Tamil (the LTTE leadership hails from the very Northern tip of the peninsula) grievance trumps other Tamil grievance has never been questioned.

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<sup>4</sup> It should be noted that Sri Lanka has suffered numerous ethnic riots and pogroms, also involving Muslims-Tamil, Sinhala-Muslim, and several instance of Christian-Buddhist dyads. Thus, just about anybody in Sri Lanka, including poor Sinhalese youth from the economically-depressed South, have cause for grievance over identity and past!

The Sri Lankan story illustrates at a minimum that factors other than grievance generated through identity politics may matter for explaining why in-group policing fails and why large-scale conflict, such as sustained civil wars come about. Of course, being geographically concentrated far from the capital, separated by a few miles of sea from a friendly regime (South India) provides much opportunity for rebellion. Ethnic difference alone is not enough, but other factors rarely theorized about must be present. In fact, the recent empirical evidence on ethnicity and conflict fail to find that ethnic fragmentation alone matters (Fearon and Laitin 2003). What explains conflict is not the absence or presence of many ethnic groups but conditions favorable for insurgency, particularly when states are weak. Others find that higher fragmentation is good, but that it is ethnic dominance that is bad (Collier and Hoeffler 2004; Welch 1998); in other words, when group sizes tend to be relatively equal, then the expropriation of a 'minority' is more attractive, which possibly explains conflict (see also Ellingsen 2000). When groups are fragmented into smaller entities, then organizing a minimum-winning coalition is more difficult and the chances that cleavages will be cross-cutting are greater. This makes organizing large-scale conflict around an exclusively-ethnic claim harder. Rather than grievance, thus, what makes ethnicity a useful concept for analyzing conflict, if at all, is not so much the 'group' factors, but the opportunity factors generated by the 'grid,' or size configurations.

The political economy models of 'opportunity' have recently come under criticism (Cederman and Girardin 2006). Cederman and Girardin argue cogently that the use of a measure of fractionalization is 'atheoretical.' Ethnonationalist mobilization has nothing to do with group size but the way in which states accommodate ethnic grievances over exclusion from state power. A configuration of ethnic group size does not predict who is left out of government, or the access to state power. In their view, what matters are not relative group sizes, but which group of which size holds state power and which demographically significant

ethnic groups are excluded from state power. From this premise, they develop an index of ethno-nationalist exclusion with an ethnic group in power in the center, interacting in a star-like fashion with each non-governmental ethnic group, but without interaction of the non-governmental groups with each other. Whereas the fractionalization and polarization indices take on the same value whether or not an ethnic majority or minority holds state power, Cederman and Girardin's index leads to drastically different values for such constellations with larger values for smaller ethnic group holding state power at the exclusion of larger ethnic groups from state power. The authors find that their index is a statistically significant predictor of civil war onset. Unfortunately, due to data limitations, their index is currently only available for Eurasian and North African countries. Thus, the non-effect of ethnicity in political economy models, they argue, is an artifact of the atheoretical nature of a measure of fractionalization. Cederman and Girardin explicitly reintroduce the 'state' back into discussions of ethnic conflict, but more importantly, propose a grievance model of ethnic conflict based on the notion of exclusion. The debate between the 'grid' and grievance models notwithstanding, few studies have actually tested the effects of ethnic fragmentation, dominance, and exclusion on the important mechanism of conflict anticipated by the grievance models—state repression of human rights.

### **Why repression?**

I am ultimately interested in explaining civil war and how ethnicity figures in the story, so why repression? According to many, ethnic groups (people) rebel against states because they face repression, or are aggrieved over and/or fear a state (Gurr 2001). This is the basis on which the entire Minorities at Risk project (MAR) is based. Majorities, or minorities as the case may be, who control state power do not tolerate dissent. Thus, as in the Sri Lankan case illustrated above, ethnic minorities facing discrimination are expected to dissent (or at least be seen as a threat), which leads to increased repression. Such repression destroys all chances for

accommodation, and civil war results due to grievance. In what follows, I lay out a standard model of repression that is widely supported by empirical studies and accepted by many scholars on the subject, which neatly allows one to test the ‘grid’ and grievance propositions about ethnic conflict. In other words, repression is the mechanism that destroys any hope of accommodation. Whether political economy models or ethnic exclusion models are right crucially hinges on which of their measures of ethnic salience correlates with repression, since civil wars require a whole host of extra constraints that need to be overcome, most importantly large finances!

I rely on Steven Poe’s (2004) model of why states repress. Poe (2004) integrates the empirical findings in the extant literature to devise a model of state behavior derived from Most and Starr’s ‘opportunity and willingness’ framework for understanding international conflict (Most and Starr 1989).<sup>5</sup> Human rights practices depend primarily on decisions made by leaders from a menu of choice about how to respond to a perceived or real threat. Leaders who make domestic policy decisions have perceptions of their regime’s political strength (S) and the level of threats it faces (T). When decision makers recognize that the government’s strength (S) is weaker than the threat (T): or that threat (T) is increasing relative to state strength (S):  $[S_{nt1}/T_{nt1}] < [S_{nt0}/T_{nt0}]$ , then the state will be willing to take action to increase its strength (S) or decrease the threat (T) (Most and Starr, 1989: 126–128). Repression is just one of the actions that can be used by leaders who try to decrease threats or/and increase strength. Others too have variously argued some version of this parsimonious model when they have suggested that political leaders are most likely to use repression as means to gain control over serious dissent (Gartner and Regan 1996; Gurr 1986; Landman 2005; Moore 2000).

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<sup>5</sup> This model assumes that decision makers are unified and value-maximizing actors who possess perfect information regarding their options and the consequences of their actions (Most and Starr, 1989: 126).

**Methods:**

I examine the most easily measurable, and the most odious aspects of state repression, which are violations of physical integrity rights (PIR) and the extent of political terror (PTS) (Cingranelli and Richards 1999; Hafner-Burton 2005).<sup>6</sup> These rights are negative rights in that they capture arbitrary physical harm and state coercion with threat of harm against ordinary people. While the sources for the two datasets on repression are the same, the correlation is not perfect due to different definitional issues and thresholds. The correlation between Hafner-Burton's (2005) PTS scale and PIR is  $r = -0.82$  (PIR measures rights and the PTS measures repression, hence the negative relationship).<sup>7</sup> Generally, there is high congruence among differently-defined scales of repression (Landman 2005). I follow the conservative strategy of using both datasets.

