

# Refugees and the Spread of Civil War\*

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## Abstract

Certain regions of the world experience more conflict than others. Previous analyses have shown that a civil war in one country significantly increases the likelihood that neighboring states will experience conflict. This finding, however, still remains largely unexplained. We argue that population movements are an important mechanism by which conflict spreads across regions. Refugee flows are not only the consequence of political turmoil — the presence of refugees and displaced populations can also increase the risk of subsequent conflict in host and origin countries. Although the vast majority of refugees never directly engage in violence, refugee flows facilitate the transnational spread of arms, combatants, and ideologies conducive to conflict; they alter the ethnic composition of the state; and they can also exacerbate economic competition. We conduct an empirical analysis of the link between refugees and civil conflict since the mid-20th century, and we find that the presence of refugees from neighboring countries leads to an increased probability of a state experiencing civil conflict.

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# REFUGEES AND THE SPREAD OF CIVIL WAR

## INTRODUCTION

Certain regions of the world experience more conflict than others. Regions such as Central America, the Great Lakes region of Africa, and South-East Asia have witnessed numerous civil wars within several states, whereas other areas such as Europe and the Southern Cone of Latin America have had a relatively low frequency of internal conflict. Statistical analyses, moreover, have demonstrated that there is a regional clustering of civil war and that states bordering countries at war are significantly more likely to experience conflict themselves (see Gleditsch 2004, Gurr and Marshall 2003, Sambanis 2002).<sup>1</sup> The regularity and strength of this geographical clustering casts doubt upon the conventional assumption that civil wars are independent, domestic phenomena, driven exclusively by processes and attributes within the state where conflict occurs. Rather, international factors and relationships with other states may be very important in shaping the risk of internal conflict.

To demonstrate this pattern, Figure 1 displays the geographical distribution of intrastate conflicts listed in the Uppsala Conflict Dataset (Gleditsch et al. 2002), as displayed by the ViewConflicts program (Rød 2003). Certain conflict clusters, or regions with a large number of conflicts over the time period, are clearly discernable: for example, Western Africa, the

<sup>1</sup> Fearon and Laitin (2003), in results not reported in their article, find no evidence for contagion effects when they include dummy variables for geographical regions. However, studies that find evidence of clustering consider terms indicating conflict in *adjacent* states rather than regional dummies. We believe that contiguity or some other measure of proximity to other states is a more appropriate basis for capturing conflict contagion than dummy variables for geographical regions. Classifications of mutually exclusive ‘regions’ are somewhat arbitrary and often poorly suited to capture the relevant linkages. There is no good reason to believe, for example, that a conflict in Mozambique will affect conflict in Sierra Leone, but many observers suggest strong linkages between the conflicts in Sierra Leone, Liberia, and Guinea in Western Africa.

Caucasus, and the Balkans. Studies using other conflict data and measures at the country-level likewise suggest a spatial clustering in civil wars (see, e.g., Gleditsch 2002).

---INSERT FIGURE 1 HERE---

The clustering of civil war, however, to a large extent remains an empirical finding in search of an explanation. Saying that conflicts occur in proximate states is not interesting in and of itself. We know that conflicts often spread across national boundaries, but what are the exact causal mechanisms behind the international diffusion of civil war? Previous studies of conflict diffusion have identified several possible explanations. Civil wars may be spatially clustered because the issues and actors engaged in disputes cross national boundaries (Gleditsch 2004). Many civil wars involve ethnic groups seeking secession, and transnational ethnic ties may lead actors in one state to act in solidarity with their ethnic kin in another (Moore and Davis 1998; Woodwell 2004). Further, through a “demonstration effect,” conflict in one country can lead actors in other states to update their beliefs about the efficacy and desirability of challenging their own government (see Beissinger 2002, Kuran 1998). Finally, conflicts may diffuse through a series of externality effects. For example, civil wars in one country may cause a decline in trade and investment throughout the region, which leads to deteriorating economic conditions, in turn leading to conditions making conflict more likely (see Collier et al. 2003, Sandler and Murdoch 2004). Civil wars may also invite the international spread of infectious disease and other public health concerns, which similarly lead to a decline in living standards and generalized discontent (see Ghobarah, Huth and Russett 2003). Although we do not discount that these arguments may offer parts of an explanation for the spatial clustering in civil wars, we

offer population movements as an additional — and we believe more satisfying — explanation for the international spread of armed conflict. For example, refugee flows from Liberia contributed to instability most prominently in Sierra Leone, but also in Guinea and Cote d’Ivoire; forced migration lead to conflict in several Balkan states; and refugees from Rwanda were involved in conflicts in the Democratic Republic of the Congo.

Most of the scholarly literature and public discussion about refugee flows treat population movements as a *consequence* of conflict rather than as a possible *cause* (see, e.g., Azam and Hoeffler 2002, Davenport, Moore and Poe 2003, Schmeidl 1997, Weiner 1996, Zolberg, Suhrke and Aguayo 1989). Several statistical analyses of refugee flows (notably Azam and Hoeffler 2002, Davenport, Moore, and Poe 2003, Öberg and Melander 2003, Okamoto and Wilkes 2003, Schmeidl 1997) have confirmed that civil wars, political repression, and regime change are important predictors of flight. Some researchers, however, have noted that international migration in general and refugee migration<sup>2</sup> in particular can have important security *consequences*, which suggest that refugee flows and population movements can spur the spread of conflict both between and within states (see Lischer 2004; Loescher 1993, Teitelbaum 1984, Stedman and Tanner 2003; Weiner 1992-93). Refugees can change the ethnic composition of the host state; exacerbate economic competition; bring with them arms, combatants, and ideologies which are conducive to violence; and mobilize opposition directed at their country of origin as well as their host country. Yet these arguments, which we explore more fully below, have never been put to a systematic empirical test.

<sup>2</sup> To clarify our use of terms, we refer to ‘migrants’ as a broad, general category of people who relocate themselves across international boundaries. Included under this heading are ‘refugees’, or the subset of migrants who move for fear of politically motivated harm. Because we are interested in international diffusion, our discussion does not include internally displaced persons, or those who flee violence within their state of origin without crossing international boundaries.

In this paper, we analyze the role of refugee flows in the international spread of civil war. We do so through a statistical analysis of refugees from neighboring countries and civil war onset during the period 1951-2001, while controlling for other neighborhood effects and domestic factors expected to be important. Although others have examined the impact of refugee flows on various aspects of conflict, our study is the first to systematically examine the effects of refugees on the likelihood of conflict in refugee-recipient states. Our findings suggest that countries that experience an influx of refugees from neighboring states are significantly more likely to experience civil wars themselves. Thus, population movements are an important factor contributing to the regional clustering of violence and the diffusion of conflict.

Although refugees can promote conflict, we do not wish to detract from the legitimate humanitarian concerns that refugee migration entails. The vast majority of the world's refugees never directly engage in political violence, but are rather the unfortunate victims of it. Furthermore, most refugee hosts never experience armed violence. Nevertheless, this alone should not lead scholars and practitioners to neglect the possible security consequences that often accompany refugee flows. We believe that a better understanding of the circumstances under which refugees can increase the risk of conflict also can help us create better policies for managing the relevant security concerns. As we will discuss in more detail later, we also believe that there are strong theoretical reasons to believe that limiting refugee access is not an effective option in mitigating security risks.

