# ETHNONATIONALIST TRIADS
## Assessing the Influence of Kin Groups on Civil Wars

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NATIONALISM has the potential to transgress and transform 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 ethnonationalist civil wars more likely. Given the highly asymmetric nature of such conflicts, which by definition feature nonstate 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 ethnopolitical map reveals that there are plenty of structural opportunities for such transborder influences. Whereas relatively few cases of outright irredentism have occurred, ethnonationalist civil wars have often featured external support from kin groups across state borders.[1] Examples include Kurdish transborder cooperation against hostile state governments such as Turkey and Iraq.[2] Transborder nationalism can also be blamed for having contributed to ethnic conflict in Croatia, Bosnia, Kosovo, and other parts of the former Yugoslavia.[3] Although the Russian "near abroad" that emerged in the post–cold war period has generally been more peaceful than ex-

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[1] Horowitz 1985; Chazan 1991.

[2] Kirişci and Winrow 1997.

[3] Brubaker 1996; Gagnon 2004.

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pected, tensions persist that could be exploited to poison ethnic politics in the post-Soviet republics.[4]

Despite the existence of a rich case-based literature documenting the impact of kin groups on ethnonationalist civil wars, we still know little about their general effect on the likelihood of internal conflict. Quantitative studies of civil war onset have thus far tended to ignore such connections. This is the result of two blind spots, one relating to overaggregation and the other to underaggregation. Regarding 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. Since researchers have assumed that civil wars take place within societies, they assume as well that the key causes of conflict must also be found within the boundaries of formally independent nation-states. They thus disregard the role of transborder linkages and processes.

In order to capture the ethnic-kin effect at both the domestic and the transnational levels of analysis, we propose a triadic model that analyzes ethnonationalist civil war as a disaggregated, relational phenomenon that includes links across state borders. Based on new data from geographic information systems, we show that ethnic kin have a discernible impact 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, the presence of external kin who could potentially offer support is more likely to increase the risk of conflict when the excluded minority is relatively large. This suggests that relatively smaller groups are less likely to rebel and that the potential assisting transborder kin groups tend to exercise caution: they give serious consideration to power relations before deciding whether to get involved in a conflict across the border. In contrast, there are no clear results indicating that the governmental or nongovernmental status of external kin groups matters for conflict propensity.

The next section charts the state of the literature before deriving our main hypotheses. The section following that, on operational definitions, then sets the stage for the analysis and our statistical results.

[4] King and Melvin 1999–2000.

## Previous Research on the Ethnic-Kin Effect and Its Impact on Conflict

The qualitative literature on ethnicity and nationalism provides rich accounts of border-transgressing processes involving support across state borders. Whereas some studies of ethnic conflict following the cold war relied on dyadic actor constellations under anarchy,[5] the border-transgressing nature of ethnonationalism has been fully appreciated by scholars who rely on explicit theories of nationalism.

In a classic article, Myron Weiner identifies a "Macedonian syndrome" that 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.[6] Based on this triadic setup, Weiner outlines an interactive process triggered by irredentist claims on the part of the minority that leads to growing ethnonationalist polarization. Once all actors have aligned themselves along the relevant ethnonationalist cleavage, extremist entrepreneurs, creating and responding to real or imagined threats, come to dominate politics within each of the three collective units, with political violence the likely consequence. Viewing his model as a corrective to country-level analysis, Weiner 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."[7]

Extending this perspective to less drastic situations than outright irredentism, Rogers Brubaker analyzes how state-led nationalization projects trigger support of national minorities from external national homelands, a process that may or may not involve violence.[8] 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 Serbs in Croatia (the national minority) with the goal of joining Serbia (the national homeland).

Also mindful of the border-transgressing logic of ethnonationalist conflict, Donald Horowitz shows that externally supported irredentist campaigns are relatively rare, despite the frequent presence of structural conditions favoring such phenomena.[9] Border revisionism carries with it considerable risks that invite caution on the part of possible sponsor-

[5] For example, Posen 1993; and Hardin 1995.
[6] Weiner 1971.
[7] Weiner 1971, 683.
[8] Brubaker 1996.
[9] Horowitz 1985.

ing 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 border-transgressing mechanisms, the qualitative literature on ethnonationalist 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 is caused by the tendency of political economists both to downplay ethnicity and to 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 propounded by political economists. Eager to show that materialist, economic explanations trump cultural, identity-related arguments, some of these scholars argue that civil wars are driven predominantly by individual rebels' opportunity costs in terms of employment and by warlords' personal enrichment through looting of raw materials such as diamonds and oil.[10] Another influential argument shifts the materialist logic from the individual level 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.[11] According to these interpretations, it is greed or the logic of insurrection that causes 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 within this research tradition operationalize ethnicity by relying on the ethnolinguistic fractionalization index (ELF). Based on the Herfindahl index, this measure indicates the likelihood of two individuals in a country not belonging to the same ethnic group.[12] Yet ethnonationalist 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.[13] Furthermore, the alleged irrel-

[10] Collier and Hoeffler 2004; for an overview, see Ross 2006.
[11] Fearon and Laitin 2003.
[12] Taylor and Hudson 1972.
[13] Cederman and Girardin 2007.

evance 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 nonlinear specifications or conflict data sets that include violent conflict at a lower level than that of the customary threshold of one thousand battle deaths suggested by the Correlates of War project.[14]

Although it is possible to construct theoretically more satisfactory country-level measures of ethnic exclusion that appear to have an influence on conflict,[15] the best way to establish the relevance of ethnonationalist 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 disregard all instances of groups without conflict with governments in countries where we see conflict for one group. Introducing a disaggregated model that features geocoded center-periphery dyads, Buhaug, Cederman, and Rød are able to show that the probability of ethnonationalist 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.[16]

Based on these results, we have good reason to believe that the invisibility of ethnicity in conventional studies depends on improperly specified, overaggregated research designs. In contrast, the second gap afflicting the literature pertains to underaggregated, statecentric analysis that does not even attempt to measure transborder effects or, if this is done, that uses very imprecise regional indicators.

