

Ethno-Nationalist Triads: Assessing the Influence of Kin Groups on Civil Wars*

Lars-Erik Cederman,¹ Luc Girardin,¹ and Kristian Skrede Gleditsch²

¹International Conflict Research

ETH Zurich

8092 Zurich, Switzerland

lcederman@ethz.ch, girardin@icr.gess.ethz.ch

²Department of Government

University of Essex

Colchester CO4 3SQ, UK

ksg@essex.ac.uk

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Abstract

Although the case-based literature suggest that kin groups are prominent in ethno-nationalist conflicts, quantitative studies of civil-war onset have both over-aggregated and under-aggregated the role of ethnicity, by looking at civil war at the country level instead of specific groups and treating individual countries as closed units, ignoring actors' transnational links. In this paper, we integrate transnational links into a dyadic perspective on conflict between marginalized ethnic groups and governments. We argue that transnational links can increase the risk of conflict as transnational kin support can facilitate insurgencies and are difficult for governments to target or deter. Our empirical analysis, using new geocoded data on ethnic groups on a transnational basis, indicates that the risk of conflict is high when large excluded ethnic groups have transnational kin in neighboring countries, and provides strong support for our propositions on the importance of transnational ties in ethno-nationalist conflict.

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Nationalism has the potential of transgressing and transforming state borders. Irredentism represents the most radical form of border-transformation, but border-transgressing effects, such as external support by kin groups short of major military interventions may also make ethno-nationalist civil wars more likely. Given the highly asymmetric nature of such conflicts, which by definition feature non-state groups challenging well-armed governments, it can be expected that the former will seek support from related groups in neighboring countries.

Even a quick look at the ethno-political map reveals that there are plenty of structural opportunities for such trans-border influences. Whereas relatively few cases of outright irredentism have occurred, ethno-nationalist civil wars have often featured external support from kin groups across state borders (Horowitz 1985; Chazan 1991). Examples include Kurdish transnational cooperation against hostile state governments, such as Turkey and Iraq (Kirişci and Winrow 1997). Trans-border nationalism can be blamed for having contributed to ethnic conflict in Croatia, Bosnia, Kosovo and other parts of the former Yugoslavia (Brubaker 1996; Gagnon 2004). Although the Russian “near abroad” that emerged in the post-Cold War period has generally been more peaceful than expected, tensions persist that could be exploited to poison ethnic politics in the post-Soviet republics (King and Melvin 1999/2000).

Despite the existence of a rich case-based literature documenting the impact of kin groups on ethno-nationalist civil wars, we still know little about their general effect on the likelihood of internal conflict. So far, quantitative studies of civil-war onset have tended to ignore such connections. This is the result of two blind spots, one relating to over-aggregation and the other one to under-aggregation. As regards the first problem, influential studies in the political-economy tradition have relied heavily on materialist interpretations of civil wars at the country level while downplaying specific interactions involving ethnic groups. The second blind spot pertains to the inclination of existing research on civil war to treat civil wars as purely domestic phenomena. Researchers have implicitly assumed that since civil wars take place within societies, the key causes of conflict must also be found within the boundaries of formally independent nation states, thus disregarding the role of transnational linkages and processes.

In order to capture the ethnic-kin effect at both the domestic and transnational levels of analysis, we propose a triadic, actor-specific model that analyses ethno-nationalist civil war as a disaggregated, relational phenomenon including links across state borders. Based on new data from geographic information systems, we show that there is a discernable impact of ethnic kin on internal conflict within a sample limited to Eurasia and Northern Africa. Rather than being an unconditional effect, this influence depends directly on the dyadic power balance between the main conflict parties. In brief, external support is more likely to increase the risk of conflict the greater the excluded minority is, suggesting that relatively smaller groups are less likely to rebel and that the assisting transnational kin groups exercise caution by considering power relations before deciding to get involved in conflict across the border. In contrast, there are no clear results indicating that external kin groups' governmental or non-governmental status matters for conflict propensity.

In the following, we first chart the state of the literature before deriving our main hypotheses. Then a section on operational definitions follows that sets the stage for the analysis and our statistical results.

Previous research on the ethnic-kin effect and its impact on conflict

The qualitative literature on ethnicity and nationalism provides rich accounts of transnational processes involving support across state borders. Whereas some studies of ethnic conflict following the Cold War relied on dyadic actor constellations under anarchy (e.g. Posen 1993; Hardin 1995), the border-transgressing nature of ethno-nationalism has been fully appreciated by scholars relying on more profound theories of nationalism.

In a classical article, Myron Weiner (1971) identifies what he labeled a "Macedonian syndrome," which involves an actor constellation featuring an irredentist state, an anti-irredentist neighboring state, and a shared ethnic group that is a minority in the latter state. Based on this triadic setup, Weiner outlines an interactive process triggered by irredentist claims on the part of the minority that leads to growing ethno-

nationalist polarization. Once all actors have aligned themselves along the relevant ethno-nationalist cleavage, extremist entrepreneurs, creating and responding to real or imagined threats, come to dominate politics within each of the three collective actors with political violence as the likely consequence. Viewing his model as a corrective to country-level analysis, Weiner (1971, p. 683) concludes that “too many theories of development assume constancy or irrelevancy as far as the international environment is concerned, and assume also that internal political development or decay occur without regard to external factors.”

Extending this perspective to less drastic situations than outright irredentism, Rogers Brubaker (1996) analyzes how state-led nationalization projects trigger support of national minorities from external national homelands, a process that may or may not involve violence. Applied to the former Yugoslavia, this triadic analysis shows why Croatia’s bid for independence (the nationalizing state) triggered calls for “Greater Serbia” among the Croatian Serbs (the national minority) with the goal of joining Serbia (the national homeland).

Also mindful of the border-transgressing logic of ethno-nationalist conflict, David Horowitz (1985) shows that externally supported irredentist campaigns are relatively rare, despite the frequent presence of structural conditions favoring such phenomena. Border revisionism carries with it considerable risks that invite caution on the part of possible sponsoring groups, especially if they are in charge of their own states. While geopolitical considerations usually trump ethnic loyalties, less drastic types of aid may be offered in cases that involve separatist groups. Even at this moderate level, which falls well short of irredentism, the fear of conflict contagion may dissuade many kin groups from lending a helping hand to secessionist minorities.

Despite the suggestive logic of these transnational mechanisms, the qualitative literature on ethno-nationalist conflict offers little by way of systematic empirical assessments of a general effect on conflict likelihood. Ironically enough, the quantitative literature turns out to be equally uninformative. As we have argued above, this lacuna can be derived from political economists’ tendency both to downplay ethnicity and to their use comparative designs that exclude neighborhood effects and dependence among observations.

The first of these two tendencies can be understood in the context of the predominantly materialist logic that is propounded by political economists. Eager to show that hard, economic explanations dominate over soft, identity-related arguments, some of these scholars argue that civil wars are predominantly driven by individual rebels' opportunity costs in terms of employment, and by warlords' personal enrichment through looting of raw materials such as diamonds and oil (Collier and Hoeffler 2004; for an overview, see Ross 2006). Another influential argument moves the materialist logic up from the individual level up to the level of political institutions, postulating that internal conflict is likely to erupt in weakly governed states that are unable to project their territorial control, especially in rough terrain (Fearon and Laitin 2003). According to these interpretations, it is greed or the logic of insurrection that cause civil wars rather than ethnic or other grievances. In brief, conflict erupts for opportunistic, self-interested reasons rather than for political motives or idealistic, high-minded projects such as nationalism.

Most scholars who contribute to this research tradition operationalize ethnicity by relying on the ethno-linguistic fractionalization index (ELF). Based on the Herfindahl index, this measures the likelihood of two individuals in a country not belonging to the same ethnic group (Taylor and Hudson 1972). Yet, ethno-nationalist civil wars clearly are not the aggregated effects of individual-level processes. It remains unclear, then, how, and whether at all, this measure is related to conflict (Cederman and Girardin 2007). Furthermore, the alleged irrelevance of ethnicity may not be robust even measured in terms of the ELF index. This measure of diversity can be shown to be significantly related to conflict in studies using alternative non-linear specifications (Sambanis 2004) or conflict datasets that include violent conflict at lower level than that the customary threshold of 1000 battle deaths suggested by the Correlates of War project (Hegre and Sambanis 2006).¹

¹ Researchers have also used alternative conceptions of ethnic relations, including polarization (Esteban and Ray 1994; Montalvo and Reynal-Querol 2005), or the share of the second largest ethnic group (Ellingsen 2000; Vanhanen 1999). We focus our discussion of ELF here since this is the most prominent measure and these alternative measures also suffer from similar problems for country level data.