Repression of physical integrity rights (PIR) is coded on the basis of the following four criteria: extrajudicial killings/unlawful and arbitrary deprivation of life, disappearances, torture/inhumane and degrading treatment, and political imprisonment because of political activism and nonviolent opposition to government. These variables are coded on a scale of 0-2 beginning with 0, which is if 50 or more reported violations have occurred. A score of 1 means that 1-49 reportings occurred, and 2 means zero reporting of violations. This information is then scaled using Mokken Scaling Analysis (MSA), which bases the scale on the observed frequencies of the type of violations of human rights observed in the data. Thus, the final physical integrity rights measure is an additive scale of the 4 repression categories named above stretching from 0, no respect on any of the categories, to 8, which is full respect for each of the categories. Some violations and partial violations show up on each of the 4 dimensions in between 1 and 7.

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<sup>6</sup> The reader should refer to <http://ciri.binghamton.edu/index.asp> for detailed descriptions of the physical integrity rights data, sources, and methodology.

<sup>7</sup> The PTS (Political Terror Scale) is collected by Mark Gibney (Gibney and Dalton 1996). I use the PTS data adapted by Hafner-Burton (2005). Her data are available at [www.stanford.edu/~emilieh/](http://www.stanford.edu/~emilieh/).

The Hafner-Burton (2005) PTS scale rates the yearly performance of countries on an interval scale of 5 categories.

*1 if countries are under secure rule of law, political imprisonment and torture are rare, and the political murders are extremely rare;*

*2 if imprisonment for non-violent political activities is limited, torture and beating are exceptional, and political murder rare;*

*3 if political imprisonment is extensive, execution and political murder may be common, and detention for political views are acceptable;*

*4 if the practices of level 3 are expanded to a larger segment of population, murders and disappearances are common, but terror affects primarily those who interest themselves in political practices and ideas*

*5 if level of terror are population wide, and decision makers do not limit themselves by which they pursue private and ideological goals*

The main variables of interest are the ethnicity variables generally categorized as the group size indicators (fragmentation), which are used in tests of the political economy models. The issue of what an ethnolinguistic group is thorny, thus, I use several measures of fractionalization developed by at least 3 different sources: Fearon (2003), Alesina et al (2003), and Montalvo and Reynal-Querol (2005).<sup>8</sup> I also use the measure of ‘ethnic group exclusion from state power’ (Nstar) developed by Cederman and Girardin (2006) to capture the grievance dimension. I use two fragmentation indicators from Fearon (2003), which is ethnolinguistic fragmentation and a measure of cultural distance based on the distance between the two dominant groups on a linguistic tree (see Fearon 2003 and Alesina 2003 for discussion). I also test religious fragmentation independently of ethnicity. Additionally, I use Fearon and Laitin’s (2003) population share of the second-largest ethnic group to indicate relative homogeneity, and Montalvo and Reynal-Quereol’s ethnic and religious polarization measures. Table 1 provides the correlations between the ethnicity variables which capture the different group configurations.

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<sup>8</sup> All of these authors use similar sources for identifying ethnic, linguistic and religious groups, but use different criteria. I use the conservative method of estimating as many of the measures as possible.

**TABLE 1 ABOUT HERE**

As seen there, the ethnic fractionalization measures of Alesina and Fearon are correlated at  $r=0.74$ , Alesina and Montalvo and Reynal-Querol's at  $r=0.80$ , and Fearon's and Montalvo and Reynal-Querol's at  $r=0.83$ . The highest correlation is between Fearon's ethnic fractionalization and Alesina's linguistic fractionalization measures ( $r=0.88$ ). Notably, Fearon's share of the second largest group is quite well correlated with ethnic polarization ( $r=0.76$ ). This is not surprising, given that polarization should be highest when the two largest groups approach parity. Interestingly, the indicator for the measure of ethnic grievance is extremely weakly correlated with all of the fractionalization indicators, but moderately correlated with the share of the second largest group ( $r = 0.46$ ) and with ethnic polarization ( $r = 0.76$ ). Thus, the exclusion measure seems closest to the ethnic grid configuration that is closer to homogeneity (polarization), when the chance of finding some group that is excluded from state power is lower! We now discuss the other controls.

Previous studies have found several factors that influence the likelihood of repression. Steven Poe and his associates (Poe and Tate 1994; Poe, Tate, and Keith 1999) find that past levels of repression (the human rights legacy), the level of formal democracy, population size, economic standing, and threat of organized violence in the form of involvement in international and civil wars have significant effects on repression (Davenport and Armstrong 2004; Landman 2005; Poe 2004). The empirical evidence on whether international war leads to human rights repression is mixed (Landman 2005; Richards, Gelleny, and Sacko 2001). I include two controls for armed conflict—civil and interstate war. Using the Uppsala/PRIO

dataset that includes all conflicts with at least 25 battle-related deaths (Gleditsch et al. 2002), I compute the number of years of peace since the last conflict for both variables.<sup>9</sup>

Democracy is an important predictor of respect for human rights (Davenport and Armstrong 2004; Landman 2005). The existence of organized, legal, political oppositions, a free press, and a civil society are constraints on leaders who may be tempted to violate citizens' rights. Established democracies contain norms of non-violent means of conflict resolution, such as protest, strikes, and other civil actions to make demands on government. Authorities responding to demands are constrained by laws of due process and political oversight. Others argue a curvilinear effect of democracy on repression (Bueno de Mesquita et al. 2005), where states at intermediate levels of democracy are most likely to be repressive (Fein 1995). Davenport and Armstrong (2005) find, however, that democracy's effect is negative and most significant when the democracy score is relatively high, working in a linear fashion. Following them and others (Fearon and Laitin, 2003), I define the control for regime type as a dummy variable taking the value 1 if the Polity IV (variable polity2) score is above 6 on the 11-point scale (i.e. 7–10) and 0 if below that. In sensitivity analyses, I test the robustness of the main variables by including democracy defined at various thresholds.

