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Brandon M. Boylan  
*University of Pittsburgh*

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# Economic Development, Religion, and the Conditions for Domestic Terrorism

BRANDON M. BOYLAN

University of Pittsburgh

Ph.D. Candidate, Public and International Affairs

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This study examines the conditions that facilitate domestic terrorism. Research on domestic terrorism has been sparse in comparison to studies that examine terrorism as a general phenomenon and transnational terrorism in particular. Most researchers find that a country's level of economic development and religious composition do not help explain its experience with terrorism. I examine if these claims apply to terrorist activity at the domestic level to explore the extent to which domestic terrorism differs from other forms of terrorism. Specifically, I employ a negative binomial regression model with time-series, cross-sectional (TSCS) data in order to observe if economic development and religion can help explain levels of domestic terrorism while controlling for other factors, including political rights, population, education, and past domestic terrorist incidents. In line with much of the empirical evidence, I observe that poor countries are no more likely to suffer domestic terrorist attacks as wealthy ones. Since domestic terrorism can resemble civil war – a type of violence that does often emerge as a result of economic problems – this finding is especially noteworthy. Religious diversity in a country is correlated with a reduction in domestic terrorism, which stands in contrast to most research on transnational terrorism. Despite the international attention to the wars in Afghanistan and Iraq, Muslim countries seem no more prone to domestic terrorism than others.

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Since the September 11 attacks, terrorism research has largely focused on transnational terrorism (Cronin 2002; Enders and Sandler 2002; Sandler 2003; Li and Schaub 2004; Rosendorff and Sandler 2005; Chalk 2007). This has primarily been in reaction to the worldwide reach and recognition of al Qaeda, the Global War on Terrorism, and the availability of data on transnational terrorist incidents. In contrast, domestic terrorism as a distinct phenomenon has been largely ignored despite the plethora of terrorist organizations that are principally domestic in nature, such as the Corsican National Liberation Front (FLNC) in France, Revolutionary Armed Forces of Colombia (FARC), Liberation Tigers of Tamil Eelam (LTTE) in Sri Lanka, and Lord's Resistance Army (LRA) in Uganda.

Furthermore, research that analyzes transnational and domestic terrorism jointly is helpful in understanding how terrorist activity differs from other forms of political violence, but conflates some conditions and mechanisms that are in fact unique to each form of terrorism. This is to say that transnational and domestic terrorism have certain distinct features that are overlooked when they are studied together. This article aims to explore the conditions that facilitate domestic terrorism with a focus on two relationships that have dominated the literature and public discourse: the poverty-terrorism and religion-terrorism relationships. Can economic development and religion help explain domestic terrorism?

To inform this question, I perform a negative binomial regression on time-series, cross-sectional (TSCS) data. These panel data cover 195 countries over three years (2005-2007). The dependent variable is the number of domestic terrorist incidents that occurred in a country in a year over a three-year period. The explanatory variables include a country's economic development and religious diversity and if the country is predominantly Muslim. I include this last variable primarily to determine if the media's coverage of al Qaeda and its affiliates indicates that Islamic countries experience more terrorism, at least on the domestic level, on average. I control for political rights, population, education, and the existence (or absence) of domestic terrorism in the country in the previous year.

In short, I find that the relationship between economic development and domestic terrorism is not significant. Neither poor nor rich countries seem especially likely to suffer domestic terrorism. This is in accordance with other terrorism research but runs counter to the civil war literature, which finds that economic hardship is a key reason why many civil wars erupt. More religiously diverse countries experience less domestic terrorism on average. For the most part, this finding differs from research on the relationship between religious diversity and transnational terrorism, suggesting that certain conditions may enable one form of terrorism but not the other. Finally, Muslim countries are no more prone to domestic terrorism than others. I supplement these findings with post-estimation calculations to determine the impact of significant variables on domestic terrorism under some interesting scenarios.

## **Defining Terrorism**

Terrorism is a difficult term to define. Many disagree over qualifying motivations, tactics, targets, and consequences. Writing about the concept thirty years ago, Brian Michael Jenkins (1980, 1) states that terrorism has no exact or accepted definition. And in the years since, it appears as though scholars, governments, and organizations have still not been able to reach a consensus. As Alex Schmid and Albert Jongman (2008, 1) put it, "The search for an adequate definition of terrorism is still on."

Despite the difficulty in articulating an acceptable definition, terrorism does have several key features that distinguish it from other types of violence. First, it is planned and calculated (Enders and Sandler 2002, 145; Krueger 2007, 14). Terrorism is not spontaneously executed, but rather "premeditated and purposeful" (Crenshaw (1983, 2). Terrorists devote much time, consideration, and care to the preparation process in order to increase the impact of their attacks.

