

# The Effect of the Refugee Experience on Terrorist Activity

An investigation of how the humanitarian refugee crisis is impacting global terrorism.

Terrorism as a global phenomenon has flummoxed policy makers and researchers alike, as we strive to understand what drives this catastrophic presence in the global community. The American government is in the 6<sup>th</sup> year of its global “War on Terror,” devoting tremendous resources to counter-terrorism and focusing its foreign policy on eradicating support for terrorist groups worldwide. Yet the academic community, governments and international organizations continue to struggle to pinpoint the causes of terrorism. As terrorist acts continue to devastate the international community, it is increasingly important to understand what causes terrorists to act.

This study investigates the relationship between the presence of refugee populations in a country and the numbers of terrorist attacks that groups based in that country are responsible for. The data will show that the size of refugee populations has a significant impact on terrorist activity. It also demonstrates the important role of humanitarian aid to refugees in curbing terrorist activity. This is the first study to empirically evaluate the effect of the lack of efficient resolutions to conflicts that produce refugee populations on terrorism.

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## **Introduction:**

The world refugee population is unique in that it experiences economic destitution, political alienation, a great deal of hopelessness and a general lack of national identity. Refugees have experienced the horrors of war and terrorism firsthand in their own countries, and then seek asylum, where they often wage personal wars against poverty and political or social oppression. (Crisp 2003b) Populations in asylum are often politically alienated in the country they find refuge in, experience extreme poverty, a life in temporary camps and little opportunity for integration into society. The United National High Commission on Refugees has called the lives of refugees 'wasted' even once they seek asylum, since integration is notoriously difficult to achieve (Executive Committee of the High Commissioner's Programme 2004).

This study argues that the refugee experience of inescapable poverty, political and geographic alienation and desperation contributes to an increase in terrorist attacks perpetrated by groups based in the country hosting the refugee population. To date, academic literature on terrorism and its causes has focused primarily on microcosms of terrorist activity and investigates political and economic factors as causes of terror. Yet it has proved difficult for the academic community to establish a causal relationship between political or economic variables and terrorism. Most studies focus on terrorist movements or groups in one region, typically the Middle East (Berrebi 2003, Krueger and Maleckova 2003). Many of these studies evaluate causal claims within the scope of economic factors such as income and level of education, or claim political motivation or even religion as a cause of terror (Berrebi 2003, Krueger and Maleckova 2003, Saleh

2004, Pape 2003). To my knowledge, a study has yet to be published that analyzes terrorism, both organizations and incidents, on a global level.

This study analyzes terrorist activity, the dependent variable, as a function of the number of active terrorist groups in a country as well as the number of incidents that those groups are responsible for, and relates that data to refugee populations as of 2005 and 1993. It uses a new dataset for terrorism which accounts for all terrorist groups active in the year 2005 and the acts they have committed, as well as refugee data obtained from the United Nations High Commission for Refugees and the United Nations Relief and Works Agency.

***Definitions of key terms:***

This study deals with two terms that are inherently difficult to define and measure, *terrorism* and *refugee*. The common idea that “one man’s terrorist is another man’s freedom fighter” makes terrorism a concept that is difficult and sensitive to define. There is no universally accepted definition of terrorism. Similarly, the increasingly complex nature of global conflict has made refugee status difficult to discern, particularly now that internal and regional conflicts generate large internally displaced populations that are difficult for the UN aid agencies to account for and aid (UNHCR 2006a).

The definition of terrorism utilized by Terrorist Knowledge Base, which is the main source of terrorism data utilized in this paper, will be used throughout the study. Terrorist Knowledge Base is a public information source found on the web at [www.tkb.org](http://www.tkb.org) and provides information on terrorist groups and incidents globally. TKB defines terrorism as:

“violence, or the threat of violence, calculated to create an atmosphere of fear and alarm... This violence or threat of violence is generally directed against civilian targets.

The motives of all terrorists are political, and terrorist actions are generally carried out in a way that will achieve maximum publicity...Finally, terrorist acts are intended to produce effects beyond the immediate physical damage of the cause, having long-term psychological repercussions on a particular target audience.”

A refugee is 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 nationality, and is unable to or, owing to such fear, is unwilling to avail himself of the protection of that country..." (1951 Convention relating to the Status of Refugees). The term “refugee” is used interchangeably in this study with what the UNHCR refers to as “persons of concern,” defined by the UNHCR as refugees, asylum-seekers, returned refugees, internally displaced persons, returned internally displaced persons, stateless persons and various others. These different populations of people are all displaced and deemed by the UNHCR to be in crisis. When speaking about the “refugee population” in this paper, we are really talking about the total number of persons of concern to the UNHCR. The terms asylum-seekers, returned refugees, internally displaced persons, returned internally displaced persons and stateless persons differ in technicality from the term “refugee” because they distinguish differences between those displaced within their home country, those who have no national home to speak of, and those who are relocated or “in asylum” in a foreign country. The UNHCR treats these populations as one when discussing humanitarian concerns, which is why we will use the larger population of concern in this paper.

### **I. The Refugee Experience:**

The United Nations High Commission on Refugees is the organization that is primarily responsible for ensuring the protection of refugees’ rights and providing

humanitarian aid to refugees. This specialized UN agency was formed after the 1951 United Nations Convention relating to the Status of Refugees and is responsible for facilitating the relocation of designated refugees, providing lasting solutions to conflicts that generate refugee populations, and for providing aid to individuals in crisis. The other major institution given the role of protecting refugees is the UNRWA, which is specifically responsible for aiding Palestinian refugees.

There were 25.2 million people designated as a ‘person of concern’ by the UNHCR and UNRWA in 2005, a 6% increase from 2004 (UNHCR 2006a, UNRWA 2005). In their annual “State of the World’s Refugees” report, the UNHCR claims that this increase is due to two factors. First, the “War on Terror”, has initiated new or fueled old conflicts, which has in turn generated large refugee populations. This is the case in Afghanistan, Iraq, Palestine, Pakistan, Chechnya, Aceh and Georgia. The second factor that is arguably contributing to the increase in the population of concern over the last several years is the increasing incidence of internal strife or civil war, which is a large problem generating large numbers of refugees, particularly in Africa (UNHCR, 2006a).

