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JEAN-PAUL AZAM AND VÉRONIQUE THELEN

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by

Jean-Paul Azam^a and Véronique Thelen^b

a: Toulouse School of Economics (UT1, ARQADE & IDEI) and Institut Universitaire de France,

b : Toulouse School of Economics (UT1, ARQADE).

Abstract: This paper presents a theoretical framework and some empirical results showing that the level of foreign aid received reduces the supply of terrorist attacks from recipient countries, while US military interventions are liable to increase this supply. Due account is taken of endogeneity problems in producing these results. They suggest that Western democracies, which are the main targets of terrorist attacks, should invest more funds in foreign aid, with a special emphasis on supporting education, and use military interventions more sparingly.

Keywords: Terrorism - Foreign aid - Military Intervention -. Education

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Corresponding Author:

Professor Jean-Paul Azam,
ARQADE, University of Toulouse 1,
21 Allée de Brienne, 31000 Toulouse, France.

E-mail : azam@univ-tlse1.fr

1. Introduction

In early April 2009, President Obama asked congress for \$ 83 billion of additional funding for Iraq and Afghanistan with a view to eradicate decisively the Al Qaeda threat. This included \$ 1.6 billion and \$ 1.4 billion for Afghanistan and Iraq, respectively, for “diplomatic programs and development aid”. An additional \$ 800 million was asked for the Palestinian Authority, including some humanitarian aid for Gaza. An additional \$ 1 billion of unconditional aid to Pakistan was announced a week later, as a provisional measure before Congress voted a \$ 1.5 billion aid flow to this country for the next five years. Rep. Lynn Woosley, an anti-war Democrat, said: “instead of attempting to find military solutions to the problem we face in Iraq and Afghanistan, President Obama must fundamentally change the mission in both countries to focus on promoting reconciliation, economic development, humanitarian aid, and regional diplomatic efforts” (CNN.com, April 9, 2009). This debate illustrates the change of emphasis that occurred since 9/11 and the decisions to invade Afghanistan and Iraq. Although the Bush administration justified the intervention in Iraq by claiming that the military option was the key strategy in the war on terror, the Millennium Challenge Account was created for channeling aid to poor countries in the wake of George W. Bush much cited speech in Monterrey on March 22, 2002, where he said: “We fight against poverty because hope is an answer to terror”. This suggests that aid has been part of the policy-mix against terrorism at least since that date.

However, the use of foreign aid as a tool in the war on terror did not get an enthusiastic reception from the academic community. Krueger (2007) expressed serious doubts about the role of aid for curbing terrorism. The bottom line of his skepticism is that poverty does not seem to be the main determinant behind terrorist attacks, while poverty alleviation is widely assumed to be the main objective of foreign aid. The data presented in

Krueger and Maleckova (2003) show that terrorists from different movements, including the Hezbollah, are predominantly recruited from a relatively wealthy and educated family background, relative to their society of origin. Some other insights on the profiles of terrorists can be gleaned from Bloom (2005), Hassan (2001), Reuter (2004), Sageman (2004) and Stern (2003), suggesting that terrorists are men and women in their twenties with some post-secondary training, mostly in technical or engineering education, and coming from a relatively well-off family background¹. However, while this microeconomic evidence refutes a simple view that poverty breeds terrorism, because terrorists are not recruited among the poorest segments of their society of origin, the conclusion about the role of foreign aid does not necessarily follow from it. The latter rests on the assumption that foreign aid reduces poverty or enhances education in recipient countries, a view that is rejected by the “aid-ineffectiveness” literature, which has accumulated a lot of empirical evidence against it. Easterly (2006) offers a synthesis of this literature that tries to sentence foreign aid to death.

This literature is quite paradoxical, from a methodological point of view. It begs the question why rich countries have consistently given away zillions of dollars for nearly six decades if this aid flow really was ineffective. Moreover, emerging countries, like China and India, are keen to become aid-donors as soon as they reach a certain level of development. These observations suggest that the donor-countries’ behavior should not be gauged by looking at the poverty impact of foreign aid. Revealed-preference theory suggests a different approach, aimed at inferring from donors’ behavior their true objectives. A more satisfactory line of empirical research has tried instead to infer the donors’ hidden agenda from the econometric analysis of their aid-allocation behavior, starting with papers by Svensson (1999) and Alesina and Dollar (2000). The latter literature, which is briefly surveyed by Azam and Thelen (2008), brings out that the allocation of foreign aid across developing countries

¹ This literature is surveyed in more depth in Azam and Thelen (2008).