Second, terrorism is intrinsically violent (Enders and Sandler 2002, 145; Hoffman 2006, 40). Louise Richardson (2007, 4) argues, "If an act does not involve violence or the threat of violence, it is not terrorism." Often, the use of violence is a trait that distinguishes the terrorist group from the political party that supports it. For example, Sinn Fein has not been violent itself, but has supported the Provisional IRA, a group that has used violence in its irredentist campaign.

Third, terrorism is a political act (Hoffman 2006, 40; Richardson 2007, 5; Krueger 2007, 14). If a premeditated, violent act does not have a political dimension, such as a bank robbery, it is not terrorism. Terrorism seeks to manipulate political standpoints rather than conquer an opponent (Crenshaw 1983, 2). Fernando Reinares (2005, 120) points out, "Terrorism becomes political when it intends to affect the distribution of power and social cohesion within a given state jurisdiction or in a wider, international scenario."

Fourth, terrorists design their attacks to have prolonged psychological effects beyond the immediate victims (Bjørge 2005, 2; Hoffman 2006, 40). Terrorism is effective when it generates

an atmosphere of fear. The shock of the incident, compounded by continuous media coverage, conveys a message that no one is safe until the political environment changes. For Reinares (2005, 120), “an act of violence is to be considered as terrorist when its psychological effects within a certain population or social aggregate, in terms of widespread emotional reactions such as fear and anxiety, are likely to condition attitudes and behavior in a determined direction.”

Fifth, terrorists communicate a message to an audience (Victoroff 2005, 4; Hoffman 2006, 40-41). In many cases, the target of the attack does not have much value to the perpetrators. Instead, terrorists intend their attacks to convey statements to governments, citizenries, or rival groups. Michel Wieviorka usefully distinguishes between primary and secondary audiences (Wieviorka 1995, 599). Terrorists may carry out an attack in order to influence a primary audience, such as a government, so that it adopts (or stops) a certain course of action. However, at the same time, the attack may send a signal to a secondary audience, such as a funder. Hezbollah’s attacks against Israeli and Western targets, for example, not only demonstrate the organization’s resolve in fighting against those that it believes are invaders but also aim to convince Iran and Syria that the group is competent in carrying out these regimes’ objectives in the region, thus securing their funding.

Finally, a defining characteristic is the deliberate targeting of civilians (Richardson 2007, 6) or non-combatants (Bjørge 2005, 2; Victoroff 2005, 4). This is a controversial point and many scholars consciously do not include this facet in their definition of terrorism.<sup>1</sup> However, the deliberate targeting of civilians (or non-combatants) is a defining feature that separates terrorism from other forms of political violence, especially insurgency. Insurgents wish to overthrow their government using armed conflict, but they do not explicitly target civilians for this purpose – though they may kill civilians in the process of their campaigns. Phil Williams (2008, 14) notes, “For terrorist organizations . . . the use of indiscriminate violence against civilian targets is not only central to their strategy but is also their defining characteristic.”

Terrorism comes in several varieties. It is useful to think about “terrorisms” rather than “terrorism” (Miller 2007). This differentiation is helpful in understanding transnational and domestic forms. For a terrorist incident to be transnational, it must involve at least two countries. Walter Enders and Todd Sandler (1999, 149) write, “Whenever a terrorist incident in one country involves victims, or targets, or institutions of another country, then the incident is characterized as transnational.” The attacks on September 11 and March 11, 2004 in Madrid are well-known examples of transnational terrorism. Domestic terrorism, in contrast, is terrorism that nationals carry out against their own country, including their government or their fellow countrymen and women. It does not involve foreign victims, targets, or institutions. Sandler (2003, 781) notes, “Domestic terrorism is home grown and has consequences for only the host country, its institutions, people, property, and policies.” Much of the terrorism that occurs in Thailand and Sri Lanka, for example, is domestic in nature.

It can be difficult to differentiate domestic terrorism from other forms of violence, such as civil war, insurgency, and organized crime, but some defining traits stand out. Domestic terrorism can resemble civil war when it takes the form of a protracted campaign. Even when this is the case, however, it is a tactic employed as part of a larger violent movement. Terrorism can take place within the context of civil war, but the two types of violence are not identical.<sup>2</sup> Unlike civil war, domestic terrorism also includes isolated incidents that do not occur in

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<sup>1</sup> Hoffman’s (2006, 40-41) comprehensive definition of terrorism, for example, omits reference to civilians or non-combatants.

<sup>2</sup> See Sambanis (2008) for a discussion of terrorism within and outside civil war.

conjunction with civil conflict, such as the Oklahoma City Bombing. Moreover, both domestic terrorist campaigns and insurgencies carry out violence against the state, but terrorists explicitly target civilians and civilian infrastructure as part of their strategy; casualties during insurgencies are usually a byproduct of violence. Finally, unlike organized criminals, domestic terrorists seek to draw public attention to their cause and to broadcast a message to their audience. In contrast, criminals use private bribery and extortion for financial gain, rather than seek public power.