Whether or not countries are petroleum exporters is a crucial control variable. In fact, several find that natural resource wealth is a problem for governance and peace (Auty 2001; de Soysa 2002). Resource wealth raises the stakes for state capture and lowers the incentive of rulers to reform (Acemoglu and Robinson 2006; Jensen and Wantchekon 2004). I expect therefore that states that are resource wealthy, such as oil-rich ones, will be more willing to resort to human rights violations than those that are not (de Soysa and Binningsbø 2006). I

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<sup>9</sup> The peace years variables were calculated using the BTSCS program working in Stata (Beck, Katz, and Tucker 1998).

enter a dummy variable that takes the value 1 if oil exports are greater than 1/3 of GDP and 0 if not, taken from Fearon and Laitin's (2003) replication dataset.<sup>10</sup>

Previous research has explicitly controlled for legal traditions of states. Apparently, a British (common law) legal tradition that has independent bureaucracies and court systems constrain arbitrary acts by government (Poe, Tate, and Keith 1999). I use British legal system coded by (La Porta et al. 1998). Economic conditions can affect the likelihood of repression. Poe et al. (1999: 294) state that "in countries with economies characterized by scarcity, regimes will be more likely to repress domestic threats." Henderson (1997) argues that in more developed states the population will be more content, and thus less repression is needed to keep control. Richer states also have higher state capacity (Fearon and Laitin 2003). Moreover, richer people may have high opportunity costs for engaging in dangerous (violent) dissent that threaten states (Collier and Hoeffler 2004). I use Gross National Income per capita (GNI) in PPP terms (logged) and the growth rate of income per capita to capture economic effects (World Bank 2005).

Studies find that countries with larger populations will be more repressive than countries with smaller populations (Landman 2005; Poe 2004). Theoretically, a large population implies larger numbers of potential dissenters and weaker state capacity. A large population generally also means a larger geographical area, which can be more difficult to control than a smaller area (Fearon and Laitin, 2003). It should be noted that the PIR scores are in fact affected by the size of the population since larger populations can determine the frequency of violations.

Others find that a lagged dependent variable (LDV) is highly significant (Poe, 2004). The LDV controls for time dependence and serial correlation, and it presumably captures effects of those factors omitted in the models (Landman 2005). On the other hand, the LDV

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<sup>10</sup> The data are available at: <http://www.stanford.edu/~jfearon/>

may soak up so much of the variance that it masks potential causal factors explained by the other variables (Achen 2000; Plümper, Troeger, and Manow 2005). I will test models with and without LDVs.

Finally, I control for time trends in the data. Human rights data maybe affected over time in several ways, such as the definition of what a human rights violation is. Moreover, the apparatus for detecting violations have increased over time, such as the activities of Amnesty International and the US State Department. I enter year dummies to capture such potential time trends in the data. Time dummies also take care of any unobserved factors, such as the end of the Cold War, or global policy shifts that may affect human rights. I could also have controlled for how committed a country is to the norms of human rights respect by adding a variable measuring whether countries participate in human rights conventions, but the existing evidence suggests that this variable does not matter (Keith 1999; Neumayer 2005). An examination of all of the variables did not show correlations that would lead us to be concerned about multicollinearity (see Table 1).

I estimate the primary dependent variable, the PIR scale using linear regression models (OLS). PIR is an ordinal scale ranging from 0–8, and the ideal estimation process should be either ordered logit or ordered probit, depending on the nature of the distribution of the dependent variable (Long 1997). Estimating a linear model if the thresholds are the same distance apart within the scale would not be such a problem, but given that the substantive nature of the cut-off points are hard to ascertain in the PIR scale, I estimate linear models as most others do (Landman 2005; Poe, Tate, and Keith 1999). The closer the scale approaches a normal distribution, the less biased the linear estimator is (Long 1997; Winship and Mare 1984). On preliminary examination, the PIR looks relatively normally distributed. I use ordered probit when estimating the PTS since the identification of cut-off points is relatively straightforward.

Additionally, time-series, cross-section data (TSCS) may contain complicated correlation patterns because of the spatial and temporal nature of the data setup. I rely on the ‘panel corrected standard error’ method (PCSE) proposed by Neal Beck and Jonathan Katz (1995), which provides more accurate, apparently more conservative estimates of significance levels compared to the standard GLS method. PCSE also allows one to correct for autocorrelation with an AR1 process (Beck and Katz 1995). Yet another estimating technique is the Newey-West method, which allows one to use a AR1 process for autocorrelation and obtain robust standard errors, clustering on the unit of analysis so that values are assumed to be dependent within the unit but independent across. Given that many of the main variables of interest are time invariant, the Newey-West method compliments the PCSE method (Gerring et al. 2005). With the ordered probit models too, I cluster the analysis on countries and estimate the Huber-White robust standard errors, a method which is robust to heteroskedasticity and serial correlation (Wiggins 1999). The summary statistics of each of the variables are described in the appendix. The estimates are based on data for roughly 136 countries with over 1 million inhabitants covering the period 1980–2003. The dataset is unbalanced, and the availability of data for all of the controls determined the size of the dataset (see appendix for country list).

**Results:**

Table 2 reports the effects of ethnic fractionalization and cultural distance on physical integrity rights and political terror. Column 1 and 2 report linear estimations of fractionalization on the 9-point physical integrity rights (PIR) scale.