Most comparative analyses have treated individual countries as independent observations where conflict may or may not occur. 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 the more likely to experience civil war, there may also be a more funda-

[14] See Sambanis 2004; Hegre and Sambanis 2006. Researchers have also used alternative conceptions of ethnic relations, including polarization (see Esteban and Ray 1994; Montalvo and Reynal-Querol 2005) or dominance measures based on the share of the second largest ethnic group or all groups other than the dominant (e.g., Ellingsen 2000; and Vanhanen 1999). We focus our discussion on the ELF index here since this is the most prominent measure and these alternative measures also suffer from similar problems for country-level data.

[15] See Cederman and Girardin 2007.

[16] Buhaug, Cederman, and Rød 2008.

mental 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 to, 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.[17] Likewise, groups may become more likely to engage in violence if they observe successful insurgencies in other states that can serve as models for emulation.[18] Furthermore, the spillover effects or externalities of conflict such as economic recessions and refugees may serve to increase the risk of conflict in other affected areas.[19]

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 transborder 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.[20] Poor relations between states may provide governments with incentives to foster insurgencies in other states to undermine rivals; or poor relations may encourage rebellion if insurgents expect to receive support from outside parties.[21]

There are a number of empirical studies that provide strong support for the importance of border-transgressing factors. When the World Bank commissioned a set of case studies to evaluate the Collier and Hoeffler model,[22] 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.[23] A number of statistical studies have shown that the positive conflict-clustering effect does not disappear when controlling for well-known predictors of civil war and survives various robustness tests, including unmeasured heterogeneity and systematic sample differences on observed characteristics. Hence, this cannot be dismissed as an artifact of the clustering of similar country characteristics.[24] A number of studies confirm that interstate relations influence the risk of civil war onset as well as the

[17] See, for example, Gleditsch 2007; and Salehyan and Gleditsch 2006.
[18] Ayres and Saideman 2000.
[19] Sandler and Murdoch 2004.
[20] Davis and Moore 1997.
[21] Gleditsch 2007; Kuperman and Crawford 2006; Thyne 2007.
[22] Collier and Hoeffler 2004.
[23] Collier and Sambanis 2005a, 2005b; Sambanis 2004.
[24] Buhaug and Gleditsch 2008.

likelihood of interventions in ongoing civil war.[25] Although there are in principle many transborder ties that could be relevant in civil war, existing empirical studies suggest that ethnic ties are among the most prominent linkages that can be mobilized in civil wars.[26]

While this incipient research on cross-border linkages in civil war is very encouraging, it still suffers from a number of shortcomings resulting from its reliance on highly aggregate country-level analysis. Some studies have used very crude proxies of external ethnic ties that lack face validity. Collier and Hoeffler,[27] for example, look at the size of immigrant communities from a given country in the United States as a measure of opportunities for support from diasporas. This is a highly problematic measure, as it ignores all communities not in the U.S. and may pick up on refugee populations that are a result of previous or ongoing conflict rather than a prior cause of conflict onset. Furthermore, most of the existing studies on the role of transborder ethnic communities have simply considered whether countries with such groups are more likely to see conflict,[28] but they have not actually examined whether the transborder group itself was involved in the rebellion. Most studies have been conducted at the country level; they therefore encounter the common problems of overaggregation and treating conflict and nonconflict cases nonsymmetrically. More specifically, a single instance of a transborder group and a conflict in a state (say India) will be taken as support for the theory, even if there may be a very large number of other border-transgressing groups in the same state that do not rebel—and therefore should be counted as evidence against the theory. Overcoming this problem requires us to move down to the level of dyads of specific individual groups and their interactions with the government. Cetinyan provides one of the few fully dyadic studies of transborder groups using the Minorities at Risk (MAR) data.[29] Although he does not find any effect of groups having ethnic kin on the risk of conflict, this finding may follow partly by construction, for reasons that we will return to later.

Existing studies of transborder ethnic ties in civil war have overlooked the strong mediating role of geography and distance. Although such ties in principle could extend over large distances,[30] it seems rea-

[25] Austvoll 2005; Gleditsch 2007; Salehyan 2009; Thyne 2007.
[26] Austvoll 2005; Saideman 2001.
[27] Collier and Hoeffler 2004.
[28] For example, Gleditsch 2007.
[29] Cetinyan 2003.
[30] For example, Shain and Barth 2003.

sonable to assume that the cross-border ties most relevant for influencing the risk of civil wars are those pertaining to groups that are geographically close. Insurgents face many tactical advantages when operating from bases outside a country's territorial boundaries, since it is costly for governments to pursue rebels across borders and violate the sovereignty of other states, but these military advantages to insurgents 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 a neighboring state is fighting a civil war but is not affected by conflict in distant countries.[31] Moreover, Salehyan and Gleditsch 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.[32] Many of the data sources used in previous research do not allow researchers to identify where other segments are located and to measure the distance between kin groups.

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

## Theorizing Ethnonationalist Triads

Our literature review has shown that it is difficult or even impossible to capture the effect of ethnic-kin groups based on conventional, country-level analysis. Therefore, the first priority should be to construct a plausible baseline model of dyadic ethnonationalist conflict within a specific country; this will allow us to examine the triadic effects of linkages to kin groups in other states. We build directly on Buhaug, Cederman, and Rød,[33] who offer such a disaggregated dyadic model that focuses on ethnic groups' access to power. [34] Measuring the effect of ethnonationalist exclusion, they disaggregate both ethnicity and conflict to the level of explicitly geocoded center-periphery dyads. Each dyad is composed of an EGIP, that is, an ethnic group (or groups) in power, and a MEG, that is, a marginalized ethnic group without access

[31] Buhaug and Gleditsch 2008.
[32] Salehyan and Gleditsch 2006.
[33] Buhaug, Cederman, and Rød 2008.
[34] See Wimmer 2002.

to executive power.[35] Illustrating these definitions, Figure 1 displays the basic center-periphery (BCP) configuration. The next section provides details on the operationalization of both notions.