## **Theoretical Considerations**

Researchers have considered several conditions that favor terrorism. Because studies on domestic terrorism are scarce, I rely on investigations that focus on terrorism in general and transnational terrorism in particular to form hypotheses about the relationships between economic development and domestic terrorism as well as between religion and domestic terrorism. Findings from terrorism research should apply to the domestic level while those from transnational terrorism research may pertain to domestic terrorism, albeit in a more limited way.

### *Economic Development and Terrorism*

Researchers that consider terrorism in general (i.e. without differentiating between transnational and domestic terrorism) do not usually find economic development to be a significant explanatory factor in their analyses. Alberto Abadie (2004) uses a country-level terrorist risk ratio that encompasses both transnational and domestic terrorism as his dependent variable and concludes that terrorist risks are not higher for poorer countries once other country-level characteristics are considered. Victor Asal and Karl Rethemeyer (2008) consider factors that explain the lethality of terrorist organizations, regardless whether they are transnational or domestic in nature, and find that the economic performance of the country that hosts the organization does not relate to the lethality of groups.

Intuitively, these findings make sense when considering terrorist activity around the world. The lack of terrorism in Africa relative to other regions and the persistence of groups in West Europe, such as the Provisional Irish Republican Army, Basque Fatherland and Freedom (ETA), and the FLNC, seem to suggest that poor countries are not more prone to terrorism than rich countries. In fact, the Basque region in Spain, ETA's regional base, is one of the most economically prosperous areas in the country. Empirically, Andreas Feldmann and Maiju Perälä (2004) do not find an association between economic performance or structural economic conditions and the prevalence of terrorism in Latin America.

Researchers interested in the relationship between poverty and terrorism often measure economic performance with an economic output measure, such as GDP per capita, because it generally reflects a country's standard of living. It seems apparent, however, that some would resort to terrorist tactics because of relative rather than absolute poverty. Ted Gurr (1970) argues that people rebel when they realize their relative deprivation – the discrepancy between their expectations of rewards, which their social environment legitimates, and their received rewards. In this sense, invidious comparison may spur violence (Pruitt and Kim 2004, 23-24). Empirically, however, researchers have not found this to be the case with regards to terrorism (Abadie 2004; Piazza 2006). Walter Laqueur (1977, 12) explains, "Even if it could be shown for argument's sake that the feeling of relative deprivation is widespread in a certain country, it does not follow that the handful of active terrorists are those most acutely suffering from relative

deprivation.” Although terrorists attack due to real or perceived injustices, they more often hold political rather than economic objections (Crenshaw 1981, 383-384).

Some scholars that only consider transnational terrorism in their analyses agree that poverty and terrorism do not generally share a relationship. James Piazza (2006) uses transnational terrorist incidents from the U.S. Department of State’s *Patterns of Global Terrorism* publication as his dependent variable and finds that the “rooted-in-poverty” thesis is doubtful. Instead, he advocates for the employment of social cleavage theory to explain terrorist activity since several demographic and political conditions, such as population, ethno-religious diversity, political repression, and the structure of party politics, are significant in his study.

Employing the International Terrorism: Attributes of Terrorist Events (ITERATE) dataset, Alan Krueger and Jitka Malečková (2003, 139) write, “Once one accounts for the fact that poorer countries are less likely to have basic civil liberties, there is no difference in the number of terrorists springing from the poorest or the richest countries.” Krueger and David Laitin (2008, 172) find that the sources of transnational terrorism have more to do with political repression than poverty. Peter Kurrild-Klitgaard, Mogens Justesen, and Robert Klemmensen (2006) also use the ITERATE dataset, but instead of considering the outcome variable in terms of count data, they use a dichotomous measure to capture the absence or presence of transnational terrorism. Also in contrast to the Krueger and Malečková model, they are interested in determining if a country’s economic development attracts rather than produces transnational terrorist attacks. Despite these differences, however, they conclude that poverty, inequality, and economic growth are unassociated with transnational terrorism.<sup>3</sup>

### *Religion and Terrorism*

What role does religion play in explaining terrorism? Given the overwhelming media coverage on religious terrorist activity, it would seem that it matters considerably. Audrey Cronin (2002-03, 41) argues that religious terrorism poses the greatest threat to international security, in part, because “religious terrorists consider themselves to be unconstrained by secular values or laws.” Similarly, Asal and Rethemeyer (2008) state that religious and religious-ethnonationalist terrorist groups are the most lethal in their attacks relative to other groups.