Although it is possible to construct theoretically more satisfactory country-level measures of ethnic exclusion that appear to have an influence on conflict (see Cederman and Girardin 1997), the best way of establish the relevance of ethno-nationalist conflict mechanisms is to disaggregate the analysis down to the group level. This also avoids the aggregation problem in country level studies, which simply ignore all variation between groups within countries, and disregards all instances of groups without conflict with governments in countries where we see conflict for one group. Introducing a disaggregated model that features geo-coded center-periphery dyads, Buhaug, Cederman and Rød (2007) are able to show that the probability of ethno-nationalist civil wars increases with the excluded group's relative demographic size, its distance from the capital, and the roughness of the terrain within its settlement area.

Based on these results, we have good reasons to believe that the invisibility of ethnicity in conventional studies depends on improperly specified, over-aggregated research designs. In contrast, the second gap afflicting the literature pertains to under-aggregated, state-centric analysis that does not even attempt to measure transnational effects, or if this is done, uses very imprecise regional indicators.

Most comparative analyses have treated individual countries as independent observations where conflict may occur or not. However, we have strong theoretical reasons to believe that the risk of civil war can be influenced by international and transnational features ignored by these studies. Many have pointed out that civil wars appear to cluster regionally and that certain regions appear particularly conflict prone in specific time periods. Although such clustering could stem from similarities in the attributes among the countries that make them all more likely to experience civil war, there may also be a more fundamental spatial dependence at play among the observations, where the risk of civil war increases for states that are either exposed to, or have particular ties with, other countries involved in civil conflicts. Ties to another state with an active or latent conflict can facilitate insurgent mobilization through the ability to raise resources, personnel, or military equipment (e.g., Gleditsch 2007; Salehyan and Gleditsch 2006). Likewise, groups may become more likely to engage in violence if they observe insurgencies considered to be successful in other states that

form relevant reference groups and subsequently emulate their strategies (Ayres and Saideman 2000). Furthermore, the spill-over effects or externalities of conflict such as economic recessions and refugees may serve to increase the risk of conflict in other affected areas (Sandler and Murdoch 2004).

Although much of the existing work on the role of international factors in civil war has focused on the diffusion implications of ongoing conflict in another state, there are many consequences for conflict that may apply in the presence of transnational ties, irrespective of whether we actually see conflict in the other state. For example, ethnic kin may support or finance insurgencies in other states in instances where they are not aggrieved in the other state or have no interest in rebelling against their own government (Davis and Moore 1997). Poor relations between states may provide governments with incentives to foster insurgencies in other states to undermine rivals or may encourage rebellion if insurgents expect to receive support from outside parties (Gleditsch 2007; Kuperman and Crawford 2006; Thyne 2007).

There are a number of empirical studies that provide strong support for the importance of transnational factors. When the World Bank commissioned a set of case studies to evaluate the Collier and Hoeffler (2004) model, many of the contributors found that international factors appeared very important in accounting for conflict onset, despite being largely absent in Collier and Hoeffler's original work (Collier and Sambanis 2005a, 2005b, Sambanis 2004). A number of statistical studies have shown that the positive conflict clustering effect does not disappear when controlling for the features researchers have argued to be predictors of civil war, unmeasured heterogeneity, and systematic sample differences on observed characteristics, and hence cannot be dismissed as an artifact of clustering in similar country characteristics (Buhaug and Gleditsch 2007). A number of studies confirmed that interstate relations predict to civil war onset as well as interventions in ongoing civil war (Austvoll 2005; Gleditsch 2007; Salehyan 2006; Thyne 2007). Although there in principle are many transnational ties that could be relevant in civil war, existing empirical studies suggest that transnational ethnic ties are among the most prominent linkages that can be mobilized in civil wars (Austvoll 2005; Saideman 2001).

While this incipient research on transnational linkages in civil war is very encouraging, it still suffers from a number of shortcomings due to its reliance on crude proxies and country-level analysis. Some studies have used very crude proxies of external ethnic ties that lack face validity. Collier and Hoeffler (2004), for example, look at the size of immigrants from a country in the US as a measure of opportunities for support from diasporas. This is a highly problematic measure as it ignores all communities not in the US, and may pick up on refugee populations that are a result of rather than a prior cause of conflict. Furthermore, most of the existing studies on the role of transnational ethnic communities have simply considered whether countries with transnational groups are more likely to see conflict (e.g., Gleditsch 2007), but not actually examined whether the transnational group itself was involved in the rebellion or not. Most studies have been conducted at the country-level, and therefore run into the common problems of over-aggregation and treating conflict and non-conflict cases non-symmetrically. More specifically, a single instance of a transnational group and a conflict in a state will be taken as a support for the theory (say India), even if there may be a very large number of other transnational groups in the same state that do not rebel, which should be counted as evidence against the theory. Overcoming this problem requires us to move down to level of dyads of specific individual groups and their interactions with the government. Cetinyan (2003) provides one of the few fully dyadic studies of transnational groups using the MAR data. Although he does not find any effect of groups having transnational kin on the risk of conflict, this finding may follow partly by construction, for reasons that we will return to later.

Existing studies of transnational ethnic ties in civil war have overlooked the strong mediating role of geography and distance. Although transnational ties in principle could extend over large distances (e.g. Shain and Barth 2003), it seems reasonable to assume that the most relevant transnational ties shaping the risk of civil wars pertain to actors that are geographically close. Insurgents face many tactical advantages for operating out of bases outside a country's territorial boundaries since governments face many costs for pursuing rebels across borders and violating the sovereignty of other states, but these military advantages dissipate over large geographical distances. Geographically close communities are likely to have a denser web of contact and communication than more distant ones. Existing studies of international factors in

civil war suggest that geographical linkages are very important. The risk of civil war increases when neighboring states are at civil war but is not affected by conflict in distant countries (Buhaug and Gleditsch 2007), and Salehyan and Gleditsch (2006) show that although refugees from neighboring countries appear to augur a higher risk of conflict there is no evidence that refugees from faraway areas are associated with civil war. Many of the data sources used in previous research do not allow researchers to distinguish where other segments are located and the distance between kin groups.

In sum, there are very strong reasons to believe that there is an effect of transnational groups on the risk of civil conflict in center periphery dyads, but that this has been obscured by problems related to data deficiencies and improper modeling or research design.

Theorizing ethnic triads

Our literature review has shown that it is hard, or even impossible, to capture the effect of ethnic kin groups based on conventional, country-level analysis. Therefore, the first priority has to be to construct a plausible base-line model of dyadic ethno-nationalist conflict within a specific country where we can examine the triadic effects of linkages to kin groups in other states. We build directly on Buhaug, Cederman and Rød (2007), who offer such a disaggregated dyadic model that focuses on ethnic groups' access to power. Drawing on Wimmer's (2002) theory of ethno-nationalist exclusion, they disaggregate both ethnicity and conflict to the level of explicitly geo-coded center-periphery dyads. Each dyad is composed of an EGIP, i.e. an ethnic group (or groups) in power, and a MEG, i.e. a marginalized ethnic group without access to executive power (Cederman and Girardin 2007). Illustrating these definitions, Figure 1 displays the basic center-periphery (BCP) configuration. The next section provides details on the operationalization of both notions.

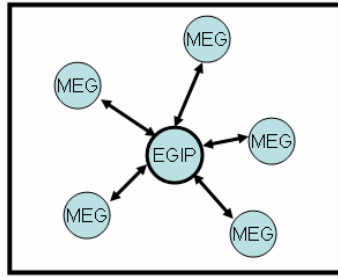


Figure 1. The basic center-periphery (BCP) configuration.

Within each dyadic relationship, Buhaug, Cederman and Rød (2007) postulate that powerful ethnic groups excluded from power are most likely to mobilize around an ethno-nationalist program and to initiate conflict against the government, and conversely, that the government will engage in repression to curb the power of such threatening contenders. Thus, on this formulation, civil wars occur when peripheral contenders to the government are powerful enough to challenge the center and sufficiently motivated to do so (Gurr 2000).

The rebels' opportunities and willingness to challenge the center are related to a large number of factors. As a first cut, Buhaug, Cederman and Rød (2007) highlight the demographic and geographic dimensions. Other things being equal, it can be expected that larger groups will be able to stage successful collective action thanks to their superior numbers:

H1. The probability of conflict increases with the relative demographic size of the excluded group.

Most obviously, this demographic effect depends on an opportunity driven mechanism that can be explained in terms of resource mobilization (McCarthy and Zald 1977; Tilly 1978). However, the rebels' willingness should increase with demographic size as well, because exclusion becomes normatively more problematic the larger a share of the population is excluded whether the political system is democratic or not. Permanent exclusion of large minorities, or even the majority of

the population, represents powerful grievances that can trigger conflict (Horowitz 1985; Wimmer 2002).

