# Internally Displaced Populations and Suicide Terrorism

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#### **Abstract**

This study asserts that countries with large internally displaced populations (IDPs) are more likely to experience a higher rate of suicide terrorism. After demonstrating this, the study tests four intervening factors hypothesized to drive the relationship between IDPs and suicide attacks: IDPs are expected (I) to increase the pool of potential suicide recruits, thereby lowering the labor costs for suicide terrorist groups; (2) to increase local ethnic conflicts that foster a favorable environment for suicide terrorism; (3) to worsen the human rights conditions in countries, prompting aggrieved people to support suicide terrorist tactics; and (4) to raise the counterterrorism and policing costs of the state, enabling terrorists to plan and execute suicide attacks. Results from negative binomial regression and Tobit models show evidence for the IDPs-suicide terrorism connection. When recursive models are employed to evaluate the effects of four intervening variables, the results most consistently support human rights violations as a significant and substantive mediator between IDPs and suicide attacks.

### **Keywords**

suicide bombings, terrorism, human rights, international security

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Scholars have offered a variety of explanations for why suicide terrorism occurs. These explanations range from the role played by extremist ideology or religious beliefs of individuals and groups who are motivated to engage in suicide terrorism (e.g., Gambetta 2005; Harris 2005; Hoffman 1998; Rapoport 1990), to individual psychological factors (e.g., Merari 1990; Post 1990), to organizational and interorganizational factors related to terrorist group structure or competition among groups in society (e.g., Bloom 2004; Moghadam 2006; Piazza 2008a), to the strategic and tactical climate of the terrorist campaign (e.g., Collard-Wexler, Pischedda, and Smith, 2014; Sprinzak 2000), to structural factors rooted in the political and economic climate of the country in which the activity takes place (e.g., Berman and Laitin 2006, 2008; Gunaratna 2004; Khashan 2003; Pedahzur, Perliger, and Weinburg 2003), and finally to global strategic factors such as foreign occupation (e.g., Pape 2003, 2005).

In this study, we investigate a phenomenon that has not been previously examined by scholars interested in explaining when and where suicide terrorism is likely to occur: internally displaced populations (IDPs).<sup>2</sup> Our research on the role of IDPs in suicide terrorist activity marks a significant departure from previous studies that revolve around the question of how to prevent internal displacement of such people. Most studies of IDPs investigate why and how armed conflicts prompt internal displacement. Aside from a few notable exceptions (e.g., Lischer 2005; Salehyan 2009), the scholarly literature has avoided the question of what consequences IDPs pose for security within countries.

Our suspicion that internal displacement drives, among other things, suicide terrorist activity is consistent with the observation that a large number of terrorist campaigns over the past forty years have occurred in the context of conflicts in which IDPs have been an integral factor. The 1982 Israeli invasion of Lebanon, for example, displaced large numbers of Shi'is from the South of Lebanon to Beirut, where they were more easily recruited as cadres and networks of supporters for the nascent Hezbollah terrorist movement. Indeed, Jaber (1997) argues that it was the displacement of this Shi'i population that enabled Hezbollah to increase its presence in Beirut and that served as the impetus for the construction of the movement's formidable political and social services wings. Counternarcotics programs and civil violence in Colombia in the 1980s and 1990s displaced large numbers of peasants. An empirical study by Holmes, Gutierrez de Pineres, and Curtain (2006) shows that those departamentos of Colombia with higher numbers of IDPs also experienced higher levels of human rights abuses associated with Revolutionary Armed Forces of Colombia-People's Army (FARC) and militia political violence.<sup>3</sup> India has experienced problems with internal displacement as a consequence of economic pressures and ethnic and communal conflict—most notably in the northeastern states and in the context of the Kashmir crisis. These displacements have been exploited by extremist movements as an opportunity to gain recruits, public sympathy, and support (Piazza 2009). The Mohajir population of Pakistan, which was displaced in the 1947 partition of India and Pakistan, has both launched terrorist attacks of their own—perpetrated by the "Real" Mohajir Quami Movement—and incited a backlash of terrorist activity against Mohajir civilians by nativist extremists (Waseem 1996). Similarly, in Sierra Leone, the displacement of young men from rural to urban areas has generated a virtual recruiting bonanza for terrorist and insurgent groups (Utas 2008), while rural development and settlement programs in Bangladesh, which have forced the rural Chakma ethnic minority to migrate to the city of Dhakka, have resulted in higher levels of political violence and terrorist activity (Kharat 2003). Finally, terrorist conflicts noted for suicide attacks in the Palestinian territories, Iraq, Afghanistan, Nepal, Somalia, eastern Turkey, and Sri Lanka all have featured large numbers of IDPs. Scholars conducting qualitative case research on the use of suicide attacks by terrorist groups in these countries specifically discuss IDPs as a crucial factor in the recruitment process (e.g., Bloom 2005; Fair and Shepherd 2006; Hassan 2011).

Our study unfolds in the following manner: we first explain why the IDPs and suicide terrorism connection is the focus of this study. We then put forward a general hypothesis about the positive relationship between IDPs and suicide terrorism and consider four specific causal mechanisms in which IDPs are hypothesized (1) to increase the pool of potential suicide recruits, thereby lowering the "labor costs" of suicide terrorism for groups; (2) to increase conflict over ethnic identity that may result in ever more extreme types of political violence, including acts of suicide terrorism; (3) to worsen the human rights picture in countries, prompting aggrieved people to resort to suicide terrorism; and (4) to raise the counterterrorism and policing costs of the state, allowing terrorists more leeway to plan and execute suicide attacks. After subjecting the hypothesis and the specific causal mechanisms to empirical tests, we conclude with a brief discussion of the scholarly and policy implications of these findings.

# Why Internal Displacement and Suicide Terrorism?

We do not argue, in this study, that internal displacement is the only or most important driver of suicide terrorism in countries, nor do we argue that IDPs solely stimulate suicide attacks as opposed to other forms of political violence. Indeed, it is clear that armed conflicts within countries typically feature multiple forms of political violence and armed actors frequently employ varying tactical forms of political violence (see Sambanis 2008). This can be seen in the example of the Liberation Tigers of Tamil Eelam (LTTE), a group that was notorious for using suicide bombings alongside a wide variety of other tactics in the context of a conflict in which internal displacement was a defining feature. Crenshaw (2002, 21) encapsulates this as a more general statement: "Suicide terrorism should be interpreted as a particular case of oppositional terrorism rather than as a sui generis phenomenon. It shares many of the properties of general terrorism" (cited in Moghadam 2006, 725). Our caveat is also supported

by supplemental exploratory estimations where we find large IDPs to statistically predict conventional (nonsuicide) terrorism as well as intrastate war duration and intensity.<sup>4</sup> However, several considerations prompt us to focus on the relationship between IDPs and suicide terrorism in this study, nonetheless.

First, as previously stated, the impetus for the study arises from our observation that suicide terrorism frequently occurs in terrorist campaigns featuring internal displacement. We endeavor, therefore, to investigate this perceived pattern using crossnational, time-series data to test for significance and substantive effects. Moreover, we use techniques to further investigate mediating factors—which we discuss at length in the next section—that help to explain the relationship between IDPs and suicide terrorism.

Second, we note that suicide terrorism is a particular deadly and destructive form of terrorism (Atran 2004; Pape 2003), making it important to understand. It is also a tactic increasingly used by terrorist movements. Some figures help to illustrate this. According to data on terrorism from the Global Terrorism Database (GTD), suicide terrorist attacks have resulted in 11.7 deaths and 25.2 persons wounded per attack on average since 1970. In contrast, conventional nonsuicide terrorist attacks yielded only 2.0 deaths and 2.6 persons wounded per attack on average. Whereas the overwhelming majority of nonsuicide attacks produce zero casualties and 84 percent result in two or fewer deaths or persons wounded, the median deaths and wounded per suicide attack are five and ten, respectively. These figures underscore the relative urgency for understanding the causes of suicide terrorism. Additionally, though previous studies have found some unique predictors of suicide terrorism such as military occupation (see Pape 2003, 2005), suicide and conventional terrorism have been found to have common predictors such as presence of minority groups at risk (see Piazza 2011; Wade and Reiter 2007). We therefore view suicide terrorism as having some common predictors with conventional terrorism but posing a different level of risk.

Third, the focus on suicide terrorism provides us with a specific methodological opportunity. In addition to determining whether or not internal displacement predicts suicide terrorism in countries, our study explores why and how IDPs affect suicide attacks. We do this by testing a set of four intervening factors—economic inequality, ethnic group political exclusion, interethnic group violence, and state failure and human rights abuses—that we hypothesize are mediators between IDPs and suicide terrorism. These tests help us to get at the causal links in the relationship between displacement and suicide attacks.

Finally, suicide terrorism is a particularly salient form of terrorism for counterterrorism officials. In addition to its costliness, suicide terrorism has been prominently featured in intense and intractable conflicts—for example, in the Israeli–Palestinian or the Sri Lankan conflicts—and has been used in high-profile incidents—such as the 9/11 attacks, the 1998 bombings of US embassies in Kenya and Tanzania, and 2002, 2003, 2004, and 2005 attacks in Bali,

Casablanca, Madrid, and London, respectively. Given this, our study should provide relevant policy implications for the counterterrorism community.

## **How IDPs Boost Suicide Terrorism**

As our starting point, we assume that countries with larger populations of internally displaced persons are more likely to experience suicide terrorism. This assumption is informed by the numerous case examples, previously discussed, in which displacement of persons is depicted by scholars as an important factor motivating suicide terrorism or providing terrorist movements with ample pools of recruits for suicide missions. Because suicide terrorism seems to occur with higher frequency in conflicts featuring IDPs, we expect to find a general pattern in which increases in IDPs in a country increase the risk of suicide terrorism. With this in mind, we put forward a general hypothesis about the direct relationship between IDPs and suicide terrorism:

**Hypothesis 1:** Countries with larger internally displaced populations are more likely to experience suicide terrorism.