responds to some political determinants, rather than to the recipient countries' performances in the fight against poverty. This search for foreign aid's hidden agenda is akin to a detective job, and researchers have tested a list of potential objectives, ranging from supporting democracy (Svensson, 1999, Alesina and Dollar, 2000) to fighting corruption (Alesina and Weder, 2002). This search is likely to have just begun, as many potential objectives easily come to mind. There are in fact two different issues in this line of analysis, which the literature has not systematically distinguished. Assuming that the donors are rational, the first question to ask is whether aid can significantly affect the potential objective under scrutiny. The second is to test whether the donors are in fact using this potential trade-off. The latter test is a key step in the analysis because it affects the choice of an appropriate econometric method for testing the former. Using reduced-form estimation, for example, for performing the former test would rest on the untested assumption that the donors are either not aware of the existing tradeoff, or else would simply disregard it for devising their policy. Neglecting the possible use of the assumed tradeoff by the donor countries would thus lead to spurious estimates and preclude drawing any policy recommendations from the results. This two-part method is applied by Azam and Thelen (2008) for testing (i) whether foreign aid has a significant impact for reducing the number of terrorist attacks originating from recipient countries, and (ii) whether the donor community is using this trade-off for curbing transnational terrorism. Their findings suggest a positive answer to these two questions.

The present paper extends the latter analysis and adds foreign military intervention in the toolkit used by the North for reducing the number of terrorist attacks from developing countries. The likely impact of this variable on terrorist activity has been brought out by Pape (2006), using a series of case studies. He suggests that a lot of terrorist attacks against Western interests have been prompted by military interventions by the USA or the NATO alliance, and concludes that Middle Eastern terrorism is mainly motivated by nationalism.

These terrorists would thus simply be fighting against what they view as a foreign occupation of their country. On the other hand, especially since 9/11, recent US military interventions have been justified as a key component in the war on terror. Hence, the link between terrorism and military intervention could in fact be due to reverse causation, the presence of US and allied soldiers being merely a response to a terrorist threat. Gelpi *et al.* (2009) have shown how this cue has been used by the Bush administration for attracting the support of the US public opinion in favor of the war in Iraq. However, some dissenting views are claiming that the control of oil reserves was the true agenda behind the invasion of Iraq, and not the fight against terrorism (see e.g., Cramer and Duggan, 2009). The latter was thus just a cover for more materialistic interests that would not attract so much support from the general public. Chatterjee (2009) goes one step further in suggesting how some private contractors got a privileged access for influencing the decision to invade Iraq, also for oil-related reasons.

Lastly, we add another interesting variable suggested by Roberts (2003). He points out that a common demand by all radical Islamist movements is the introduction of the *Shari'a* Law. Based on his analysis of the Middle East, and of Algeria in particular, he concludes that the popular support for this movement is rooted in the feeling by ordinary Muslims that Islamism is an effective response to a weak institutional environment marred by corruption and injustice. The *Shari'a* Law would thus be demanded by ordinary people as a way of getting an equal rule of Law for all. This implies that terrorist organizations would benefit from more popular support if they are perceived by ordinary people as engaged in a fight against a government that sustains an unjust legal system, and its external supports. We try to capture such an effect in what follows, by looking at the impact of law and order, without restricting its domain of application to the Muslim world only.

The present paper provides an empirical analysis of these issues based on the two-part methodology briefly described above. The next section presents a simple extension of the

Azam and Thelen (2008) theoretical framework for thinking about the choice made by the foreign power between aid and military intervention for reducing terrorism. As in Azam and Delacroix (2006), the aid issue is analyzed as a principal-agent problem where the foreign power is delegating the fight against terrorism to the recipient government for protecting its interests within the latter's sphere of influence. Military intervention is then added as a tool for supporting the recipient government's effort in the fight against terrorism. Because of the debate mentioned above about the true motives of military intervention, this model allows for other potential determinants of such interventions. This theoretical analysis is also suggesting the kind of instrumental variables that should be used in the empirical analysis. Section 3 presents the data and briefly describes the econometric method used, while section 4 presents the estimation results and the different tests of the hypotheses discussed above. This section suggests that US military interventions are probably not mainly motivated by the war on terror and are significantly determined by oil-related issues. Moreover, it shows that after taking due account of some exogenous heterogeneity across countries, the impact of the US military interventions on terrorist attacks is positive on average. A finer analysis is then offered for bringing out the conditions under which military intervention is effectively used against terrorism. Lastly, after controlling for the impact of these military interventions on the supply of terrorist attacks, foreign aid and education remain significant as in the original Azam-Thelen model. Some concluding comments are then presented in section 5.