Despite their central importance to any ethnographic configuration, raw demographic sizes are likely to be imperfect predictors of the marginalized ethnic groups' power and motivation. In particular, even relatively small groups, such as the Chechens and the Aceh, can stage surprisingly effective, long-lasting rebellions. On average, then, the prospects of peripheral challenges to the central government can be expected to be the most successful in the cases where the latter's reach is least developed, and propose the following two hypotheses:

H2a. The probability of conflict increases with the distance between the excluded group and the capital.

H2b. The probability of conflict increases with the roughness of the terrain within the settlement area of the excluded group.

Again the causal mechanisms vary with both opportunities and willingness. In the former sense, standard logistical arguments show how state capacity declines with increasing distance and geographic obstacles (Boulding 1962). Beyond such straightforward materialist relationships, Buhaug, Cederman and Rød (2007) suggest that rebel groups' motivation also vary with distance and terrain. Rokkan's (1999) multidimensional notion of "peripherality" suggests that ethnic groups that are far removed from the political center and live in inaccessible territories hold, on average, more hostile attitudes towards central rule than those who have been more thoroughly socialized to tolerate central control. In this regard, distance and remoteness can be thought of as indicators of lacking cultural penetration by the central state (Cederman forthcoming).

Having summarized the dyadic base-line model based on the BCP configuration, we are now ready to extend it by introducing a third actor category, namely that of the ethnic kin group, which is the potential deliverer of external support, see Figure 2. This extended center-periphery (ECP) configuration conforms directly to the triadic logic proposed by Weiner (1972) and Brubaker (1996). Depending on the presence of

a kin relationship, assistance can come from either a peripheral group in the neighboring country, or it can come from this country's EGIP, whether it is the only dominant group or part of the governmental coalition. We classify the former transnational link as being of the PP type because it connects two peripheries and the latter one as the PC type, because it links the periphery with the center of another state.

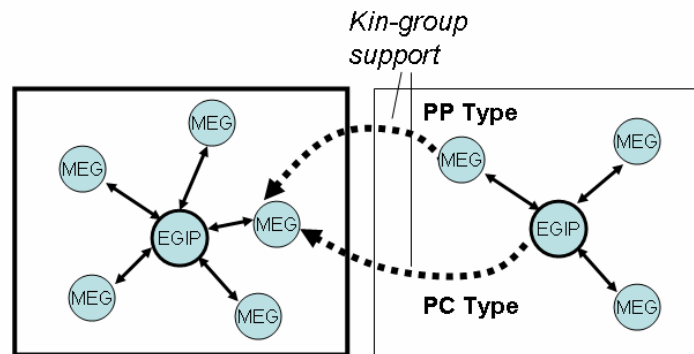


Figure 2. The extended center-periphery (ECP) configuration.

Why should it matter whether for the risk of conflict whether a peripheral group has a link to transnational kin? On the one hand, the ethnic kin group may provide additional resources to a peripheral group, and thus make the relative power balance more favorable to the peripheral group than what would be apparent from the attributes of the group at the domestic level. However, although there may be instances where have a pure aggregation effect where transnational kin simply help contribute to resources that are “scarce” at the domestic level, it will often be the case that transnational kin groups can provide qualitatively different forms of resources and contributions to insurgencies. Since kin groups are based in other states, it will typically be much more difficult for the central government to target supporters of insurgency and deter contributions through severe repression than would be the case for groups fully contained within the territory controlled by the state. Furthermore, insurgencies that have the opportunity to seek shelter among kin in on the other side of international boundaries and operate out from extra-territorial bases will be more difficult for governments to conclusively defeat. In this sense, transnational links can provide insurgencies with many advantages beyond the direct aggregation or resource pooling implications.

Based on the ECP, we propose a series of hypotheses about the transnational relationship's influence on conflict probabilities within the core dyad. The simplest version introduces this influence as a constant effect, where transnational groups generally increase the risk of violence. The justification for such an unconditional argument can be derived from non-instrumentalist interpretations of nationalism. For example, Connor (1994, p. 206) claims that rationalistic and materialist approaches to ethnic nationalism "can be faulted principally for their failure to reflect the emotional depth of national identity." More specifically referring to external intervention in civil wars, Holsti (1996, p. 127) suggests that "reasons of affinity and sentiment rather than ... power or more hard-headed cost-benefit analyses." Such observations find at least partial support in Heraclides' (1990) comparative case studies of secession. Most simply stated, this hypothesis can be stated as follows:

H3. The probability of conflict increases if the excluded group has ethnic kin in a neighboring state

However, there are good reasons to believe that such a hypothesis is too bluntly stated. Indeed, most scholars are inclined to make their analysis of the ethnic kin effect dependent on power-related considerations. For example, in their study of "diaspora politics" in the former Soviet Union, King and Melvin (1999/2000, p. 109) insist that

in the realm of ethnicity and international relations, identity politics is often more about politics than about identity. Disputes over the allocation of scarce resources, competing visions of foreign policy directions, domestic political contests, and other prosaic features of political life frequently trump any putative duty that political elites might feel toward individuals who share their language or culture beyond their own frontiers.

Whether of the PP or PC type, intervention in ethno-nationalist civil wars is a risky business even if the assistance falls below outright irredentist warfare. For one, groups that are weak at the outset will face major risk by trying to challenge governments through violence even if they count on the support of transnational groups. In addition

there may be carry-on effects of unsuccessful insurgencies in other states. Horowitz' (1985) classical study of *Ethnic Groups in Conflict* still offers the most subtle analysis of these considerations. Focusing on separatist ethnic conflict, this work highlights a number of reasons why transnational bonds often remain inactive despite considerable minority mobilization and possibly even violent ethno-nationalist conflict:

Trans-border ethnic affinities more often promote restraint in supporting separatists or intervention in behalf of a central government fighting to suppress separatism. Fear or contagion and domino effects is widespread. Among separatists, this creates a fear that the failure of a movement in one state will hurt movements in others – hence the ties among them. Among states, fear of the success of separatism works in the opposite direction (Horowitz 1985, pp. 274-275).

How can this caution be empirically assessed? The most obvious way to do so is to measure the power of the MEG that is to receive support in order to discriminate between plausible and less plausible challengers at the outset. Before deciding to offer assistance to ethnic kin, the external actor has to evaluate the success chances in the first place. Accordingly, Horowitz (1985, p. 272) points out that “there is a certain circularity involved in securing foreign support in the first place. No foreign state will risk committing itself to a movement that appears weak.”

In addition to the implications of demographic balance for the prospects for success, it will also generally be the case that larger excluded group would have a greater sense of having legitimate political grievances. This may increase the identification of transnational kin groups with their cause, and make it easier to mobilize political support. Furthermore, it may be easier for governments in other state to allow active support for insurgencies perceived as legitimate, or resist calls to crack down on the political space for supporters of the insurgency or opportunities to mobilize that take place on their territory.

In operational terms, the most straightforward test of this power-sensitive mechanism combines hypotheses H1 and H3 in an interactive specification in the following way:

H4. The ethnic-kin effect on conflict increases in proportion to the excluded group's relative demographic weight in the primary dyad

Our expectation is that this hypothesis, rather than H3, will be empirically confirmed.² Finally, we need to consider the nature of the external group. It could at least in principle matter a great deal whether it is another peripheral group in a PP link or a central actor in a PC relationship. Other things being equal, there can be no doubt that actors in control of state resources, such as EGIPs, are more powerful than those that do not. We know from existing research that interstate disputes between states are particularly likely when an excluded group is politically privileged in other states (Davis and Moore 1997; Gleditsch, Salehyan, and Schultz 1997).

Direct intervention against another state is a strong act of aggression, and poses large risks for governments. This will in turn make less direct forms of support for insurgents more attractive, but the effects on civil war are still ambiguous. It is not obvious whether the willingness of EGIPs to support insurgencies is higher than excluded kin groups: "Even where ethnic affinities relate, not to peripheral minorities in the external state, but to centrally influential groups, support is by no means automatic" (Horowitz 1985, p. 275). There are many reasons why state governments may be more cautious than actors from non-state groups. Most obviously, territorial revisionism can come back to haunt its state-based promoter. Multiethnic states that have problems controlling its own minorities generally have to think twice before supporting rebellions in neighboring states. More generally, international norms governing interstate relations are biased in favor of stability and non-intervention. Their impact has been most clearly observed in the case of Sub-Saharan Africa (Herbst 1989), but is likely to apply to other parts of the world as well (Zacher 2001). Caution also derives from the fear that transnational assistance also may lead to unwanted turmoil spreading across state borders into the territory of the intervening state. Furthermore, when potential external government support for excluded groups

² A pure aggregation effect would suggest the risk of conflict should hinge on this size of the transnational kin group. However, the fact that transnational kin can provide qualitatively different forms of resources suggests that the risk of conflict should increase even when transnational kin are not necessarily particularly large.

is known in advance, governments in countries experiencing conflict will face greater incentives to provide some form of accommodation to excluded group, which in turn would make these groups less likely to resort to violence. On balance, while the arguments for a cautioning, countervailing effect on accommodation are strong, we state our hypothesis in favor a stronger conflict-inducing impact in the PC cases compared to their PP counterparts.