The UNHCR and the UNRWA are the two organizations charged with protecting the rights of refugees under international law. In the case of Internally Displaced Persons, who do not fall under the jurisdiction of the 1951 Convention because they are not displaced internationally, the UNHCR and UNRWA provide various types of humanitarian assistance. Humanitarian aid is a large part of the work of both bodies, which involves setting up and managing refugee camps, providing basic infrastructure such as sewage removal and clean water, as well as education and healthcare. The

organizations also work with the governments of asylum countries to provide aid to refugee populations. (UNHCR, 2006a)

In addition to its work on the ground, the UNHCR is the main source of literature on the status of refugee situations worldwide, and provides several studies about risks associated with unresolved refugee situations, as well as a breadth of regional and national case studies. Aside from UNHCR literature, articles analyzing the psychological and socio-political effects of mass migrations and refugee generating conflicts provide a basis for investigating the refugee experience and its possible affects on terrorism.

Several common trends in the experience of refugees are outlined by Jeff Crisp (2003 (a) and (b)). Crisp notes important facts and trends regarding refugees in camps, particularly geographic isolation, threat of violence, poverty and inability to protect human rights. In refugee populations in Africa, refugee camps are often isolated in desolate border areas where they are unable to integrate with the host country's society or economy (Crisp 2003a). Hostility from host populations is frequently a problem for refugees in camps. In the case of Internally Displaced Persons violence from domestic conflicts can be directed at populations living in camps.

Geographic isolation and lack of integration are two factors contributing seriously to the extreme poverty of refugees (Crisp 2003b). Refugees living in camps have little access to jobs, and according to Crisp, are commonly entirely dependent on aid from agencies such as the UNHCR. This lack of self reliance is claimed by Turner (1999) to have created vast societal changes in the Burundian refugee population in Tanzania, where communities in camps are bound by expectations of Western agencies such as the UNHCR. This has subjected populations to a rapid "Westernization" process, which can

be culturally straining. For example, the gender equality mandated by the UNHCR is a large change in cultural habits for Burundian refugees. Turner argues that men in these camps find themselves frustrated by social changes, often referring to the UNHCR as the “universal husband” who provides for the community.

Lastly, refugee populations are promised protection from host countries (which they do not always receive), but they are often not granted political rights. (Crisp 2003) According to Crisp, refugee populations are often kept from seeking legal naturalization. In addition to the hardships that refugee populations experience, Crisp notes that countries are increasingly unwilling to accept refugee populations, leading to large populations of Internally Displaced Persons (Crisp, 2003b).

These factors establish the basis of our understanding of what can be assumed to be a common “refugee experience,” with differing degrees of severity in each situation. The effects of these experiences have been academically evaluated with regard to their political and psychological ramifications, which are examined in the following sections.

### **Political Effects:**

The most notable article for the purposes of this paper is that conducted by Svante Cornell’s 2003 paper on the conflict in Chechnya. This paper is of particular relevance because Cornell shares the hypothesis that refugee situations can lead to an increased level of terrorism. Cornell suggests that the prolonged territorial or ethnic conflict between Chechen rebels and the Russian government has had the effect of radicalizing the Chechen cause and aligning it with extremist groups in other regions, mainly the Middle East. The study details the history of the conflict in Chechnya, and argues that the human rights violations that have occurred in the name of “counter terror”

on the part of the Russian government have had two lasting and negative effects for the spread of terrorist ideologies in the region.

First, Cornell argues that the conflict, which the international community has regarded as ethnic and domestic to Russia, has caused extensive damage to future generations of Chechens. Cornell notes that increasingly, Chechens affected by the conflict are “withdrawn, irritable, and quick to take offense or aggression.”

The second important impact of the conflict according to Cornell is the proliferation of extremist Islamic groups with links to terrorist organizations within Chechnya and the increase in terrorist acts. Cornell insists that “the longer the war goes on, the longer the Russian brutality continues, the more recruits the Islamic radicals will find among the Chechens”. He goes on to argue that both the war and the trauma experienced during the conflict have prompted Chechens to resort to terror.

This case study of Chechnya is comprehensive in its account of both the violent domestic conflict, termed a terrorist campaign by the Russian government, and its treatment of the humanitarian problem associated with displaced persons and refugees in Chechnya experiencing the atrocities of ethnic war and subsequent relocation. It is the only paper found that relates a situation producing hundreds of thousands of refugees to the development of terrorism within that country. While Cornell and I share the hypothesis that refugees are prone to recruitment by, and operating within terrorist organizations, Cornell does not provide empirical evidence to substantiate his claim.

### **Psychological Effects:**

Where there is a lack of research about refugees and terrorism, there is no deficiency of psychological studies about the effects of the refugee experience. Studies

range in type from short-term analysis to long-term evaluations. It has been established by the body of psychological research conducted on refugee populations that as many as 50% of refugees experience Post Traumatic Stress Disorder (PTSD) and between 15 and 80% experience major depression soon after exposure to a life-threatening event. Bosnian refugees were found to have PTSD at a rate of 26%, while 39% suffered from depression, and 21% suffered from both conditions (Durieux-Paillard and Whitaker-Clinch 2006). A study conducted by the World Health Organization in Chechnya established that there is a widespread phenomenon of psychological disorders amongst Chechen refugees, which has also led to social stigma and alienation. (Gutlove, 1998)

Research conducted by Derrick Silove (2002), builds off of extensive research on immediate and medium-term psychological effects of refugee trauma and conducts a long-term analysis of 1,413 Vietnamese refugees who had been living in asylum in Australia for an average of 14.8 years. Seven percent of these refugees were found to have psychological disorders related to trauma. The majority of refugees evaluated in this study had fewer symptoms of trauma-related mental illness as time passed. However, refugees who had experienced more than three traumatic events were more prone to long-term mental illness.