## **Intervening Factors**

To gain a better understanding, though, of the causal links in this assumed relationship between IDPs and suicide terrorism, we consider a set of intervening factors that we theorize mediate the relationship between internal displacement and suicide terrorism. In this study, we consider four of them: (a) economic deprivation, (b) ethnic conflict, (c) human rights abuses, and (d) raising counterterrorism costs/taxing state capacity. We expect, at the outset, that internal displacement boosts each of these factors, thereby creating an environment in which suicide attackers can be more easily recruited, suicide attacks can be more easily planned and launched, and suicide terrorism will be met with higher approval or less condemnation from constituent groups of the terrorist movements themselves.

Economic deprivation as an intervening factor. IDPs are among the world's most vulnerable people to economic deprivation. They often suffer from inadequate nutrition, medical care, sanitation, education, and employment opportunities (Madsen 2003) and security and sovereignty issues often make it particularly challenging for national governments and the international community to address IDP's needs.<sup>5</sup> We assume that economic deprivations and poor quality of life suffered by IDPs increases the pool of potential suicide recruits for terrorist movements, lowering the costs for using suicide attackers and enabling them to use suicide attacks more frequently. Our assumption here is informed by rational choice theories that explain an individual's participation in criminal activity in terms of opportunity costs (e.g., Becker 1976). In this framework, extreme poverty produces an oversupply of potential terrorists, changing the

human resources terrorist movements find at their disposal (see Bueno de Mesquita 2005), thereby affecting the type of tactics they pursue.

Moreover, some literature specifically reinforces the assumption that by increasing economic deprivation, IDPs increase suicide terrorism. Humphreys and Weinstein (2008) argue that poor, young males from IDP camps with few economic opportunities and significant grievances are more likely to join terrorist groups because they suffer lower opportunity costs for joining and are provided with a sense of purpose provided by membership. Formal theory work by Rosendorff and Sandler (2010) finds that suicide terrorism is more likely to occur under conditions where potential recruits lack attractive economic alternatives and when preemptive policing and counterterrorism measures by government officials have produced a public backlash.<sup>6</sup>

The empirical literature on the relationship between poverty and terrorism is, however, divided and complicates the picture for economic deprivation as a mediator in the IDP—suicide terrorism. Some work indicates that economic deprivation is a significant motivator of terrorist activity insofar as it facilitates recruitment (Khashan 2003; Von Hippel 2009). For example, studies by Blomberg, Hess, and Weerapana (2004); Drakos and Gofas (2004); and Honaker (2005) demonstrate that terrorist activity increases during periods of economic downturn. Moghadam (2003) considers the role played by high unemployment and poverty among Palestinians living in the Occupied Territories in order to explain why movements like Hamas and Islamic Jihad are able to recruit suicide bombers by providing material benefits—in the form of a death benefit payout—to the bomber's surviving family members. Other studies, however, have found little evidence that poor socioeconomic status drives individual engagement in or support for suicide terrorism (Berrebi 2007; Krueger and Maleckova 2003).

Despite this controversy, economic disparity is a theoretically viable mediator between internal displacement and increased suicide terrorism. If IDPs, by promoting economic hardship, help to swell the pool of willing terrorists and suicide bombers, this would enable terrorist movements to select higher-quality recruits (see Bueno de Mesquita 2005). Benmelech, Berrebi, and Klor (2012) determine in their empirical study of Palestinian suicide terrorist movements that cultivation of better, higher-quality recruits actually enables groups to deploy more suicide attackers with confidence that they will fulfill their missions, to deploy them to more distant targets, and to commit higher-casualty attacks. Finally, Rosendorff and Sandler's (2010) theoretical model and the equilibria it produces gives us confidence that the economic deprivation induced by internal displacement expands recruiting pools for groups engaged in suicide terrorism, in turn making it a more desirable strategy adopted. Therefore, we test the following hypothesis:

**Hypothesis 2a:** Internal displacement creates higher levels of economic deprivation, which produce more suicide terrorist attacks.

Ethnic conflict as an intervening factor. The next intervening factor linking IDPs to suicide terrorism involves ethnic group discrimination and ethnic identity conflicts. The process of internal displacement frequently upsets the stability of ethnic relations within countries, as communities are uprooted from their traditional residences, where they may have enjoyed majority or plurality status, and are inserted into communities in which they are perceived as unwelcome minorities. This relocation process exposes the displaced to greater discrimination (see Holmes and Gutierrez de Pineres 2001, 573) and escalates the frequency and intensity of ethnic hostilities, thereby raising levels of political violence in general while also increasing the likelihood that the members of the aggrieved group will resort to suicide terrorism in particular.

This expectation is informed by social science theories on ethnic identity conflicts and the types of violence they produce, as well as by empirical work suggestive of the relationship between ethnic identity conflicts and terrorist group tactics. For example, Goodwin (2006) argues that insurgents are likely to terrorize those civilians who speak different languages and/or practice different religions. In their empirical study of how terrorist group features affect the lethality of their attacks, Asal and Rethemeyer (2008) argue that a process they term "othering," whereby dominant ethnic or religious communities construct exotic, negative and dehumanizing images of members of other communities with which they have tensions and conflict, leads to even more indiscriminate forms of political violence. This assumption is buttressed by the theoretical work of Juergensmeyer (2003) and Tilly (2003)—both of them argue that such sociocultural boundaries ease the psychological pain of committing atrocities against members of another community and by the observations of Kaufman (1996, 1998), who claims that conflicts involving clashes of ethnic identity more often result in extreme forms of violence because the victims have been rhetorically dehumanized. Other recent empirical works by Piazza (2011, 2012) and Choi and Piazza (2012) find that countries with greater numbers of ethnic minority communities experiencing discrimination or exclusion from political power induce more frequent as well as more lethal attacks.

Based on the previous theoretical and empirical findings, we suspect that internal displacement drives suicide terrorism by inflaming ethnic identity conflicts and increasing the incidence of discrimination. These, in turn, produce an environment in which political violence is more likely to be extreme and indiscriminate. Within such a scenario, suicide terrorism will be more frequent. We test this intervening factor in the following hypothesis:

**Hypothesis 2b:** Internal displacement leads to increased ethnic group conflicts, which produce more suicide attacks.

Human rights violations as an intervening factor. IDPs are likely to suffer human rights violations as a result of their displacement. They face a heightened likelihood for

abuse at the hands of government authorities—frequently authorities who are responsible for their administration and settlement (Lischer 2005). Moreover, because they often encounter conflict with the populations into which they are settled—over employment and access to resources or due to animosities regarding ethnic or cultural identities—members of IDP communities are likely to suffer from abuse inflicted by aggravated locals and vigilantes. Research by Walsh and Piazza (2010) empirically demonstrates that countries with poor human rights conditions experience higher levels of terrorist activity, in part because such abuses alienate members of the afflicted community from state counterterrorism efforts. The human rights abuses experienced by IDPs may, therefore, drive up rates of terrorism in general and increase opportunities for suicide terrorism in particular. This line of reasoning is, once again, supported by the formal theoretical model of Rosendorff and Sandler (2010), stating that counterterrorism measures to address and preempt terrorism often produce grievances that, ironically, aid terrorist movements in their recruitment of willing suicide attackers.

However, at least two more factors may link the human rights abuses experienced by IDPs to an increase in suicide terrorism. First, experiences of abuse might serve to reinforce the group identity of displaced persons, as they become alienated from the local or majority population. This process is similar to that envisioned in Gurr's (1993, 1996) model where minority group discrimination acts as a motivating force for community radicalization and rebellion—a process adapted to the study of terrorism by Ross (1993). As human rights abuses fuel feelings of grief and alienation, terrorist groups are likely to find greater tolerance among their community members for increasingly uninhibited and atrocious acts, including suicide attacks. Second, a rise in human rights abuses against IDPs may normalize violence more generally, in both the displaced communities and the larger population. This normalization may also increase public tolerance for more extreme terrorist activity, like suicide attacks, thus reducing the political costs associated with their execution. This leads us to the following hypothesis:

**Hypothesis 2c:** Internal displacement is associated with an increase in human rights abuses, which, in turn, results in an increase in suicide attacks.

State counterterrorism capacity as an intervening factor. Internal displacement is likely to raise the governmental costs of policing and counterterrorist efforts, producing an environment in which terrorist groups have the opportunity to commit even more ambitious and lethal attacks. In the empirical literature, policing costs are recognized as an important predictor of terrorist activity (Eyerman 1998) and there is evidence that states with low capacities are more vulnerable to terrorism (Hendrix and Young 2014). As a result, it has become customary in cross-national analyses of terrorist attacks to control for various factors affecting the burden on counterterrorism officials such as geographic area, terrain, population density, government capacity, and

the like. We argue that IDPs place similar burdens on counterterrorism officials in that flows of IDPs, because they are transient and are more difficult to monitor. Furthermore, officials face greater barriers to the building of trust and rapport with IDPs, which are essential to the efforts of counterterrorism intelligence. Terrorist movements, on the other hand, can exploit IDP flows to elude counterterrorism officials, embedding their members within the population and exploiting intelligence asymmetries. Holmes and Gutierrez de Pineres (2011) note this as a standard assumption among scholars studying IDPs and civil conflict; Choi and Salehyan (2013) propose a similar theory regarding transnational refugee flows (see also Salehyan 2009; Salehyan and Gleditsch 2006). This leads us to the final hypothesis:

**Hypothesis 2d:** Internal displacement increases the policing and counterterrorism costs of the state, contributing to the attractiveness of suicide terrorism as a tactic of terrorist groups.