**TABLE 2 ABOUT HERE**

As seen there, higher ethnic fractionalization predicts greater respect for physical integrity. The result is statistically significant using the PCSE and the Newey-West methods. This result

is corroborated using ordered-probit technique on the 5-point political terror scale (column 3). In column 4, we test the cultural distance measure using the PTS, and this variable too predicts lower political terror.<sup>11</sup> Using the ordered-probit estimations, I compute marginal effects in order to judge the substantive impact of fractionalization by estimating the predicted probability at cut-off point 4.<sup>12</sup> The baseline predicted probability of political terror computed at the mean values of each variable for the cut-off point of 4 in the PTS scale in the model reduces by 31% if ethnic fractionalization is increased by a standard deviation above the mean value, holding all the other variables at their means. The same exercise with cultural distance reduces the baseline probability by 21%. Comparatively, holding all other variables at their means, going from an autocracy to a democracy reduces political terror by 59%. An increase in per capita income by a standard deviation above the mean reduces the baseline probability by roughly 80%. Thus, while fractionalization's substantive effect relative to a valued political variable, such as political democracy, is quite close, increasing wealth and avoiding civil war, which has the largest impact (308%), matters most to reducing the threat to physical integrity. Very similar results obtain with religious fractionalization, despite the low correlation between religious and ethnic fractionalization. The larger the number of religious groups, the better!

### **TABLE 3 ABOUT HERE**

In table 3, we report results with Alesina et al's disaggregated measures of fractionalization. As seen there, only linguistic fractionalization seems to matter. These results are the same for linear estimation with the PIR scale. Higher linguistic fractionalization

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<sup>11</sup> The cultural distance variable is also statistically significant when using PIR with both linear estimation techniques (results not shown but available on request from author).

<sup>12</sup> Cut-off point 4 of the PTS is when political terror against political activists is widespread. Hence forth, all the substantive effects are computed for this cut-off point.

predicts lower political terror. Holding all other variables at their mean values, raising linguistic fractionalization by a standard deviation above the mean reduces the baseline predicted probability by 26%, again an effect relatively slight compared with democracy, income, and civil war. However, the often-discussed issue of linguistic difference as a cause of social friction is not supported by these estimations.

In table 4, we test the effect of our ethnic grievance conceptualization measured as exclusion from state power (Nstar).

#### **TABLE 4 ABOUT HERE**

As seen there, Nstar is statistically not different from 0 in all of the tests. In terms of political terror, Nstar predicts lower repression, yielding the largest z value of the 3 estimating methods (1.2). Thus, we find no support for the view that exclusion of ethnic groups from state power has any effect on the level of state violations of physical integrity or political terror. Given that the exclusion (grievance) model would predict the highest level of dissent, the lack of a correlation with state repression is surprising, calling into question the theoretical basis on which the Nstar variable is formulated. Perhaps as this measure is developed for more countries, the effect might change. In any case, there is little support for the grievance model.

#### **TABLE 5 ABOUT HERE**

In table 5, I enter Fearon and Laitin's (2003) share of the population belonging to the 2<sup>nd</sup>-largest ethnic group. As seen there, the larger the share of the population belonging to the second-biggest group, the lower the respect for physical integrity rights, results that are statistically highly significant. The ordered-probit estimate on political terror just misses

significance at the 10% level. Substantively, a standard deviation increase in the size of the second largest group increases respect for rights by 0.15, a fraction of the standard deviation of the PIR scale (2.4). Holding all other variables at their mean values, raising the size of the second-largest group by a standard deviation above the mean increase the baseline risk by 20%, again a small effect compared with other variables more easily affected by policy. There is, however, some support for the view that as two groups tend to dominate a state, the larger the problems. We test whether a more explicit conceptualization of polarization matters.

### **TABLE 6 ABOUT HERE**

As seen in table 6, using Montalvo and Reynal-Querol's measurement of polarization, ethnic polarization is the only statistically significant effect. These results might largely be a reflection of the different sample size. Since we use only societies with 1 million inhabitants and greater, many of the countries in their dataset (small islands) drop out ( $N = 111$ ). In any case, the effect of ethnic polarization is similar to Fearon's size of the second-largest group. Substantively, an increase of ethnic polarization by the mean plus a standard deviation reduces the predicted probability at cut-off point 4 by 28%, again a relatively small effect compared with democracy, income, and civil war.

In summary, the effect of greater fractionalization (ethnic, religious, and linguistic) and cultural distance reduces repression of human rights and political terror. If social frictions come from ethnic coordination failures then governments do not seem to face high levels of dissent that requires repression. There is little support to suggest that grievances due to ethnic exclusion from state power matters. However, the question of whether it is grievance or opportunity that leads to greater dissent and repression under conditions of polarization is still up in the air. One way to assess this issue is to see whether ethnic grievance is greater under conditions of democracy, rather than autocracy. Since the most risky ethnic-group-size

configuration is when the share of the second-largest group is greater, then conditions of democracy should favor this group since they stand to command a large share of the vote relative to the majority and others. If democracy alone is the enabling condition for dissent then the interactive effect with fractionalization should be similar to polarization. Thus, I test interaction terms of the size of the second-largest group with the dummy variable for democracy (Polity2 score above 7). I do the same with ethnic fractionalization and ethnic polarization.

### **TABLE 7 ABOUT HERE**

As seen in table 7, the size of the second-largest group is unambiguously more problematic among democracies than among autocracies. The interactive effect with fractionalization has no such effect, and polarization too seems problematic among the democracies, although significant only at the 10% level. Again, if ethnic group size correlates with higher dissent and repression, then it is not easily fathomable why a large minority would be driven by ‘grievance’ to dissent at a time when their chances of being elected into government are greatest. It seems that this particular configuration of ethnicity that allows a reasonable chance of getting demands met affords opportunities for mobilization that may lead to spirals of dissent and repression, particularly among democracies, which generally respect physical integrity rights to higher degrees than do autocracies. There could of course be other mechanisms, such as splinter groups from the larger minority that challenge the state to upstage those that are less-extreme. These are issues that will have to be teased out in future studies, particularly in carefully designed case studies. Again, however, the estimates of these effects are comparatively quite small, and policymakers might do well to look beyond the discourse of ethnic grievance when designing policies for peace.

**Conclusion:**

The question of governance under conditions of ethnic fragmentation has recently received a lot of attention. Apparently, fragmentation leads to several bad social outcomes because of social frictions that lower investment and even causes civil wars. Using a direct measure of social friction short of armed conflicts, this study estimated the effect of several measures of ethnic salience on the level of a state's respect for the rights of physical integrity and political terror. The results taken together show little support for the view that ethnic grievance generates dissent serious enough to warrant state repression. Contrarily, ethnic fractionalization predicts better human rights conditions and lower state repression. These results throw into question the often-recited 'social friction' arguments about Africa's growth tragedy due to high fractionalization (Kimenyi 1997). Are there other unobserved factors we attribute to ethnic friction, such as more narrowly-based rent seeking? The results generally support the view that cross-cutting cleavages are likely to decrease opportunities for dissent.