Durieux-Paillard and Whitaker-Clinch's and Silove's studies deal with very different populations. Durieux-Paillard and Whitaker-Clinch are analyzing refugees in camps, whereas Silove's study investigates the psychological effects of refugee trauma amongst refugees that have been living in Australia for 15 years. It is not surprising that the Vietnamese refugees in Australia experienced a far lower incidence of trauma related

mental illness, since the strain of the refugee experience should be far less in Australia than it would be in a refugee camp.

These studies help us understand that there are absolutely tangible effects common to the refugee experience. If there are distinct psychological trends amongst refugee populations related to their traumatic experiences, it is not unreasonable to inquire whether the trauma, compounded with other experiences of life in camps or resettlement communities contribute to an increase in terrorism.

## **II. Literature Review:**

### ***Crenshaw's Theory of Preconditions:***

The causes of terrorism have been a subject of academic interest for several decades, though, until recently, studies have been mainly theoretical. Crenshaw (1981) provides a convincing general theoretical analysis regarding the causes of terrorism, which provides a useful lens for investigating the theoretical propensity for refugees to engage in terrorist acts. While her paper is not data based, her theory of terrorism and its causes is very comprehensive in terms of causal claims.

Crenshaw examines what she terms the preconditions and the precipitants of terrorism. The preconditions she describes include a set of “concrete grievances” amongst an isolated sub-group within society, as well as a lack of opportunities for political participation available to a population. Both of these factors would be considered relevant to the refugee experience (Crisp 2003 (a) and (b), Executive Committee of the High Commissioner's Programee 2004). They are also the two factors that Crenshaw theorizes lay the foundation for the elite within a subgroup to emerge as leaders or supporters of terrorist movements on the behalf of an oppressed minority.

Crenshaw combines several independent variables that are commonly analyzed in literature on terrorism and attributes the coincidence of these preconditions to an increased likelihood of terrorism. Though it does not provide empirical evidence, this study succeeds in looking to a number of factors that might cause terrorism in a society, unlike many empirical papers which look to one or two independent variables. Using Crenshaw's theoretical framework of preconditions, it can be argued that the refugee experience (which combines several of Crenshaw's factors) can "precondition" terrorism.

### **Economics as a determinant:**

Those who believe that terrorism is motivated by similar factors as generic criminal behavior have argued that wealth and level of education should be negatively correlated with involvement in terrorist activity. Theories of criminal behavior state that as one's education increases, one's opportunities for participating in the legal sector of society should increase, as should one's wealth. As one's wealth increases, the risk associated with participating in illegal activity increases, and rational actors should choose not to participate in illegal activity (Becker, 1968). However, economic analyses of terrorism have yielded results that contradict this criminal theory.

Berrebi (2003) and Krueger and Maleckova (2003) have produced studies that conclude the opposite of the criminal behavior intuition. Both studies find that economic factors are unrelated or slightly *positively* correlated with terrorism. Berrebi uses a sample of 335 biographies of Palestinian suicide terrorists to create a dataset that captures the economic and educational status of individual terrorists who executed or orchestrated terrorist attacks in Israeli territory. Krueger and Maleckova use several sources of data, including a survey of residents in the West Bank and Gaza Strip, a study of Hezbollah

members in Lebanon, and a dataset which uses aggregate economic data from impoverished countries to determine if the wealth level of the community affects terrorist activity. Both studies conclude that if there is any relationship between economics and terrorist activity, it tends to be the case that terrorists are wealthier and more educated than the average person in their communities.

These results might be reflecting problems with the datasets used because surveys and analyses of biographical information do not provide ideal economic indicators. But these studies could be reflecting a truth, that terrorists are not comparatively poor. Crenshaw's precondition three might explain these somewhat baffling results. If, as Crenshaw postulates in her third precondition, the elite of a sub-group are acting on the behalf of an alienated minority, then economics might remain an impetus for terror despite the fact that the terrorists performing the acts are not themselves impoverished (Crenshaw 1981).

Prompted by the counter-intuitive results of Berrebi's, as well as Krueger and Maleckova's papers, Saleh (2004) investigates the relationship between economics and terror by altering several key aspects of earlier papers. Saleh hypothesizes that as economic conditions in the Palestinian territories deteriorate, terrorist acts should increase. He uses unemployment figures and income per capita as measures of economic well being, expands the sample of terrorist incidents used in Berrebi's paper and controls for the level of conflict intensity between Israel and Palestine at the time of each incident, an oversight of previous work. An additional improvement upon earlier papers is Saleh's inclusive data on attack type. This paper is not restricted to suicide incidents, which frequently require higher degrees of planning and are very selective missions (Hassan

2001). Saleh's dataset encompasses shootings and miscellaneous types of attacks. A Poisson analysis reveals that both economic indicators are correlated with terrorist incidents.

The findings regarding economics as a determinant of terrorist activity remain ambiguous. All of the studies evaluated here are confined to terrorist acts executed by Palestinian terrorist cells in Israel, which makes it difficult to extrapolate the relationships found due to the unique nature of the Israeli-Palestinian conflict.

This study, unlike many of those before it, analyzes terrorism on a macro-level by using data from 166 countries and does not restrict terrorist incidents by attack type. This large scale analysis will allow us to establish macro-level effects.

### ***III. Research Design:***

#### **Hypothesis 1:**

Due to the coincidence of several variables typically cited as causes of terrorism, namely poverty and political alienation, as well as Cornell's study which critiques the refugee situation in Chechnya as a breeding ground for terrorism and the demonstrated psychological effects of the refugee experience, *I hypothesize that the size of refugee populations in a country will be positively correlated with terrorist activity in that country.*

**Null Hypothesis 1:** *Refugee populations have no effect upon the level of terrorist activity observed in the host country.*

#### **Hypothesis 2:**

*I hypothesize that the existence of a protracted refugee conflict produces higher levels of terrorism in the host country than those observed in countries without refugee populations or without protracted refugee conflicts.*

**Null Hypothesis 2:** *The presence of a protracted conflict in a country has no effect on that country's level of terrorism.*

“Protracted refugee situations” are of particular concern to this research. A protracted refugee situation is “one in which refugees find themselves in a long-lasting and intractable state of limbo. Their lives may not be at risk, but their basic rights and essential economic, social and psychological needs remain unfulfilled after years in exile. A refugee in this situation is often unable to break free from enforced reliance on external assistance” (Executive Committee of the High Commissioner’s Programme 2004).