## Research Design

To test these hypotheses, we execute several types of empirical analyses on a crossnational, time-series database of 146 countries during the period from 1970 to 2006. When testing the general hypothesis (i.e., Hypothesis 1), we rely on standard statistical models in which the predictors are lagged one year to reduce endogeneity concerns. When testing the effects of the four intervening variables (i.e., Hypotheses 2a to 2d), we employ recursive models in which all variables are set to time t by definition.

# Negative Binomial Regression and Tobit Estimations

The general hypothesis—that countries with large IDPs experience more suicide terrorism—is tested using a set of negative binomial regression and Tobit models. In these models, we assume that suicide terrorism is a function of IDPs and twelve other predictors. Suicide terrorism, the dependent variable, is defined as an attack launched by a terrorist perpetrator who intends to die in the course of the act. In order to verify the robustness of our findings across the models, we operationalize suicide terrorism in three different ways. The first is a raw count of suicide attacks derived from the GTD collected and maintained by the START Center at the University of Maryland. The second is a raw count of suicide attacks per observation using data collected from Wade and Reiter's (2007). The third variable is also built using GTD data and is the ratio of counts of suicide attacks to counts of all terrorist attacks.

Since the first and second dependent variables are count measures whose variance is larger than the mean, negative binomial regression is the appropriate estimation technique (see Brandt et al. 2000; Cameron and Trivedi 1998; King 1988).<sup>8</sup> In an

effort to understand the tactical behavior of terrorist groups in our proposed context, a ratio of suicide attacks to all terrorist attacks occurring within a particular country is employed as a third dependent variable. For this third dependent variable, Tobit estimations censored on zero and on the maximum ratio are used. In all estimations, we calculate robust errors clustered on country.

The main independent variable for these models is the natural log of the number, in thousands, of internally displaced persons in the country at the end of the designated year as reported in the "Forcibly Displaced Populations, 1964-2008" database compiled by Marshall (2009).

To avoid omitted variable bias, we include a number of controls. <sup>10</sup> It has been suggested that terrorist movements use suicide attacks more frequently against "hardened" targets—that is, targets that are better defended—and against stronger and better armed adversaries (Berman and Laitin 2006; Sprinzak 2000). We, therefore, include a measure of state capacity, using the Index of National Capability (CINC) from the Correlates of War database, to operationalize the capacity of the state to defend itself against terrorist activity. In his seminal work on suicide terrorism, Pape (2003, 2005) argued that terrorist movements are most likely to deploy attacks against democracies engaged in foreign military occupations. In our models, we control for this possibility by constructing a dummy variable coded "1" for all observations where a country is experiencing a foreign military occupation. Data for this variable are derived from tables in Edelstein (2004) and supplemented by data from Wade and Reiter (2007).

Some qualitative and theoretical work on suicide terrorism also suggests that competition among groups for attention and notoriety drives the frequency and severity of suicide attacks (Bloom 2005; Kydd and Walter 2006). Terrorist movements use ever more spectacular, and deadly, forms of terrorism as a means to "outbid" one another for public support and to demonstrate their determination in the struggle. We therefore include a dummy variable coded as "1" for observations where more than one terrorist movement in a country committed attacks in a given year. We expect this to be a significant positive predictor of suicide terrorism, but note that in their cross-national empirical analysis of the outbidding thesis, Findley and Young (2012) did not find substantive evidence that intergroup competition increases suicide terrorism.

In their empirical analysis of suicide terrorism, Wade and Reiter (2007) found that countries with large Muslim populations and countries with Minority at Risk (MAR) populations are more likely to experience suicide terrorism; thus, we also include a variable measuring the percentage of Muslim population within a country, using religious demographic data from Fearon and Latin (2003), and a dummy variable coded as "1" if a country contains an MAR population (according to the MAR database). Furthermore, because Piazza (2008a) found that religious differences between terrorists and their targets is a positive predictor of the likelihood of suicide attacks, we control for the level of religious fractionalization within a country using Fearon and Laitin's (2003) indicator.

Another host of covariates that have been found to be, or have been proposed as, predictors of suicide terrorism within the literature (e.g., Drakos and Gofas 2004; Eyerman 1998; Li 2005; Piazza 2011; Wade and Reiter 2007) includes a natural log of the country population; an indicator of the country-level economic development, measured by the Human Development Index; regime type and regime age of the country, measured using the Polity and regime durability scores from the Polity IV database; a measure of press freedom within the country, provided by Freedom House; and the number of all terrorist attacks occurring within a given country. Each of these covariates is expected to be positive predictors of suicide terrorism except for the durable measure that is expected to reduce all forms of terrorism including suicide terrorism. Moreover, because the objective of both suicide and nonsuicide terrorism is to garner attention and to influence a mass audience (Hoffman and McCormick 2004), and because terrorist incidents are more likely to be reported by open-source databases for countries with free media (Drakos and Gofas 2006), we also expect to see a higher rate of suicide terrorism in countries with greater freedom of press. Finally, we include a count of all GTD-reported terrorist attacks per country-year observation, as we wish to control for the general level of terrorist activity within a country.

## Recursive Models

To help assess the hypothesized intervening factors in the relationship between IDPs and suicide terrorism, we use a recursive modeling technique. In the recursive models, 11 the proposed relationship between IDPs and suicide terrorism is deconstructed into direct and indirect (mediated) effects. The impact of IDPs on suicide terrorism (Hypothesis 1) refers to the direct effect denoted as "de" in Figure A1. The impact may be also mediated by a number of intervening factors (Hypotheses 2a through 2d). Such a mediation is called an indirect effect and can be calculated as a product of "ie<sub>1</sub>" and "ie<sub>2</sub>". Complete mediation is said to occur if the independent variable, IDPs, no longer affects suicide terrorism after an intervening factor has been controlled for. In this situation, we would find path "de" to be zero. Partial mediation is said to occur if when an intervening factor is considered, the path from IDP to suicide terrorism is reduced in absolute size but remains different from zero. The recursive model also controls for secular trends that may affect IDPs, the intervening factor, and suicide terrorism, denoted as "c" in Figure A1. It should be noted that the recursive model is consistent with our theoretical discussion since all causal effects in the model are unidirectional in nature; that is, no two variables in the model are reciprocally related, either directly or indirectly. For example, the choice of the recursive model is appropriate, given that IDPs are likely to increase suicide attacks and not vice versa. More important, recursive model building is most effective in assessing and comparing the four intervening factors.

We employ Baron and Kenny's (1986) technique for recursive models, which uses four steps to test for an intervening effect. Step 1 conducts a regression analysis

with IDPs and exogenous variables predicting suicide terrorism to test for path "de" alone; step 2 conducts a regression analysis with IDPs and exogenous variables predicting an intervening variable to test for path "ie<sub>1</sub>"; step 3 conducts a regression analysis with an intervening variable and exogenous variables predicting suicide terrorism to test the significance of path "ie<sub>2</sub>" alone; and step 4 conducts a regression analysis with IDPs, an intervening variable, and exogenous variables predicting suicide terrorism. The purpose of steps 1 through 3 is to establish that zero-order relationships among the variables exist. If one or more of these relationships are insignificant, we can conclude that an intervening effect is either not possible or not likely.

We adopt indicators for the four intervening factors that we theorize link IDPs to suicide terrorism: economic deprivation, ethnic conflict and discrimination, human rights abuses, and state counterterrorism capacity. We model the number of IDPs as a predictor for each of these four intervening variables in order to determine whether IDPs serve as a significant and positive predictor and use the intervening variables as predictors of suicide terrorism in steps 3 and 4.

We utilize five data sources to operationalize the four intervening links between IDPs and suicide terrorism. Because there is no reliable cross-national, time-series data on living standards of internally displaced peoples (i.e., measuring the economic conditions of fleeing people), we turn to a commonly used measure of intrastate income disparity: the Gini coefficient. Our expectation is that as the number of IDPs increases within a country, so will Gini measures of income inequality. Data for Gini coefficients are derived from the UN Development Program (UNDP) and the missing observations are imputed. 12 To operationalize ethnic conflict and discrimination, we employ two different measures available on a cross-national, time-series basis: the ethnic violence (ethviol) indicator as per the Major Episodes of Political Violence, 1946–2008 database (Marshall 2010) and the natural log of the size of the politically excluded ethnic population within a country as per the Ethnic Power Relations database (Wimmer, Cederman, and Min 2009). To operationalize the third intervening link between IDPs and suicide terrorism, human rights violations, we modify the Cingranelli and Richards (2010) Physical Integrity Rights measure by subtracting it from eight, thereby transforming it into a measure of abuse, as opposed to protection, of physical integrity. Finally, to measure the counterterrorism capacity, we use the Aggregate State Failure measure derived from the Political Instability Task Force by Piazza (2008b). This indicator measures challenges to state ability to project force against its internal population and to maintain domestic control. For each of these, we employ either ordinary least squares (OLS) or ordered logit regression analysis, depending on the level of measurement of the dependent variable.

In the recursive technique, we include two exogenous variables: national capabilities and military occupation. Other control variables are not included in the recursive system because there is no evidence within the existing literature that they can serve as common predictors of IDPs, intervening variables, or suicide terrorism, and

because the focus of this study is on the comparison of intervening factors rather than on the explanation of variation in the outcome variables.

# **Empirical Results**

This section discusses empirical results regarding the IDPs—suicide terrorism connection in general and then moves on to evaluate the effects of the four intervening variables.

## The Effect of IDPs on Suicide Terrorism

The negative binomial regression and Tobit models in Table 1 are built to test the expectation that IDPs can significantly predict the likelihood of suicide terrorism within a given country. It appears that regardless of the measurement of the outcome variable and the estimation method, IDPs are statistically significant and in the hypothesized direction. Countries containing a large number of IDPs are more likely to experience suicide terrorist attacks and to endure a higher percentage of suicide bombings relative to the total rate of terrorist activity they experience. When we change the value of IDPs from its mean to one standard deviation for substantive analysis (based on the estimates of model 1), we also find an increase of 140 percent in the likelihood of suicide attack, and the change to two standard deviations leads to an increase of 460 percent. Because both statistical and substantive analyses are consistent, we believe that IDPs are an important cause of suicide terrorism.