We start by a brief review of the previous research and arguments linking refugees to conflict between and among states. We then discuss the relationship between refugees and the known geographical clustering and contagion of conflict across states. We outline a research design and data for testing our hypotheses and report the results from our empirical analysis. In

the final section, we summarize our conclusions and discuss some of the broader security implications of refugee flows and what we see as constructive and counterproductive responses.

## **REFUGEE FLOWS AND THE SPREAD OF CONFLICT**

The 1951 United Nations Convention Relating to the Status of Refugees defines a refugee as a person who, "...owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his [or her] nationality..." (United Nations High Commissioner for Refugees 1978). A more inclusive and intuitive definition of "refugee" includes anyone who flees their country of origin or residence for fear of politically-motivated harm. This *de facto* definition fits well with the current understanding of refugee movements among non-governmental and intergovernmental organizations as well as in popular discourse (see Zolberg, Suhrke, and Aguayo 1989 for a discussion). Thus, people that flee conditions of general violence such as civil or international wars and the breakdown of political regimes, in addition to those escaping direct government persecution, are considered to be refugees (and, importantly for our study, are counted as such). Not included are those that migrate for purely economic reasons, although we acknowledge that migration decisions are often made for multiple reasons and that political and economic motivations may not be easily separable.

Refugees are usually thought of as victims of political violence—this we do not dispute. Periods of ethnic strife, armed conflict between rival factions, and government purges of political opposition groups clearly place great burdens on civilian populations. People in these contexts face difficult choices: stay and risk harm, or flee to safety, leaving behind one's property,

homeland, and friends and family. Moreover, refugees often live in difficult conditions in their countries of destination, and are frequently dependent on humanitarian assistance.

Many have argued that international refugee migration can also spark conflict. Refugee flows can have important security consequences for sending countries, host countries, and for bilateral relations between the two (see Loescher 1993, Weiner 1992-93). Through the process of being uprooted from their homes and livelihood, refugees have a direct grievance and experience of victimization. Furthermore, because of losses suffered, they have low opportunity costs for fighting. First, for sending countries, the emigration of people implies that politically relevant populations live outside of the boundaries of the state, where they are beyond the security jurisdiction of the government. In the case of refugees, such emigration can be especially problematic because they are especially likely to engage in political opposition to their country of origin, including rebellion (Salehyan 2005). Refugee camps across national boundaries, therefore, often provide sanctuary to rebel organizations, a base of operations, and fertile recruitment grounds. These “Refugee Warriors”—politically active communities in exile—such as Palestinians in Lebanon and Jordan, Cuban-Americans, and Rwandan Tutsis in Uganda, can be powerful opposition forces to their home governments (Zolberg, Suhrke, and Aguayo 1989). Importantly, their location outside of the state allows them to escape efforts at repression.

Second, refugee flows may jeopardize bilateral relations between sending and receiving countries (Weiner 1992). The acceptance of refugees by a government implicates the sending country in committing human rights abuses and failing to provide security for its people. The sending country is also blamed for placing a refugee burden on the host state. On the other side of the coin, sending countries often accuse host countries of providing sanctuary to their dissidents. Although this can sour relations between governments, accepting the refugees of

one's rivals can also be a useful political tool. For example, during the Cold War, the United States and other Western powers regularly accepted those fleeing communist regimes as a way to discredit their rivals and to promote opposition groups in exile (Loescher 1993, Salehyan 2004). This strategy of manipulating refugee communities to serve geopolitical goals has also been documented in several developing country dyads such as Cambodia-Thailand and Afghanistan-Pakistan (Stedman 2003).

### *Refugees and Conflict in the Host Country*

Although most of the existing research has focused on either how conflict generates refugees or how refugee flows may lead to tension between states, in this study we focus on how refugees can pose a security threat to the host country. Refugees can raise the probability of conflict in the host society for a number of reasons. Refugees may either pose a direct security risk to the host government if they become militarized and/or they may play an indirect role in fostering instability through their demographic and economic effects on the host society. In this section, we detail a number of ways in which refugees can make conflict more likely in the host country.

First, refugee flows may imply the direct “importation” of combatants, arms, and ideologies from neighboring states that can facilitate the spread of conflict. In some cases, refugees are able to set up complex political structures in exile and can challenge the host government directly. Several refugee communities have been in their host countries for decades and, rather than bear squalid camp conditions, have engaged in economic activities and formed political organizations—including rebel groups—in their host countries. These political organizations may in turn make policy demands on the host country and influence the domestic political process in ways that are not welcome by the state. For instance, Tutsi refugees from

Rwanda (the Banyarwanda) were active in their opposition to the Obote regime in Uganda and participated in conflicts there; there have been periods of open fighting between refugees from Zambia and the South African government; and a Sri Lankan Tamil refugee was involved in the assassination of Indian Prime Minister, Rajiv Gandhi. Often, the refugees come into conflict with their host government over their opposition to the home government. The refugees' desire to maintain rebel bases from which to attack their home country may not conform to the host government's foreign policy objectives. Cross-border fighting between refugee warrior groups and neighboring governments threaten local populations and the sovereignty of the host country, which may in turn lead to conflict between refugees and their hosts.

Second, rather than fighting openly with the host government, refugee populations can provide resources and support to domestic opposition groups of a similar ethnic group or political faction. Population movements allow for an exchange of resources and ideas among rebel groups in neighboring countries. Migrants fleeing conflicts at home may be responsible for the transfer of arms, which provides domestic groups with the means to fight. In the host country, domestic opposition groups may lack the means, organization, and inspiration to launch an assault on their government. The influx of refugees from neighboring countries where fighting is already underway can provide the impetus and materiel for groups to begin an armed challenge, especially if the refugees share many of the same goals as the domestic opposition. Somali refugees, for example, have often worked closely with ethnic Somali separatists in the Ogden region of Ethiopia, providing them with support in their own political efforts.

Third, as a more indirect route toward conflict, refugee flows can change the ethnic balance in a country, sparking discontent by local populations towards the refugees as well as the government that allows access. Changing demographic patterns due to migration heighten

nativist sentiment among local populations and are the impetus for “Sons of the Soil” movements (Sadiq, 2005; Weiner 1978). Ethnic change sparked by large refugee flows can lead some groups to feel threatened. Competition among locals and ethnically different foreigners may lead to conflict, especially if there is a domestic minority of the same ethnic group as the foreign population—the dominance of the majority group is jeopardized. As Michael Brown (1996: 576) writes, “...the sudden influx of refugees can aggravate ethnic problems and further complicate the picture by changing the domestic balance of power.” For example, conflicts in North-Eastern India (i.e., Assam, Tripura, Mizoram, Manipur, and Nagaland) have been fueled by the influx of migrants and refugees from Bangladesh who have displaced the indigenous native population (Ganguly 1996).

Fourth, ethnic antagonisms often have economic roots—this brings us to a final reason why refugee flows may lead to conflict. Immigrants and refugees compete with locals over scarce resources such as employment, housing, land, and water, constituting an economic “threat”. Migrants can depress wages if and when they enter the labor force and lead to an increase in prices as they consume goods, services, housing, etc. (see Borjas 1989). This may lead to a decline in living standards for politically important segments of the population, particularly those who are in greatest competition with immigrants. Such a decline may lead to a setting that invites violence against migrants as well as more general dissatisfaction with political and economic conditions. In the case of Macedonia, which we discuss below, the influx of refugees from Kosovo led to the widespread perception that refugees were responsible for declining economic conditions in Macedonia.