Religious terrorist organizations might be more prevalent and deadlier than groups that identify with other ideologies, such as socialist or right-wing organizations, but research on the relationship between a country’s level of religious diversity and its overall experience with terrorism finds that the two conditions are generally unrelated (Abadie 2004). This suggests that religiously homogeneous and heterogeneous countries are equally at risk for suffering terrorism. Studies that only consider transnational terrorism generally agree with this conclusion (Kurrild-Klitgaard, Justesen, and Klemmensen 2006; Krueger and Laitin 2008). Specifically, Kurrild-Klitgaard, Justesen, and Klemmensen find that a country’s level of religious diversity does not help to elucidate why a transnational terrorist event originates from within a country. Krueger and Laitin’s study concurs, and also reveals that a country’s religious composition does not matter in attracting a transnational attack either.

Although these studies are in agreement in suggesting that religious diversity is irrelevant in explaining terrorism, one should be careful in applying findings from research that treats terrorism as a general phenomenon to either transnational or domestic terrorism specifically

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<sup>3</sup> See Li and Schaub (2004) and Blomberg and Hess (2008) for alternative findings on the relationship between economic development and transnational terrorism.

without empirical testing. Transnational and domestic terrorist activities may have different permissive conditions and motivational causes that become confused when studied jointly. For example, one study reveals that more religiously diverse countries experience fewer domestic terrorist incidents (Blomberg and Hess 2008).<sup>4</sup> This suggests that diversity matters in explaining domestic terrorism, but not transnational terrorism – a finding that would have been missed had domestic terrorism not been studied separately.

In addition to religious diversity, a country's predominant religious affiliation may matter in explaining the outbreak of terrorism. High-profile terrorist activities across the Middle East, especially in Palestine, Iraq, Afghanistan, and Pakistan, suggest that Muslim countries produce more terrorism than non-Muslim countries. Empirically, however, this has not been found to be the case (Krueger and Malečková 2003; Bravo and Dias 2006; Krueger and Laitin 2008). Krueger and Laitin, in particular, reveal that Muslim countries are no more or less likely to produce or suffer from transnational terrorism. This implies that media coverage may underreport terrorist activities that are not Islamist, such as those in Latin America, and further suggests that there is a difference between transnational and domestic terrorism.

## **Hypotheses**

I hypothesize the following relationships based on research that examines the connections between economic development and terrorism and religion and terrorism, as noted in the previous section:

**H<sub>1</sub>:** Economic development and domestic terrorism should be unrelated. Domestic terrorism is an action that attempts to persuade an audience, usually a government, to adopt or to cease a certain policy. Its motives are always political but seldom economic; thus, it should be that economic development does not generally correspond with domestic terrorism.

**H<sub>2</sub>:** Religious diversity and domestic terrorism should be negatively related. Not only is this consistent with the Blomberg and Hess (2008) study on domestic terrorism, but it is often the case that religious plurality in a country promotes tolerance. Although it may be irrelevant in explaining transnational terrorism, religious diversity should play a mitigating role in the outbreak of domestic terrorism.

**H<sub>3</sub>:** Muslim countries are no more likely to experience domestic terrorism than non-Muslim countries. Despite the overwhelming number of domestic terrorist incidents in countries like Afghanistan and Iraq, there are an abundance of campaigns in non-Muslim countries as well, such as Spain, Sri Lanka, and Colombia. It should be shown that domestic terrorism is not a phenomenon unique to Muslim countries.

## **Variables, Data, and Method**

### *Dependent Variable*

The model's dependent variable is the number of domestic terrorist incidents that occurred in a country in a year for the years, 2005-2007 (*Domestic Terrorism*). These figures

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<sup>4</sup> Blomberg and Hess (2008) also find this to be true when they only consider transnational terrorism.

come from RAND's Database of Worldwide Terrorism Incidents. RAND defines terrorism as violence or the threat of violence that is intended to create fear and alarm and to coerce certain actions, maintaining that terrorism is politically motivated, generally directed against civilian targets, and carried out by either a group or an individual. This definition resembles the six factors of terrorism highlighted in the above section. RAND considers terrorist incidents as transnational if they involve a foreign entity, such as a perpetrator or target. Otherwise, they label them as domestic.<sup>5</sup>

### *Explanatory Variables*

To measure economic development, I use GDP per capita in current U.S. dollars for each country for each year in the dataset (*GDP*). GDP per capita is a suitable measure of economic development since it gives a good indication of a country's standard of living. These numbers are from the International Monetary Fund's World Economic Outlook Database (April 2010).<sup>6</sup>

For religion, I use a measure of religious diversity (*Religious Diversity*) and a dummy variable for whether a country is Muslim or not (*Muslim*). The religious diversity variable comes from Alberto Alesina et al. (2003). This index represents the likelihood that two people chosen randomly from the same country belong to different religious groups. It includes 294 different religions in 215 countries and ranges between "0" and "1." Higher values represent more religious diversity. Figures are only available for 2001 so I use them for all three years under the assumption that religious diversity in countries remained relatively constant from 2001 through 2007. Regarding the binary variable, if the CIA World Factbook reports that the majority of the country's population is Muslim, I label that country as "1." Otherwise, I label it "0." Correlation between these two variables is not high (-0.3891).