Within each dyadic relationship, Buhaug, Cederman, and Rød postulate (1) that powerful ethnic groups excluded from power are most likely to mobilize around an ethnonationalist program and to initiate conflict against the government and conversely (2) that the government will engage in repression to curb the power of such threatening contenders. Thus, according to this formulation, civil wars occur when peripheral contenders to the government are powerful enough to challenge the center and sufficiently motivated to do so.[36]

The rebels' opportunities and willingness to challenge the center are related to many factors. As a first cut, we follow Buhaug, Cederman, and Rød in highlighting 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.[37] However, the rebels' willingness to act should increase with demographic size as well, because exclusion becomes normatively more problematic as the share of the excluded population increases, whether the political system is democratic or not. Permanent exclusion of large minorities, let alone, as is sometimes the case, of the majority of the population, represents powerful grievances that can trigger conflict.[38]

Despite their central importance to any ethnographic configuration, raw demographic size is likely to be an imperfect predictor of the power and motivations of marginalized ethnic groups. In particular,

[35] Cederman and Girardin 2007. Note that this specification reifies the ethnic groups for empirical tractability reasons. Thus, here we do not attempt to analyze the groups' representatives and organizations, which constitute the actual locus of agency. For a critique of group reification, see Cederman 2002; and Brubaker 2004.

[36] Gurr 2000.

[37] McCarthy and Zald 1977; Tilly 1978. We acknowledge that the ability of a group to successfully challenge the state can be influenced by resources other than demographic size and that some excluded groups may have far more or less power relative to the state than would be expected from their relative size, due to factors such as economic position or degree of group cohesion; see, for example, Hechter 1987. However, there are no systematic sources of data that would allow us to consider alternative resources, so we focus here on potential power as given by demographic size.

[38] Horowitz 1985; Petersen 2002; Wimmer 2002.

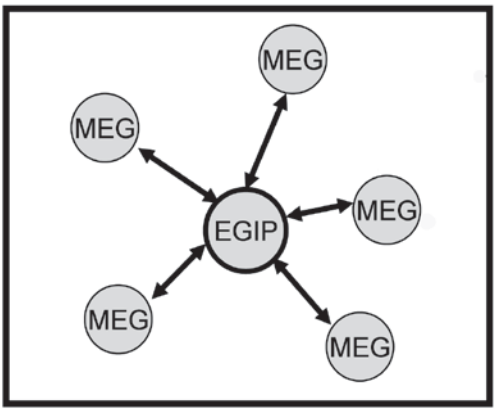


FIGURE 1
THE BASIC CENTER-PERIPHERY (BCP) CONFIGURATION

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. We 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 opportunity and willingness. In the former sense, standard logistical arguments show how state capacity declines with increasing distance and geographic obstacles.[39] Beyond such straightforward materialist relationships, Buhaug, Cederman, and Rød suggest that the motivation of rebel groups also varies with distance and terrain.[40] Rokkan's 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 toward central rule than those that have been more thoroughly socialized to tolerate central control.[41] In this regard, distance and remoteness can be thought of as indicators that cultural penetration by the central state is lacking.[42]

[39] Boulding 1962.
[40] Buhaug, Cederman, and Rød 2008.
[41] Rokkan 1999.
[42] Cederman 2008.

Having summarized the dyadic baseline model based on the BCP configuration, we are now ready to extend it by introducing a third unit 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 and Brubaker.[43] Depending on the presence of a kin relationship, assistance can come either from a peripheral group in the neighboring country or from this country's EGIP, whether it is the only dominant group or part of the governmental coalition. Accordingly, we classify the former transborder link as the symmetric type, because it connects two peripheries, and the latter one as the asymmetric type, because it links the periphery with the center of another state.

Why should the risk of conflict depend on whether a peripheral group has a link to cross-border 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 would be apparent from the attributes of the group at the domestic level. On the other hand, although there could be instances where transborder kin simply help contribute to resources that are "scarce" at the domestic level, it will often be the case that such 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 can seek shelter among kin on the other side of international boundaries and operate from extraterritorial bases will be more difficult for governments to conclusively defeat. In this sense, cross-border links can provide insurgencies with many advantages beyond the direct aggregation or resource-pooling implications.

Based on the ECP configuration, we propose a series of hypotheses about the influence of the transborder relationship on conflict probabilities within the core dyad. The simplest version introduces this influence as a constant effect, where border-transgressing groups generally increase the risk of violence. The justification for such an unconditional argument can be derived from noninstrumentalist interpretations of nationalism. For example, Connor claims that rationalistic and materialist approaches to ethnic nationalism "can be faulted principally for

[43] Weiner 1972; Brubaker 1996.

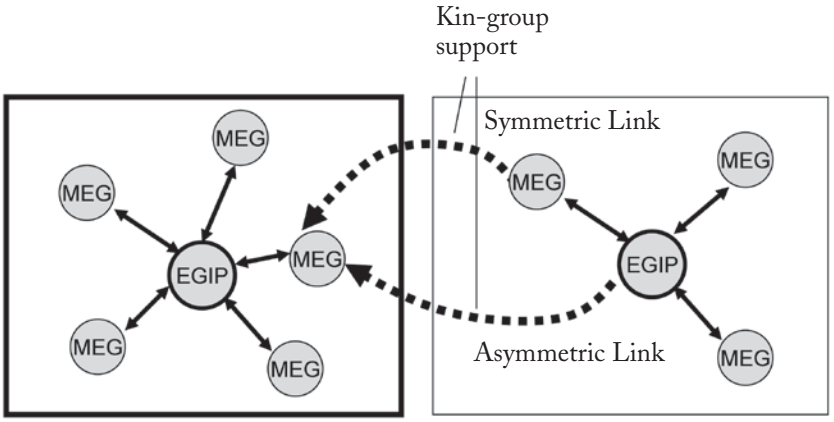


FIGURE 2
THE EXTENDED CENTER-PERIPHERY (ECP) CONFIGURATION

their failure to reflect the emotional depth of national identity."[44] More specifically referring to external intervention in civil wars, Holsti suggests that "reasons of affinity and sentiment rather than . . . power or more hard-headed cost-benefit analyses."[45] Such observations find at least partial support in Heraclides' comparative case studies of secession.[46] 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

There is, however, good reason 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 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.[47]

[44] Connor 1994, 206.
[45] Holsti 1996, 127.
[46] Heraclides 1990.
[47] King and Melvin 1999–2000, 109.