We now turn to several cases which will illustrate these different mechanisms.<sup>3</sup> First, we argued that refugees may become involved in conflict directly as combatant. One example of refugees as combatant is the direct role of the Palestine Liberation Organization, a government-in-exile formed among Palestinian refugees, in civil wars in both Jordan and Lebanon. The PLO was organized during the 1960s and was initially based in Jordan, where it frequently engaged in back-and-forth clashes across the border with Israeli forces, threatening Jordan's security and its truce with Israel. Along with other groups such as the Popular Front for the Liberation of Palestine, the PLO formed a parallel government that challenged the authority of Amman. Armed units freely moved about Jordanian territory wielding weapons and launching frequent, unauthorized attacks on Israel, which threatened Jordan's internal security and its ability to direct its own foreign policy. Fearing that Palestinian organizations were setting up a rival government, King Hussein moved to thwart the power of the PLO and related groups by issuing a number of decrees restricting their activities. The situation boiled over in September of 1970 when members of the PFLP hijacked four civilian airliners and landed three of them in Jordan, against the wishes of the Jordanian government. In response, on 15 September, the Jordanian army was commanded to enter Palestinian refugee camps and crush the various groups, particularly the PLO. The Palestinians fought back, and for ten days Jordanian forces clashed with refugees and combatants, killing soldiers and civilians alike (Cleveland 2000). This event, known as Black September, effectively rid Jordan of major armed Palestinian factions and the PLO subsequently moved their operations to southern Lebanon where they would become further embroiled in conflict.

<sup>3</sup> We do not claim that the various processes described above are necessarily mutually exclusive or competing explanations. Refugees may destabilize a country for any or all of the reasons described above. In many cases the different mechanisms are likely to go together and reinforce the impact of one another, and it may not always be possible to clearly isolate one mechanism from another.

In Lebanon, the PLO continued to attack Israeli positions while basing themselves in refugee camps where they found shelter and recruits. The presence of the PLO and cross-border bombing raids by Israel angered the local Shi'a population of Southern Lebanon, who for the most part wanted nothing to do with the conflict in their neighbor. Southerners who fled the instability in the region quickly overwhelmed the outskirts of the capital Beirut. Lebanese Muslim leaders were frustrated that the government was doing little to protect its southern border from Israeli raids and accused their government of tacitly encouraging strikes against the PLO. Lebanese Maronites, for their part, disapproved of the PLO presence on Lebanese soil and were angered by Beirut's unwillingness to oust Palestinian militants. Maronite leaders, particularly Pierre Gemayel and Camille Chamoun, formed their own private militias and moved to break the PLO stronghold in the south. The Lebanese Civil War began in April of 1975 when Maronite militias attacked a busload of Palestinians and killed twenty-seven passengers. Fighting between Maronite forces and the PLO continued until June when a cease-fire was agreed upon. However in August, Lebanese Muslims also took up arms against the central government to demand greater political representation. During this new round of fighting, Maronite forces besieged the Palestinian refugee camp at Tal al-Zatar, drawing the PLO back into the conflict. Soon thereafter, Syria joined in the conflict to bolster the Christian militias, and in 1982, Israel invaded in order to crush the PLO. Eventually, the PLO was forced to relocate to Tunis, but not before taking part in a bloody conflict in Lebanon as well (Cleveland 2000).

We have also argued that refugees may lead to increased polarization in host countries and escalating hostility, especially when refugees have links to existing groups within countries. In Macedonia, for example, the massive influx of Albanian refugees from Kosovo exacerbated the existing conflict between the Slav majority and Albanians. Since the inception of the new

republic of Macedonia, Albanians demanded greater rights from the central government and ethnic relations were at times tense although non-violent. Across the border in the Yugoslav region of Kosovo, however, ethnic relations were growing increasingly bloody as the Kosovo Liberation Army (KLA) began to clash with the government in 1995. Beginning in May of 1998, ethnic Albanian refugees fled their homes in search of safety in Macedonia. Responding to the Kosovo situation, NATO took action against the government of Slobodan Milosevic, and bombing raids began against Yugoslavia on 24 March 1999. Because of the bombings and the increased governmental targeting of the Albanian minority, what began as a trickle of refugees crossing into Macedonia quickly became a flood.

Macedonian President Kiro Gligorov, fearing that the conflict could spread, viewed the refugee situation with alarm and moved to seal the border with Kosovo, leaving thousands of refugees stuck on the border near the Blace crossing point, but later succumbed to international pressure and re-opened the border. At the height of the refugee crisis, Macedonia, with a population of approximately 2 million, hosted over 250,000 Kosovo Albanian refugees. The International Crisis Group, an NGO that monitors armed conflicts, issued a report in May of 1999, highlighting the effect of the refugees on the security situation and ethnic relations in Macedonia. The report asserted that, “[t]he longer the refugees are forced to stay in Macedonia, the more likely there will be friction between refugees and the local population. This could also lead to a deterioration of relations between the country’s ethnic Macedonians and the sizeable ethnic Albanian minority.” (International Crisis Group 1999: 4). Top-level officials were also aware of this threat. In a *Newsweek* interview with President Gligorov, when asked about the domestic security implications of the refugee situation and the conflict in Kosovo, he responded, “...we have consistently pointed out that the war in Bosnia and Croatia could spill over into a

Balkan war or even a wider war. And Kosovo is right next to us.”<sup>4</sup> Along with the refugees, moreover, there came reports of weapons smuggling into Macedonia and the infiltration of Macedonian territory by the KLA. Indeed, the Yugoslav armed forces shelled the Macedonian village of Jazine in June, where it was believed that KLA fighters were mingling with refugees and local Albanians.

Albanian groups and political parties in Macedonia openly sympathized with the refugees and decried the government’s handling of the situation, particularly reports of border closures and the treatment of refugees in the camps. There were also reports that Macedonian Albanians were being recruited into the KLA, underscoring the local Albanian sense of anger and frustration and establishing cross-border networks with militant groups. For their part, Macedonian Slavs, alarmed by the presence of so many refugees, were quick to blame the migrants for deteriorating economic conditions, including a 40-50% unemployment rate and the lack of economic growth (International Crisis Group 1999).

An open conflict at the height of the refugee crisis was thwarted by effective international cooperation. The US and NATO allies worked to secure the Kosovo/Macedonia border, manage refugee camps, and airlift a substantial number of refugees to destinations in Europe and elsewhere, diffusing some of the local tensions. However, in early 2001, in and around Tetovo, the largest Albanian city in Macedonia, a group calling itself the National Liberation Army launched attacks against Macedonian police and military forces. It was estimated that the NLA consisted of between 2,000 and 2,500 fighters, including both Kosovar and Macedonian Albanians, many of whom worked directly with the KLA (Kim 2001). Attacks by militant Albanians sparked riots against ethnic Albanian businesses in the southern city of Bitola,

<sup>4</sup> “Macedonia Tries to Cope.” *Newsweek*. 19 April 1999, p. 74.

threatening a further escalation of the conflict. By November, over 100 people had died in the conflict, but extensive support to the Macedonian government by NATO members, along with the initiation of negotiations, prevented further violence (Kim 2001). As this example shows, while relations between Macedonian Slavs and Albanians were previously strained though non-violent, refugee migration from Kosovo and the cross-border social networks that were formed contributed to the escalation and spread of armed conflict.