### *Control Variables*

I include several theoretically-relevant control variables in the model, including level of political rights (*Political Rights*), population (*Population*), level of education (*Education*), and the number of domestic terrorist incidents in the previous year (*Past Incidents*).

To measure the level of political rights, I use figures from Freedom House for each country for each year in the dataset. The index ranges from 1 to 7. "1" represents a strong presence of political rights in the country (e.g. Denmark) while "7" represents an absence of political rights (e.g. Eritrea). Freedom House generates figures on political rights by evaluating the country's electoral process, political pluralism and participation, and functioning of government. Many find that countries with medium levels of political rights experience more terrorism than either highly democratic or highly authoritarian regimes (Abadie 2004; Reinares

<sup>5</sup> Most databases, including RAND's, rely on media accounts to collect data. The principal challenge is that states with restricted or weak media outlets may underreport the number of incidents in the country. Nonetheless, RAND's is the most current and complete database available on domestic terrorism.

<sup>6</sup> To assess if relative deprivation matters in explicating domestic terrorism, I rerun the model using GINI coefficients (*GINI*) instead of GDP per capita for each country for each year. These statistics come from the 2007/2008 and 2009 Human Development Reports. These data are highly problematic. Figures for 69 of 195 countries for 2005 are missing; 53 are missing for 2007. Most countries that are missing statistics for 2005 are missing them for 2007 as well. The United Nations Development Programme does not provide 2006 data so I use the 2007 figures for 2006 under the assumption that figures would not have changed much from 2006 to 2007.



2005; Testas 2004). This is because strong democratic and authoritarian regimes have effective counterterrorism capabilities, and because some opportunists decide to engage in violence during transitions from totalitarian to democratic systems (Snyder 2000).

To measure population for each country for each year, I use figures from the International Monetary Fund’s World Economic Outlook Database (April 2010). Some studies find that larger populations experience more terrorism (Li and Schaub 2004). Since larger country’s have more diverse groups, minorities may resort to terrorism to influence their governments (Li and Schaub 2004). Joe Eyerman (1998) also notes that larger populations are harder to police.

The education measure is an education index, which comes from the 2007/2008 and 2009 Human Development Reports and the Human Development Indices: A Statistical Update (2008). The United Nations Development Programme generates the education index on the basis of the adult literacy rate (two-thirds weight) and the combined gross enrollment ratio for primary, secondary, and tertiary schools (one-third weight). One missing value for 2006 was replaced with a 2007 figure and seven for 2005 were replaced with 2006 data. The effect that education has on terrorism is mixed, but many find the relationship to be nonexistent or weak (Krueger and Malečková 2003; Drakos and Gofas 2006; Kurrild-Klitgaard, Justesen, and Klemmensen 2006; Krueger and Laitin 2008). However, I include it in the model since domestic terrorists in particular may carry out their attacks in response to an overall lack of education access.

Finally, I control for the number of domestic terrorist attacks that each country experienced in the previous year. Terrorism is path dependent in that past violence breeds present violence, which encourages future violence. This is because a culture of terrorism enables terrorists to continue their activity. Successful attacks ensure future funding from donors and break down psychological hesitations about carrying out future acts. Data for this variable also come from the RAND database. Figure 1 provides information on all variables.

**Figure 1**  
Model Variables

Unit of Analysis: Country-Year

Variable	Year(s)	Definition	Source	N	Median	Mean	S.D.	Min.	Max.
<b>Dependent</b>									
Domestic Terrorism	2005-2007	Total number of domestic terrorist incidents	RAND's Database of Worldwide Terrorism	583	0	26	215.7584	0	3,892
<b>Explanatory</b>									
GDP	2005-2007	GDP per capita in current U.S. dollars	International Monetary Fund	543	3,370.11	10,416.98	16,033.80	106.88	106,983.30
GINI	2005, 2007	GINI coefficient	Human Development Reports	410	39.50	40.8520	9.3556	24.70	74.30
Religious Diversity	2001	Religious fractionalization	Alesina et al. (2003)	576	0.4545	0.4363	0.2322	0.0023	0.8603
Muslim	2010	1 = Majority of country is Muslim 0 = Otherwise	CIA World Factbook	583	0	0.2264	0.4189	0	1
<b>Control</b>									
Political Rights	2005-2007	Level of political rights	Freedom House	583	3	3.3448	2.1434	1	7
Population	2005-2007	Population (in millions)	International Monetary Fund	543	7.4410	35.8966	133.1428	0.05	1,321.29
Education	2005-2007	Education index	Human Development Reports	553	0.864	0.7917	0.1790	0.255	0.993
Past Incidents	2004-2006	Total number of domestic terrorist incidents in previous year	RAND's Database of Worldwide Terrorism	583	0	22	19.9304	0	3,892