H5. The risk of conflict increases if the kin group is governmental (EGIP) rather than another peripheral group (MEG)

Nevertheless, in the presence of the countervailing, power-enhancing influence of state power, it is hard to be certain of the net effect. To determine it more precisely, it would be necessary to consider further factors influencing supporting state's calculations that unfortunately fall outside the scope of this study. A prominent example relates to the exact geographic location of the groups in question. Horowitz (1985, p. 276) observes that "external aid seems longest-lived when it comes, not from strong, established states with clear-cut interests, but from irregular forces across porous, remove borders." Moreover, risk-taking behavior can also be expected to vary with the nature of the interstate relations in question. While geopolitical rivalry could introduce temptations to weaken the other side through the transnational support of insurgencies (Saideman 2002), stable democratic relations should make such interventions less likely.

Operationalizing ethnic triads

In this section, we describe the operational definitions of our variables. Because our analysis builds directly on the operationalization of the dyadic base-line model proposed by Buhaug, Cederman and Rød (2007), it is necessary to provide a short summary of the data used in that study before turning to the data on transnational ethnic affiliations. This dyadic setup traces conflict between ethnically defined state authorities, i.e. the "ethnic group(s) in power," and their challengers. In this connection, the spatial dimension is crucial, because it helps us not only to identify and locate the ethnic groups, but also to estimate their demographic sizes. All in all,

the extended triadic model relies on information along six dimensions, of which the first five were covered by Buhaug, Cederman and Rød (2007):

- (1) the identity and location of ethnic groups,
- (2) demographic group sizes,
- (3) ethnic group(s) in power,
- (4) geo-coded data on distances and terrain, and
- (5) ethnic dyadic conflicts.
- (6) trans-border ethnic affiliations

In the following, we describe briefly the data-collection efforts before turning to the result analysis in the next section.

(1) Geocoding ethnic groups

In their choice of basic dataset on ethnic groups, Buhaug, Cederman and Rød (2007) rely on the well-known *Atlas Narodov Mira (ANM)* (Bruk and Apenchenko 1964). The *ANM* stems from a major project of charting ethnic groups undertaken by Soviet ethnographers in the early 1960s. Their efforts bore fruit in the extensive but still untranslated atlas, covering the entire world. The *ANM* has several strengths: it is complete and carefully researched, it relies on a consistent classification of ethnicity, it offers a uniform group list that is valid across state borders, and it provides high-quality maps. Among its weaknesses, it should be stressed that the *ANM* contains too many politically irrelevant groups and is based on data available in the 1960s and is thus clearly outdated in some cases. In order to make the data of the *ANM* available for statistical analysis, all of the *Atlas*' maps had to be converted to a digital format through scanning. Then, the digitized maps were geo-referenced as polygons, meaning that they were aligned with underlying GIS country shapes for the period (1964). The resulting dataset, labeled GREG (Geo-Referencing of Ethnic Groups), contains spatial information on the location of more than 1,600 ethnic groups identified in the *ANM* (Cederman, Rød and Weidmann 2007).

(2) Estimating group sizes as share of state populations

Having determined the geographic location of all ethnic groups, the next task is to construct a suitable measure of the power balance in the center-periphery dyads. Because a number of states did not exist at the time of the atlas' publication, such as the post-Soviet republics of Russia, Buhaug, Cederman and Rød (2007) propose a

spatial estimation method based on an intersection of territorial country masks, the group polygons, and population density maps. Using the boundaries in a country layer (shapefile) representing the Post- Cold War period as “cookie cutters,” the method selects the group polygons (or parts thereof) that fell within the borders of each state. The ethnic group layers were then intersected with a gridded population density layer, making it possible to measure the size of the population that fell within a given ethnic group’s “state-cropped” polygon(s). For details on this procedure, see Buhaug, Cederman and Rød (2007).

(3) Identifying the ethnic group(s) in power

The notion of “ethnic group(s) in power” (EGIP) that we introduced above provides the crucial piece of information that makes the definition of ethnic dyads possible. In our empirical analysis, we follow Cederman and Girardin (2007) in considering a group, or a coalition of groups, to be in power if their leaders serve (at least intermittently) in senior governmental positions, especially within the cabinet. Thus we focus on ethnic groups’ influence over the executive at the national level rather than on their legislative or local power. In addition to the ethnic background of senior cabinet members, specific institutional arrangements, such as different types of power-sharing and consociationalism, may also be indicators of power inclusion. By power sharing, we mean any arrangement that divides the access to power among the groups making up the governing coalition. Accordingly, EGIPs can consist of more than one group. For example, we code all the four language groups of Switzerland as constituting the EGIP, see Buhaug, Cederman and Rød (2007) for a full list of EGIPs. Wherever deemed appropriate, period-dependent EGIPs were introduced as a way to capture major shifts in the political constellation of power access (see e.g. Afghanistan and Yugoslavia). By definition, any group not coded as an EGIP is a marginalized ethnic group (MEG). We can now form center-periphery dyads as pairwise constellations of a country’s EGIP and each of its MEGs. Given the enormous difficulty of identifying EGIPs in Sub- Saharan Africa, we limit the empirical sample to Eurasia and North Africa, thus covering roughly half of the world’s states.

(4) Geocoding distances and terrain

Hypotheses 2a and 2b call for geographic data on the distances between each MEG and the corresponding capital, as well as the extent of mountainous terrain in their home regions. The location of the ethnic groups can be readily determined by means of geocoded polygons. Groups belonging to the EGIP are by default coded with the capital city as their location. For MEGs represented by two or more polygons, Buhaug, Cederman and Rød (2007) generated a weighted distance measure that gives the average centroid-capital distance for all locations of the group, weighted by the population size in each polygon. The population weighting is necessary to prevent a distortion of distances due to small clusters far away from the group's core settlement area. To reduce outlier influence and to account for an expected declining effect of distance with higher values, we take the natural logarithm of the distance variable. The second proxy for geographic opportunity and willingness, extent of mountainous terrain, was computed in a manner similar to that of group populations. Intersecting gridded mountain data with the boundaries of the ethnic groups yielded the share of the two-dimensional area of each polygon covered by mountains. The area-weighted mountain variable takes on values between zero and one.

(5) Determining the onset of dyadic ethnic conflict.

The final step of data generation for the dyadic base-line model concerns the dependent variable, namely the outbreak of dyadic ethnic conflict. The main source was the UCDP/PRIO Armed Conflicts Dataset, henceforth ACD (Gleditsch et al. 2002), which is arguably the most established country-level dataset on armed conflict thanks to its comparably low minimum casualty threshold of just 25 annual battle-related deaths and its separate coding of multiple simultaneous conflicts within single countries. Using an operational definition of ethnic conflict that focuses on all conflicts in which the parties are organized primarily along ethnic lines, Buhaug, Cederman and Rød (2007) identified the MEG(s) that were involved in each ethnic conflict. In cases where more than one group challenged the capital at the same time, an onset of conflict was recorded in each of the corresponding dyads. Ongoing years of conflict were coded as missing. In case of a lull in the fighting or a peace agreement that lasts for at least two consecutive calendar years, the next observation of conflict in the dyad was coded as a new onset.

(6) Trans-border ethnic affiliations

Finally, we need to consider the data on external ethnic affiliations in some details, because this dimension was not covered by the previous study. There are many existing data source on ethnic affiliation, including Gurr's (1993) Minority at Risk data and Fearon's (2003) more recent list of ethnic groups. Although these data sources may be useful and appropriate for many analyses or comparisons of individual ethnic groups, the most commonly used data sources on ethnic affiliation tend to have many limitations when it comes to identifying the transnational presence of ethnic groups. These data sources typically do not have standardized group codes that are comparable across countries, and in many cases we will find similar labels used for groups that may lack any common identity across national boundaries. For example, Fearon's data identify "Black" as a separate ethnic group in Brazil, Canada, Nicaragua, and Uruguay, and – for unknown reasons – the label "Blacks" appears in Ecuador. In this case, it would clearly be problematic to treat English, Portuguese, and Spanish speaking blacks as one ethnic group with a transnational presence. Likewise, the Minority at Risk data identify "Foreigners" as a minority at risk in Switzerland, but it would highly problematic to treat "foreigners" as a cohesive group and assume linkages to communities in other states without further information about the specific composition of the group.