Whether of the symmetric or asymmetric type, intervention in ethnonationalist 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 a major risk of escalation by trying to challenge governments through violence even if they count on the support of transborder groups. In addition there may be carry-on effects of unsuccessful insurgencies in other states. Horowitz's classic study *Ethnic Groups in Conflict* still offers the most subtle analysis of these considerations.[48] Focusing on separatist ethnic conflict, this work highlights a number of reasons why cross-border bonds often remain inactive despite considerable minority mobilization and possibly even violent ethnonationalist 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 of 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.[49]

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, members of the external kin group have to evaluate the chances of success. Accordingly, Horowitz 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."[50]

In addition to the implications of demographic balance for the prospects for success, it will also generally be the case that larger excluded groups can claim more legitimate political grievances than smaller ones, thus adding to the radicalizing effect of external kin groups.[51] This may increase the identification of transborder kin groups with their cause and make it easier to mobilize political support. Furthermore, it is generally easier for governments in other states to allow active support for insurgencies perceived as legitimate.

In operational terms, the most straightforward test of this power-

[48] Horowitz 1985.
[49] Horowitz 1985, 274–75.
[50] Horowitz 1985, 272.
[51] See Jenne 2007.

sensitive mechanism combines hypotheses H1 and H3 interactively 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.[52]

Finally, we need to consider the nature of the external group. At least in principle, it could matter a great deal whether it is another peripheral group in a symmetric link or a central actor in an asymmetric relationship. Other things being equal, there can be no doubt that groups that control 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.[53]

Direct interventions against another state are explicit acts of aggression and pose 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 that of 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."[54] There are many reasons why state governments may be more cautious than actors from nonstate groups. Most obviously, territorial revisionism can come back to haunt its state-based promoter. Multiethnic states that have problems controlling their own minorities must typically think twice before supporting rebellions in neighboring states. More generally, international norms governing interstate relations are biased in favor of stability and nonintervention. Their impact has been most clearly observed in the case of sub-Saharan Africa,[55] but it is likely to apply to other parts of the world as well.[56] Caution also derives from the fear that cross-border assistance may likewise lead to unwanted turmoil spreading across state borders into the territory of the intervening state. Furthermore, when

[52] A pure aggregation effect would suggest that the risk of conflict should hinge on the size of this 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 groups are not necessarily particularly large.

[53] See Davis and Moore 1997; Gleditsch, Salehyan, and Schultz 2008.

[54] Horowitz 1985, 275.

[55] Herbst 1989.

[56] Zacher 2001.

potential external government support for excluded groups is known in advance, governments in countries experiencing conflict will face greater incentives to provide some form of accommodation to excluded groups, which in turn would make these groups less likely to resort to violence. While the arguments for a cautioning, countervailing effect on accommodation are strong, there is empirical evidence pointing in the opposite direction.[57] Thus, we state our hypothesis in favor of a stronger conflict-inducing impact in the asymmetric cases as compared with their symmetric 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 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, remote borders."[58] 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 transborder support of insurgencies,[59] stable democratic relations should make such interventions less likely.[60]

## Operationalizing Ethnonationalist Triads

In this section we describe the operational definitions of our variables. Because our analysis builds directly on the operationalization of the dyadic baseline model proposed by Buhaug, Cederman, and Rød,[61] we provide a short summary of the data used in that study before turning to the data on transborder ethnic affiliations. This dyadic setup traces conflict between ethnically defined state authorities, that is, 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

[57] Saideman 2001.
[58] Horowitz 1985, 276.
[59] Saideman 2002.
[60] Belanger, Duchesne, and Paquin 2005; but see also Saideman 2007.
[61] Buhaug, Cederman, and Rød 2008.

the ethnic groups but also to estimate their demographic sizes. All in all, the extended triadic model relies on information along six dimensions, the first five of which were covered by Buhaug, Cederman, and Rød:

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

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

## Geocoding Ethnic Groups

In their choice of a basic data set on ethnic groups, Buhaug, Cederman, and Rød rely on the well-known *Atlas Narodov Mira* (*ANM*).[62] The *ANM* stems from a major project to chart 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 a number of strengths: it is complete and carefully researched, provides high-quality maps, relies on a consistent classification of ethnicity, and offers a uniform group list valid across state borders; this last item, in particular, is important for our research purposes. However, the *ANM* is not without its problems. It is exclusively defined on the basis of linguistic criteria and therefore disregards many other often potentially important markers of ethnicity such as religion. It also contains many groups that are politically irrelevant and insufficiently mobilized to have any capacity for collective action. In particular, the *ANM* list is often seen as problematic for identifying relevant ethnic groups in Africa.[63] Finally, the *ANM* data, based as they are on information from the 1960s, are clearly outdated in some cases.[64] Realizing that this choice of data source is far from uncontroversial, we nevertheless contend that the advantages outweigh the disadvantages, at least until a more suitable data set becomes available. In order to make the data of the *ANM* available for statistical analysis, all of the *Atlas*'s maps were converted by scanning

[62] Bruk and Apenchenko 1964.

[63] E.g., Posner 2005.