If, as postulated by Hypothesis 1, refugee populations are prone to high rates of terrorism, then areas with prolonged refugee situations should generate higher rates of terrorism than areas where refugee situations are resolved quickly. According to reports published by the UNHCR there were 38 prolonged refugee conflicts worldwide in 2005, accounting for 6.2 million refugees. This number does not include the Palestinian refugees residing in Jordan, Syria, Lebanon and the West Bank and Gaza Strip. Including the Palestinian numbers, there are a total of 34 countries coded as having prolonged conflicts in this dataset; several countries have more than one prolonged conflict. The UNHCR has declared that refugees in only 6 of the 38 non-Palestinian conflicts have integrated into the economic fabric of the country of asylum (Executive Committee for the High Commissioner’s Programme 2004).

This surprisingly low rate of successful integration is most likely a result of hostility towards large refugee populations from residents of the asylum country, as well as refugees' restriction to camps, where access to job markets and the domestic economy is very limited (Crisp 2003b). It is not unreasonable to assume that such physical, cultural, social and economic alienation and desperation would create an environment conducive to terrorist activity, especially when we consider Crenshaw's preconditions. The Standing Committee on Protracted Refugee situations substantiates that claim when they acknowledged in their 2004 report that:

“a consequence of protracted refugee situations is that they can serve as incubators for future problems... Large, disaffected and alienated populations relying on subsistence-level handouts are prime targets for recruitment into armed groups. And the frustration of being a refugee- of living in squalor and obscurity, and of feeling that injustice continues in one's homeland-can lead persons to commit dramatic actions that draw attention to a cause”.

While acknowledging the risks associated with protracted refugee situations, the UNHCR has not conducted an empirical analysis of terrorism within countries hosting these populations or within the populations themselves. This study includes a separate analysis of the 34 protracted conflict countries and terrorist activity within the countries of asylum.

### **Hypothesis Testing:**

Testing Hypothesis 1 is a relatively simple matter involving comparing the refugee statistics and data on terrorism, which are described in the following section. This is accomplished by comparing 2005's active terrorism data with 2005's refugee statistics, and also by comparing 2005's level of terrorism with refugee statistics from 1993, which would account for a possible lag effect caused by the large number of refugees that are

children. In theory, it is likely that since a significant number of refugees are children, they would not become involved in terrorist activities for 10-15 years. I use refugee data from 1993 to compare with 2005's level of terrorism in order to correct for the possibility that today's terrorists were refugees 15 years ago, and not accounted for in 2005 refugee statistics.

In order to test Hypothesis 2, that the length of conflict is relevant to the level of terrorist activity, it is necessary to create a dummy variable representing what the UNHCR has deemed "prolonged conflicts" as of 2005. This variable is then compared with the relevant terrorism data. If Hypothesis 2 is not falsified, it would suggest that refugee conflicts are more damaging the longer they last, a theory that is accepted by the international community as demonstrated by the existence and the mandates of relief agencies such as the UNHCR and UNRWA.

#### **IV. Description of Data:**

##### **Dependent Variable:**

Terrorism is particularly difficult to measure given that terrorists and the organizations that they are affiliated with are not likely to reveal themselves so that academics might count them. The clandestine nature of these groups and their operatives makes a level of terrorism difficult to ascertain. Tragically, our only clear indicator of terrorism is when a group or individual succeeds in executing an attack. Ideally, measuring terrorist activity in a country would involve ascertaining recruitment levels, support from civil society and activities such as planning attacks and training operatives, but those data are unavailable. That data would be ideal to have at our disposal for academic (and intelligence) purposes. It is not a major concern that this data is

unavailable, since terrorist incidents are the most concerning and relevant of terrorists' activities.

This study consists of a cross sectional analysis of refugees' impact on terrorism using data on terrorist groups that were active in 2005 and refugee population data for the years 2005 and 1993. Following Berrebi's lead, I use terrorist incidents as the main indicator of terrorist activity and as the primary unit of analysis. **Table 1** provides descriptive and summary statistics for the dataset, which includes data obtained from the Terrorist Knowledge Base website ([www.tkb.org](http://www.tkb.org)). The dependent variable is logged in the dataset in order to provide the most accurate results. Originally the dataset included fatality and casualty data as well, but those variables proved to be very volatile since fatalities and casualties are largely determined by chance. Therefore, fatalities and casualties were dropped as dependent variables.

By using the number of incidents "successfully" carried out by groups in each country, we are able to capture the strength of terrorist organizations and thus the aggregate strength of terrorism within each country. This method of measuring terrorism ensures that terrorism is evaluated on a country level. Since groups do not execute attacks exclusively in the countries in which they operate, measuring the number of incidents that a group is responsible for, and that group's base country are the most relevant statistics to this study, not the number of incidents that occur domestically.

It is worth noting that TKB marks groups as "active" based upon the date of their last attack, which did not always occur in the year 2005. In fact, many of the incidents in the dataset did not occur in 2005, but are attributed to an active group and included in the data. This measure of terrorist activity is meant to ascertain a group's strength as of 2005,

which arguably requires using past incidents as measures for a group's current strength. We would be unlikely to consider al-Qaeda a weak terrorist group, but using incident numbers from 2005 alone would make al-Qaeda dormant currently, which we know is not the case. If TKB categorized a group as active, the total number of incidents committed by that group was counted in the dataset. While this might seem to skew the cross-sectional analysis to a degree, it is important to remember that the data is measuring the *strength* of terrorist groups within a country as of 2005.