Although we believe that the ANM data offer certain advantages over the alternatives, the list of ethnic groups in the ANM data contain some of the problems noted above with regards to cross national comparisons. We have therefore made some changes to the data to better facilitate meaningful cross-national comparisons. In particular, all the ethnic groups in Switzerland (i.e., French Swiss, German Swiss, and Italian Swiss) are listed as separate ethnic groups in the ANM, distinct from their kin in their respective nation states, while Germans in Belgium and Italians in Yugoslavia are considered "the same" as their kin in their respective nation states. For consistency, we recode all the Swiss ethnic groups to the same group identifier as the ethnic groups in their respective nation states and other neighboring countries.³ Likewise, Austrians are considered a distinct ethnic group from Germans in the ANM, and we recode all

³ This is not to say that the Swiss nationalities do not attribute their primary loyalty to the Swiss state. In future versions, a more systematic benchmark for common identity will have to be applied.

instances of this in Austria and elsewhere to Germans. Furthermore, Jews in Israel are considered a distinct ethnic group from Jews in other states, for example Russia or the USSR. We recode all Jews as the same ethnic group.

The most fundamental change that we make to the ANM data pertains to the role of Arabs. The ANM data codes Arabs from different states in the Middle East and North Africa as separate ethnic groups. Although we recognize the wide variation in language in spoken Arabic and that the issue of a common Arab identity is controversial among, it seems problematic to assume that Palestinians in Israel and Arabs in Iran have no ties to neighboring communities. Moreover, many other encompassing categories are included as single groups in the ANM data, including Chinese, despite the large differences and lack of mutual intelligibility between dialects such as Mandarin and Cantonese within the greater Chinese macro-language. We therefore include all Arab groups as a single ethnic group to ensure meaningful transnational linkages.

Empirical Estimates and Results

To test our hypotheses on the onset of ethnic conflict, we consider a series of regression models. Our basic unit of analysis is a basic center-periphery (BCP) dyad composed of an excluded peripheral group (MEG) paired against the center or government of a state (EGIP). We limit ourselves to ethnic groups of more than 50,000 individuals in a state. Our dependent variable is the onset of an ethnic conflict in a peripheral group, as defined in the previous section. We consider two different samples in our analysis. Our first is a static dataset, where we have one observation per dyad and look at whether the dyad experiences conflict at any point during the period 1945-2005, or earlier, if the country where the dyad ceases to exist as an independent state, based on the characteristics prevailing at the beginning of the period. Our static data contain 541 center periphery dyads in 60 countries in Europe and Asia.

Our first model -- Model 1 in Table 1 -- is essentially a replication of the empirical operationalization of the BCP model proposed by Buhaug, Cederman and Rød (2007).

The right hand side variable considers the demographic balance of the peripheral group to the EGIP, as well the distance of the group from the capital, the extent to which the group populates mountainous terrain, and the per capita income of the country at large. More specifically, the measure of the dyadic power balance between the EGIP and the marginalized group is operationalized using the share of the periphery's population s_p relative to the population of the EGIP s_c , or more precisely $\ln\left[s_p / (s_p + s_c)\right]$. Relatively larger excluded groups have higher rates. The measure is logged due to the skewed nature of the ratio, as most peripheral groups are considerably smaller than the center. Furthermore, using the logged rate implies that the effect of further increases in group size decline the larger the size of the group. As specified above, the distance from the capital is measured using the logged distance from the geographical centroid of the polygon for each ethnic group to a country's capital. The mountain share measure indicates the proportion of the polygon for an ethnic group that is composed of "mountainous terrain". Finally, we consider the national level per capita income, given the attention that this has received in the cross-country comparative literature. We refer to Buhaug, Cederman and Rød (2007) for further details and discussion of data sources and definitions for these control variables.

The results for Model 1 shown in Table 1 are very similar to those reported by Buhaug, Cederman and Rød (2007), thus confirming hypotheses H1, H2a and H2b. Dyads with larger peripheral ethnic groups are much more likely to see the onset of an ethnic conflict. Furthermore, violent conflict is significantly more likely for dyads with excluded ethnic groups that are far from the centre or the capital of the state. Groups that populate a greater share of mountainous terrain are also more likely to be involved in civil conflict, although the positive coefficient here is only marginally statistically significant. At the dyadic level, once we have taken into account the demographic balance and the geographical position of the group, national level GDP per capita income no longer has a negative statistically significant impact on the likelihood of conflict.

Table 1: Logit estimates of the probability of ethnic conflict onset, static sample

Variable	Model 1	Model 2	Model 3	Model 4
<i>Group-level variables</i>				
Ln demographic balance r	0.471 (0.105)***	0.490 (0.108)***	0.253 (0.127)**	0.259 (0.128)**
Ln distance from capital	0.506 (0.174)***	0.486 (0.176)***	0.479 (0.178)***	0.499 (0.185)***
Mountain share	0.810 (0.459)*	0.782 (0.461)	0.828 (0.464)*	0.846 (0.466)*
<i>Transnational variables</i>				
Contiguous transnational group		-0.298 (0.317)	2.344 (0.873)***	2.257 (0.899)**
Ln dem. balance X contiguous group			0.661 (0.212)***	0.657 (0.212)***
Transnational group EGIP				0.216 (0.529)
<i>Country-level variables</i>				
Ln GDP per capita (lagged)	-0.122 (0.179)	-0.106 (0.181)	-0.155 (0.181)	-0.173 (0.187)
Intercept	-2.816 (1.684)*	-2.581 (1.706)	-3.409 (1.749)*	-3.394 (1.754)*
N	541	541	541	541
LR Chi²	24.33	25.23	36.43	36.59

Note: Entries are logit coefficient estimates, with standard errors in parentheses.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

As a test of Hypothesis H3, Model 2 introduces a dichotomous measure of whether the excluded ethnic group has a transnational kin in another state. For reasons explained above, we limit ourselves to groups that are located in states that are within 500 km of one another, using the Gleditsch, Jones, and Ward (2007) minimum distance data. We also disregard small transnational groups, encompassing fewer than 50,000 individuals. As can be seen, the coefficient estimate for the simply dichotomous indicator of transnational presence is actually negative, although not statistically significant. Hence, as we expected, our results do not provide any support for H3, i.e. the idea that transnational excluded groups are generally more likely to rebel, even after taking into account other dyadic characteristics that make groups more likely to become involved in violence against the center of a state or the

government. Comparing the likelihood ratio (LR) χ^2 for the two models indicates that adding the dichotomous measure for whether groups have a transnational presence does not yield a statistically significant increase in the overall fit of the model.

As specified by Hypothesis H4, Model 3 also includes an interactive term between the dyadic demographic balance and whether a group has a transnational presence. This specification reflects our argument that the transnational linkages can increase the risk of conflict, but only conditional on dyadic characteristics likely to be associated with conflict. As can be seen, we find a large significant positive coefficient for the interactive term. Substantively, the results for Model 3 imply that although larger groups are more likely to become engaged in violence with the centre, the effect of increases in the demographic power balance is much greater for groups that have a transnational presence. Comparing the LR χ^2 for Models 1 and 3 indicates that the addition of the terms for contiguous transnational groups and the interaction between transnational group and the demographic power balance makes a significant contribution and improves notably on the baseline Model 1. This provides strong support for our argument that transnational links can dramatically increase the risk of civil war, but only in dyads where the transnational link combine with domestic characteristics that make violence more likely.

The net impact of a variable that enters a regression model with an interactive term will depend on the value of the other variable in the interactive term as well as the scaling of the two individual variables or raw components of the interactive term (Braumoeller 2004). Figure 3 presents graphically the net effects of differences in the demographic ratio on the predicted probability of conflict in a center periphery dyad implied by the baseline Model 1 and Model 3 with the interactive term, for groups with and without a transnational presence. All other covariates in the model are held at their median values. The thin dashed line indicates the predictions from the baseline Model 1, where we disregard whether groups have a transnational presence or not. The longer dashed line indicates the predicted probabilities from Model 3 for a group without a transnational presence in any neighboring country, while the solid line indicates how the predicted probabilities from Model 3 change with the

demographic balance for a group with kin in a neighboring state. As can be seen, the increase in the risk of civil war in larger group size is indeed much more pronounced for groups that have transnational kin in Model 3. Moreover, Model 3 yields notably higher predicted probabilities for relatively larger groups with a transnational presence than the purely domestically oriented Model 1. Consider for example the case of the Kurds in Turkey, where the center-periphery dyad has a demographic balance ratio of about 0.136. Based on the other values of for this dyad, the estimates for Model 1 imply a predicted probability of conflict of about 0.32. By contrast, Model 3 implies a higher predicted probability of conflict – i.e., 0.43 – given the presence of Kurds in neighboring Iran, Iraq, and Syria.