These findings are highly consistent across the models and are robust in relation to covariates such as military occupation and the percentage of national population that is Muslim, both of which are significant and positive across all models. The other covariates do not fare as well as the IDP variable in the tests. Across the models, we find that the Index of National Capability (CINC), <sup>13</sup> the dummy variable for MAR population, the measure of religious fractionalization, democracy, political durability, the measure of press freedom, and the count of all terrorist attacks are all insignificant predictors of suicide terrorism.

# The Effects of the Four Intervening Variables

Relying on the four steps laid out in the research design section, we examine the intervening relationship between the IDPs and suicide terrorism. To recap, an intervening effect can be said to occur when (1) IDPs significantly predict suicide terrorism in the absence of an intervening variable, (2) IDPs significantly predict the intervening variable, (3) the intervening variable has a significant and distinct effect on suicide terrorism, and (4) the effect of IDPs on suicide terrorism shrinks upon the addition to the model of an intervening variable. To judge whether an intervening

Table 1. The Effects of IDPs on Suicide Terrorism.

Variable	Suicide attacks (GTD) Model I <sup>a</sup>	Suicide attacks (Wade and Reiter) Model 2 <sup>a</sup>	Percentage suicide (GTD) Model 3 <sup>b</sup>
IDPs	0.426***	0.487***	0.112*
	(0.084)	(0.093)	(0.062)
National Capabilities	-19.232*	<b>-9.575</b>	-0.450
	(11.353)	(14.855)	(4.555)
Military Occupation	2.555**	2.563**	0.594*
	(0.997)	(1.044)	(0.302)
Multi-Group	1.794**	14.661***	0.148
·	(0.766)	(0.680)	(0.276)
Muslim Population	0.026***	0.027**	0.006**
·	(0.009)	(0.010)	(0.002)
Minority at Risk	0.903	0.800	0.172
•	(0.734)	(0.723)	(0.276)
Religious Fractionalization	0.893	1.374	0.322
· ·	(1.346)	(1.541)	(0.410)
Population	0.982 <sup>*</sup> ***	0.519	0.246 <sup>*</sup> **
·	(0.285)	(0.334)	(0.095)
Human Development	6.325 <sup>*</sup> *	4.086	`2.127 <sup>*</sup>
Index	(2.407)	(2.898)	(1.077)
Democracy	0.062	`0.051 <sup>°</sup>	0.022
•	(0.056)	(0.055)	(0.022)
Political Durability	`0.011 <sup>*</sup>	0.012	0.002
,	(0.007)	(0.009)	(0.003)
Press Freedom Index	0.014	0.008	0.011
	(0.016)	(0.015)	(800.0)
All Terrorist Attacks	0.002	0.002	,
	(0.003)	(0.002)	
Constant	− l`6.253****	−26.039 <sup>*</sup> ***	<b>−5.305** −2.233</b>
	(2.854)	(3.314)	
Wald $\chi^2$	108.92	962.38	
Prob $> \chi^2$	0.001	0.001	
F Stastic			2.32
Prob > F			0.006
Log pseudolikelihood	-569.03	-393.63	-306. <del>4</del> 8
Dispersion = I	13.70	19.62	<del>-</del>
Observations	4,422	2,985	2,108

 $\textit{Note}: \mathsf{GTD} = \mathsf{Global} \ \mathsf{Terrorism} \ \mathsf{Database}; \ \mathsf{IDP} = \mathsf{internally} \ \mathsf{displaced} \ \mathsf{population}. \ \mathsf{Robust} \ \mathsf{standard} \ \mathsf{errors} \ \mathsf{in} \ \mathsf{parentheses}.$ 

<sup>&</sup>lt;sup>a</sup>Negative binomial estimation.

<sup>&</sup>lt;sup>b</sup>Tobit estimation.

<sup>\*</sup>p < .05. \*\*p < .01. \*\*\*p < .001, one-tailed tests.

Variable	Suicide attacks (GTD) Model I	Suicide attacks (Wade and Reiter) Model 2	Percentage suicide (GTD) Model 3
IDPs	0.459***	0.494***	0.114*
	(0.096)	(0.115)	(0.058)
National Capabilities	22.884**	19.736*** <sup>*</sup>	8.133**
•	(8.654)	(4.976)	(3.308)
Military Occupation	2.885*** <sup>*</sup>	2.807*** <sup>*</sup>	0.438*
, ,	(0.704)	(0.875)	(0.191)
Constant	−4.301*** <sup>*</sup>	−4.516***	− Ì.809**
	(0.396)	(0.389)	(0.613)
Wald $\chi^2$	Ì05.5Ś	Ì 16.5Ś	` ,
Prob $> \chi^2$	0.001	0.001	
F Stastic			3.71
Prob > <i>F</i>			0.011
Log pseudolikelihood	-803.34	-509.33	-408.43
Dispersion = I	28.02	29.75	
Observations	4,931	3,250	2,324

 Table 2. The First Step of Recursive Models: From IDPs to Suicide Terrorism.

 $\it Note$ :  $\it GTD = Global Terrorism Database$ ;  $\it IDP = internally displaced population$ . Robust standard errors in parentheses.

effect is occurring, we conduct four regression analyses, examining the significance of the coefficients at each step.

Table 2 shows the results of step 1 in which IDPs and the two controls predict suicide terrorism (i.e., testing path "de" as denoted in Figure A1). The outcome variables of models 1 through 3 in Table 2 are counts of GTD suicide terrorist attacks, Wade and Reiter's counts of suicide attacks, and the percentage of all attacks that are suicide attacks, respectively. The IDPs variable is statistically significant and in the hypothesized direction in all models. It appears that countries with large IDPs are significantly more likely to experience suicide terrorism and to experience a higher percentage of suicide attacks relative to the total amount of terrorist activity they endure. The two control variables, national capabilities and military occupation, are also found to be significant. Since the overall results are highly consistent across the models and are robust in relation to the two covariates in this model, we conclude that IDPs are positively associated with suicide attacks and, thus, move on to step 2.

The results of step 2, which tests path "ie<sub>1</sub>," are reported in Table 3 where each of the five intervening measures is regressed on IDPs, national capabilities, and military occupation. Model 1 in Table 3 tests the economic deprivation hypothesis using the Gini coefficient (UNDP), models 2 and 3 test the ethnic conflict and discrimination hypothesis using the Ethnic Power Relations (EPR) and Political Instability Task Force (PITF) data sets, model 3 tests the human rights violations

<sup>\*</sup>p < .05. \*\*p < .01. \*\*\*p < .001, one-tailed tests.

Table 3. The Second Step of Recursive Models: From IDPs to Intervening Factors.

Variable	GINI coefficient (UNDP) Model I	Ethnic group exclusion (EPR) Model 2	Ethnic group violence (PITF) Model 3	Human right abuses (CIRI) Model 4	State failure (PITF) Model 5
IDPs	0.468**	0.186***	0.221***	0.464***	0.457***
	(0.185)	(0.035)	(0.066)	(0.035)	(0.036)
	-75.070***	7.637*	19.181**	5.239	4.427
Capabilities	(21.595)	(4.608)	(6.442)	(12.170)	(5.136)
Military	0.117	0.893*	-2.727*** (0.705)	-0.521	0.626
Occupation Constant	(2.052) 44.209***	(0.390) 1.588***	(0.795)	(0.691)	(0.598)
Constant	(0.705)	(0.143)			
Cutl	(0.703)	(0.1 13)	3.305	<b>-1.569</b>	2.228
			(0.293)	(0.183)	(0.167)
Cut2			`3.808 <sup>´</sup>	_0.600 <sup>°</sup>	`2.337 <sup>´</sup>
			(0.322)	(0.148)	(0.169)
Cut3			5.283	0.064	2.921
			(0.580)	(0.134)	(0.173)
Cut4			6.762	0.724	3.719
			(0.670)	(0.130)	(0.219)
Cut5			7.577	1.510	4.106
C ./			(1.000)	(0.144)	(0.233)
Cut6				2.194	4.445
Cut7				(0.163) 2.958	(0.244) 4.836
Cut/				(0.187)	(0.278)
Cut8				3.886	5.484
Cuto				(0.211)	(0.350)
Cut9				()	5.858
					(0.406)
Cut10					6.207 <sup>°</sup>
					(0.489)
Cutll					7.104
					(0.461)
Cut12					7.814
6 . 12					(0.483)
Cut13					8.515
Cut14					(0.692) 9.212
Cuti4					(0.610)
Wald $\chi^2$			32.57	178.95	162.87
Prob > $\chi^2$			0.001	0.001	0.001
F Statistic	5.95	13.21			
Prob > F	0.001	0.001			
Log Pseudolikelihoo	d		-1199.66	-5856.90	-3559.74
Observations	4,925	3,978	4,896	2,933	4,922

 $\textit{Note:} \ \mathsf{IDP} = \mathsf{internally} \ \mathsf{displaced} \ \mathsf{population.} \ \mathsf{Robust} \ \mathsf{standard} \ \mathsf{errors} \ \mathsf{in} \ \mathsf{parentheses}$ 

<sup>\*</sup>p < .05. \*\*p < .01. \*\*\*p < .00] whose tailed tests ub.com by guest on August 10, 2016

hypothesis using the Cingranelli-Richards (CIRI) Human Rights data, and model 4 tests the state failure hypothesis using the PITF data. As expected, the IDPs variable is significantly different from zero across all of the models. This finding indicates that IDPs positively affect each of the five intervening variables, which were treated as outcome variables in the regression models. Because step 2 successfully establishes the causal relationship between IDPs and intervening factors, we proceed to step 3.