## Method

Because the dependent variable in my analysis is an event count variable, I use a negative binomial regression model to produce estimates. The data suffer from overdispersion but unlike the Poisson regression model, the negative binomial allows the conditional variance of the dependent variable to exceed the conditional mean. Models that employ time-series, cross-sectional (TSCS) data often experience heteroskedasticity as well as serial correlation in the error term. To address these problems, I use robust standard errors clustered over countries. Controlling for the number of domestic terrorist incidents that a country experienced in the previous year and including dummy variables for 2006 and 2007 (2005 is the baseline year) in the model should also help to deal with temporal dependence. I also perform post-estimation tabulations to determine probabilities for terrorist incidents under some interesting scenarios.

## Results

**Figure 2**

**Negative Binomial Regression Model Results**

*Dependent Variable: Total number of domestic terrorist incidents for each country for each year, 2005-2007*

<i>Variable</i>	<i>Coefficient</i>	<i>Robust S.E.</i>	<i>z</i>	<i>P &gt;  z </i>
<i>GDP</i>	-0.000016	0.000018	-0.91	0.361
<i>Religious Diversity</i>	-1.951586	0.965337	-2.02	0.043
<i>Muslim</i>	0.318697	0.399936	0.80	0.426
<i>Political Rights</i>	-0.017864	0.128469	-0.14	0.889
<i>Population</i>	0.009774	0.007400	1.32	0.187
<i>Education</i>	3.641863	1.429348	2.55	0.011
<i>Past Incidents</i>	0.030967	0.013897	2.23	0.026
<i>Constant</i>	-1.657793	1.723420	-0.96	0.336

*Time dummy variables are not shown.*

*Standard errors are adjusted for 177 clusters.*

*N = 531*

*Wald  $\chi^2$  (9) = 72.93*

*Prob >  $\chi^2$  = 0.0000*

*Log Pseudolikelihood = -830.2146*

Results are provided in Figure 2. Economic development, as measured by GDP per capita, is not significant in the model, which supports the first hypothesis.<sup>7</sup> This suggests that a country's economic status does not seem to be associated with its experience with domestic

<sup>7</sup> In order to see if relative rather than absolute deprivation may be a factor in explaining domestic terrorism, I rerun the model using the *GINI* variable instead of *GDP*. Full results for this model are not provided, but *GINI* is not significant ( $P > |z| = 0.137$ ) while the substantive results for all other variables remain consistent. This is in line with studies that focus on terrorism in general (Abadie 2004) and transnational terrorism (Piazza 2006). However, major problems exist with the *GINI* variable (i.e. missing data) so caution in this interpretation is necessary.

terrorism in either a positive or negative direction, implying that terrorists are as likely to come from wealthy countries as economically weak ones.

Although this finding is in line with the terrorism literature, it is especially noteworthy because of the distinct nature of domestic terrorism. Domestic terrorism includes isolated homegrown incidents, such as the Oklahoma City Bombing and Sarin attack on the Tokyo subway (both in 1995), as well as prolonged internal terrorist movements. In some cases, these movements become so powerful that they provoke civil war. Examples include the LTTE in Sri Lanka and Shining Path in Peru. Thus, domestic terrorist campaigns and civil wars can be difficult to distinguish in reality. This is interesting because research shows that poverty is an important factor in the onset of civil war (Collier and Hoeffler 1998; Fearon and Laitin 2003; Sambanis 2008). Paul Collier and Anke Hoeffler (1998, 7) emphasize, "Civil war is overwhelmingly a phenomenon of low income countries." Thus, despite its resemblance to civil war in some cases, domestic terrorism does not appear to be brought about by low economic development. If data become available, future research should disaggregate domestic terrorism between isolated events and protracted movements to see if their explanatory conditions differ. Nicholas Sambanis (2008, 201) argues, "economic development strategies that increase per capita income or education levels might help reduce terrorism if they help reduce the prevalence of civil war since terrorism can easily occur in civil war. But economic development alone is unlikely to succeed in reducing terrorism of the sort that takes place outside of the context of civil war." Thus, economic development strategies may reduce domestic terrorism if it exists in conjunction with civil war, but otherwise they may not.

The model suggests that religious diversity is a factor in explaining domestic terrorism. In accordance with the second hypothesis, which is primarily based on the Blomberg and Hess (2008) study, more religiously heterogeneous countries observe fewer domestic terrorist attacks on average. This stands in contrast to the majority of research on transnational terrorism. On one hand, it seems reasonable to assume that the presence of more religious groups in a country would incite terrorist violence under the assumption that some religious factions would adopt terrorist tactics against others. However, it may be that the presence of several religions in a society encourages people to be more tolerant of other religions. For example, Australia has a high religious diversity level, but experiences very few attacks. Moreover, it may also be that small religious minorities in countries that are overwhelmingly affiliated with one religion carry out terrorist violence against the dominant religious group in an effort to stop real or perceived rights abuses. This may explain countries like Thailand in which the Pattani United Liberation Organization (PULO) strives to achieve independence for the Muslim community in the country's southern provinces. Finally, members of the same religion may adopt terrorism against one another because of varying interpretations of religious texts or priorities regarding religious values. Afghanistan, for example, is religiously homogenous, but suffers high levels of within-religion violence.