[64] Moreover, the ANM data do not reflect population changes due to migration or refugees. As such, the Kashmiris are considered to be present in India only, despite there reportedly being over one hundred thousand migrants from the province in Pakistan. However, in our case, this helps ensure that the data do not reflect population movements that may be in part a result of conflict.

to a digital format. 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 data set, labeled GREG (Geo-Referencing of Ethnic Groups), contains spatial information on the location of more than sixteen hundred ethnic groups identified in the *ANM*.[65]

### 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's publication, such as the post-Soviet republics of Russia, Buhaug, Cederman, and Rød 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).[66]

### 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 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.[67] 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

[65] Weidmann, Rød, and Cederman 2010.
[66] For details on this procedure, see Buhaug, Cederman, and Rød 2008.
[67] Cederman and Giradin 2007.

of Switzerland as constituting the EGIP.[68] Wherever deemed appropriate, period-dependent EGIPs were introduced as a way to capture major shifts in the political constellation of power access (see, for example, 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.

### 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 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.

### Determining the Onset of Dyadic Ethnic Conflict

The final step of data generation for the dyadic baseline model concerns the dependent variable, namely, the outbreak of dyadic ethnic conflict. The main source was the UCDP/PRIO Armed Conflicts Dataset, henceforth ACD,[69] which is arguably the most established country-level data set on armed conflict thanks to its comparably low minimum casualty threshold of just twenty-five annual battle-related deaths and its sepa-

[68] For a full list of EGIPs, see Buhaug, Cederman, and Rød 2008.
[69] Gleditsch et al. 2002.

rate 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 identified the MEGs that were involved in each ethnic conflict.[70] 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.

### Transborder Ethnic Affiliations

Finally, we need to consider the data on external ethnic affiliations in some detail, because this dimension was not covered by the previous study. As already mentioned, we rely on the ANM's global group list, which facilitates the coding of transborder ethnic links. Of course, there are many other data sources on ethnic affiliation, including Gurr's Minorities at Risk (MAR) data and Fearon's more recent list of ethnic groups.[71] 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 presents many limitations when it comes to identifying the cross-border presence of ethnic groups. These data sources typically do not have standardized group codes that are comparable across countries, and in many cases we 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 transborder presence. Likewise, the MAR data identify "Foreigners" as a minority at risk in Switzerland, but it would be 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 regard to transborder comparability.

[70] Buhaug, Cederman, and Rød 2008.
[71] Gurr 1993; Fearon 2003.

We have therefore made some changes to the data to facilitate meaningful cross-national comparisons. In particular, all the ethnic groups in Switzerland (that is, 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. Likewise, Austrians are considered a distinct ethnic group from Germans in the ANM, and we recode all 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 code Arabs from different states in the Middle East and North Africa as separate ethnic groups. Although we recognize the wide variation in spoken Arabic and that the issue of a common Arab identity is controversial among Arabs, 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 macrolanguage. We therefore include all Arab groups as a single ethnic group to ensure meaningful border-transgressing 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 that encompass at least fifty thousand 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 data set for which we have one observation per dyad. We investigate whether the dyad experiences conflict at any time during the period 1945–2005 (or the period of a state's existence for dyads in countries that cease to exist as independent states prior to 2005), with values for the independent

variables based on the characteristics prevailing at the beginning of the period.

### Static Analysis

Our static data contain 541 center-periphery dyads in sixty countries in Europe and Asia. Panel data often tend to violate the assumption of constant variances, given the stacked structure of the data. Our data have a panel structure where not only are the individual observations pooled over time for each dyad and across space, but multiple dyads may also originate within the same country. This in turn makes it likely that we may have large variation across individual dyads and countries, and we therefore report Huberized robust standard error estimates, clustering on countries.[72]

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.[73] The right-hand-side variables considered include the demographic balance of the peripheral group to the EGIP, 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 $\ln[s_p/(s_p+s_c)]$. 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 declines as the size of the group grows larger. 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.[74]

[72] Most of our explanatory variables are dyad specific, and it could be argued that we should cluster on individual dyads or consider possible differences across dyads rather than countries. Group-level clustering leads to standard error estimates generally much smaller than those found for clustering on countries. Hence, the country-level robust standard error estimates should be regarded as the more conservative estimates.

[73] Buhaug, Cederman, and Rød 2008.

[74] We refer to Buhaug, Cederman, and Rød 2008 for further details and discussion of data sources and definitions for these control variables.

TABLE 1
LOGIT ESTIMATES OF THE PROBABILITY OF ETHNIC CONFLICT ONSET, STATIC SAMPLE[a]

| *Variable* | *Model 1* | *Model 2* | *Model 3* | *Model 4* |
|---|---|---|---|---|
| *Group-Level Variables* | | | | |
| Ln demographic balance 4 | 0.471 | 0.489 | 0.254 | 0.260 |
| | (0.135)*** | (0. 143)*** | (0. 189)* | (0.185)* |
| Ln distance from capital | 0.506 | 0.487 | 0.481 | 0.503 |
| | (0.189)*** | (0.188)*** | (0.180)*** | (0.201)*** |
| Mountain share | 0.810 | 0.781 | 0.829 | 0.848 |
| | (0.388)** | (0.377)** | (0.424)** | (0.433)* |
| *Transnational Variables* | | | | |
| Contiguous transnational group | | –0.289 | 2.341 | 2.249 |
| | | (0.466) | (1.326)** | (1.294)** |
| Ln dem. balance X contiguous group | | | 0.658 | 0.653 |
| | | | (0.265)*** | (0.260)*** |
| Transnational group EGIP | | | | 0.226 |
| | | | | (0.631) |
| *Country-Level Variables* | | | | |
| Ln GDP per capita (lagged) | –0.122 | –0.106 | –0.157 | –0.176 |
| | (0.242) | (0.256) | (0.252) | (0.239) |
| Intercept | –2.816 | –2.592 | –3.414 | –3.399 |
| | (2.273) | (2.282) | (2.430)* | (2.403)* |
| N | 541 | 541 | 541 | 541 |
| Wald $\chi^2$ | 21.38 | 21.72 | 26.21 | 26.93 |

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$ (one-tailed)
[a] Entries are logit coefficient estimates, with standard errors in parentheses.