Albanians in Macedonia provide one example of our claim of how refugees may lead to conflict in host countries through perceived demographic and economic threats, along with links to local rebel organizations. Changing demographics and instability stemming from refugee flows also lead to conflict in the Democratic Republic of Congo (then known as Zaire). Rwandan Tutsi refugees in Uganda formed the Rwandan Patriotic Front, re-entered the country, and toppled the Hutu government in Kigali which had instigated the Rwandan genocide. This prompted a mass exodus of Rwandan Hutus—who feared retribution by the new government—into the Eastern provinces of the Congo. However, local Tutsis in the Congo were outraged by the sudden entry of over one million Hutus and mobilized opposition to the Mobutu government, which was seen as siding with the Hutus against the Tutsis. Laurent Kabila’s overthrow of the Mobutu government with the support of Eastern Tutsis did not end the conflict, however. Fighting between rival Hutu and Tutsi (among others) militias in the east—which included refugees from across the border—and Kabila’s abandonment of his former supporters in Rwanda, provoked a second round of fighting as well as the intervention of Rwanda, Burundi, Uganda, and several other African states into the Congo.

## AN EMPIRICAL TEST OF REFUGEES ON HOST COUNTRY CONFLICT

We have discussed a number of ways in which refugee flows can lead to conflict in host countries, and discussed a number of examples where refugees were a key factor leading to escalating hostilities and the onset of armed conflict. We argue that the impact of refugees is not limited to the cases discussed here, and that the presence of refugees more generally influences the likelihood of violent conflict in host countries. Thus, the hypothesis we consider in this study is that *the presence of refugees from neighboring countries increases the probability that a country will experience civil war*. We develop an empirical test of this proposition, using annual data on conflict and refugees for nearly all countries in the world since 1951.<sup>5</sup> We believe that refugees are more likely to lead to conflict the greater the number of refugees and in cases where refugees enter from neighboring countries. Before turning to our measures and empirical test, we discuss how the large number of refugees in the contemporary world can have a significant impact on host countries and why we would expect neighboring refugees rather than refugees in general to be associated with higher risks.

Table 1 lists the number of refugees hosted by some of the largest refugee-receiving states in 2001, using data from the US Committee for Refugees. In the largest cases, Iran and Pakistan both hosted over 2 million refugees, principally Afghans, while there are over 1.6 million refugees in Jordan, mostly from Palestine. But the raw number of refugees may not adequately reflect the impact refugees may have on a country's ethnic balance, economic and labor-market conditions, or the possibility that armed factions may take root. Therefore, in Table 2, we report the size of the refugee population hosted *relative* to the local population for several

<sup>5</sup> Our country list based on the Gleditsch and Ward (1999) list of states. We do not include small, formally independent states with less than 250,000 inhabitants, which are both unlikely to host significant numbers of refugees and to experience conflict. The availability of data on migration effectively constrains our sample to 1951-2001.

countries. Table 2 makes it clear that in percentage terms, refugees often make up a substantial portion of the total national population. Clearly, not all of these refugee communities lead to open armed conflict in the host country, but they almost invariably lead to tensions with local populations, particularly in regions where they were concentrated. In Jordan and Lebanon, refugees make up roughly one-third and one-tenth of the countries' total populations, respectively. In a small country like Djibouti, a relatively modest number of refugees can have an important impact.

These aggregate figures for a country may often mask or understate the relevant impact of refugees as felt on the ground by local communities. Refugees are not distributed equally across the territory of a country, and their effects may be particularly acute within particular regions or areas. Buhaug and Gates (2002) demonstrate that civil conflicts often are confined to particular regions within states; in many instances, it is the *local* effects of refugees on ethnic relations, economic conditions, and rebel mobilization—particularly in border regions—that are important. Moreover, beyond the actual impact of refugees on a country's demographic balance or economic fortunes, foreigners often become scapegoats and are blamed for social ills, and in many instances the *perception* that refugees have negative economic and social effects may be more important than the objective evidence.

---INSERT TABLES 1 AND 2 HERE---

Although it is possible that the presence of refugees in general raises the probability of conflict, we believe it above all is refugees from neighboring countries that raise the risk of conflict. Refugees from distant countries are less likely to have ethnic kin in the host country.

They are also less likely to mobilize militarily, bring in arms, and concentrate in large numbers in particular areas. Accordingly, we do not expect the risk of civil war in the United States to be affected by the influx of refugees from Somalia, but Somali refugees could increase the risk of civil conflict in Ethiopia. Second, to recapitulate a point made earlier, although we use the term “refugee” out of convenience, we realize that it is only a small subset of the refugee population which may engage in political violence—most refugees are civilians and retain their civilian status.

### *Research Design and Data*

Our conflict data come from the Uppsala Conflict Data set (see Eriksson, Wallensteen and Sollenberg 2003, Gleditsch et al. 2002). These data identify instances of armed conflict involving more than 25 casualties in a given calendar year. As a robustness check, we also re-estimate our model, restricting the analysis to more severe wars involving at least 1000 battle deaths over the course of the conflict.<sup>6</sup> For our dependent variable, we include data on intrastate and internationalized intrastate conflicts where a state experiences conflict on its own territory, as classified by the location variable in the Uppsala data set. Our main dependent variable is conflict *onset*, which is coded one for the first year of a conflict, and zero if no conflict takes place in the state in that particular year. Subsequent ongoing years of the same conflict are

<sup>6</sup> We prefer a lower battle death threshold since a high threshold understates the extent of violent incidents. Moreover, we do not expect high-intensity and low-intensity conflicts to be driven by entirely different factors or that the impact of refugees should differ dramatically between the two. We also believe that a high threshold for classifying binary events could lead to a problematic screening effect when taking into account dependence among observation over time, using either past conflict occurrences or counts of years at ‘peace’ (see Beck et al. 1997). With a 1000 deaths threshold, an event that falls just short but still generates 900 deaths would by construction not be a conflict and be assumed to have no impact on the subsequent probability of conflict. In practice, however, low-intensity conflicts are likely to be systematically associated with a higher likelihood of future large-scale conflict.

dropped from the estimation sample.<sup>7</sup> In cases where there were multiple conflict onsets in a country, data on a new onset was included if it occurred during the years when another conflict was ongoing.<sup>8</sup>

Our main independent variable is the number of refugees that a state receives from neighboring states. We consider two definitions of “neighboring” countries based on the Gleditsch and Ward (2001) minimum distance data. First, we use a restrictive definition in which neighbors are defined by borders falling within a distance of 100km or less (including contiguity). A second, more inclusive definition identifies neighbors as states falling within a 950km span around a given state’s boundaries. The first corresponds to what is commonly thought of as immediate neighbors (yet does not exclude states separated by short stretches of water, as strict contiguity would entail). The second is more consistent with common definitions of the broader regional environment of a state, without forcing discrete and mutually exclusive classifications of regions based on their proper names (see Gleditsch and Ward 2004, Przeworski and Teune 1970); A distance of 950km, furthermore, can also be traveled over land by refugees in a relatively short period of time. Additionally, we also include a measure weighting the total number of refugees from neighboring states relative to the size of the host countries (more specifically, we consider the number of refugees per thousand inhabitants in the host country).