### **Independent Variables:**

Relevant non-Palestinian refugee statistics were obtained from the United Nations High Commission for Refugees ([www.unhcr.org/statistics.html](http://www.unhcr.org/statistics.html)). The data used is contained in Appendix 1 of the Annual Report on Refugees and Persons of Concern, 2005 (<http://www.unhcr.org/statistics/STATISTICS/4486ceb12.pdf>), and Table 3 of the Populations of Concern to UNHCR: A Statistical Overview (1994). These two publications report the total number of "persons of concern" in each country of asylum, as well as UN aid statistics used as a control variable.

(<http://www.unhcr.org/statistics/STATISTICS/3bfa33154.pdf>)

Statistics on Palestinian refugees were obtained from the United Nations Relief and Works Agency (<http://www.un.org/unrwa/publications/index.html>). Palestinian data are also based on country of asylum, and the data for the occupied territories of the West Bank and Gaza Strip are aggregated into one "territory of asylum" which is coded as a base country of its own (West Bank/Gaza Strip).

Since the UNHCR and the UNRWA operate independently from one another, the method of reporting data and the type of statistics recorded differ at times between the

Palestinian data and the rest of the dataset. The UNRWA is responsible for Palestinian refugees in Syria, Lebanon, Jordan and the West Bank/Gaza Strip. Due to this division of responsibilities between the UNHCR and the UNRWA, the data for countries and territories hosting Palestinian refugees sometimes differs from the general UNHCR data. Such a discrepancy occurred when gathering refugee statistics for the year 1993. Unfortunately the UNRWA did not have available data on refugee populations in 1993, but provided population statistics for the years 1990 and 1995. The data for 1990 was used for the variable named “Number of Refugees in Asylum in 1993” for Jordan, Syria, Lebanon and the West Bank/Gaza Strip.

The refugee statistics described above comprise the main independent variables, (“Number of Refugees in Asylum in 2005” and “Number of Refugees in Asylum in 1993”) which are logged in the dataset. The other independent variable used is a dummy variable indicating the existence of a prolonged conflict. This variable is coded as a “1” in countries where the UNHCR has designated a “protracted refugee situation”, as well as in the four asylum countries of Palestinian refugees. The rest of the sample is coded as a “0”. This variable will allow analysis of Hypothesis 2, that the length of a refugee situation is positively correlated with terrorist activity.

Due to the common causal claim made regarding economics and terrorism (Krueger and Maleckova, Berrebi, Saleh), this study controls for economic factors such as GDP per capita, GDP growth and unemployment levels. The unemployment statistics were obtained from the CIA Factbook. GDP growth, GDP per capita and growth of GDP per capita data were obtained from the World Bank’s annual publication “World Development Indicators 2005.”

In order to account for political factors such as a country's level of political freedom and civil liberties, I use the Freedom House measures of civil liberties and political rights, which rate countries from a 1 (most free), to a 7 (least free) based on criteria that determine the level of democracy and freedom in a country.

The role of the UNHCR and UNRWA in the worldwide refugee community is essential and cannot be overlooked in a study on humanitarian issues in refugee populations. It is reasonable to assume that, where UN agencies are aiding a greater portion of the population, refugees are less likely to engage in terrorist activities due to the anticipated mitigation of some of the more trying elements of the refugee experience. On the other hand, it is apparent when looking at agency aid numbers that a proportionally greater number of people are receiving aid in "worse" conflict areas (Annual Report on Refugees and Persons of Concern, 2005). While it makes absolute sense that the aid go where it is most immediately needed, if the more severe or immediate conflicts are receiving more aid, the above assumption about aid itself quelling the likelihood of increased terrorist activity would be weakened. Nonetheless, data on humanitarian aid received from UN organs might provide a type of gauge as to intensity or urgency of the refugee situation. With both of these factors in mind, I control for the number of refugees aided by the UNHCR or UNRWA in each country of asylum.

The aid data is difficult to report due to discrepancies in reporting techniques employed by the two agencies over the time period 1993-2005, and the differences that exist in the way that the UNHCR and the UNRWA report aid statistics. The most notable issue with this data is its absence for the Palestinian asylum countries for the year 1993 and its ambiguity for those populations in 2005. The aid numbers for 1993 are

unavailable. The UNRWA disaggregates the 2005 aid data by types of aid, such as health, education, etc. This is different from the manner in which the UNHCR reports aid statistics, which is as the number of total refugees aided. Due to the ambiguity in the total number of Palestinian refugees receiving UNRWA aid in 2005, there are two measures of the number of aid recipients for the Palestinian countries used in this study. The first is the rough UNRWA estimate that “one in two Palestinian refugees worldwide is aided by the UNRWA” (UNRWA [www.unrwa.org](http://www.unrwa.org)). This is a very general indicator of the level of aid. It is reflected in the variable “UN Assisted Refugees in 2005”, which for Jordan, Syria, Lebanon and the West Bank/Gaza Strip is the “Number of Refugees in Asylum in 2005” halved. Due to the imprecision of this indicator, I created an alternate control variable named “Number of Refugees Assisted in 2005, Adjusted for Palestinians in Camps,” which uses the number of Palestinian refugees in UNRWA camps in Syria, Jordan, Lebanon and the West Bank/Gaza Strip as the number of aided refugees. Despite the large discrepancy in the *number* of aided refugees between these two indicators, the results obtained when using one or the other differed very little (see **Tables 2 and 4**).

One problem has resulted from using countries of base as the unit of analysis. Many organizations are based in more than one country, while the numbers associated with those organizations are not disaggregated. This creates a potential problem with double counting data, since the data for number of incidents is attributed to groups that are counted more than once. It is important to note that these organizations were able to develop roots in each of the countries that they are “based” in. However, this might cause some misrepresentation in the data, which is most clearly illustrated by the large numbers of incidents that al-Qaeda transfers to the many countries that it is based in. I have

controlled for this al-Qaeda balloon effect by creating a dummy variable coded as “1” in countries where TKB determined al-Qaeda to be active and “0” where it is inactive.