The results for model 1 shown in Table 1 are very similar to those reported by Buhaug, Cederman, and Rød,[75] 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 center 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. 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 statistically significant negative impact on the likelihood of conflict.

[75] Buhaug, Cederman, and Rød 2008.

As a test of hypothesis H3, model 2 introduces a dichotomous measure of whether the excluded ethnic group has transborder kin in another state. For reasons explained above, we limit ourselves to groups that are located in states within five hundred kilometers of one another, using data on the minimum distances between states.[76] We also disregard groups that have a small transborder contingent, encompassing fewer than fifty thousand individuals, and code these as not having a cross-border presence. As can be seen, the coefficient estimate for the simple dichotomous indicator of transborder presence is actually negative, although not statistically significant. Hence, as we expected, our results do not provide any support for H3, that is, the idea that transborder 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 ratios or the Wald $\chi^2$ for the two models indicates that adding the dichotomous measure for whether groups have a cross-border 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 transborder presence. This specification reflects our argument that the border-transgressing 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 center, the effect of increases in the demographic power balance is much greater for groups that have a cross-border presence. Comparing the Wald $\chi^2$ for models 1 and 3 indicates that the addition of the terms for contiguous transborder groups and the interaction between border-transgressing groups 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 transborder links can dramatically increase the risk of civil war, but only in dyads where the transborder link combines 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

[76] Gleditsch et al. 2008.

raw components of the interactive term.[77] Figure 3 graphically presents 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 cross-border 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 transborder presence. The longer dashed line indicates the predicted probabilities from model 3 for a group without a transborder 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 sizes is indeed much more pronounced for groups that have transborder kin in model 3. Moreover, model 3 yields notably higher predicted probabilities for relatively larger groups with a cross-border 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 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—that is, 0.43—given the presence of Kurds in neighboring Iran, Iraq, and Syria. The appendix lists all groups with transborder kin involved in conflict, ordered by the demographic balance ratio.

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 in 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 zero. This is consistent with our discussion above.

So far we have seen that the terms for border-transgressing characteristics in model 3 when added to the purely domestic dyadic baseline model 1 are clearly statistically significant, and that the introduction of the transborder 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 of model 1, in the sense of assigning higher predicted probabilities to cases in which we observe conflict and assigning lower probabilities to those in which we do not?

[77] See Braumoeller 2004.

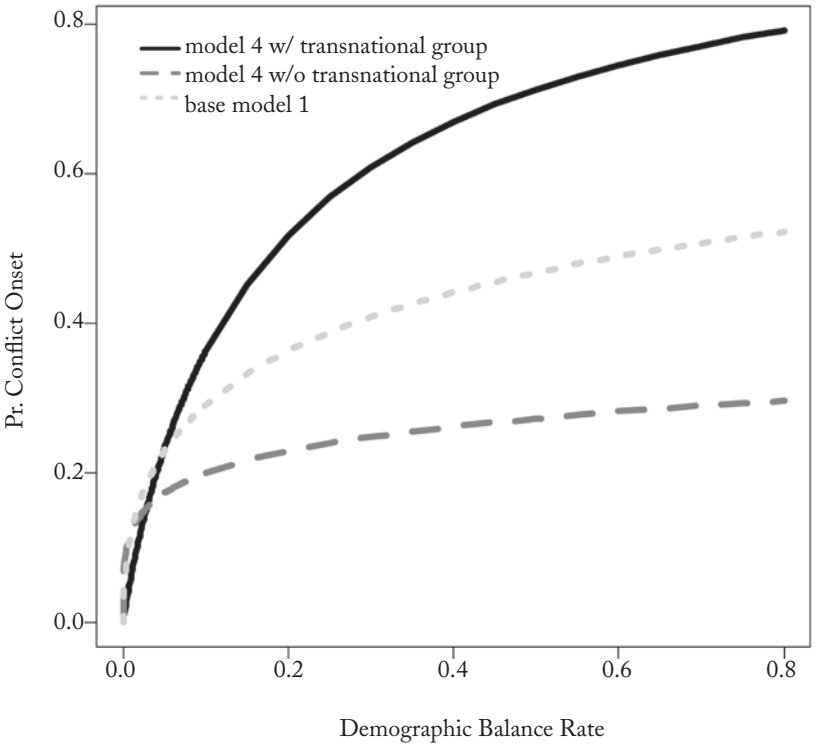


FIGURE 3
PREDICTED PROBABILITY OF CONFLICT BY DEMOGRAPHIC BALANCE RATE FOR A MEDIAN DYAD PROFILE, STATIC SAMPLE

Neither model 3, with the interaction between demographic balance and transborder kin, nor the baseline model 1 returns predicted probabilities above 0.5—that is, instances where conflict is predicted to be more likely than not—for any dyad where we actually observe conflict.[78] However, since conflict is a rare event that occurs in only about 10 percent 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 within which we actually see conflict and those within which we do not. If an event is very rare, we can typically maximize the share of

[78] The baseline model 1 does not generate predicted probabilities above 0.5 for any groups. Model 3 does yield predicted probabilities above 0.5 for two dyads (Jhats/Awans in Pakistan and Russians in Kazakhstan), but neither of these groups is actually involved in conflict.

correct predictions by simply assuming that the event will never occur. In practice, however, we generally prefer to know whether certain features are associated with the rare events and therefore help identify when these events are more likely. The State Failure Task Conflict Task Force, for example, considered a prediction threshold of 0.25 in its efforts to forecast failing states. For a prediction threshold of 0.25, model 3 correctly identifies nine out of the fifty-five dyadic conflicts, while model 1 correctly identifies only five conflicts.[79]

From a decision-theoretic viewpoint, the appropriate prediction threshold C depends on the relative costs of a false negative or on a case for which a true event is not predicted 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 minimizes 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 suggest using Receiver-Operating-Characteristic (ROC) plots to compare the performance of two competing models over a range of prediction threshold Cs.[80] 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 transborder characteristics provide important information in identifying the center periphery dyads within which conflict is more common.