Of the various ethnic group configurations tested, repression is most likely when ethnic polarization is present, or when the sizes of the two largest groups approach parity. However, the substantive effects are relatively much smaller than basic political and economic factors. This is good news for policy, since much can be done to promote development, democracy, and prevent civil war, compared to the rather daunting task of adjusting state borders and altering ethnic configurations that some advocate as the road to security (Van Evera 1994). As in Sartre's play, hell for the protagonists is being locked in a room with two others with 'no exit,' suggesting that escape from hell is the variety and anonymity of a crowd. Future studies should tease out the exact mechanisms by which higher fragmentation produces lower political repression, such as the mechanisms of political accommodation and in-group policing.

## References:

- Acemoglu, Daron, and James A. Robinson. 2006. Economic Backwardness in Political Perspective. *American Political Science Review* 100 (1):115–131.
- Achen, Christopher. 2000. Why Lagged Dependent Variables Can Suppress the Explanatory Power of Other Independent Variables. Paper read at Annual Meeting of the Political Methodology Section of the American Political Science Association, UCLA, July 20–22, 2000.
- Ades, Alberto, and Rafael Di Tella. 1999. Rents, Competition, and Corruption. *American Economic Review* 89 (4):982–993.
- Alesina, Alberto, Reza Baqir, and William Easterly. 1999. Public Goods and Ethnic Divisions. *Quarterly Journal of Economics* 114 (4):1243–1284.
- Alesina, Alberto, Arnaud Devleeschauwer, William Easterly, Sergio Kurlat, and Romain Wacziarg. 2003. Fractionalization. *Journal of Economic Growth* 8:155–194.
- Auty, Richard M., ed. 2001. *Resource Abundance and Economic Development, UNU/WIDER studies in development economics*. Oxford: Oxford University Press.
- Beck, Nathaniel, and Jonathan N. Katz. 1995. What To Do (and Not To Do) with Time-Series Cross-Section Data. *American Political Science Review* 89 (3):634–647.
- Beck, Nathaniel, Jonathan N. Katz, and Richard Tucker. 1998. Taking Time Seriously: Time-Series-Cross-Section Analysis with a Binary Dependent Variable. *American Journal of Political Science* 42 (4):1260–1288.
- Brubaker, Rogers, and David D. Laitin. 1998. Ethnic and Nationalist Violence. *Annual Review of Sociology* 24:423–452.
- Bueno de Mesquita, Bruce, George W. Downs, Alastair Smith, and Feryal Marie Cherif. 2005. Thinking Inside the Box: A Closer Look at Democracy and Human Rights. *International Studies Quarterly* 49:439–457.
- Cederman, Lars-Erik, and Luc Girardin. 2006. Beyond Fractionalization: Mapping Ethnicity onto Nationalist Insurgencies. Paper read at Political Institutions and Civil War Organized by the World Bank and the Center for the Study of Civil War, PRIO, June 28–29, at Oslo, Norway.
- Chandra, Kanchan. 2006. What is Ethnic Identity and Does it Matter? *Annual Review of Political Science* 9 (June):?????
- Chua, Amy. 2003. *World on Fire: How Exporting Free Market Democracy Breeds Ethnic Hatred and Global Instability*. New York: Doubleday.
- Cingranelli, David L., and David L. Richards. 1999. Respect for Human Rights after the End of the Cold War. *Journal of Peace Research* 36 (5):511–534.
- Collier, Paul. 2001. Implications of Ethnic Diversity. *Economic Policy* 32 (April):127–155.
- Collier, Paul, and Anke Hoeffler. 2004. Greed and Grievance in Civil War. *Oxford Economic Papers* 56 (4):563–595.
- Dahl, Robert A. 1982. *Dilemmas of Pluralist Democracy: Autonomy vs Control*. New Haven, CT: Yale University Press.
- Davenport, Christian, and David A. II Armstrong. 2004. Democracy and the Violation of Human Rights: A Statistical Analysis from 1976 to 1996. *American Journal of Political Science* 48 (3):538–554.
- de Soysa, Indra. 2002. Paradise is a Bazaar? Greed, Creed, and Governance in Civil War, 1989–1999. *Journal of Peace Research* 39 (4):395–416.
- de Soysa, Indra, and Helga Malmin Binningsbø. 2006. Devil's Excrement or Social Cement? Oil Wealth and Repression, 1980–2001. Paper read at International Studies