Our data on refugee flows come from the Population Data Unit of the United Nations High Commission for Refugees (UNHCR). These annual data contain dyadic records of refugee stocks, organized by the origin and asylum countries. Some of the entries in the UNHCR data list refugees as originating in colonies or dependent areas, such as Angola prior to independence, or

<sup>7</sup> We have also estimated our models using conflict incidence as our dependent variables, with any year where a state experiences a conflict with more than 25 casualties coded as a 1. Our principal findings remain the same.

<sup>8</sup> In an alternative measure, not shown, we counted as a new onset cases where a new rebel group entered the conflict. Results do not vary significantly when using this variable.

recognized communities that aspire to independence but are not effectively independent states— notably Western Saharans and Palestinians. In these cases, we first consider the location of the territory from which the refugees originate. For colonies or communities within or directly adjacent to the country exercising territorial control, we code the refugees as originating in the recognized nation-state exercising control over the territory. In the cases of Palestine and Western Sahara, we thus consider refugees as originating from Morocco and Israel respectively. In cases where refugees originate from overseas colonies or dependent areas that are located at great distances from the country exercising control, we count these as neighboring refugees for countries bordering the dependent area. As such, refugees from Portuguese held Angola in the 1960s are considered refugees from neighbors for Zaire.

Based on the refugee data along with the data on distances between states, our main measure of local refugee movements contains the sum of all refugees from neighboring countries. The number of refugees from neighboring countries has an extremely skewed distribution. The majority of countries host no refugees from neighboring countries, indeed this is the case for almost three quarters of the country-years in our sample. Likewise, disregarding the block of countries not hosting any refugees, the distribution of the actual number of refugees in recipient countries still remains highly skewed with a long right tail. Although most countries where we see refugees from neighbors have less than 5,000 refugees, some countries such as Malawi, Pakistan, and Sudan have at various points in time hosted more than 1,000,000 refugees from neighboring states. Although we generally expect that the risk of conflict will increase with the number of refugees, we do not expect a strictly linear relationship between the number of

refugees and the risk of conflict. Therefore, we take the natural log of the number of refugees after adding one to the base.<sup>9</sup>

A quick comparison of our refugee variable against the conflict variable provides preliminary support for the thesis linking refugees to war onset (see Table 3). Of our country-year observations, 1,101 cases hosted refugees from neighbors (at the 100km threshold) while 4,826 did not. Of the non-refugee observations, 156 (3%) experienced a civil war onset while for refugee hosts, 127 or 10% experienced conflict, a significantly higher proportion. Although this suggests a relationship between the two variables, we must consider the role of possible confounding factors to draw any firm conclusions. However, it is also clearly the case that the relationship between refugees and conflict is not a deterministic one. Although civil wars are more common in countries that are refugee recipients, the majority of cases in which a country hosts refugee populations are not violent.

--- INSERT TABLE 3 HERE ---

### *Control Measures*

First, we have argued that conflict in neighboring states may increase the risk of civil war in the state itself. Taking into account refugee flows may explain part of this effect, but other attributes of neighboring conflict such as availability of arms, economic externalities, etc. may also have independent effects. Just as serial correlation over time can bias regression coefficients, spatial clustering in conflict outcomes not accounted for by country specific covariates can bias

<sup>9</sup> We have also considered a dichotomous variable indicating a “substantial” number of refugees, where we consider countries with more than 10,000 refugees as having substantial presence. Results do not change when this variable is used.

coefficient estimates. Therefore, it is essential to control for the effect of the presence of conflict in neighboring states to ensure that our findings do not merely reflect other contagion tendencies not explicitly taken into account. One way to control for residual spatial clustering is to include a right hand side spatial lag in the model.<sup>10</sup> We use a dichotomous indicator of whether there is at least one conflict with more than 25 casualties in a given year in any neighboring country, based on the delineation of neighboring states discussed previous. A positive coefficient estimate for this term indicates positive spatial clustering, or that we are more likely to see a conflict onset in a country that is adjacent to a country experiencing an ongoing conflict.

Second, we include a variable for transborder ethnic groups based upon the Minorities at Risk dataset (Davenport 2004). Some of the international diffusion of conflict may be driven by transnational ethnic ties, which should be controlled for. This variable is a dichotomous indicator, coded one if there is at least one ethnic group in the country in question that has ethnic kin in any neighboring country. However, because of the limited coverage of this variable, its inclusion substantially reduces our number of observations. We thus estimate our models with and without it.

Third, the civil war literature has argued that civil conflicts are less likely in wealthier states (Fearon and Laitin 2003). Richer states tend to have better police, military, infrastructure, and administrative capabilities. A high level of wealth may also reduce economic grievances and provide high opportunity costs for fighting. To control for the effect of income, we use the

<sup>10</sup> There is a large literature on how spatial dependence among observations can be modeled in a regression framework. We refer to Anselin (1988) and Schabenberger and Gotway (2005) for further details. Whereas it is common to use a simultaneous autoregressive model to represent a spatial process for a continuous dependent variable, a conditional model is more natural for a binary dependent outcome. The normal logit model where the individual observations of  $y$  are presumed to be independent of one another can be generalized to the so-called *autologistic* model, where the value of  $y$  for an individual observation  $i$  depends upon the value of  $y$  in other connected locations (see Besag 1974).

natural log of GDP per capita in constant 1996 values, based on the expanded GDP per capita data in Gleditsch (2002).

Fourth, many have argued that political systems influence the risk of civil war. Many researchers have argued that the risk of conflict is highest in ‘anocracies’ or states that are not fully democratic, but not quite autocratic (see, for example, Muller and Weede 1990). Democracies allow non-violent means of protest while harsh authoritarian regimes can effectively repress dissent. This suggests that the relationship between the likelihood of civil war and continuous measures of democracy should have an inverted U-shaped relationship. Our measure of political institutions is based on the modified Polity 4 data (see Gleditsch 2003), which contain an institutionalized democracy scale ranging from –10 for the least democratic political systems to value of 10 for democratic polities. The modified version of the Polity 4 data differ from the original Polity 4 data in that they conform to the population of independent states in the Gleditsch and Ward (1999) list, and contain estimates for some countries not in the original Polity data based on the Freedom House data. To control for the inverted U-curve hypothesis, we include a term for a country’s Polity score as well as its square.

In the original Polity data, a large number of the observations have been assigned special transition codes that fall outside the –10 to 10 scale (e.g. -77, -88). The Polity project now recommends that these be converted in a polity score of 0, and this has become common in the literature on civil war. Although we believe this approach may be problematic,<sup>11</sup> we ultimately chose to follow this convention to make our results more comparable with other studies.

<sup>11</sup> Many of these transition codes occur precisely because countries experience conflict. As a result, seeming support for an inverted U-shape may thus in part be due to the construction of the measure rather than a functional relationship between the character of institutions and conflict per se. Comparisons with other data sources such as the Freedom House data suggest that many of these countries with irregular Polity values are “less democratic” than a score of zero would suggest.