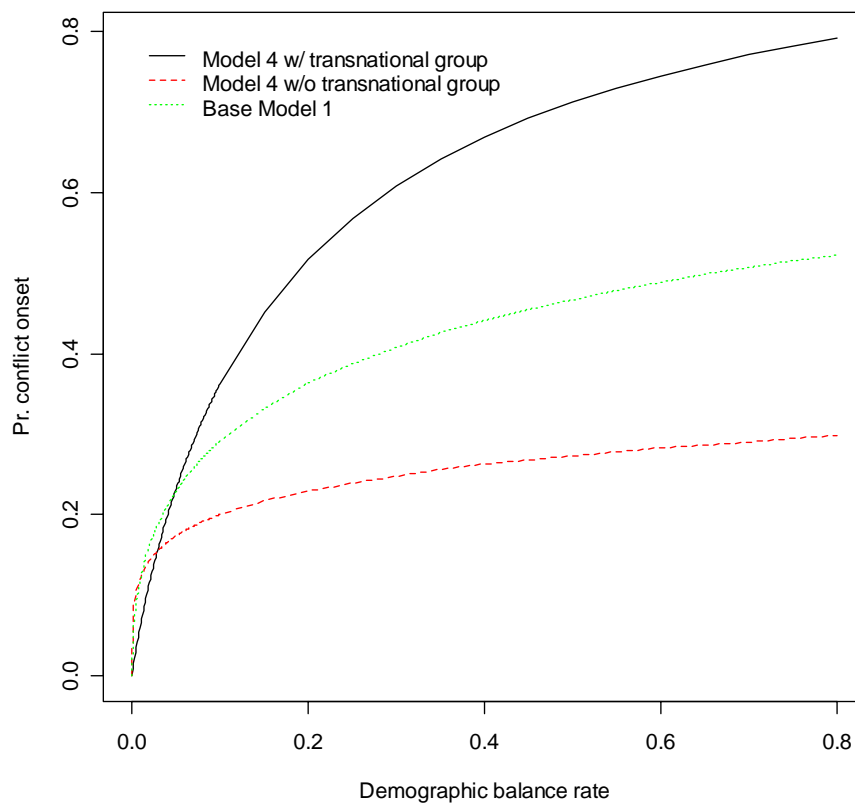


Figure 3: Predicted probability of conflict by demographic balance rate for a median dyad profile, static sample

As foreseen by Hypothesis H5, Model 4 adds a term indicating whether the peripheral group in a dyad is an EGIP or ethnic group in power at least one of the contiguous

states in which it is present. Although the results indicate a positive coefficient, this does not reach statistical significance and is not distinguishable from 0. This is consistent with our discussion above, where we argued that ties to transnational groups in power in other state has an ambiguous additional net effect on the prospects for violence due to the role of caution and incentives for concessions from governments short of what would make a group included as an EGIP.

So far we have seen that the terms for transnational characteristics in Model 3 into the purely domestic dyadic baseline Model 1 clearly are statistically significant, and that the introduction of the transnational features in Model 3 can generate quite different predictions. However, is there any evidence that the predictions of Model 3 are generally more accurate than those from Model 1, in the sense of assigning higher predicted probabilities to cases where we see conflict and lower probabilities to those where we do not?

Neither Model 3 with the interaction between demographic balance and transnational kin nor the baseline Model 1 return predicted probabilities above 0.5 – i.e., instances where conflict is predicted to be more likely than not – for any dyad where we actually observe conflict. However, since conflict is a rare event that only occurs in about 10% of the 541 dyads in our sample, it may be more appropriate to consider whether the model does a good job of identifying a higher likelihood of conflict and helps in discriminating between those dyads where actually see conflict and those where we do not. If an event is very rare, we can typically maximize the share of correct predictions by simply assuming that the event will never occur. In practice, however, we would typically prefer to know if certain features are associated with the rare events and can help identify where these are more likely. The State Failure Task Conflict Task Force, for example, considered a prediction threshold of 0.25 in their efforts to forecast of failing states. For a prediction threshold of 0.3, Model 3 correctly identifies 6 out of the 55 dyadic conflicts, while Model 1 only correctly identifies 2 conflicts.⁴

⁴ More specifically, Model 3 correctly predict conflict in the center periphery dyads involving Arabs, Azerbaijanis, and Kurds in Iran, Kurds in Turkey, Baloch in Pakistan, and Shan in Myanmar. All of these groups have transnational kin.

From a decision theoretic viewpoint, the appropriate prediction threshold C depends on the relative costs of a false negative, or a case where miss a true event, and the costs of a false positive, or an incorrect prediction of the event in an instance where it does not happen. A low threshold will minimize the missed events, but risks generating an unacceptable number of false positives. Rather than choosing a single prediction threshold, we could evaluate whether there are systematic differences between models across a range of plausible thresholds. King and Zheng (2001) suggest using Receiver-Operating-Characteristic (ROC) plots to compare the performance of two competing models over a range of prediction threshold C s. An ROC plot plots a continuous curve comparing the share of true and false positives from a model for a given prediction threshold. The performance of a model relative to a random guess based on the share of events in the sample can be assessed by comparing the height of the curve to a 45 degree line. Figure 4 shows ROC plots for Model 1 (dashed line) and Model 3 (solid line). With a few isolated exceptions, the curve for Model 3 is generally higher than that of Model 1, and the difference is quite substantial in most of the relevant areas of the curve, suggesting that transnational characteristics provide important information in identifying the center periphery dyads where conflict is more common.

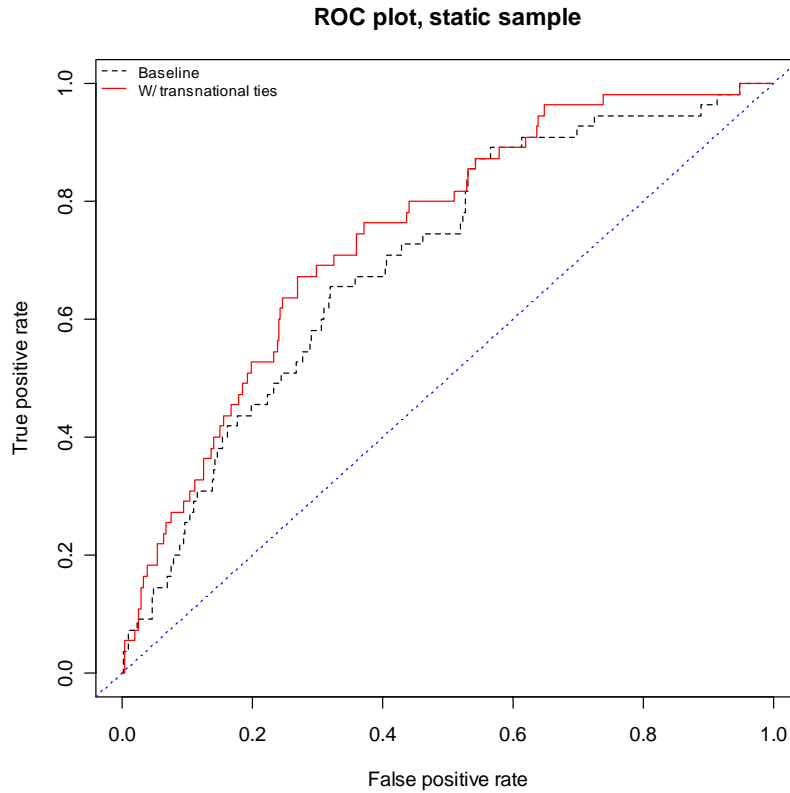


Figure 4: Predictive success based on the static sample

So far we have only considered a static analysis where each of center periphery dyad is observed once and we consider whether conflict occurs at any point. However, conflicts may be more or less frequent, and many of the features in our model can change over time. In particular, groups may become included or excluded, and demographic balances may be changed by border changes and changes in the state system. Table 2 replicates Models 1-4 for a sample of annual dyadic observations, where we consider how the covariates in the model predict to the onset of conflict in a given year. Since the risk of conflict is likely to be highly dependent on whether a dyad has experienced conflict previously, we include a count of the length of time that a dyad has remained peace, using a cubic smoothing spline to allow for possible time dependence as suggested by Beck, Katz, and Tucker (1998). We also include a linear time trend. As can be seen from Table 2, the conclusions from the analysis based on the static sample are generally upheld in the dynamic analysis, with the exception that the negative coefficient for the log of per capita GDP now becomes significantly negative in some of the models.

More specifically, Model 6 with the dichotomous term for whether groups have a transnational presence still indicates that conflict is not generally more likely for such groups, again disconfirming Hypothesis H3. However, the interactive specification in Model 7 still suggests a strong interactive effect between demographic balance and transnational presence, thus lending support to Hypothesis H4. Finally, with respect to Hypothesis 5, the coefficient estimate for whether the group is EGIP in any of the neighboring state now actually returns a negative coefficient estimate, although this is not statistically significant.