- Association Annual Meeting, March 21–27, at San Diego, CA.
- Diamond, Larry, and Marc F. Plattner, eds. 1994. *Nationalism, Ethnic Conflict, and Democracy*. Baltimore, MD: Johns Hopkins Press.
- Easterly, William, and Ross Levine. 1997. Africa' Growth Tragedy: Policies and Ethnic Divisions. *Quarterly Journal of Economics* 112:1203–1250.
- Ellingsen, Tanja. 2000. Colorful Community or Ethnic Witches' Brew?: Multiethnicity and Domestic Conflict During and After the Cold War. *Journal of Conflict Resolution* 44 (2):228–249.
- Fearon, James D. 2003. Ethnic and Cultural Diversity by Country. *Journal of Economic Growth* 8:195–222.
- Fearon, James D., and David D. Laitin. 1996. Explaining Interethnic Cooperation. *American Political Science Review* 90 (4):715–735.
- Fearon, James D., and David D. Laitin. 2000. Violence and the Social Construction of Ethnic Identity. *International Organization* 54 (4):845–877.
- Fearon, James D., and David D. Laitin. 2003. Ethnicity, Insurgency, and Civil War. *American Political Science Review* 97 (1):1–16.
- Fein, Helen. 1995. More Murder in the Middle: Life-integrity Violations and Democracy in the World, 1987. *Human Rights Quarterly* 17 (1):170–191.
- Gartner, Scott Sigmund, and Patrick M. Regan. 1996. Threat and Repression: The Non-Linear Relationship between Government and Opposition Violence. *Journal of Peace Research* 33 (3):273–287.
- Gerring, John, Philip Bond, William T. Barndt, and Carola Moreno. 2005. Democracy and Economic Growth: A Historical Perspective. *World Politics* 57 (April):323–364.
- Gibney, Mark, and Matthew Dalton. 1996. The Political Terror Scale. In *Human Rights and Developing Countries*, edited by D. L. Cingranelli. Greenwich, CT: JAI Press.
- Gleditsch, Nils Petter, Peter Wallensteen, Mikael Eriksson, Margareta Sollenberg, and Håvard Strand. 2002. Armed Conflict 1946–2001: A New Dataset. *Journal of Peace Research* 39 (5):615–637.
- Gurr, Ted R., and Barbara Harff. 1994. *Ethnic Conflict in World Politics*. Boulder, CO: Westview.
- Gurr, Ted Robert. 1986. The Political Origins of State Violence and Terror: A Theoretical Analysis. In *Government Violence and Repression: An Agenda for Research*, edited by M. Stohl and G. A. Lopez. New York: Greenwood.
- Gurr, Ted Robert. 2001. *People Versus States: Minorities at Risk in the New Century*. Washington, DC: United States Institute of Peace.
- Hafner-Burton, Emilie M. 2005. Right or Robust? The Sensitive Nature of Repression to Globalization. *Journal of Peace Research* 42 (6):679–698.
- Horowitz, Donald L. 2000. *Ethnic Groups in Conflict*. 2nd Edition ed. Berkeley: University of California Press.
- Jensen, Nathan, and Leonard Wantchekon. 2004. Resource Wealth and Political Regimes in Africa. *Comparative Political Studies* 37 (7):816–841.
- Keith, Linda C. 1999. The United Nations International Convention on Civil and Political Rights: Does It Make a Difference in Human Rights Behavior? *Journal of Peace Research* 36:95–118.
- Kimenyi, Mwangi S. 1997. *Ethnic Diversity, Liberty and the State: The African Dilemma*. Cheltenham: Edward Elgar.
- La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Schleifer, and Robert Vishny. 1998. *The Quality of Government*. Cambridge, MA: NBER.
- Lake, David, and Donald Rothchild. 1996. Containing Fear: The Origins and Management of Ethnic Conflict. *International Security* 21 (2):41–75.

- Landman, Todd. 2005. *Protecting Human Rights: A Comparative Study*. Washington, DC: Georgetown University Press.
- Long, Scott J. 1997. *Regression Models for Categorical and Limited Dependent Variables*. London: Sage.
- Montalvo, José G., and Marta Reynal-Querol. 2005. Ethnic Polarization, Potential Conflict, and Civil Wars. *American Economic Review* 95 (3):796–816.
- Moore, Will H. 2000. The Repression of Dissent: A Substitution Model of Government Coercion. *Journal of Conflict Resolution* 44 (1):107–127.
- Most, Benjamin, and Harvey Starr. 1989. *Inquiry, Logic, and International Politics*. Columbia, SC: University of South Carolina Press.
- Moynihan, Daniel Patrick. 1994. *Pandaemonium: Ethnicity in International Politics*. Oxford: Oxford University Press.
- Mueller, John. 2000. The Banality of Ethnic War. *International Security* 25 (1):42–70.
- Neumayer, Eric. 2005. Do International Human Rights Treaties Improve Respect for Human Rights? *Journal of Conflict Resolution* 49 (6):925–953.
- Petersen, Roger. 2001. *Understanding Ethnic Violence: Fear, Hatred, Resentment in Twentieth Century Eastern Europe*. Cambridge: Cambridge University Press.
- Plümper, Thomas, Vera Troeger, and Philip Manow. 2005. Panel Data Analysis in Comparative Politics: Linking Method to Theory. *European Journal of Political Research* 44 (2):327–354.
- Poe, Steven C. 2004. The Decision to Repress: An Integrative Theoretical Approach to the Research on Human Rights and Repression. In *Understanding Human Rights Violations: New Systematic Studies*, edited by S. Carey and S. C. Poe. Aldershot: Ashgate.
- Poe, Steven C., and Neal Tate. 1994. Repression of Human Rights to Personal Integrity in the 1980s: A global Analysis. *American Political Science Review* 88:853–900.
- Poe, Steven C., Neal Tate, and Linda C. Keith. 1999. Repression of the Human Rights to Personal Integrity Revisited: A Global Cross-National Study Covering the Years 1976-1993. *International Studies Quarterly* 43:291-313.
- Posen, Barry. 1993. The Security Dilemma and Ethnic Conflict. *Survival* 35:27–47.
- Richards, David L., Ronald D. Gellenny, and David H. Sacko. 2001. Money With a Mean Streak? Foreign Economic Penetration and Government Respect for Human Rights in Developing Countries. *International Studies Quarterly* 45 (2):219–239.
- Saideman, Stephen. 2001. *The Ties That Divide: Ethnic Politics, Foreign Policy, and International Conflict*. New York: Columbia University Press.
- Sambanis, Nicholas. 2001. Do Ethnic and Nonethnic Civil Wars Have the Same Causes? A Theoretical and Empirical Inquiry (Part 1). *Journal of Conflict Resolution* 45 (3):259–282.
- Van Evera, Stephen. 1994. Hypotheses on Nationalism and War. *International Security* 18 (4):5–39.
- Welch, Ivo. 1998. *Asymmetry and Power: Can Ethnic Dominance Minimize Conflict?* Los Angeles, CA: Anderson Graduate School of Management Finance, University of California, Los Angeles, (UCLA).
- Wiggins, Vince. *Comparing XTGLS with Regress Cluster ()* Stata Corporation, 1999 [cited. Available from [www.stata.com/support/faqs/stgls\\_rob.html](http://www.stata.com/support/faqs/stgls_rob.html)].
- Wimmer, Andreas, Richard J. Goldstone, Donald L. Horowitz, Ulrike Joras, and Conrad Schetter, eds. 2004. *Facing Ethnic Conflicts: Towards a New Realism*. Oxford: Rowman and Littlefield.
- Winship, Christopher, and Robert D. Mare. 1984. Regression Models With Ordinal Variables. *American Sociological Review* 49 (4):512–525.