Lastly, due to the frequent regional studies conducted on terrorism (Berrebi 2003, Krueger and Maleckova 2003, Saleh 2004), I have included a “Region” variable. This allows for regional analysis and enables a more rigorous evaluation of results.

## **V. Results:**

The results of this study are presented in **Tables 2, 3, and 4** and are graphically represented in **Graph 1**. **Table 2** shows the results relevant to the two major hypotheses. **Table 3** reports the results of the hypotheses excluding the Middle East, which lends salience to the global relevance of this study. **Table 4** reports the effect on the results when the number of Palestinians in camps is used as an aid indicator instead of the UNRWA’s estimate of half the refugee population. **Graph 1** is a visual representation of the main regression presented in **Table 2**.

**Table 2:** Hypothesis 1 tests whether an increase in refugee populations contributes to a higher rate of terrorism in the country of asylum. If this contention were true, we would expect a positive correlation between the variables “Log of Terrorist Attacks” and the “Log of No. of Refugees in Asylum.” This paper is arguing that an increase in the refugee population will cause an increase in terrorist acts. If we observe a negative correlation between these two variables, we will reject this hypothesis.

The contention that an increase in the size of refugee populations causes an increase in terrorist activity was not falsified, with a positive co-efficient of .183 (**Table 2**). The results indicate that a 1% increase in the size of a country’s 2005 refugee

population creates a corresponding 18% increase in terrorist attacks committed by groups based in that country; these results are significant at the .01 level.

There was not a significant relationship found between refugee populations in 1993 and levels of terrorism in 2005. The variable “Log of No. of Refugees in Asylum 1993” was included in the data in order to account for a theoretical “lag” in turnaround time between the refugee experience and the initiation of an individual’s involvement in terrorist activity. However this lag had no academic basis and was purely a caution, therefore the lack of correlation between this variable and the number of terrorist attacks is not particularly significant to the study.

The existence of a significant positive relationship between the size of refugee populations and terrorism found here is an important result and can be the basis for further research.

**Table 2** also includes results regarding Hypothesis 2. Hypothesis 2 contends that the presence of a prolonged refugee conflict in a country increases its level of terrorism. If this hypothesis is not falsified, we will observe a positive co-efficient between the number of terrorist attacks and the dummy variable “Existence of a Prolonged Refugee Conflict as of 2005.” There was no such relationship observed. There was no significant relationship established between prolonged conflicts and terrorism. These results are surprising given the significant positive relationship demonstrated between the size of a refugee population and terrorist activity. It is possible that deficiencies in the data produced this result. The data does not include groups that became inactive prior to 2005 but might have been active and responsible for acts of terrorism during the time period of the prolonged conflict. This could have resulted in an under-estimation of the level of

terrorism over the life of the prolonged conflict. If possible, it would be ideal to include all groups that were active throughout the duration of the conflict and their attack information in our estimate of terrorism when investigating Hypothesis 2 further.

Two other variables were found to be relevant, with varying degrees of significance. The first is the al-Qaeda control, which has a positive coefficient of 2.83 at the .01 level, indicating that the presence of al-Qaeda is very significant in determining the number of attacks committed. This is not surprising given that al-Qaeda is a highly organized and effective terrorist organization. The level of UN aid to refugees in 1993 was also found to have a very small positive coefficient (significant at the .1 level). The positive relationship between 1993's aid level and terrorist attacks is surprising in light of results regarding aid that are presented in the next section. However, this result might be tainted since there is missing aid data from Palestinian countries for 1993.

The results in **Table 2** are exciting and leave room for further research. The positive relationship established between refugee populations and terrorist acts is an important finding, and the lack of a relationship between prolonged conflicts and terrorist acts provides an opportunity for continued study, which arguably could yield different results with an adjustment in the terrorism data.

**Table 3:**

Saleh's, Krueger and Maleckova's and Berrebi's papers all deal exclusively with the Middle East, and with good reason. When we think about the phenomenon of global terrorism, one's mind inevitably drifts to that part of the world. The Munich Olympic attack in 1974 was the first instance of "international terrorism," where a regional conflict (the Arab-Israeli conflict) was internationalized using the scare tactics of a terrorist

attack. Since then notorious terrorist organizations born out of the Arab-Israeli conflict have expanded our notions of terrorism time and time again. The conflict in the Middle East is also inextricably intertwined with refugee issues. The Palestinian refugee population is the largest in the world. The Palestinian case is also what inspired this paper, though it is my firm belief that it is the refugee experience that “pre-conditions” individuals to engage in terrorist acts, and therefore can be applied globally.

In order to test the global relevance of Hypothesis 1, I have conducted a separate analysis of the data excluding the Middle East and Persian Gulf region (**Table 3**). Hypothesis 1 was not falsified when the Middle East data was excluded. Results excluding Middle Eastern data indicate that with a 1% increase in the size of the refugee population, terrorist acts will increase by 18.6% (significant at the .05 level).

These results indicate that the significant relationship found between refugee populations and terrorist acts is not being driven by the severity of the conflict in the Middle East.

“UN Assisted Refugees 1993” was again found to be positively related to terrorist acts, with a coefficient of .119 significant at the .10 level. As was mentioned in the analysis of **Table 2**, the results for “UN Assisted Refugees in 1993” are perplexing. Further investigation will be required to establish why populations that received more aid 12 years in the past are committing more terrorist acts today. While this relationship is weaker than others observed (it is only significant at the .10 level), it is worth reporting to prompt further study.

The opposite effect was seen for the 2005 aid data, which is an interesting (and heartening) result. Excluding the Middle East, UN aid in 2005 was shown to have a

*mitigating* effect upon terrorism, declining the percentage increase in terrorist attacks by 12.9% (significant at the .05 level as reported in **Table 3**). In other words, higher levels of UN aid in 2005 would appear to be helping to combat the increase in terrorist acts experienced with increases in refugee populations in non Middle Eastern countries.