Figure 6 displays the implied predictions for the dyadic model, for a median dyad profile. Conflict is a very rare event in our sample of annual observations (less than 0.5% of the observations), and given the strong time dependence, the predicted probability of conflict will be low in a dyad with the median value of successive years of peace in our sample, which is 24 years. However, although the absolute predicted probabilities of conflict obviously are much lower, the relative differences between the predictions for different dyad profiles given domestic and transnational specifications are similar to what we found in the static analysis.

We have also conducted a number of robustness checks. First, we have examined a version of Model 3 using the size of the transnational group rather than the binary indicator to examine whether the risk of conflict increases in the absolute size of the transnational group. We find no evidence, however, for the specification where that the effect depends on the size of the group. Second, we have experimented with alternative size thresholds to see if our results should depend on the specific criterion. Doubling the cut-off threshold to 100,000, however, does not lead to results that differ notably for those found with a 50,000 threshold. Third, we have re-estimated the model using all transnational groups rather than just groups in countries within 500 km of the outer boundaries of countries. In our Eurasian sample, only a relatively low share – about 5.5% – of the observations with transnational groups do not have any kin in a neighboring state. As such, the results do not look remarkably different when we include all groups, although we strongly believe that the geographical dimensions is very important.

Table 2: Logit estimates of the probability of ethnic conflict onset, dyadic sample

Variable	Model 5	Model 6	Model 7	Model 8
<i>Group-level variables</i>				
Ln demographic balance r	0.401 (0.076)***	0.429 (0.079)***	0.254 (0.094)***	0.250 (0.094)***
Ln distance from capital	0.603 (0.129)***	0.565 (0.131)***	0.558 (0.134)***	0.546 (0.137)***
Mountain share	1.136 (0.341)***	1.126 (0.343)***	1.017 (0.341)***	0.998 (0.344)
<i>Transnational variables</i>				
Contiguous transnational group		-0.398 (0.242)	1.504 (0.602)***	1.570 (0.625)***
Ln dem. balance X contiguous group			0.514 (0.155)***	0.522 (0.157)***
Transnational group EGIP				-0.150 (0.385)
<i>Country-level and control variables</i>				
Ln GDP per capita (lagged)	-0.292 (0.148)**	-0.285 (0.151)*	-0.315 (0.156)**	-0.311 (0.156)**
Year	0.065 (0.009)***	0.067 (0.009)***	0.065 (0.010)***	0.065 (0.010)***
Peaceyears	-0.272 (0.053)***	-0.262 (0.053)***	-0.259 (0.053)***	-0.257 (0.054)***
Spline1	-0.001 (<0.001)***	-0.001 (<0.001)***	-0.001 (<0.001)***	-0.001 (<0.001)***
Spline2	<0.001 (<0.001)***	0.001 (<0.001)**	0.001 (<0.001)**	0.001 (<0.001)**
Spline3	>-0.001 (<0.001)	>-0.001 (<0.001)	<0.001 (<0.001)	<0.001 (<0.001)
Intercept	-133.000 (18.040)***	-135.800 (18.250)***	-132.300 (18.470)***	-133.200 (18.560)***
N	22,925	22,925	22,925	22,925
LR Chi²	212.7	215.5	227.9	228.1

Note: Entries are logit coefficient estimates, with standard errors in parentheses.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

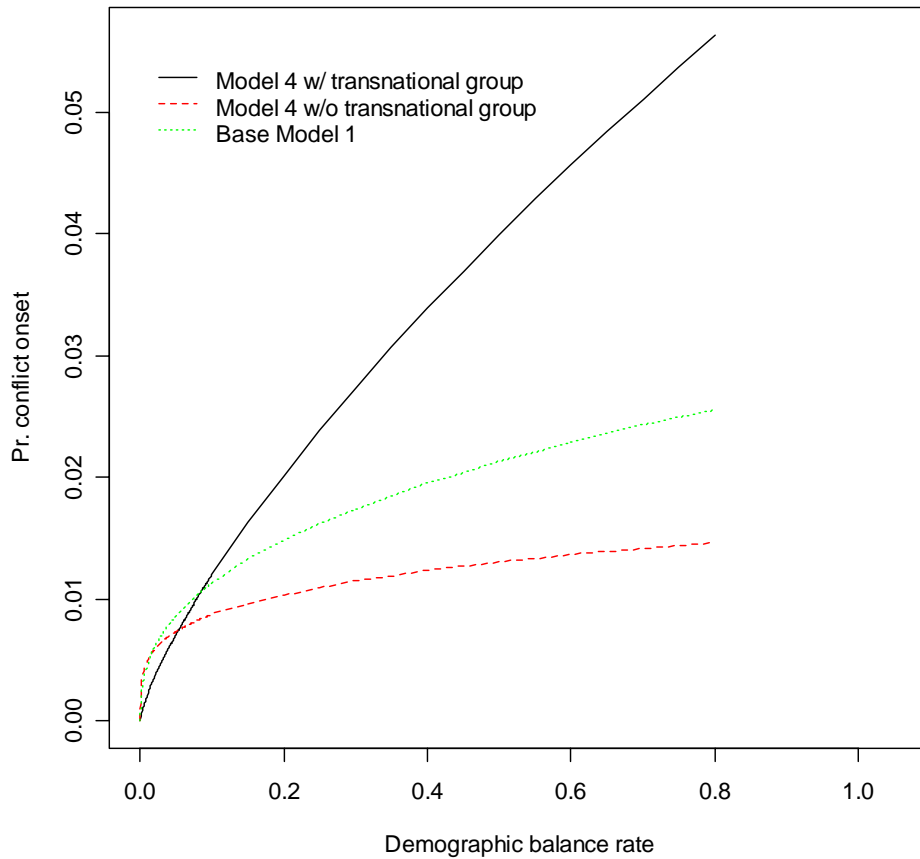


Figure 6. Predicted probability of conflict by demographic balance rate for a median dyad profile, dynamic sample

Conclusion

In this paper, we have been able to show that transnational ethnic affiliations have a considerable impact on the likelihood of ethno-national civil wars. Furthermore, our findings indicate that rather than being automatic and given by the presence of matching ethnic identities, this effect depends directly on the power balance in the primary conflict dyad.

We believe that the current research represents considerable progress compared to prevailing quantitative literature, whose state-centric research designs have generally failed to capture triadic ethno-nationalist configurations. By tracing conflict at the

dyadic level, our study disaggregates the analysis to the group-level, while at the same time extending the focus across state borders. In doing so, the present approach enables more precise testing of actor-specific mechanisms in triadic ethnic configurations that have so far only been explicitly treated by qualitative research on ethno-nationalism.

While promising, these results do not imply that the last word has been said about the influence of ethnic kin on conflict. Future research will tell us if our conclusions are robust beyond the current sample, which is limited to Eurasia and North Africa. Furthermore, thanks to an ongoing research project called Expert Survey on Ethnic Groups (ESEG), we will be able to limit the group lists to politically relevant ethnic groups and assess their access to power over time in a more precise manner than was possible in this study (see Cederman, Girardin and Wimmer 2006). The geographic dimension could also be explored more fully. We would expect transnational support to be dependent on geographic factors, very much as seems to be the case in domestic dyads. Such possibilities include the effect of borders, distances between relevant groups, and terrain. More generally, more research is needed on the details of the transnational bond, especially as regards the nature of the actor-specific mechanism. Disaggregated research designs, such as those employed by Cunningham, Gleditsch and Salehyan (2006), will be able to tell us if conflict is driven by refugee camps, arms smuggling, demonstration effects, irredentist foreign policies or other types of external interventions.

For the time being, however, we conclude that ethnicity matters in civil wars and that its influence is felt beyond state borders. Attempts to overlook such mechanisms are likely to block scientific progress and may lead to dangerously distorted policy advice.