World Bank. 2005. World Development Indicators, CD-rom. Washington, DC: World Bank.

Table 1. Correlations among measures of ethnicity

	1	2	3	4	5	6	7	8	9	10	11
1. FLethfrac	-										
2. FLrelfrac	0.42	-									
3 FL Cultf	0.80	0.36	-								
4. FLsecond	0.40	0.11	0.46	-							
5. Alesinaethf	0.74	0.36	0.73	0.60	-						
6. Alesinarelf	0.34	0.90	0.22	0.04	0.27	-					
7. Alesinalinf	0.88	0.42	0.73	0.25	0.69	0.33	-				
8.RQethfrac	0.83	0.40	0.68	0.50	0.80	0.33	0.75	-			
9. RQrelfrac	0.51	0.56	0.50	0.33	0.52	0.56	0.49	0.53	-		
10. Ethpol	0.39	0.15	0.38	0.76	0.51	0.13	0.26	0.54	0.30	-	
11. Relpol	0.53	0.52	0.49	0.40	0.59	0.53	0.50	0.56	0.95	0.37	-
12. Nstar	0.005	0.15	0.28	0.46	0.25	0.09	0.09	0.17	0.29	0.41	0.39

Table 2. Estimates of the effect of Fearon and Laitin's measures of ethnic fractionalization and cultural distance on physical integrity rights and political terror, 1980–2003

	(1)PCSE	(2)Newey-West	(3)Oprobit	(4)Oprobit
Dependent variable	PIR	PIR	PTS	PTS
<b>Ethfrac(FL)</b>	<b>0.678</b>	<b>0.704</b>	<b>-0.633</b>	
	<b>(3.32)***</b>	<b>(4.21)***</b>	<b>(2.50)**</b>	
<b>Cultural dist.</b>				<b>-0.582</b>
				<b>(2.13)**</b>
Ipoil	-0.609	-0.575	0.516	0.516
	(5.70)***	(5.31)***	(3.41)***	(3.38)***
Lnincome	0.392	0.372	-0.383	-0.346
	(11.84)***	(12.07)***	(7.37)***	(7.38)***
Growth	0.007	0.005	-0.006	-0.007
	(1.41)	(0.81)	(1.23)	(1.38)
democ_dummy	0.913	1.033	-0.767	-0.782
	(8.36)***	(12.57)***	(6.76)***	(6.50)***
Ilegalbrit	0.082	0.086	-0.110	-0.141
	(0.77)	(1.10)	(0.86)	(1.07)
Lnpop	-0.464	-0.417	0.251	0.249
	(16.53)***	(16.62)***	(5.81)***	(5.63)***
civil_war	-1.323	-1.845	1.098	1.088
	(11.64)***	(15.23)***	(7.59)***	(7.53)***
Civpeaceyrs	0.030	0.026	-0.022	-0.021
	(9.96)***	(10.09)***	(4.80)***	(4.41)***
interstate_war	0.166	-0.270	0.318	0.317
	(1.09)	(1.50)	(1.34)	(1.41)
Intpeaceyrs	-0.016	-0.017	0.015	0.015
	(5.08)***	(7.06)***	(3.67)***	(3.65)***
Year	-0.035			
	(3.21)***			
Constant	77.864	8.829		
	(3.61)***	(17.49)***		
Observations	2792	2792	2797	2751
No. countries	136	136	137	135

z statistics in parentheses

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

year dummies computed with Newey-West and Ordered-probit estimations (not shown)

Table 3. Estimates of the effect of Alesina's disaggregated data on ethnic, religious, and linguistic fragmentation on political terror, 1980–2002

	(1)Oprobit	(2)Oprobit	(3)Oprobit
Dependent variable	PTS	PTS	PTS
<b>Alesinaethf</b>	<b>0.038</b>		
	<b>(0.16)</b>		
<b>Alesinarelf</b>		<b>0.093</b>	
		<b>(0.35)</b>	
<b>Alesinalinf</b>			<b>-0.572</b>
			<b>(2.33)**</b>
Ipoil	0.471	0.478	0.483
	(3.10)***	(3.12)***	(3.12)***
Lnincome	-0.326	-0.328	-0.378
	(6.67)***	(6.82)***	(7.29)***
Growth	-0.005	-0.005	-0.006
	(1.08)	(1.06)	(1.21)
democ_dummy	-0.741	-0.738	-0.803
	(6.18)***	(6.23)***	(7.22)***
Ilegalbrit	-0.202	-0.215	-0.134
	(1.63)	(1.81)*	(1.05)
Lnpop	0.252	0.252	0.249
	(5.58)***	(5.72)***	(5.68)***
civil_war	1.088	1.099	1.110
	(7.66)***	(7.99)***	(7.27)***
Civpeaceyrs	-0.020	-0.020	-0.021
	(4.32)***	(4.26)***	(4.67)***
interstate_war	0.285	0.293	0.318
	(1.23)	(1.27)	(1.33)
Intpeaceyrs	0.016	0.016	0.015
	(3.85)***	(3.77)***	(3.47)***
Observations	2797	2797	2752
No. countries	136	136	136

Robust z statistics in parentheses

significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%  
year dummies computed with all estimations (not shown)

Table 4. Estimates of the effect of ethnic exclusion from state power on physical integrity rights and political terror, 1980–2003