## Dynamic Analysis

So far we have considered only a static analysis where each 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,

[79] More specifically, in addition to those conflicts identified by model 1, model 3 correctly predicts conflict in the center periphery dyads involving Azerbaijanis and Kurds in Iran, Kurds in Turkey, Baloch in Pakistan, and Shan in Myanmar. All of these groups have transnational kin. The number of false positives is the same for both models, so model 3 improves on the predictions of model 1 without increasing the number of incorrectly called conflicts.

[80] King and Zheng 2001.

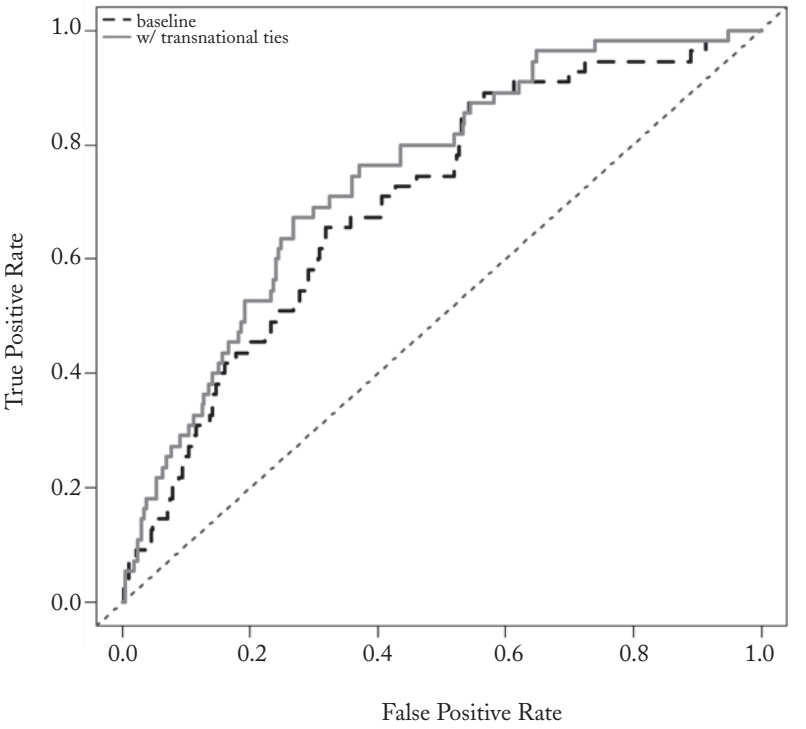


FIGURE 4
ROC PLOT FOR PREDICTIVE SUCCESS BASED ON THE STATIC SAMPLE

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 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 at peace, using a cubic smoothing spline to allow for possible time dependence as suggested by Beck, Katz, and Tucker.[81] 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 the baseline model without the border-transgressing variables.

[81] Beck, Katz, and Tucker 1998.

TABLE 2
LOGIT ESTIMATES OF THE PROBABILITY OF ETHNIC CONFLICT ONSET, DYADIC SAMPLE[a]

| *Variable* | *Model 5* | *Model 6* | *Model 7* | *Model 8* |
|---|---|---|---|---|
| *Group-Level Variables* | | | | |
| Ln demographic balance r | 0.399 | 0.430 | 0.224 | 0.215 |
| | (0.135)*** | (0. 145)*** | (0. 190) | (0.189) |
| Ln distance from capital | 0.602 | 0.547 | 0.545 | 0.508 |
| | (0.135)*** | (0.124)*** | (0.119)*** | (0.115)*** |
| Mountain share | 1.135 | 1.114 | 1.012 | 0.955 |
| | (0.305)*** | (0.310)*** | (0.287)*** | (0.262)*** |
| *Transnational Variables* | | | | |
| Contiguous transnational group | | –0.446 | 1.716 | 1.892 |
| | | (0.420) | (1.273)* | (1.285)* |
| Ln dem. balance X contiguous group | | | 0.574 | 0.595 |
| | | | (0.250)** | (0.256)** |
| Transnational group EGIP | | | | –0.415 |
| | | | | (0.434) |
| *Country-Level and Control Variables* | | | | |
| Ln GDP per capita (lagged) | –0.289 | –0.274 | –0.301 | –0.288 |
| | (0.263)* | (0.282) | (0.299) | (0.289) |
| Year | 0.065 | 0.067 | 0.064 | 0.065 |
| | (0.010)*** | (0.011)*** | (0.011)*** | (0.011)*** |
| Peaceyears | –0.271 | –0.267 | –0.261 | –0.259 |
| | (0.067)*** | (0.062)*** | (0.065)*** | (0.066)*** |
| 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 | –132.906 | –135.398 | –130.995 | –133.020 |
| | (18.820)*** | (19.621)*** | (21.032)*** | (20.125)*** |
| N | 22,961 | 22,961 | 22,961 | 22,961 |
| Wald $\chi^2$ | 374.39 | 383.71 | 521.36 | 615.78 |

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$ (one-tailed)
[a] Entries are logit coefficient estimates, with standard errors in parentheses.

More specifically, model 6 with the dichotomous term for whether groups have a transborder 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 cross-border

presence, thus lending support to hypothesis H4. Finally, with respect to hypothesis H5, the coefficient estimate for whether the group is EGIP in any of the neighboring states now actually returns a negative coefficient estimate, although this is not statistically significant.