This is important to note, since humanitarian aid to refugees by developed nations has significantly decreased since the end of the Cold War (Crisp 2003b). The UNHCR's "Income and Expenditure Trends" indicates that aid donations from governments to the UNHCR were at their peak in 1993, amounting to 1.6 billion dollars. That number hit a low in 2000, at 900 million dollars. The level of donations to the UNHCR is on the rise again after a significant decrease, and this study helps illustrate why this trend must continue. The amount of aid that the UNHCR provides to refugees on the ground trends with the amount of donations it receives from governments and outside donors (UNHCR 2006 b). Thus it is essential for governments to increase their donations of humanitarian aid funds to the UNHCR in order for refugee aid levels to increase. While the United States has been the leading donor to the UNHCR in dollar amount in the last 15 years, its per capita donation is on the low end of the spectrum, at \$1.10, compared with the leading donor, Luxembourg's \$16.66 (UNHCR 2006d, UNHCR 2006c).

In light of this study, counter-terrorism funding could arguably be partially redirected to humanitarian aid agencies assisting refugees such as the UNHCR and UNRWA. Most importantly, this result demonstrates that whatever is causing the increase in terrorism amongst refugee hosting countries is fixable. This result indicates that humanitarian aid has a very real effect on the global refugee crisis.

**Table 4:**

Due to the ambiguous nature of aid statistics for Palestinian populations discussed in the data description, and the relevant findings regarding the aid controls observed earlier, I ran a regression identical to the one represented by **Table 2**, including the Middle East, but replacing the variable “Log of UN Assisted Refugees 2005” with an alternate variable which measures aid to Palestinians not as a half of the total population, as was suggested by the UNRWA and used in the regression represented by **Table 2**, but instead using the number of Palestinian Refugees in UNRWA run camps. This was a cautionary measure, and proved irrelevant. The coefficients across all variables, including UN aided refugees, were nearly identical in the results of **Table 2** and **Table 4**, indicating that the different measures of Palestinian aid had no effect the observed results. UN aid was not a significant variable in either of the regressions run that included Middle Eastern data. This indicates that UN aid is only a significant mitigating factor to terrorism outside of the Middle East. Why this is the case should absolutely be investigated further. It might be due to insufficient data, which this study has attempted to account for in its two measures of Palestinian aid levels, but it might also have something to do with the historical and political nature of the Arab-Israeli conflict, which perhaps makes the humanitarian aid received obsolete due to history, the length of the conflict and the ensuing political circumstances.

**Moving Forward:**

This study raises several new questions and room for further research. Finding an adequate measure of terrorism is a difficult task, particularly since this study deals with

several time periods and data is, at times, sparse. Future studies might benefit from disaggregating the terrorist attack data and attributing attacks not to all countries where a group is based, but instead to only the countries whose branches of the organizations had definite involvement in the planning or execution of the attack itself. This type of research was outside the scope of this project, but would certainly add to the results found here.

A second area for growth is re-testing Hypothesis 2, which could be accomplished by adding the incident data from groups that have gone inactive as of 2005, but were active during the life of protracted conflicts. This would enable a more rigorous evaluation of the effect of the length of the refugee situation upon terrorism. While the theory behind Hypothesis 2 follows intuitively in light of the significance of Hypothesis 1, the data is not conclusive and therefore needs to be improved in future studies.

These two improvements would add to the results of this study and provide exciting opportunities for future research.

## **VI. Conclusions:**

This research has demonstrated that an increase in the number of refugees a country hosts leads to an increase in the activities of terrorist groups based in that country. It has also shown that this connection is weakened when refugee populations receive aid from international humanitarian organizations. The international community, particularly the Western countries that are the primary financiers of the UNHCR, have, in the last 15 years drastically cut their level of aid (UNHCR 2006b). This is a trend that should not continue, especially given the increasing number of persons to concern to the UNHCR (UNHCR 2006a). The results of this study decisively show that the world's

refugees are an extremely important part of our global community, and that the hardship that almost 25 million people are experiencing around the world today has dangerous implications outside of the humanitarian impact on those populations, which must be mitigated.

Unfortunately, the level of attention surrounding refugee issues has been insufficient for quite some time (Crisp 2003). This study recommends the immediate increase in attention given to the swift and efficient resolution of refugee generating conflicts, both for the good of the refugee populations of the world and as per the results demonstrated here, the safety of the international community.

**Table 1: Summary Statistics**

<b>Variable</b>	<b>Number of Observations</b>	<b>Mean</b>	<b>St. Dev.</b>	<b>Minimum</b>	<b>Maximum</b>
Country	0				
Region	0				
No. of Refugees 2005	166	150817.8	327643.9	0	2000210
Log of No. of Refugees 2005	153	9.625	2.945	0.693	14.509
No. of Refugees 1993	166	107481.4	286813.9	0	2495000
Log of No. of Refugees 1993	166	7.298	4.575	0	14.730
Total No. of Attacks	166	72.0361	201.120	0	1399
Log of No. of Total Attacks	166	2.098	2.108	0	7.244
Existence of a Protracted Situation in 2005	166	0.199	0.400	0	1
No. of UN Assisted Refugees 2005	166	38771.59	148113.4	0	1290984
Log of Number of UN Assisted Refugees 2005	166	5.209	4.425	0	14.070
No. of UN Assisted Refugees 1993*	166	43604.82	147292	0	1466700
Log of No. of UN Assisted Refugees 1993*	166	4.946	4.740	0	14.199
Presence of al-Qaeda in Country Base	166	0.271	0.446	0	1
Political Rights	159	3.503	2.160	1	7
Civil Liberties	159	3.321	1.819	1	7
GDP Growth	153	4.912	3.316	-7.1	26.2
Level of GDP Per Capita	151	6796.367	10488.48	91.2	49979.8
Growth of GDP Per Capita	149	3.447	3.431	-7.6	25
Unemployment Rate	138	15.062	15.054	0.7	85
No. of UN Assisted Refugees 2005, Adjusted for Palestinians in Camps	166	32503.96	124936.9	0	1290984
Log of No. of UN Assisted Refugees 2005, Adjusted for Palestinians in Camps	166	5.193	4.399	0	14.071
e1	149	9.88E-10	1.509	-2.123	6.172
yhat1	149	2.157	1.464	-0.008	5.732