Models in Table 4 are designed to examine whether suicide terrorism is influenced by each of the intervening factors (i.e., testing path "ie<sub>2</sub>"). These models treat the intervening variables as if they were predictors of suicide terrorism. It turns out that Ethnic Group Exclusion and Human Rights Abuses are consistent predictors of suicide terrorism, regardless of the differing measures of suicide attacks. State Failure is significant in only two of the three models; GINI Coefficient and Ethnic Group Violence, however, are far from achieving significance in any of the models. It is possible that an intervening variable and suicide terrorism are correlated because they are both caused by IDPs. Accordingly, IDPs must be controlled for in order to establish the effect of an intervening variable on suicide terrorism, as discussed in step 4.

Table 5 includes those intervening factors that were significant in steps 1 through 3: Ethnic Group Exclusion and Human Rights Abuses. Though its influence was less consistent than the other two factors in the tests reported in Table 4, State Failure is also included in step 4 as a check. Step 4 is the final step in testing the recursive model in which IDPs, an intervening variable, and the two controls are supposed to predict suicide terrorism (i.e., testing paths "de" and "ie<sub>2</sub>" together). In models 1 through 3, IDPs turn out to be significantly different from zero, while Ethnic Group Exclusion achieves significance in only two of the three models. These results indicate that Ethnic Group Exclusion may not serve as a reliable intervening factor between IDPs and suicide terrorism. IDPs appear to be positively associated with suicide terrorism in models 4 and 5 only, while Human Rights Abuses emerge as a consistent predictor across all the three models, 4 through 6. The results of models 4 and 5, in which IDPs are still significant (i.e., IDPs and Human Rights Abuses both significantly predict suicide terrorism), point to the presence of a partial intervening effect. The results of models 6, in which IDPs are no longer significant when Human Rights Abuses are included in the estimation, indicate a full intervening effect. Models 7 through 9 show no evidence for an intervening effect, as the State Failure variable achieves no significance in any of the models. The results of models 7 through 9 are not surprising, given that the significance of the variable was not consistent in Table 4.

The findings presented on Table 5 demonstrate that, of the intervening variables, Human Rights Abuses alone are positively and consistently associated with suicide terrorist activity. To verify the robustness of the findings in the recursive models and to more formally test the indirect effect as a product of ie<sub>1</sub> and ie<sub>2</sub>, we also conduct additional tests of mediation using Sobel,

(continued)

	Suicide	Suicide	Percentage suicide	Suicide		Percentage suicide		Suicide
	(GTD)	(W and R)	(GTD)	(GTD)	(W and R)	(GTD)	(GTD)	(W and R)
Variable	Model I	Model 2	Model 3	Model 4		Model 6		Model 8
GINI Coefficient	-0.064** (0.025)	-0.094 (0.058)	-0.013					
Ethnic Group				0.779***	0.791	0.128*		
Exclusion				(0.155)		(0.065)		
Ethnic Group							0.481	-0.223
Violence							(0.474)	(0.490)
Human Right Abuses							•	
State Failure								
National Capabilities	31.075	27.329	6.647*	44.750**	32.279*	6.775*	39.958	34.354
	(19.950)	(21.971)	(3.280)	(18.796)	(18.649)	(3.762)	(25.363)	(24.644)
Military Occupation	4.056***	3.156***	0.787***	2.263**	2.411*	*019.0	3.986***	3.149**
	(0.688)	(0.744)	(0.250)	(0.864)	(1.079)	(0.261)	(0.776)	(0.928)
Constant	-0.544	0.949	_I.046*	-5.053***	4.686***	-2.051**	-3.384***	-3.079**
	(1.403)	(3.122)	(0.495)	(0.431)	(0.448)	(0.763)	(0.586)	(0.786)
Wald $\chi^2$	50.37	61.04		94.54	91.28	•	26.69	15.47
Prob $> \chi^2$	0.001	0.001		0.001	0.001		0.001	0.002
F Stastic			3.71			2.77		
Prob > F			0.011			0.041		
Jolikelihood	-861.41	-553.87	-442.46	-645.70	-491.86	-354.95	-862.84	-557.40
Dispersion = I	53.55	64.24		53.07	55.82		53.32	65.58
7	100		, , ,	010				

Table 4. Continued

Variable	Percentage suicide (GTD) Model 9	Suicide (GTD) Model 10	Suicide (W and R) Model 11	Percentage Suicide (GTD) Model 12	Suicide (GTD) Model 13	Suicide (W and R) Model 14	Percentage Suicide (GTD) Model 15
GINI Coefficient Ethnic Group Exclusion Ethnic Group Violence	0.130						
Human Right Abuses State Failure		0.606***	0.761***	0.161* (0.086)	0.533*	0.781**	0.039
National Capabilities Military Occupation	7.157* (3.164) 0.805****	28.860* (13.554) 2.623***	25.431* (13.184) 3.114****	10.228** (3.544) 0.686*	28.817 (19.390) 4.229****	(8.879) (8.879) 3.646₩₩	7.481* (3.298) 0.686****
-	(0.246) -1.641** (0.542)	(0.875) 5.967*** (0.480) 51.38	(0.787) -6.838**** (0.564) 59.13	(0.354) -2.629** (1.095)	(0.770) -3.872*** (0.296) 50.53	(0.752) -4.235**** (0.323) 70.58	(0.214) -1.653*** (0.563)
Frob > \( \chi \) F Stastic Prob > F Log peudolikelihood Dispersion = 1 Observations	4.65 0.003 443.14 2,312	29.87 2,933	0.001 -424.53 35.07 2,933	3.61 0.013 -266.63 1,632	-849.94 49.05 4,922	0.001 -532.84 47.85 3,244	4.00 0.008 443.59 2,323

Note: W and R = Wade and Reiter; GTD = Global Terrorism Database; IDP = internally displaced population. Robust standard errors in parentheses. \*p < .05. \*\*p < .01. \*e\*p < .001, one-tailed tests.

Table 5. The Fourth Step of Recursive Models: From IDPs to Intervening Factors and to Suicide Terrorism.

				•					
	Suicide (GTD)	Suicide (W and R)	Percentage suicide	Suicide (GTD)	Suicide (W and R)	Percentage suicide	Suicide (GTD)	Suicide (W and R)	Percentage suicide
Variable	Model I	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
IDPs	0.435***	0.493***	0.123*	0.303**	0.275*	0.078	0.488***	0.453***	0.129*
	(0.105)	(0.117)	(0.070)	(0.102)	(0.122)	(090.0)	(0.097)	(0.106)	(0.065)
Ethnic Group	0.456*	0.411	0.057						
Exclusion	(0.155)	(0.158)	(0.043)						
Human Right Abuses				0.333**	0.487***	0.104*			
Chat's Failure				(0.110)	(0.123)	(/cn·n)	000	77	7600
State Fallure							(0.111)	(0.145)	(0.032)
National Capabilities	25.592	18.607*	7.746*	24.768***	22.244**	10.520**	23.052***	***699.61	8.045**
-	(16.100)	(8.083)	(3.496)	(7.749)	(7.890)	(3.854)	(8.744)	(4.696)	(3.312)
Military Occupation	2.265**	2.509**	0.366	2.522**	3.069***	0.553	2.954***	2.653**	0.462**
•	(0.880)	(0.840)	(0.249)	(0.921)	(0.831)	(0.368)	(0.717)	(0.879)	(0.186)
Constant	-5.248***	-5.258***	-2.093**	-5.459***	-6.250***	-2.543**	<b>-4.264</b> ***	<b>-4.578***</b>	-I.789**
	(0.319)	(0.375)	(0.739)	(0.452)	(0.546)	(1.017)	(0.394)	(0.393)	(0.610)
Wald $\chi^2$	103.83	101.76		69.42	61.27		105.15	118.49	
Prob > $\chi^2$	0.001	0.001		0.001	0.001		0.001	0.002	
F Stastic			2.18			2.39			2.92
Prob > $F$			0.069			0.049			0.020
dolikelihood	-604.35	-449.99	-326.77	-461.86	-417.02	-260.95	802.63	-508.68	-406.44
Dispersion = I	28.36	25.49		23.73	28.85		27.65	29.88	
Observations	3,978	2,710	1,950	2,933	2,933	1,632	4,922	3,244	2,323

Note: W and R = Wade and Reiter; GTD = Global Terrorism Database; IDP = internally displaced population. Robust standard errors in parentheses. \*p < .05. \*\*p < .01. \*\*\*p < .001, one-tailed tests.

Goodman, and Aroian tests and structural equation modeling (SEM) tests (for technical details, see Baron and Kenny 1986; Goodman 1960; MacKinnon, Warsi, and Dwyer 1995; Sobel 1982). These tests also produce the same result: IDPs in countries worsen the human rights picture, thereby increasing suicide terrorism <sup>14</sup>

#### Conclusion

This study is the first cross-national, time-series analysis of the relationship between IDPs and suicide terrorism. After establishing a significant relationship between IDPs and suicide terrorism, we examined four possible intervening factors theorized to mediate between internal displacement and suicide terrorism. The main findings of this study are that countries with larger IDPs are more prone to suicide terrorist attacks and that this relationship is likely to occur because internal displacement increases human rights abuses in countries, thereby fostering an environment in which the displaced are likely to turn to suicide terrorism to settle grievances.