	(1)	(2)	(3)
Dependent variable	PIR	PIR	PTS
Ipnstar	-0.191 (0.79)	0.020 (0.07)	-0.440 (1.21)
Ipoil	-0.364 (2.82)***	-0.285 (1.88)*	0.418 (1.78)*
Lnincome	0.462 (9.25)***	0.434 (9.24)***	-0.393 (6.04)***
Growth	0.000 (0.01)	0.005 (0.50)	-0.000 (0.05)
democ_dummy	0.965 (6.76)***	1.134 (9.14)***	-0.992 (6.27)***
Iplegalbrit	-0.269 (1.51)	-0.236 (1.91)*	0.052 (0.30)
Lnpop	-0.390 (8.31)***	-0.343 (9.44)***	0.209 (4.35)***
civil_war	-1.298 (6.79)***	-1.915 (10.61)***	1.266 (5.07)***
Civpeaceyrs	0.018 (4.57)***	0.011 (3.29)***	-0.010 (2.05)**
interstate_war	-0.047 (0.28)	-0.424 (2.03)**	0.419 (1.25)
Intpeaceyrs	-0.004 (1.12)	-0.002 (0.75)	0.001 (0.11)
Year	-0.040 (3.18)***		
Constant	87.195 (3.45)***	7.356 (9.22)***	
Observations	1327	1327	1310
No. countries	68	68	67

z statistics in parentheses

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

year dummies computed with Newey-West and Ordered-probit estimations (not shown)

Table 5. Estimates of the effect of share of the second-largest ethno-linguistic group on physical integrity rights and political terror, 1980–2003

	(1) PCSE	(2) Newey-West	(3) Oprobit
Dependent variable	PIR	PIR	PTS
<b>Isecond</b>	<b>-1.374</b>	<b>-1.263</b>	<b>0.899</b>
	<b>(4.92)***</b>	<b>(3.77)***</b>	<b>(1.55)</b>
Ipoil	-0.547	-0.507	0.454
	(5.11)***	(4.74)***	(2.96)***
Lnincome	0.325	0.304	-0.321
	(10.16)***	(10.61)***	(6.89)***
Growth	0.007	0.004	-0.005
	(1.43)	(0.63)	(1.02)
democ_dummy	0.879	0.999	-0.734
	(7.95)***	(12.07)***	(6.12)***
Ilegalbrit	0.187	0.196	-0.196
	(1.73)*	(2.65)***	(1.56)
Lnpop	-0.488	-0.439	0.268
	(16.55)***	(17.16)***	(5.74)***
civil_war	-1.293	-1.808	1.069
	(11.43)***	(15.13)***	(7.61)***
Civpeaceyrs	0.028	0.024	-0.020
	(9.42)***	(9.33)***	(4.24)***
interstate_war	0.178	-0.242	0.289
	(1.21)	(1.35)	(1.27)
Intpeaceyrs	-0.016	-0.018	0.015
	(5.22)***	(7.39)***	(3.77)***
Year	-0.032		
	(2.96)***		
Constant	74.791	10.200	
	(3.43)***	(20.14)***	
Observations	2792	2792	2797
No. countries	136	136	137

z statistics in parentheses

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

year dummies computed with Newey-West and Ordered-probit estimations (not shown)

Table 6. Ordered-probit estimates of Reynal-Querol's measure of fragmentation and polarization on political terror, 1980–2002

	(1)Oprobit	(2)Oprobit	(3)Oprobit
Dependent variable	PTS	PTS	PTS
<b>RQethfrac</b>	<b>-0.288</b>		
	<b>(1.08)</b>		
<b>RQrelfrac</b>		<b>0.237</b>	
		<b>(0.60)</b>	
<b>Ethpol</b>			<b>0.548</b>
			<b>(1.82)*</b>
Ipoil	0.527	0.513	0.499
	(3.31)***	(3.14)***	(3.04)***
lnincome	-0.366	-0.324	-0.340
	(6.61)***	(5.72)***	(6.70)***
Growth	-0.011	-0.011	-0.011
	(2.02)**	(2.02)**	(1.85)*
democ_dummy	-0.751	-0.717	-0.744
	(5.64)***	(5.31)***	(5.64)***
iplegalbrit	-0.295	-0.315	-0.320
	(2.17)**	(2.31)**	(2.33)**
lnpop	0.247	0.245	0.258
	(4.74)***	(4.70)***	(4.99)***
civil_war	0.976	0.999	0.968
	(6.62)***	(6.83)***	(6.88)***
civpeaceyrs	-0.026	-0.025	-0.024
	(4.90)***	(4.76)***	(4.63)***
interstate_war	0.206	0.212	0.170
	(0.86)	(0.90)	(0.72)
intpeaceyrs	0.013	0.013	0.012
	(2.73)***	(2.80)***	(2.61)***
Observations	2454	2477	2454
No. countries	111	112	111

Robust z statistics in parentheses  
 significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%  
 year dummies computed in all estimations (not shown)

Table 7. Ordered-probit estimates of interactive effects between democracy and ethnicity on political terror, 1980–2002

	(1)Oprobit	(2)Oprobit	(3)Oprobit
Dependent variable	PTS	PTS	PTS
ipsecond	-0.002 (0.00)		
<b>democsecond</b>	<b>2.030</b> <b>(2.03)**</b>		
democ_dummy	-1.096 (5.45)***	-0.794 (3.69)***	-1.289 (4.16)***
ipethfrac		-0.653 (2.54)**	
<b>democethfrac</b>		<b>0.063</b> <b>(0.15)</b>	
Ethpol			0.092 (0.28)
<b>democethpol</b>			<b>0.943</b> <b>(1.76)*</b>
Ipoil	0.399 (2.49)**	0.514 (3.37)***	0.436 (2.56)**
lnincome	-0.314 (6.78)***	-0.383 (7.26)***	-0.330 (6.45)***
Growth	-0.005 (1.09)	-0.006 (1.23)	-0.010 (1.84)*
iplegalbrit	-0.201 (1.58)	-0.111 (0.87)	-0.344 (2.49)**
Lnpop	0.262 (5.83)***	0.251 (5.84)***	0.262 (5.07)***
civil_war	1.103 (7.80)***	1.098 (7.58)***	0.991 (6.67)***
civpeaceyrs	-0.019 (4.06)***	-0.022 (4.85)***	-0.023 (4.39)***
interstate_war	0.312 (1.37)	0.314 (1.31)	0.197 (0.85)
intpeaceyrs	0.015 (3.66)***	0.015 (3.64)***	0.012 (2.54)**
Observations	2797	2797	2454
No. countries	137	137	111

Robust z statistics in parentheses

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%