Fifth, ethnic relations are often thought to be important for the risk of civil war, but researchers differ on what type of constellations between ethnic groups are most prone to conflict. Many studies have considered ethnic fractionalization indices, and found at best weak evidence that of fractionalization or group diversity being related to conflict. In this study, we will consider a measure of ethnic dominance, based on the size of the largest ethnic group. We use a data set developed by Vanhanen (1999) that distinguish between the three largest groups in terms of race, religion, and language. We identify the dominant group by the largest share of the population for any of the three individual indicators. More specifically, our measure is defined as 100 minus the size of the largest group, so that higher values indicate a smaller dominant ethnic group.

Finally, we include a variable for total country population (logged). Several studies have found population size to be related to conflict. Furthermore, as a ‘gravity model’ of international migration would suggest, refugees may be especially likely to migrate to larger countries.

We estimate the probability of conflict onset given the covariates and conflicts in adjacent states through a logistic regression model. Our observations are likely to display temporal dependence over time, as conflicts are more likely to recur soon after a previous conflict, and increasing lengths of time at peace may have a self-sustaining effect on decreasing the risk in conflict. We address the potential time dependence by measuring time since last conflict in years (or initial year of independence, if a country has not experienced conflict). We estimate the effect of the count of peace years on conflict using the non-parametric Beck, Katz, and Tucker (1998) method with a cubic smoothing spline with three interior knots. Since we only look at onset and censor ongoing years in this paper, we disregard the possible impact of refugees and migration on conflict escalation or the prospects for peaceful settlements. Although

we believe that refugees will generally make it harder to settle conflicts and thus are likely to increase duration, we leave these issues for further research.

## RESULTS

In Table 4, we first estimate a model without any variable for refugees and then consider the effect of our main independent variable. The results for the first model in Table 4 confirms the tendency for civil wars to cluster: the positive coefficient estimate for neighboring civil war indicates that countries neighboring territories experiencing a civil war are more likely to experience conflict themselves. This ‘spatial lag’ is a correction for spatial correlation, although it provides little theoretical insight as to why conflicts may cluster based on its simple inclusion.

--- TABLE 4 HERE ---

The other control variables behave largely as expected. Consistent with earlier studies, we find there is an inverted-U relationship between the Polity score and conflict onset. The positive coefficient estimate for Polity and the negative coefficient estimate for Polity<sup>2</sup> suggest that both democracies (high values on the Polity scale) and highly authoritarian governments (low values on the Polity scale) are less likely to experience conflict.<sup>12</sup> We also find that a higher GDP per capita decreases the likelihood of a conflict, whereas greater ethnic heterogeneity increases the risk of conflict. We further find a strong positive relationship between the size of a country’s population and the likelihood of conflict. Finally, the model demonstrates strong

<sup>12</sup> Using a likelihood ratio test we find that the coefficients for the two Polity terms are jointly significant.

evidence for dependence over time, with higher numbers of peace years decreasing the likelihood of conflict.

In the second model reported in Table 4 we include our variable indicating refugees from neighboring states. The results demonstrate that refugees from neighboring countries have a significant and positive effect on the probability of conflict. To test our theoretical claim that it is only refugees from *neighboring* states that matter for conflict, we ran an additional model (not shown) including both refugees from countries beyond 950km of the host state and refugees from countries within that threshold. While refugees from further abroad had a positive coefficient, it was not statistically significant by conventional standards, whereas the coefficient estimate for refugees from nearby countries remains both positive and statistically significant. We also note that in Table 4, the coefficient on civil wars in neighboring countries is reduced somewhat in size (from 0.421 to 0.337) when we control for the stock of refugees hosted from neighboring states. We interpret this as evidence that hosting refugees from neighboring countries accounts in part for the observed clustering of civil wars, but that other diffusion mechanisms not accounted for in our model also appear to operate.<sup>13</sup>

Because logit coefficients are linear in the log-odds of events and non-linear in probabilities and thus difficult to interpret, we compute predicted probabilities in order to shed light upon the substantive impact of refugees, based upon these results. As a baseline comparison group, we set all continuous variables to their means, Polity to zero, and refugees and neighboring war to zero. The number of years at peace was set to five. In this baseline hypothetical scenario, the probability of a conflict onset was .035. Then, we set the value of

<sup>13</sup> We tested for possible residual geographic heterogeneity across not captured by our spatial by regressing a set of regional dummies on the Pearson residuals from Model 2 in Table 4. The coefficient estimates for the regional dummies were all small, and Raftery's (1995) Bayesian Information Criterion strongly suggested that the residuals were essentially orthogonal to the regional dummy variables.

refugees to 100,000 (in logged terms), which had the effect of raising the predicted probability of conflict onset to 0.055, or a 57% increase in probabilities. Finally, we set the value of refugees to 100,000 and in tandem, set the neighboring war variable to one. This raised the probability of conflict to 0.075, or a 114% increase over the baseline. As can be seen, neighboring a civil war and/or an influx of refugees can have a large substantive impact on the likelihood of violence.

However, since this hypothetical baseline comparison profile may not be typical for countries in the actual data, another and perhaps more interesting counterfactual approach is to use actual values for a particular country of interest and see how much this would change given the number of refugees hosted. To do so, we compute predicted probabilities of conflict for the Democratic Republic of the Congo (DRC) in 1996. We evaluate, based on the estimated results, how the presence of refugees contributes to the predicted risk of conflict and what the predicted risk of conflict would have been in the absence of refugees. With no refugees, our model predicts that the DRC would have had a 12% chance of civil conflict in 1996; a rather high prediction given the relatively low predicted probabilities of civil conflict in a given year across the data. However, in actuality, the DRC hosted over 670,000 refugees from neighboring countries — particularly Rwanda, Burundi, and Sudan. The historical evidence suggests that the refugees from Rwanda were especially important in fostering conflict. With this number of refugees, our model predicts that the DRC's risk of conflict rose to 20%, which implies a large increase in relative terms. If there were no civil conflicts in any of the DRC's neighbors as well as no refugees, this predicted probability would have dropped to 9%. Thus, the combination of refugees and civil wars in neighboring countries clearly had a large impact on "internal" developments in the Congo.

---INSERT TABLE 5 HERE---

In Table 5 we estimate several additional models to check the robustness of our findings to other neighboring country characteristics, a higher conflict threshold, and refugees relative to host country population. The first model includes a variable for whether the country in question contains an ethnic group that also exists in an adjacent country. Inclusion of this variable reduces the number of cases to less than two thirds of the original sample due to limited data coverage. However, results show that our refugee measure is robust to its inclusion although the coefficient is reduced somewhat. More specifically, we find that ethnic kin in a neighboring state appears to increase the probability of a civil conflict, but the neighboring civil war and refugee variables continue to be positive and significant even when controlling for the presence of transnational ethnic ties.