Our study has several implications for scholarship on terrorism. It identifies another important predictor of counts of suicide terrorism and the mix of suicide versus conventional terrorism a country experiences. Indeed, the finding that internal displacement causes a change in the proportion of suicide attacks launched by terrorists within a country suggests to us that IDPs and the treatment of IDPs triggers a discrete tactical change in terrorist movements. This finding could be examined in greater detail in future studies. The results of this study also underscore the importance of human rights for explaining a particularly costly form of terrorism—a finding that is consistent with results produced earlier by Walsh and Piazza (2010). Finally, this study illustrates the value in testing for intervening variables and mediators—a type of empirical investigation that is wholly absent in terrorism studies but might be useful in garnering a more substantive understanding of causal relationships between predictors and patterns of terrorism.

Our study also has some policy implications. In finding that IDPs substantially contribute to the likelihood that suicide terrorism will occur in a country, this study highlights internal displacement as a potential forecasting tool for where and when suicide attacks will occur, though more testing will be required to determine precisely how the findings of this study can inform forecasting. In a general sense, the results underscore the security dimension of IDPs, and suggest that by addressing the processes that produce internal displacement and by improving the human rights picture within countries, the frequency of suicide attacks can be reduced. These policy implications—the use of IDPs to assess country risk for suicide terrorism and to leverage policy responses to minimize terrorism—give sobering dimension to the size and dramatic increase of IDPs in the contemporary world. According to data from the

UN Commission on Human Rights in 2012, there were around 17.6 million IDPs in the world, compared with 10.5 million refugees. Also, while the global refugee population declined by 13 percent between 2010 and 2012, the global IDP grew by 194 percent.<sup>15</sup>

In addition to helping to explain the phenomenon of suicide terrorism in those countries that have sizable IDPs and already are noteworthy for their terrorist activity—such as Afghanistan, Colombia, Iraq, Nepal, Pakistan, Somalia, Sudan, and Yemen—the study also draws counterterrorism officials' attention to those countries with large numbers of IDPs that have so far escaped consideration—such as the Democratic Republic of the Congo, Azerbaijan, Kenya, Libya, and Myanmar. In particular, the findings of this study are particularly poignant when considering that since the start of the civil war in Syria in 2012, more than 2 million Syrian residents have been displaced while the ruling Ba'athist government has been accused of gross human rights violations against its citizens. These, the study indicates, are a toxic mix that should give counterterrorism officials pause.

# **Appendix**

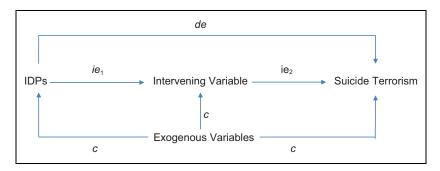


Figure A1. Recursive model.

continued)

 Table AI. The Effect of IDPs on Suicide Terrorism: Robustness Tests.