Figure 5 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 percent 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 twenty-four years. However, although the absolute predicted probabilities of conflict are obviously much lower, the relative differences between the predictions for different dyad profiles given domestic and cross-border 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 transborder group rather than the binary indicator to examine whether the risk of conflict increases with the absolute size of the transborder group. We find no evidence, however, for the specification according to which the effect depends on the size of the border-transgressing component of the group. Second, we have experimented with alternative group size thresholds to see whether our results depend on the specific criterion. Doubling the cutoff threshold to one hundred thousand, however, does not lead to results that differ notably from those found with a threshold of fifty thousand. Third, we have reestimated the model using all transborder groups rather than just groups in countries within five hundred kilometers of the outer boundaries of countries. In our Eurasian sample only a relatively low share—about 5.5 percent—of the observations with transborder groups have no kin in a neighboring state. As such, the results do not look remarkably different when we include all groups, although we strongly believe that geographical dimensions are very important. Fourth, to check whether our results might reflect the capabilities of states where kin groups are located, we also conducted additional robustness tests adding the capabilities of the kin states as well as the ratio of kin state capabilities to those of the countries in question. The capabilities of kin states are in our view a poor proxy for the potential capabilities of transborder groups, since there is no reason to expect that ethnic groups can rely on the resources of states where their kin are located. However, adding this does not change our main results—the coefficient estimate for the capabilities of states with kin is negative, but not statistically significant.

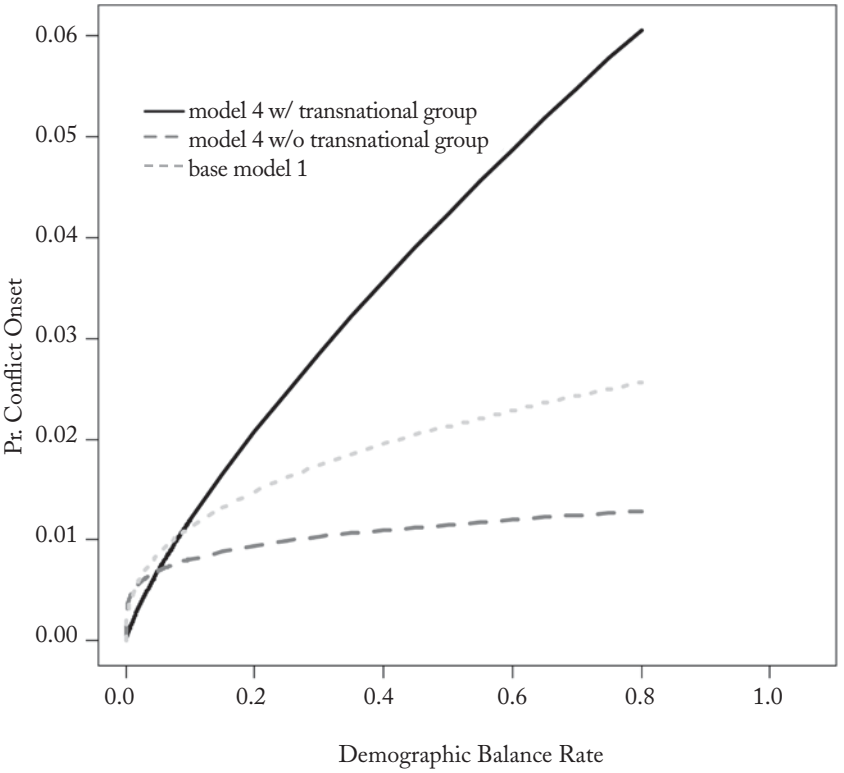


FIGURE 5
PREDICTED PROBABILITY OF CONFLICT BY DEMOGRAPHIC BALANCE RATE FOR A MEDIAN DYAD PROFILE, DYNAMIC SAMPLE

## CONCLUSION

In this article we have demonstrated that border-crossing ethnic affiliations have a considerable impact on the likelihood of ethnonational 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 this research represents considerable progress as compared with the prevailing quantitative literature, whose statecentric research designs have generally failed to capture triadic ethnonationalist 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 ap-

proach enables more precise testing of relational mechanisms in triadic ethnic configurations that have thus far been only explicitly treated by qualitative research on ethnonationalism.

Although these results are promising, they are not intended to suggest that the last word has been had about the influence of ethnic kin on conflict. Future research will tell us whether our conclusions are robust beyond the current sample, which is limited to Eurasia and North Africa. In principle, it is possible to incorporate other parts of the world using the current data, but the difficulties of establishing reliable coding of ethnic-kin relationships, especially in sub-Saharan Africa, are so serious that we deem it more fruitful to rely on alternative data sources. Thanks to the new data set on Ethnic Power Relations, we will be able in the future to extend the sample to the rest of the world while at the same time limiting it to politically relevant ethnic groups and assessing their access to power over time in a more precise manner than was possible in this study.[82] The geographic dimension could also be explored more fully. We would expect transborder 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, additional research is needed on the details of the border-transgressing bond, especially as regards the nature of the actor-specific mechanism. Disaggregated research designs, such as those employed by Cunningham, Gleditsch, and Salehyan,[83] will be able to tell us what drives conflict—whether 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.

[82] See Min, Cederman, and Wimmer 2008.
[83] Cunningham, Gleditsch, and Salehyan 2009.

## Appendix

Groups with Transborder Kin (+50,000) Involved in Conflict, Ordered by Dyadic Power Balance

| *Country* | *Group* | *Dyadic Power Balance* |
|---|---|---|
| Israel | Arabs (Palestinians) | 0.364 |
| Macedonia | Albanians | 0.208 |
| Iran | Azerbaijanis | 0.192 |
| Iraq | Kurds | 0.174 |
| Iran | Kurds | 0.160 |
| Turkey | Kurds | 0.136 |
| Iran | Arabs | 0.112 |
| Moldova | Ukrainians | 0.109 |
| Yugoslavia | Albanians | 0.088 |
| Myanmar | Shan | 0.083 |
| Myanmar | Karen | 0.073 |
| Croatia | Serbs | 0.071 |
| Pakistan | Baloch | 0.070 |
| Spain | Basques | 0.069 |
| Azerbaijan | Armenians | 0.045 |
| Myanmar/Burma | Mon (Talaing) | 0.037 |
| USSR | Azerbaijanis | 0.035 |
| Georgia | Ossetians | 0.028 |
| Myanmar | Kachins | 0.023 |
| USSR | Armenians | 0.016 |
| Myanmar | Wa | 0.004 |
| United Kingdom | Irish | 0.002 |

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