References

- Austvoll, Martin. 2005. Transnational Ethnic Affinities and Interventions in Internal Conflicts. MA Thesis in Political Science, University of Oslo.
- Ayres, R. William, and Stephen M. Saideman. 2000. Is Separatism as Contagious as the Common Cold or as Cancer? Testing the International and Domestic Determinants of Secessionism. *Nationalism and Ethnic Politics* 6 (3):92-114.
- Beck, Nathaniel, Jonathan N. Katz, and Richard M. Tucker. 1998. Taking Time Seriously: Time-Series Cross-Section Analysis With a Binary Dependent Variable. *American Journal of Political Science* 42 (4):1260-1288.
- Boulding, Kenneth. 1962. *Conflict and Defense*. New York: Harper & Row.
- Braumoeller, Bear F. 2004. Hypothesis Testing and Multiplicative Interaction Terms. *International Organization* 58:807-820.
- Brubaker, Rogers. 1996. *Nationalism Reframed: Nationhood and the National Question in the New Europe*. Cambridge: Cambridge University Press.
- Bruk, Salomon I. and V. S. Apenchenko, eds. 1964. *Atlas Narodov Mira*. Moscow: Academy of Science USSR.
- Buhaug, Halvard, Lars-Erik Cederman and Jan Ketil Rød. 2007. Disaggregating Ethno-Nationalist Civil Wars: A Dyadic Test of Exclusion Theory. Unpublished paper, PRIO, ETH Zurich, NTNU Trondheim.
- Buhaug, Halvard, and Kristian Skrede Gleditsch. 2007. The Origin of Conflict Clusters: Contagion or Bad Neighborhoods? Typescript, Centre for the Study of Civil War, PRIO.
- Cederman, Lars-Erik. Forthcoming. Articulating the Geo-Cultural Logic of Nationalist Insurgency. In *Order, Conflict, and Violence*, eds. Stathis Kalyvas and Ian Shapiro. Cambridge: Cambridge University Press.
- Cederman, Lars-Erik, and Luc Girardin. 2007. Beyond Fractionalization: Mapping Ethnicity onto Nationalist Insurgencies. *American Political Science Review* 101: 173-185.
- Cederman, Lars-Erik, Luc Girardin, Andreas Wimmer. 2006. Getting Ethnicity Right: An Expert Survey on Power Distributions. Paper presented at the Annual Convention of the American Political Science Association, August 30-September 3.

- Cederman, Lars-Erik, Jan Ketil Rød and Nils Weidmann. 2007. Geo-Referencing of Ethnic Groups: Creating a New Dataset. Paper presented at the 48th ISA Convention in Chicago, February 28 - March 3.
- Cetinyan, Rupen. 2002. Ethnic Bargaining in the Shadow of Third-Party Intervention. *International Organization* 56 (3):645-677.
- Chazan, Naomi, ed. 1991. *Irredentism and International Politics*. Boulder: Lynne Rienner.
- Collier, Paul, and Anke Hoeffler. 2004. Greed and Grievance in Civil Wars. *Oxford Economic Papers* 56 (October): 563–595.
- Collier, Paul, and Nicholas Sambanis, eds. 2005a. *Understanding Civil War: Evidence and Analysis. Vol. 1, Africa*. Washington, DC: World Bank.
- Collier, Paul, and Nicholas Sambanis. 2005b. *Understanding Civil Wars, Evidence and Analysis: Volume 2, Other Regions*. Washington, DC: World Bank.
- Connor, Walker. 1994. *Ethnonationalism: The Quest for Understanding*. Princeton: Princeton University Press.
- Cunningham, David, Kristian S. Gleditsch, and Idean Salehyan. 2006. Dyadic Interactions and Civil War Duration. Paper presented at the 46th Annual Convention of the International Studies Association, Honolulu, HI, 1–5 March.
- Davis, David R., and Will H. Moore. 1997. Ethnicity Matters: Transnational Ethnic Alliances and Foreign Policy Behavior. *International Studies Quarterly* 41 (1):171-184.
- 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.
- Esteban, Joan, and Debray Ray. 1994. On the Measurement of Polarization. *Econometrica* 62:819-852.
- Fearon, James D. 2003. Ethnic and Cultural Diversity by Country. *Journal of Economic Growth* 8 (June): 195–222.
- Fearon, James D., and David D. Laitin. 2003. Ethnicity, Insurgency, and Civil War. *American Political Science Review* 97 (February): 75–90.
- Gagnon, V. P. 2004. *The Myth of Ethnic War: Serbia and Croatia in the 1990s* (Ithaca: Cornell University Press).

- Gleditsch, Kristian Skrede. 2007. Transnational Dimensions of Civil War. *Journal of Peace Research* 44 (3):293-309.
- Gleditsch, Kristian Skrede, Idean Salehyan, and Kenneth Schultz. 2007. The 'Civil Peace': Exploring the Relationship between Civil and International Conflict. Typescript, University of Essex, University of North Texas, and Stanford University.
- 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 (September): 615–637.
- Gurr, Ted Robert. 1968. A Causal Model of Civil Strife: A Comparative Analysis Using New Indices. *American Political Science Review* 62(4): 1104–1124.
- Gurr, Ted Robert. 2000. *Peoples Versus States: Minorities at Risk in the New Century*. Washington, DC: United States Institute of Peace Press.
- Hardin, Russell. 1995. *One For All: the Logic of Group Conflict*. Princeton: Princeton University Press.
- Hegre, Håvard and Nicholas Sambanis. 2006. Sensitivity Analysis of Empirical Results on Civil War Onset. *Journal of Conflict Resolution* 50 (August): 508–535.
- Heraclides, Alexis. 1990. Secessionist Minorities and External Involvement. *International Organization* 44 (3):341-378.
- Herbst, Jeffrey. 1989. The Creation and Maintenance of National Boundaries in Africa. *International Organization* 43 (4):673-692.
- Holsti, Kalevi J. 1996. *The State, War, and the State of War*. Cambridge: Cambridge University Press.
- Horowitz, Donald L. 1985. *Ethnic Groups in Conflict*. Berkeley: University of California Press.
- Kirişci, Kemal, and Gareth M Winrow. 1997. *The Kurdish Question and Turkey: An Example of a Trans-State Ethnic Conflict*. London and Portland, OR: Frank Cass.
- King, Charles, and Neil J. Melvin. 1999/2000. Diaspora Politics: Ethnic Linkages, Foreign Policy, and Security in Eurasia. *International Security* 24 (3):108-138.
- King, Gary, and Langche Zeng. 2001. Improving Forecasts of State Failure. *World Politics* 53 (4):623-658

- Kuperman, Alan, and Timothy W. Crawford. 2006. *Gambling on Humanitarian Intervention: Moral Hazard, Rebellion and Civil War*. New York: Routledge.
- McCarthy, John D., and Mayer Zald, N. 1977. Resource Mobilization and Social Movements: A Partial Theory. *American Journal of Sociology* 82: 1212-1241.
- Montalvo, Jose G., and Marta Reynal-Querol. 2005. Ethnic Diversity and Economic Development. *Journal of Development Economics* 76 (2):293-323.
- Posen, Barry R. 1993. The Security Dilemma and Ethnic Conflict. In *Ethnic Conflict and International Security*, edited by M. E. Brown. Princeton: Princeton University Press.
- Rokkan, Stein. 1999. *State Formation, Nation-Building, and Mass Politics in Europe: The Theory of Stein Rokkan*. Flora, Peter, ed. Oxford: Oxford University Press.
- Ross, Michael. 2006. A Closer Look at Oil, Diamonds, and Civil War. *Annual Review of Political Science* 9: 965-300.
- Saideman, Stephen M. 2001. *The Ties That Divide: Ethnic Politics, Foreign Policy, and International Conflict*. New York: Columbia University Press.
- Saideman, Stephen M. 2002. Discriminating in International Relations: Analyzing External Support for Ethnic Groups. *Journal of Peace Research* 39 (1):27-50.
- Salehyan, Idean. 2006. Rebels Without Borders: State Boundaries, Transnational Opposition, and Civil Conflict. PhD Thesis, Department of Political Science, University of California, San Diego.
- Salehyan, Idean, and Kristian Skrede Gleditsch. 2006. Refugee Flows and the Spread of Civil War. *International Organization* 60 (2):335–366.
- Sandler, Todd, and James Murdoch. 2004. Civil War and Economic Growth: Spatial Dispersion. *American Journal of Political Science* 48 (1):138-151.
- Shain, Yossi, and Aharon Barth. 2003. Diasporas and International Relations Theory. *International Organization* 57 (3):449-479.
- Taylor, Charles L., and Michael C. Hudson. 1972. *World Handbook of Political and Social Indicators*. New Haven, CT: Yale University Press.
- Thyne, Clayton. 2007. Cheap Signals with Costly Consequences: The Effect of Interstate Relations on Civil War. *Journal of Conflict Resolution* 50 (6):937-961.
- Tilly, Charles. 1978. *From Mobilization to Revolution*. New York: McGraw-Hill.
- Vanhanen, Tatu. 1999. Domestic Ethnic Conflict and Ethnic Nepotism: A Comparative Analysis. *Journal of Peace Research* 36 (1):55-74.

- Weiner, Myron. 1971. The Macedonian Syndrome: An Historical Model of International Relations and Political Development. *World Politics* 23 (4):665-683.
- Wimmer, Andreas. 2002. *Nationalist Exclusion and Ethnic Conflict: Shadows of Modernity*. Cambridge: Cambridge University Press.
- Zacher, Mark W. 2001. The Territorial Integrity Norm: International Boundaries and the Use of Force. *International Organization* 55 (2): 215-250.