Variable         Model I         Model 2         Model 3         Model 4         Model 5         Model 5           IDPs         0.448****         0.448****         0.658***         0.508****         0.170**         0.170**           IDPs         (0.083)         (0.118)         (0.094)         (0.175)         (0.064)         (0.070*)           National Capabilities         13.591**         (0.118)         (0.094)         (0.175)         (0.064)         (0.004)           Taxes/GDP         1.239         (0.062)         1.927**         (0.084)         (0.015)         (0.015)           Multi-Groups         1.239         (0.062)         1.927**         (0.084)         (0.150)         (0.015)           Multi-Groups         2.846***         2.839**         1.5462***         16.486***         0.417         0.634           Multi-Groups         0.035***         0.049**         (0.190)         (0.019)         (0.015)         (0.015)           Multi-Groups         0.035***         0.049**         0.049**         0.049**         0.017         0.012           Multi-Groups         0.035***         0.049**         0.049**         0.049**         0.012**         0.012**           Muslim Population         0.0100<		Suicide (GTD)	GTD)	Suicide (Wade and Reiter)	and Reiter)	Percentage suicide	e suicide
0.448***         0.458***         0.508***         0.854***         0.119*           (0.085)         (0.118)         (0.094)         (0.175)         (0.064)           13.591*         (0.084)         (0.175)         (0.064)           (3.212)         (0.062)         (0.084)         (3.268)           (0.062)         (0.084)         (0.297)         (0.097)           (0.839)         (1.138)         (0.922)         (0.909)         (0.297)           (0.839)         (1.138)         (0.922)         (0.909)         (0.027)           (0.751)         (1.138)         (0.922)         (0.909)         (0.297)           (0.839)         (1.138)         (0.922)         (0.909)         (0.017)           (0.010)         (0.012)         (0.010)         (0.013)         (0.014)         (0.014)         (0.017)           (0.010)         (0.011)         (0.012)         (0.010)         (0.013)         (0.014)         (0.017)           (0.010)         (0.011)         (0.012)         (0.010)         (0.014)         (0.014)         (0.014)           (0.023)         (0.024)         (0.024)         (0.024)         (0.024)         (0.024)           (0.024)         (0.024) <t< th=""><th>Variable</th><th>Model I</th><th>Model 2</th><th>Model 3</th><th>Model 4</th><th>Model 5</th><th>Model 6</th></t<>	Variable	Model I	Model 2	Model 3	Model 4	Model 5	Model 6
(0.085)         (0.118)         (0.094)         (0.175)         (0.064)           13.591**         (0.050         (0.038)         (3.268)           (8.212)         (0.062)         (0.038)         (3.268)           (0.062)         (0.062)         (0.972)         (0.094)           (0.839)         (1.138)         (0.927*)         (0.297)           (0.839)         (1.138)         (0.922)         (0.097)           (0.846***         (0.012)         (0.010)         (0.017)           (0.010)         (0.012)         (0.010)         (0.014)         (0.014)           (0.010)         (0.012)         (0.010)         (0.019)         (0.027)           (0.010)         (0.012)         (0.010)         (0.019)         (0.027)           (0.010)         (0.012)         (0.010)         (0.019)         (0.027)           (0.023***********************************	IDPs	0.448***	0.458***	0.508***	0.854***	*611.0	0.170*
13.591*    13.591*    13.591*    10.050		(0.085)	(0.118)	(0.094)	(0.175)	(0.064)	(0.090)
(8.212)     (8.457)     (0.084)       (0.062)     (0.084)     (0.084)       (1.239)     (0.092)     (0.972)     (0.973)       (0.839)     (1.138)     (0.922)     (0.909)     (0.297)       2.846****     2.833**     15.462****     16.486***     0.417       (0.839)     (1.131)     (0.922)     (0.909)     (0.297)       (0.015     (0.012)     (0.013)     (0.017)     (0.007**       (0.010)     (0.012)     (0.010)     (0.019)     (0.007**       (0.013)     (0.013)     (0.019)     (0.007**     (0.007**       (0.043)     (0.936)     (0.662)     (0.830)     (0.298)       (0.053)     (0.936)     (0.662)     (0.830)     (0.298)       (1.104)     (1.109)     (1.408)     (1.380)     (0.298)       (1.231)     (1.100)     (1.408)     (1.380)     (0.248)       (1.929)     (3.018)     (2.648)     (3.566)     (0.943)       (0.054)     (0.101)     (0.052)     (0.089)     (0.014)     (0.003)       (0.008)     (0.009)     (0.004)     (0.014)     (0.011)     (0.014)     (0.011)       (0.018)     (0.017)     (0.014)     (0.019)     (0.014)     (0.011)     (0.011)	National Capabilities	13.591*	•	9.112		7.384*	•
0.050 (0.084) (0.062) (0.084) (0.0839) (1.138) (0.922) (0.909) (0.297) (0.839) (1.313) (0.945) (0.922) (0.909) (0.297) (0.314) (0.761) (0.761) (0.761) (0.012) (0.012) (0.010) (0.012) (0.010) (0.012) (0.010) (0.013*** (0.010) (0.012) (0.010) (0.011/** (0.010) (0.012) (0.010) (0.010) (0.011/** (0.010) (0.010) (0.010) (0.010) (0.010) (0.010) (0.010) (0.010) (0.010) (0.010) (0.010) (0.010) (0.010) (0.010) (0.010) (0.010) (0.002) (0.010) (0.002) (0.010) (0.010) (0.002) (0.003) (0.003) (0.001) (	-	(8.212)		(8.457)		(3.268)	
(0.062)     (0.084)       (0.839)     (1.138)     (0.922)     (0.909)     (0.297)       (0.839)     (1.138)     (0.922)     (0.909)     (0.297)       2.846***     2.839**     15.462***     16.486***     0.417       (0.761)     (1.313)     (0.495)     (1.301)     (0.314)       (0.761)     (0.012)     (0.010)     (0.019)     (0.0314)       (0.010)     (0.012)     (0.010)     (0.019)     (0.002)       2.036***     2.114*     1.465*     1.781*     0.422       (0.693)     (0.936)     (0.662)     (0.830)     (0.298)       (0.693)     (0.936)     (0.662)     (0.830)     (0.298)       (1.091)     (0.662)     (0.830)     (0.298)       (1.231)     (1.100)     (1.408)     (1.980)     (0.172       (1.231)     (1.100)     (1.408)     (1.980)     (0.172       (1.929)     (3.018)     (2.648)     (3.566)     (0.943)       (0.054)     (0.101)     (0.052)     (0.088)     (0.023)       (0.008)     (0.009)     (0.008)     (0.014)     (0.003)       (0.018)     (0.017)     (0.014)     (0.019)     (0.019)	Taxes/GDP		0.050		0.038		0.005
1.239			(0.062)		(0.084)		(0.015)
(0.839)       (1.138)       (0.922)       (0.909)       (0.297)         2.846****       2.839**       15.462****       16.486***       0.417         (0.761)       (1.313)       (0.495)       (1.301)       (0.314)         (0.015)       (0.012)       (0.010)       (0.019)       (0.007***         (0.010)       (0.012)       (0.010)       (0.019)       (0.002)         2.036***       2.114*       1.465*       1.781*       0.002         (0.693)       (0.936)       (0.662)       (0.830)       (0.298)         (0.693)       (0.936)       (0.662)       (0.830)       (0.298)         (1.091)       0.681       1.465*       1.781*       0.298         (1.231)       (1.100)       (1.408)       (1.980)       (0.298)         (1.231)       (1.100)       (1.408)       (1.980)       (0.294)         (1.929)       (3.018)       (2.648)       (3.566)       (0.943)         (0.054)       (0.101)       (0.052)       (0.088)       (0.023)         (0.008)       (0.009)       (0.009)       (0.014)       (0.019)       (0.011)         (0.018)       (0.017)       (0.014)       (0.019)       (0.019)       (0.0	Military Occupation	1.239	0.009	1.927*	0.137	0.212	-0.111
2.846***         2.839**         15.462***         16.486***         0.417           (0.761)         (1.313)         (0.495)         (1.301)         (0.314)           0.035***         0.040***         0.033***         0.061***         0.007**           (0.010)         (0.012)         (0.010)         (0.019)         (0.002)           2.036***         2.114*         1.465*         1.781*         0.422           (0.693)         (0.936)         (0.662)         (0.830)         (0.298)           1.091         0.681         1.453         0.890         0.172           (1.231)         (1.100)         (1.408)         (1.980)         (0.298)           (1.231)         (1.100)         (1.408)         (1.980)         (0.298)           (1.231)         (1.100)         (1.408)         (1.980)         (0.234)           (1.929)         (3.018)         (2.648)         (3.566)         (0.943)           (0.054)         (0.101)         (0.052)         (0.088)         (0.023)           (0.008)         (0.009)         (0.009)         (0.014)         (0.014)         (0.003)           (0.018)         (0.017)         (0.014)         (0.019)         (0.019)         (0.019)<		(0.839)	(1.138)	(0.922)	(0.909)	(0.297)	(0.526)
(0.761)     (1.313)     (0.495)     (1.301)     (0.314)       0.035***     0.040***     0.033***     0.061***     0.007**       (0.010)     (0.012)     (0.010)     (0.019)     (0.002)       2.036***     2.114*     1.465*     1.781*     0.422       (0.693)     (0.936)     (0.662)     (0.830)     (0.298)       (0.693)     (0.936)     (0.662)     (0.830)     (0.298)       (1.091)     0.681     1.453     0.890     0.172       (1.231)     (1.100)     (1.408)     (1.980)     (0.172       (1.231)     (1.100)     (1.408)     (1.980)     (0.172       (1.929)     (3.018)     (2.648)     (3.566)     (0.943)       (0.054)     (0.101)     (0.052)     (0.088)     (0.023)       (0.054)     (0.101)     (0.052)     (0.088)     (0.003)       (0.008)     (0.009)     (0.008)     (0.014)     (0.003)       (0.018)     (0.017)     (0.014)     (0.019)     (0.008)	Multi-Groups	2.846***	2.839*	15.462***	16.486***	0.417	0.634
0.035****         0.040***         0.033****         0.061***         0.007**           0.010)         (0.012)         (0.010)         (0.019)         (0.002)           2.036***         2.114*         1.465*         1.781*         0.422           (0.693)         (0.936)         (0.662)         (0.830)         (0.298)           1.091         0.681         1.453         0.890         0.172           (1.231)         (1.100)         (1.408)         (1.980)         (0.172           (1.231)         (1.100)         (1.408)         (1.980)         (0.172           (1.929)         (3.018)         (2.648)         (3.564)         (0.343)           (0.080)         (0.101)         (0.076         (0.147*         (0.033)           (0.054)         (0.101)         (0.052)         (0.088)         (0.023)           (0.008)         (0.009)         (0.009)         (0.001)         (0.001)         (0.001)           (0.018)         (0.017)         (0.014)         (0.019)         (0.008)		(0.761)	(1.313)	(0.495)	(1.301)	(0.314)	(0.566)
(0.010)     (0.012)     (0.010)     (0.019)     (0.002)       2.036**     2.114*     1.465*     1.781*     0.422       (0.693)     (0.936)     (0.662)     (0.830)     (0.298)       1.091     0.681     1.453     0.890     0.172       (1.231)     (1.100)     (1.408)     (1.980)     (0.172       (1.231)     (1.100)     (1.408)     (1.980)     (0.344)       (1.929)     (3.018)     (2.648)     (3.566)     (0.943)       (0.054)     (0.101)     (0.052)     (0.088)     (0.033)       (0.054)     (0.101)     (0.052)     (0.088)     (0.003)       (0.008)     (0.009)     (0.008)     (0.011)     (0.003)       (0.011)     (0.017)     (0.014)     (0.008)     (0.008)	Muslim Population	0.035	0.040***	0.033	%**I90.0	0.007**	0.012**
2.036**       2.114*       1.465*       1.781*       0.422         (0.693)       (0.936)       (0.662)       (0.830)       (0.298)         1.091       0.681       1.453       0.890       0.172         (1.231)       (1.100)       (1.408)       (1.980)       (0.364)         (1.231)       (1.100)       (1.408)       (1.980)       (0.364)         (1.929)       (3.018)       (2.648)       (3.566)       (0.943)         (0.080)       (0.101)       (0.052)       (0.088)       (0.033)         (0.054)       (0.101)       (0.052)       (0.088)       (0.023)         (0.008)       (0.009)       (0.008)       (0.014)       (0.003)         (0.008)       (0.017)       (0.014)       (0.008)       (0.008)		(0.010)	(0.012)	(0.010)	(0.019)	(0.002)	(0.005)
(0.693)     (0.936)     (0.662)     (0.830)     (0.298)       1.091     0.681     1.453     0.890     0.172       1.091     0.681     1.453     0.890     0.172       (1.231)     (1.100)     (1.408)     (1.980)     (0.364)       (1.929)     (3.018)     (2.648)     (3.566)     (0.943)       (0.080)     (0.101)     (0.052)     (0.088)     (0.033)       (0.054)     (0.101)     (0.052)     (0.088)     (0.023)       (0.008)     (0.009)     (0.008)     (0.003)       (0.008)     (0.009)     (0.008)     (0.003)       (0.011)     (0.017)     (0.014)     (0.019)     (0.008)	Minority at Risk	2.036**	2.114*	1.465*	1.781*	0.422	0.614
1.091     0.681     1.453     0.890     0.172       (1.231)     (1.100)     (1.408)     (1.980)     (0.364)       4.380*     0.668     3.278     1.512     1.620*       (1.929)     (3.018)     (2.648)     (3.566)     (0.943)       0.080     0.124     0.076     0.147*     0.033       0.054)     (0.101)     (0.052)     (0.088)     (0.023)       0.005     0.001     0.005     0.0015     0.003       0.008     (0.009)     (0.008)     (0.014)     (0.003)       0.001     0.001     (0.017)     (0.014)     (0.008)		(0.693)	(0.936)	(0.662)	(0.830)	(0.298)	(0.461)
(1.231) (1.100) (1.408) (1.980) (0.364) 4.380* 0.668 3.278 1.512 1.620* (1.929) (3.018) (2.648) (3.566) (0.943) 0.080 0.124 0.076 0.147* 0.033 (0.054) (0.101) (0.052) (0.088) (0.023) 0.005 0.011 0.007 0.015 0.000 (0.008) (0.009) (0.008) (0.014) (0.003) 0.001 -0.002 0.005 0.004 0.011 (0.018) (0.017) (0.014) (0.019)		1.09.1	0.681	1.453	0.890	0.172	0.143
4.380*     0.668     3.278     1.512     1.620*       (1.929)     (3.018)     (2.648)     (3.566)     (0.943)       0.080     0.124     0.076     0.147*     0.033       (0.054)     (0.101)     (0.052)     (0.088)     (0.023)       0.005     0.011     0.007     0.015     0.000       (0.008)     (0.009)     (0.008)     (0.014)     (0.003)       (0.018)     (0.017)     (0.014)     (0.019)     (0.008)		(1.231)	(1.100)	(1.408)	(1.980)	(0.364)	(0.469)
(1.929)     (3.018)     (2.648)     (3.566)     (0.943)       0.080     0.124     0.076     0.147*     0.033       (0.054)     (0.101)     (0.052)     (0.088)     (0.023)       (0.005     0.011     0.007     0.015     0.000       (0.008)     (0.009)     (0.008)     (0.014)     (0.003)       (0.018)     (0.017)     (0.014)     (0.019)     (0.008)	Human Development Index	4.380*	899.0	3.278	1.512	1.620*	0.627
0.080     0.124     0.076     0.147*     0.033       (0.054)     (0.101)     (0.052)     (0.088)     (0.023)       0.005     0.011     0.007     0.015     0.000       ex     0.001     0.008)     (0.008)     (0.003)       ex     0.001     0.0014     (0.003)       (0.018)     (0.017)     (0.014)     (0.019)     (0.008)		(1.929)	(3.018)	(2.648)	(3.566)	(0.943)	(0.815)
(0.054) (0.101) (0.052) (0.088) (0.023) 0.005 0.011 0.007 0.015 0.000 (0.008) (0.009) (0.008) (0.014) (0.003) ex 0.001 -0.002 0.005 0.004 0.011 (0.018) (0.017) (0.014) (0.019)	Democracy	0.080	0.124	0.076	0.147*	0.033	0.067
0.005     0.011     0.007     0.015     0.000       (0.008)     (0.009)     (0.008)     (0.014)     (0.003)       ex     0.001     -0.002     0.005     0.004     0.011       (0.018)     (0.017)     (0.014)     (0.019)     (0.008)		(0.054)	(0.101)	(0.052)	(0.088)	(0.023)	(0.041)
(0.008)     (0.009)     (0.008)     (0.014)     (0.003)       0.001     -0.002     0.005     0.004     0.011       (0.018)     (0.017)     (0.014)     (0.019)     (0.008)	Political Durability	0.005	0.011	0.007	0.015	0.000	0.005
0.001     -0.002     0.005     0.004     0.011       (0.018)     (0.017)     (0.014)     (0.019)     (0.008)		(0.008)	(0.009)	(0.008)	(0.014)	(0.003)	(0.003)
(0.017) (0.014) (0.019) (0.008)	Press Freedom Index	0.001	-0.002	0.005	0.004	0.011	9000
		(0.018)	(0.017)	(0.014)	(0.019)	(0.008)	(0.009)