In the second model in Table 5 we restrict the analysis to the “traditional” civil war threshold of 1,000 battle-deaths. Although we believe this definition is overly restrictive and potentially problematic (see fn 6), the effect of our refugee variable on conflict onset is unchanged. In the third model we scale the size of the refugee stock by dividing it by the host country’s population in thousands, as large refugee populations relative to the host country may more adequately reflect the propensity for conflict. Measured in this way, we find that refugees from neighboring countries continue to have a substantial impact on political violence. Using this model, we generated predicted probabilities with a baseline identical to that reported above: the baseline category (no refugees, no civil war in neighbors) was predicted to have an 3.5% risk of conflict. Increasing the refugee/population variable from zero to its mean (for non-zero observations) shifted this probability up to 4.5%. Finally, a similar increase with neighboring

civil war also set to one implied a further jump to a 6.2% probability of violence. While these may appear to be small absolute numbers, as civil conflicts after all are relatively rare events, the proportionate change remains quite large. The final model includes both the refugees/population specification as well as the ethnic kin in a neighboring state variable, and results remain robust to this specification as well. In sum, we continue to find a strong positive relationship between refugees and the spread of violence, even when we include additional control variables and vary our key measure of the stock of refugees.

## **DISCUSSION AND CONCLUSION**

We have shown that refugees from neighboring countries can increase the risk of intrastate conflict. This cannot be attributed to an effect of refugees in general, as only refugees from neighboring states appear to consistently increase the risk of conflict. The effect holds up even when controlling for the main factors believed to be associated with civil war, including transnational variables. Our results suggest that refugee flows are one of the mechanisms driving the observed diffusion or spillover of civil conflict, although other neighborhood effects appear to be at work as well. Thus, consistent with our hypothesis, we find evidence for a positive effect of refugees from neighboring countries on conflict, which suggests that large populations of displaced persons may create security concerns in host countries. However, further research into the diffusion of war is warranted to assess the importance of other spillover mechanisms.

While our research presents the first attempt to statistically verify the relationship between refugees and conflict diffusion, policy-makers have long been attuned to the regional instability that forced migration can create. Most recently, refugees from the Sudanese region of Darfur have the potential to seriously destabilize Chad. Indeed, in May of 2004 a group of about

80 soldiers of the Zagawa ethnic group in Chad — kin to the Darfurese — mutinied against the government of Idriss Deby, citing the government’s failure to protect the refugees and directly confront the Khartoum government. Although the attempted coup was unsuccessful, a Western diplomat remarked, “[t]he general turmoil and instability at the border is ringing alarm bells here.”<sup>14</sup> The UNHCR has also acknowledged security concerns; in a statement by the UNHCR on October 22, 2004, it was declared, “[w]e fear that if the situation is not stabilized soon in Darfur, we could see tens of thousands more refugees cross the border into Chad, where resources are already stretched to the breaking point and where there is growing animosity among the local population.”<sup>15</sup>

We emphasize again that most cases of refugee flows do not lead to violence (see Table 3 above) and that the vast majority of refugees never engage in fighting. Although refugee flows can create security concerns there is clearly no reason to expect deterministic links between refugees and conflict. We believe that proactive steps taken by host countries in cooperation with agencies such as the UNHCR and humanitarian NGOs to manage refugee camps can reduce possible security risks when they exist. In this regard, the case of Malawi during the 1980’s and early 1990’s is instructive. Fighting in neighboring Mozambique caused nearly 2 million refugees to escape to Malawi. At one point, refugees constituted 10 percent of Malawi’s resident population, placing enormous strains on local resources. Despite its status as one of the poorest countries of the world, NGOs described Malawi’s response to the refugee crisis as “heroic” (US Committee for Refugees 1989). Local integration efforts, access to land and employment, and extensive cooperation with the UNHCR and the World Food Program prevented the spread of conflict from Mozambique. As an example of effective management efforts, the UNHCR

<sup>14</sup> “Chad: Darfur forces President Deby onto Political Tightrope” *IRIN News*. October 5, 2004.

<sup>15</sup> Chad/Darfur: UNHCR to substantially increase presence in West Darfur. UNHCR Briefing Notes. Oct 22, 2004.

reported that 90 percent of the refugees were engaged in some type of productive economic activity such as making crafts, raising livestock, and processing maize (United Nations High Commissioner for Refugees 2000: 113). Further, when the fighting ended, Malawi, Mozambique and the UNHCR cooperated in voluntary repatriation efforts that are considered to be a model in the field of refugee protection. Thus, it is possible for receiving countries to provide humanitarian access and manage potential security risks. We believe that further research on the governance of refugee communities is warranted to determine how conflict may be exacerbated or mitigated (see Jacobsen 1996; Lischer 2005).

Closing the border to refugees is, furthermore, likely to be a counter-productive response to refugee influxes. Despite the ethical problems with such an approach, restricting exit options—an alternative to fighting—may lead to the escalation of violence in neighboring states, which could yield even greater security risks, in addition to more severe economic and public health externalities. For wealthy developed countries, an implication of this study is that fully funding aid agencies such as the UNHCR is more than a humanitarian gesture, but can alleviate security risks when they are present. The UN must be equipped to preserve the civilian status of refugees and prevent conflicts with local populations. Moreover, overseas resettlement programs, when appropriate, can serve to mitigate some of the pressures on countries of first asylum.

Effective policy measures therefore require states to manage the humanitarian needs of migrants, the potential security risks associated with refugee communities, and must address issues leading to flight in the first place. Thus, we believe that from a policy standpoint, generous asylum and refugee programs—both in the initial host countries as well as in developed

third countries—can limit the spread of armed conflict as well as curtail the escalation of conflict in sending countries.

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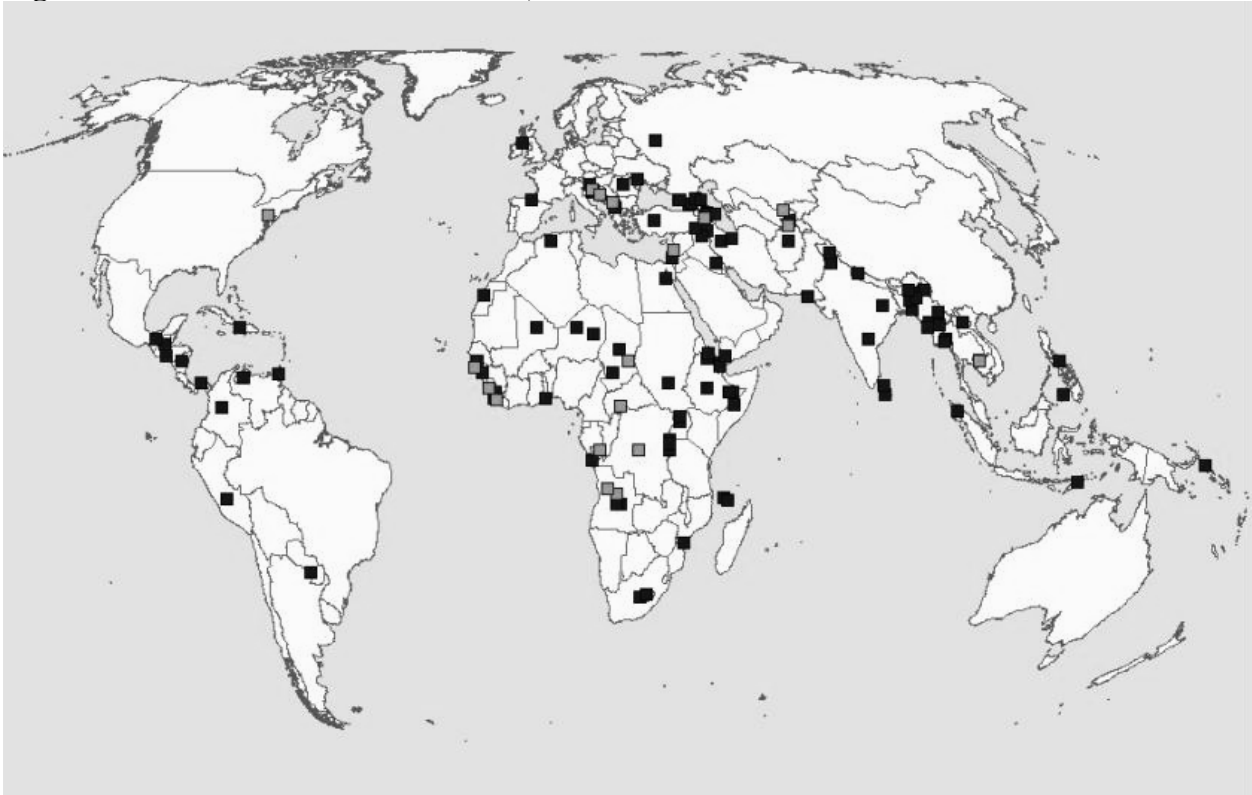
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**Figure 1: Location of Armed Conflicts, 1989-2001**