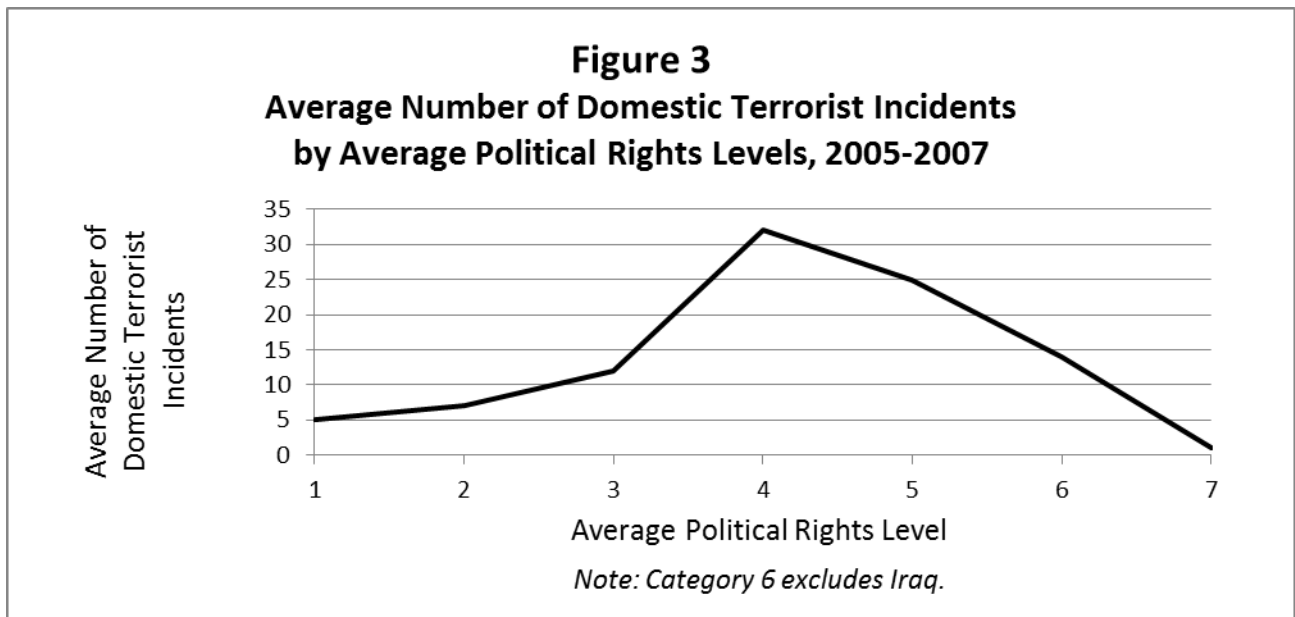
Supporting the third hypothesis, the model shows that Muslim countries are no more or less prone to domestic terrorist activity. This is in agreement with the empirical research, but runs counter to the impression that media coverage on terrorism gives, which suggests that non-Muslim terrorist incidents are underreported. Muslim countries, however, may be more likely to suffer suicide terrorism (Wade and Reiter 2007).

Some of the control variables show interesting results. The relationship between education and domestic terrorism is positive and significant. Countries with higher education levels experience more domestic terrorism. This suggests that although education can provide

opportunities to participate in political processes, it may also equip terrorists with the resources and connections necessary to carry out attacks against the government or rival groups. Higher education levels may also enable terrorists to outmaneuver counterterrorist efforts. For example, in Spain, ETA had traditionally been able to infiltrate the Ertzaintza – the Basque police force – in order to preempt law enforcement activities. Moreover, it could be that countries with low levels of education may not maintain populations that have the resources or skills to execute terrorism.

Moreover, the model supports the notion that terrorism is path dependent. Countries that experience domestic terrorism in the past are more likely to endure it in the future. This is because a history of terrorism may help to secure future donor funding, attract new fighters, and reduce reservations about conducting acts of violence.