Table AI. (continued)

	Suicide (GTD)	(GTD)	Suicide (Wade and Reiter)	e and Reiter)	Percenta	Percentage suicide
Variable	Model I	Model 2	Model 3	Model 4	Model 5	Model 6
All Terrorist Attacks	0.005	110:0	0.003	0.001		
Constant	-13.613***	- II.054***	-25.416***	_27.369***	-4.681*	-4.493*
	(2.377)	(2.999)	(3.010)	(3.765)	(2.049)	(2.252)
Wald $\chi^2$	11.13	61.32	1560.95	325.50		•
Prob > $\chi^2$	0.001	0.001	0.001	0.001		
F Stastic					2.10	1.53
Prob > <i>F</i>					0.017	9110
Log pseudolikelihood	-585.36	-306.84	-395.90	-185.64	-317.23	-159.64
Dispersion = I	17.28	9.75	21.09	9.55		
Observations	4,422	939	2,985	629	2,108	533

Note: GDP = gross domestic product; GTD = Global Terrorism Database; IDP = internally displaced population. Robust standard errors in parentheses. \*p < .05. \*\*p < .01. \*

Table A2. Sobel, Aroian, and Goodman Tests.

				Ethnic G	Ethnic Group Exclusion	ion			
		Model I		2	Model 2		1	Model 3	
	Test statistic	SE	p value	Test statistic	SE	ρ value	Test statistic	SE	p value
Sobel test	2.574	0.033	010.	2.336	0.033	610:	1.286	0.008	861.
Aroian test	2.540	0.033	II0:	2.304	0.033	.021	1.265	0.008	.206
Goodman test	2.609	0.033	600.	2.370	0.032	810.	1.308	0.008	161.
				Human	Human Rights Abuses	es			
	_	Model 4		۷	Model 5		_	Model 6	
	Test statistic	SE	ρ value	Test statistic	SE	p value	Test statistic	SE	þ value
Sobel test	2.951	0.052	.003	3.794	090'0	000	1.808	0.027	170.
Aroian test	2.943	0.052	.003	3.784	090.0	000:	1.802	0.027	.07
Goodman test	2.959	0.052	.003	3.804	0.059	000	1.813	0.027	.070
				Sta	State Failure				
	2	Model 7		2	Model 8		1	Model 9	
	Test statistic	SE	p value	Test statistic	SE	p value	Test statistic	SE	p value
Sobel test	-0.890	0.051	.374	0.874	990.0	.382	-1.151	0.015	.250
Aroian test	-0.887	0.051	.375	0.871	0.067	.384	-I.I48	0.015	.251
Goodman test	-0.892	0.051	.372	0.876	990.0	.381	<b>–1.155</b>	0.015	.248

**Table A3.** Summary of Results of SEM Tests of Partial Mediation.

		Suicide (GTD)	TD)	Suicid	Suicide (Wade and Reiter)	er)	<u>ا</u>	Percentage suicide	uicide
Mediator	SEM Coeff. X → M	SEM Coeff. M → Y	Proportion of total effect mediated	$\begin{array}{c} SEM \\ Coeff. \ X \to M \end{array}$	$\begin{array}{c} SEM \\ Coeff. \ M \to Y \end{array}$	Proportion of total effect mediated	SEM Coeff. X → M	SEM Coeff. M → Y	Proportion of total effect mediated
GINI coefficient 0.341***	0.341***	0.002	n/a	0.271***	-0.003 (0.002)	n/a	0.393***	_0.001 (0.000)	n/a
Ethnic group	0.090***	0.014	n/a	0.087	0.011	n/a	0.084***	0.0004	n/a
exclusion Ethnic group	(0.014) 0.023***	(0.025) -0.065	n/a	(0.012) 0.035***	(0.013) -0.009	n/a	(0.013) 0.036***	(0.002) -0.009	n/a
violence	(0.004)	(0.067)		(0.003)	(0.044)		(0.005)	(0.006)	
Human rights	0.415***	0.076	28.3 percent	0.410***	0.068***	27.2 percent	0.383***	0.007**	48.6 percent
apnses	(910.0)	(0.019)		(0.016)			(0.019)	(0.002)	
State failure	0.365***	-0.022	n/a	0.336** -0.009		n/a	0.316***	-0.003	n/a
	(0.011)	(0.024)					(0.014)	(0.002)	

Note: SEM = structural equation modeling; GTD = Global Terrorism Database; OIM = observed information matrix. For SEM, all covariates included and OIM standard errors reported in parentheses. \*p < .05. \*\*p < .01. \*\*\*p < .001.

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#### **Notes**

- 1. Our conceptual and operational definitions of the terms "terrorism", "suicide terrorism", and "terrorist group or movement" conform to those used by Pape (2003, 345)—"Terrorism involves the use of violence by an organization other than a national government to cause intimidation or fear among a target audience"—and by the Global Terrorism Database (2013, 7)—"the threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion or intimidation." We define suicide terrorism as a type of terrorism in which the perpetrator intends to die in the course of launching the attack. Though Crenshaw (2007) notes that scholarly treatment of suicide terrorism is marked by conceptual ambiguities, the spare definition we use meets what she observes as a standard or common definition. Finally, in our study, a terrorist group or movement refers to any group practicing, or that has significant subgroups that practice, terrorism, to achieve a political goal.
- 2. Internally displaced populations (IDPs) are people who have been forced to flee their homes as a result of, or in order to avoid, the effects of armed conflict, situations of generalized violence, political instability or natural, economic, and humanitarian crises. IDPs differ from refugees in that they remain within the borders of their own country (see United Nations 2004). The decision in our study to focus on IDPs only, as opposed to IDPs in conjunction with refugees, is informed by the research by Moore and Shellman (2004, 2006), which demonstrates that, contrary to conventional assumptions, IDP and refugee flows occur in very different contexts and are prompted by different processes, conditions and state behaviors.
- 3. Though in a separate empirical study, Holmes and Gutierrez de Pineres (2011) do not find the arrival of conflict-induced internally displaced population (IDP) populations into departamentos to predict Revolutionary Armed Forces of Colombia-People's Army (FARC) violence within Colombia.
- 4. These results are available from the authors.
- 5. See http://unami.unmissions.org/LinkClick.aspx?fileticket=OBG2vkKw1FM%3D&.
- 6. Rosendorff and Sandler (2010) also find that suicide attacks have a "propaganda effect" that increases recruitment and prompts further suicide terrorist activity.

7. It is worth noting that social psychologists suggest that prejudice and discrimination often lead to frustration, anger, and/or political violence (e.g., Feagin and Hahn 1973; Swim, Cohen, and Hyers 1998; Victoroff, Adelman, and Matthews 2012).

- 8. Because most of the country-years are zeroes, and many of the counts are low, dichotomizing the count measures for the first and the second dependent variables is an alternative way of operationalization. When (rare events) logit models with the dichotomized measures are employed, the main findings are virtually similar to those reported in the Empirical Results section. These results are available from the authors.
- Rosendorff and Sandler (2010) similarly examine the incidence of suicide attacks in comparison to conventional attacks.
- 10. One indicator we do not control for is domestic or international aid to internally displaced persons (IDPs). This would, of course, be a useful covariate for estimation. However, because data on IDP aid are not consistently collected both across and within countries over time, it is not compatible with our data analysis. IDP aid data are also hotly contested among experts as IDPs, as opposed to refugees, are not registered with international organizations like the UN High Commission on Refugees and national governments often fail to provide accurate information about assistance to IDPs. The sparse data that do exist indicate that, again unlike refugees, very few IDPs receive assistance in the global aggregate (see www.internaldisplacement.org/global-figures).
- Figure A1 illustrates a recursive model built to test the effects of the four intervening variables between IDPs and suicide terrorism.
- 12. An alternative to the UN Development Program is Solt's (2009) Standardized World Income Inequality at http://myweb.uiowa.edu/fsolt/swiid/swiid.html. When the Solt measure is used, the main results of this study do not change. These results are available from the authors.
- 13. Because Index of National Capability (CINC; i.e., National Capabilities) incorporates population, it may be correlated with Population in the estimation of Table 1. Table A1 accounts for this concern by excluding population in the model specification. We find that the significant and positive effect of IDPs on suicide terrorism remains the same in models 1, 3, and 5 while the National Capabilities score fails to achieve significance in a consistent manner. Note that Hendrix (2010, 283) offers two alternative measures of state capacity: bureaucratic quality and total taxes/gross domestic product (GDP). When National Capabilities are replaced with taxes/GDP in models 2, 4, and 6, we encounter a large loss of observations (i.e., about 80 percent) but find IDPs still significant while taxes/GDP turns out to be insignificant. World Bank's *World Development Indicator 2014* at http://data.worldbank.org/ is used for the operationalization of taxes/GDP whose data are available only after 1990 and contains many missing observations. The results of bureaucratic quality are not reported as the models do not converge.
- 14. The results of these tests are presented in Tables A2 and A3.
- 15. See http://popstats.unhcr.org/Default.aspx.
- 16. This figure does not include the significant foreign refugee population in Syria, that grew to 1.5 million in 2007—and was mostly composed of people fleeing armed conflict in Iraq—but has now dwindled to around 400,000, mostly due to the unfavorable security environment.

## Supplemental Material

The online [appendices/data supplements/etc.] are available at http://jcr.sagepub.com/supplemental.

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