**Table 2: Results of primary regression**

	Log of Number of Attacks
Log of No. of Refugees in Asylum in 2005	<b>***0.183</b>
	-2.88
Log of No. of Refugees in Asylum in 1993	-0.038
	-0.83
Existence of Prolonged Refugee Conflict as of 2005	-0.203
	-0.51
Log of No. of Refugees Assisted in 2005, Adjusted for Palestinians in Camps	-0.072
	-1.36
Log of No. of UN Assisted Refugees in 1993 (*)	*0.074
	-1.8
Presence of al- Qaeda in Country Base	<b>***2.830</b>
	-10.41
Level of Political Rights as of 2005	-0.24
	-1.12
Level of Civil Liberties as of 2005	0.292
	-1.28
Constant	-0.223
	-0.42
Observations	149
R-squared	0.49
Robust t-statistics in parentheses	
* significant at 10%; ** significant at 5%; *** significant at 1%	

\* The variable “Log of No. of UN Assisted Refugees in 1993” does not include data for Palestinian populations.

**Table 3: Results excluding the Middle East/Persian Gulf**

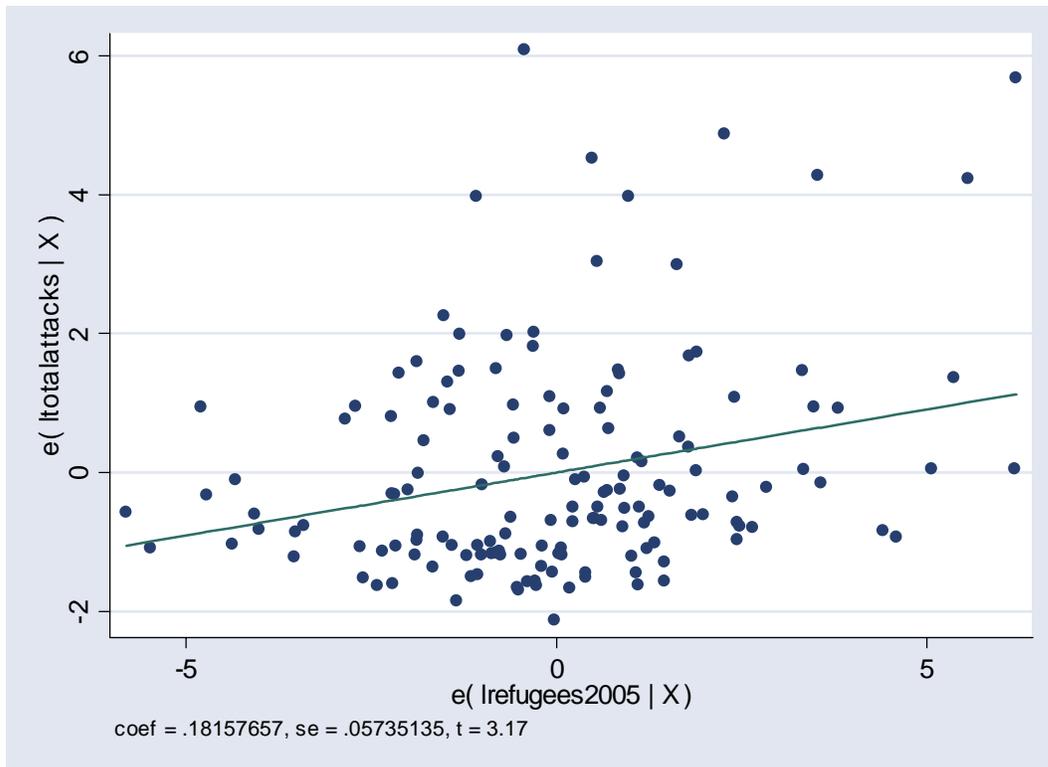
	Log of Number of Attacks
Log of No. of Refugees in Asylum in 2005	<b>***0.186</b>
	-2.67
Log of No. of Refugees in Asylum in 1993	-0.05
	-1.19
Existence of Prolonged Refugee Conflict as of 2005	-0.484
	-1.17
Log of No. of UN Assisted Refugees in 2005	<b>** -0.129</b>
	-2.32
Log of No. of UN Assisted Refugees in 1993	<b>***0.119</b>
	-2.79
Presence of al-Qaeda in Country Base	<b>***2.891</b>
	-10.48
Level of Political Rights as of 2005	-0.196
	-1.05
Level of Civil Liberties as of 2005	0.272
	-1.33
Constant	-0.27
	-0.53
Observations	134
R-squared	0.54
Robust t-statistics in parentheses	
* significant at 10%; ** significant at 5%; *** significant at 1%	

**Table 4: Results using adjusted measure of aided Palestinian refugees**

	Log of Number of Attacks
Log of No. of Refugees in Asylum in 2005	<b>***0.183</b>
	-2.88
Log of No. of Refugees in Asylum in 1993	-0.038
	-0.83
Existence of Prolonged Refugee Conflict as of 2005	-0.203
	-0.51
Log of No. of Refugees Assisted in 2005, Adjusted for Palestinians in Camps	-0.072
	-1.36
Log of No. of UN Assisted Refugees in 1993 (*)	*0.074
	-1.8
Presence of al-Qaeda in Country Base	<b>***2.830</b>
	-10.41
Level of Political Rights as of 2005	-0.24
	-1.12
Level of Civil Liberties as of 2005	0.292
	-1.28
Constant	-0.223
	-0.42
Observations	149
R-squared	0.49
Robust t-statistics in parentheses	
* significant at 10%; ** significant at 5%; *** significant at 1%	

\* The variable “Log of No. of UN Assisted Refugees in 1993” does not include data for Palestinian populations.

**Graph 1: Results of main regression, as indicated in Table 2**



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