\* Location of intrastate conflicts (dark) and internationalized intrastate conflicts (light dots), 1989-2001, based on the Uppsala conflict data. Each dot corresponds to the geographical midpoint of a conflict assigned a unique ID, based on conflict incompatibility. See Gleditsch et al. (2002) for further details on the Uppsala conflict data.

**Table 1. Countries with Significant Refugee Populations, 2001**

<b>Host</b>	<b>Number</b>
Iran	2,558,000
Pakistan	2,018,000
Jordan	1,643,900
Tanzania	498,000
United States	492,500
Yugoslavia	400,000
Syria	397,600
Lebanon	389,500
India	345,800
China	345,000
Sudan	307,000
DR Congo	305,000
Thailand	277,000
Zambia	270,000
Guinea	190,000

Source: United States Committee for Refugees, 2002 Yearbook

**Table 2. Ratio of Refugees to Host-Country Populations, 2001**

<b>Host Country</b>	<b>Ratio of Refugee Population to Total Population</b>	<b>Number of Refugees</b>
Jordan	1:3	1,643,900
Lebanon	1:11	389,500
Iran	1:26	2,558,000
Djibouti	1:27	22,000
Yugoslavia	1:27	400,000
Congo-Brazzaville	1:30	102,000
Zambia	1:36	270,000
Guinea	1:40	190,000
Liberia	1:53	60,000
Pakistan	1:72	2,018,000
Tanzania	1:73	498,000
Sudan	1:104	307,000

Source: United States Committee for Refugees, 2002 Yearbook

**Table 3: Refugees from neighboring states and civil conflict onset.**

		Conflict Onset		Total
		No	Yes	
Refugees from Neighboring states	No	4,826 (97%)	156 (3%)	4,982 (100%)
	Yes	1,101 (90%)	127 (10%)	1,228 (100%)
Total		5,927	283	6,210

Pearson chi-squared = 117.7695; Pr = 0.000

\*Percentages listed across rows

**Table 4 : Logistic Regression Results**

	<b>1. Controls Only</b>		<b>2. Including Refugees</b>	
	Coef. (Robust s.e.)	P-value	Coef. (Robust s.e.)	P-value
Refugees	--	--	0.042 (0.013)	0.002
Civil War in Neighbor	0.421 (0.152)	0.006	0.337 (0.152)	0.027
Polity	0.005 (0.012)	0.699	0.006 (0.012)	0.642
Polity Squared	-0.015 (0.003)	0.000	-0.015 (0.003)	0.000
GDP Per Capita (log)	-0.254 (0.089)	0.004	-0.214 (0.089)	0.016
Population (log)	0.280 (0.039)	0.000	0.264 (0.040)	0.000
Ethnic Heterogeneity	0.016 (0.004)	0.000	0.016 (0.004)	0.000
Peace Years	-0.503 (0.063)	0.000	-0.492 (0.063)	0.000
Spline 1	-0.007 (0.001)	0.000	-0.007 (0.001)	0.000
Spline 2	0.003 (0.001)	0.000	0.003 (0.001)	0.000
Spline 3	0.000 (0.000)	0.129	0.000 (0.000)	0.108
Constant	-2.030 (0.832)	0.015	-2.298 (0.823)	0.005
N	5567		5567	
Wald Chi-squared	347.93		354.06	
Prob > Chi-Squared	0.000		0.000	
Log Likelihood	-825.595		-821.040	

\*P-Values are of two-tailed significance tests

**Table 5: Additional Models**

	<u>3. Including Ethnic Kin</u>		<u>4. Large Conflicts</u>		<u>5. Refugees per 1,000 Population</u>		<u>6. Refugees per 1,000 and Ethnic Kin</u>	
	Coef. (Robust s.e.)	P-value	Coef. (Robust s.e.)	P-value	Coef. (Robust s.e.)	P-value	Coef. (Robust s.e.)	P-value
Refugees	0.033 (0.014)	0.021	0.041 (0.018)	0.025	0.161 (0.063)	0.010	0.134 (0.071)	0.059
Civil War in Neighbor	0.435 (0.176)	0.013	0.746 (0.229)	0.001	0.352 (0.152)	0.021	0.445 (0.176)	0.012
Ethnic Kin	0.531 (0.191)	0.005	--	--	--	--	0.549 (0.191)	0.004
Polity	0.012 (0.013)	0.356	-0.010 (0.018)	0.576	0.007 (0.012)	0.582	0.013 (0.013)	0.309
Polity Squared	-0.011 (0.003)	0.000	-0.018 (0.004)	0.000	-0.015 (0.003)	0.000	-0.011 (0.003)	0.000
GDP Per Capita (log)	-0.170 (0.100)	0.090	-0.122 (0.120)	0.305	-0.227 (0.088)	0.010	-0.178 (0.100)	0.075
Population (log)	0.222 (0.045)	0.000	0.297 (0.053)	0.000	0.288 (0.040)	0.000	0.242 (0.044)	0.000
Ethnic Heterogeneity	0.016 (0.005)	0.002	0.019 (0.006)	0.001	0.016 (0.004)	0.000	0.016 (0.005)	0.001
Peace Years	-0.507 (0.071)	0.000	-0.573 (0.081)	0.000	-0.499 (0.063)	0.000	-0.516 (0.071)	0.000
Spline 1	-0.007 (0.002)	0.000	-0.006 (0.001)	0.000	-0.007 (0.001)	0.000	-0.007 (0.002)	0.000
Spline 2	0.004 (0.001)	0.000	0.003 (0.001)	0.000	0.004 (0.001)	0.000	0.004 (0.001)	0.000
Spline 3	0.000 (0.000)	0.149	-0.001 (0.000)	0.017	0.000 (0.000)	0.000	0.000 (0.000)	0.139
Constant	-2.719 (0.915)	0.003	-3.796 (1.093)	0.001	-2.371 (0.830)	0.107	-2.800 (0.920)	0.002
N	3591		5448		5567		3591	
Wald Chi-squared	270.20		278.53		349.34		267.60	
Prob > Chi-Squared	0.000		0.000		0.000		0.000	
Log Likelihood	-657.727		-464.249		-822.489		-658.409	

\*P-Values are of two-tailed significance tests