The political rights variable is insignificant, suggesting that politically free and repressive countries are as likely to face domestic terrorism. Nonetheless, I explore this link further. Theory suggests that the relationship between political freedom and terrorism is non-monotonic (Abadie 2004; Testas 2004). Martha Crenshaw (1981, 396) argues that terrorism is a consequence of state behavior and concludes that “Government reactions that are inconsistent, wavering between tolerance and repression, seem most likely to encourage terrorism.” Countries in political transition or that maintain medium levels of political rights seem more likely to experience terrorism. To assess if this is the case, I calculate the mean number of domestic terrorist incidents within countries across the three-year timeframe and then across countries for each of the seven levels of political rights.<sup>8</sup> Figure 3 shows this graph. The graph supports the observation that terrorism is most prevalent in states with fluctuating levels of political freedom.



<sup>8</sup> Because Iraq experiences an overwhelming number of domestic terrorist attacks, thus disrupting the scale of the graph, I exclude it. The mean number of attacks across the three-year period for Iraq is 2,828, which is nearly six times as large as the next highest mean. Its inclusion, however, does not change the general trend.

*Expected Count Tabulations*

The regression model suggests that a country’s levels of religious diversity and education influence its experience with domestic terrorism. But if the religious composition or overall education level of a country were to change, how would this affect its experience with domestic terrorist violence? A limitation of maximum likelihood estimation models is that they do not provide a reliable  $R^2$ ; thus, it is difficult to determine the extent to which significant independent variables affect the outcome variable. However, expected count tabulations can show the change in the outcome if a significant predictor were to change.<sup>9</sup> Here, they can demonstrate the extent to which religious diversity and education affect domestic terrorism by allowing for changes in their values and holding other variables at their mean.

**Figure 4**

Expected Count Means for Domestic Terrorist Attacks, Various Scenarios

<i>Scenarios</i>	<i>Expected Count Mean</i>	<i>S.E.</i>
All Variables Held at Their Mean	2.022763	0.384503
<i>Religious Diversity</i> Set at Its Lowest (0.0023)	5.077131	2.373506
<i>Religious Diversity</i> Set at Its Highest (0.8603)	0.979340	0.480771
<i>Education</i> Set at Its Lowest Value (0.255)	0.379114	0.428861
<i>Education</i> Set at Its Highest Value (0.993)	4.459790	1.650509

Note: All variables in the model are set at their mean except for the variable listed.

Figure 4 shows these tabulations. When all of the model’s independent variables are held at their own means, a country should experience two domestic terrorist attacks. This is to say that an “average” country (average in the sense that it maintains average levels of all of the independent variables) is expected to experience two attacks. However, if all variables remain at their mean, except for religious diversity, which is reduced to the level experienced in Yemen – the lowest in the dataset – a country would suffer approximately five incidents. This is three more than the average. The regression model suggests that religious homogeneity increases the likelihood of domestic terrorism, but this calculation shows by how much (i.e. by three more attacks). Examples of countries that are religiously homogenous and terrorism-prone include Colombia and Afghanistan. On the other hand, if a country were as religiously diverse as South Africa – the highest in the dataset – they would only experience one domestic terrorist incident on average, holding all other variables at their mean. This is one less than the mean. Malawi and Australia are examples of religiously diverse, low-terrorism countries.

Moreover, if a country had an education level as high as New Zealand’s (while experiencing average levels of all other independent variables), it would experience four incidents on average, which is two more than the average. France, Spain, and Greece are representative of high-education, high-terrorism countries. If its education level were as low as Burkino Faso’s, it would experience virtually no attacks, which is representative of several

<sup>9</sup> To calculate expected count tabulations, I use CLARIFY software. See Tomz, Wittenberg, and King (2001) for information about and access to this software. For detailed information about the utility of post-estimation tabulations, see King, Tomz, and Wittenberg (2000).

African countries, such as Chad and Niger. These calculations help to show how changes in education levels affect the level of domestic terrorism that a country experiences.<sup>10</sup>

## Conclusions

This study has aimed to evaluate the conditions that foster domestic terrorism in an effort to elucidate this phenomenon and highlight its differences from transnational terrorism. Specifically, it has endeavored to see if economic development and religion matter in creating the space for domestic terrorism to occur. In line with other terrorism research, I fail to find evidence that development, measured as overall economic output or income inequality, brings about domestic terrorism. Religion helps to explain terrorist activity, which stands in contrast to most research on transnational terrorism. Religiously homogenous countries seem to experience more terrorism while Muslim countries are no more or less likely to suffer from attacks. This might suggest that Western media outlets overstate the degree of Islamist terrorism, placing less attention on non-Islamist terrorist organizations. Moreover, education levels and past experiences with domestic terrorism appear to be important predictors of future domestic terrorism. Finally, I do not find that politically repressive countries are more prone to terrorism than politically free states, but transitional countries – those with medium levels of political freedom – seem to face more attacks.

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<sup>10</sup> Of course any increase in domestic terrorism is dangerous and unwelcome; however, the type (i.e. bombing, assassination, kidnapping) and lethality (i.e. number of deaths or injuries) of these incidents are important but unaccounted for in these scenarios.

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