2. The Model

We model a foreign power that delegates to the governments of some other countries the task of protecting its economic and political interests within their respective spheres of influence. It has two instruments for doing this, namely giving aid and intervening militarily. We do not distinguish between the friendly or hostile interventions that might occur in the real

world. In both cases, the ultimate result is the same, i.e., the incumbent local government, or the new one in case of a radical intervention, has some enhanced incentives to protect the intervener's interests. The foreign power allocates aid between a number of countries, which are liable to produce some terrorist attacks against it, and where the government can exert some effort to fight terrorism, at a cost. Then, aid is a way to defray the recipient government for this cost of effort. The latter is also affected by the foreign power's military intervention, which is liable to reduce its direct cost of fighting terrorism. The government's action exerts its influence on the value that the activists attach to terrorist attacks against the foreign power as well as on their cost. The latter also depends on some idiosyncratic "militancy" parameter. Hence, for each country, three players are involved: (i) the terrorist group determines the number of attacks against the foreign power, (ii) the local government exerts some effort to deter these actions, while (iii) the foreign power provides some aid for compensating the government or intervenes militarily for directly reducing the latter's costs of repression. This model is an extension of those in Azam and Delacroix (2006) and Azam and Thelen (2008) and some shortcuts are taken in the presentation, when a more detailed derivation can be found in these two papers.

The Three Agents

Denote A the total amount of aid allocated by the foreign power and H the total number of terrorist attacks that it gets from the different countries, which inflict a total damage worth $\psi(H)$, assumed increasing and convex. Denote a_i the aid given to country $i \in \{1, \dots, n\}$, and h_i the number of attacks originating in i . Then, $A = \sum_i a_i$ and $H = \sum_i h_i$. The donor splits its aid flow between general budget support and an amount s_i which is earmarked for education. In addition the donor can intervene militarily by an amount m_i .

Country i 's government values the aid flow as well as the level of human capital achieved in the country k_i , which produces a level of utility $u(k_i)$ (assumed increasing and concave) for the government. The latter captures both the pecuniary and non-pecuniary benefits that the ruler gets from the human capital present in his country. The unit cost of producing this human capital is denoted $\delta(s_i, \varepsilon_i)$, which is decreasing in the donor's earmarked contribution s_i and in the country's own past investment in human capital, which we call educational capital from now on, denoted ε_i . The latter captures the social and physical infrastructure that the country has in the education (and health) sector, including its cultural traditions, its schools and universities, as well as its stock of trained teachers, etc. The donor's earmarked contribution to the education sector s_i is reducing the cost of expanding human capital borne by the government, because it is not perfectly fungible with either local funds or other aid flows. This may capture the use of differentiated inputs like highly qualified teachers, without local substitutes, that would not be available without the donor's intervention, or scholarships for joining select institutions abroad. We can thus define the government's profit from human capital investment as:

$$\pi(s_i, \varepsilon_i) = \max_{k_i} u(k_i) - \delta(s_i, \varepsilon_i)k_i. \quad (1)$$

This function is increasing in its two arguments, reflecting the cost-saving effects of the local educational capital and the donor's earmarked contribution. By Hotelling's lemma, (1) implies that country i 's human capital level is an increasing function of s_i and ε_i :

$$k_i = k(s_i, \varepsilon_i). \quad (2)$$

The country's government also incurs a cost $\xi(r_i, m_i) \geq 0$ (assumed increasing and convex in r_i) when performing an amount r_i of repression against terrorists, with $\xi(0, m_i) = 0$. This cost is decreasing in the foreign power's military intervention m_i , but the

latter cannot make it negative. Then, the aid-cum-military support contract will specify how much repression the local government is expected to perform against the terrorists in return for the aid received, including the earmarked contribution to the education sector, and taking due account of the in-kind contribution made by the military intervention. This captures the idea that the donor is delegating part of the protection of its interests against terrorism to local governments, using aid to defray the costs of doing so incurred by the recipient government. For this contract to be acceptable, the quadruplet $\{a_i, s_i, r_i, m_i\}$ must fulfill the following government's participation constraint, where we normalize $\pi(0, \varepsilon_i) = 0$:

$$a_i + \pi(s_i, \varepsilon_i) - s_i \geq \xi(r_i, m_i). \quad (3)$$

The left-hand side of (3) measures the reward that the recipient government gets from the aid-cum-military-support that it gets, while the right-hand side measures the cost that the former incurs for protecting the donor's interests within its own sphere of influence.

Let h_i be the number of attacks perpetrated by country i 's terrorist organization against the foreign power's interests. The terrorist organization attaches a unit value $\theta_i v(k_i, m_i, \lambda_i)$ to these attacks, where θ_i is the "militancy" parameter, assumed known to both the donor and the government, and $v(k_i, m_i, \lambda_i)$ is increasing in its first two arguments. This captures the two determinants of the value attached by the terrorists to the attacks against the foreign power's interests mentioned in the introduction, i.e., the positive impact of human capital, emphasized by Krueger (2007), and the nationalist response to military intervention emphasized by Pape (2006). The country-specific parameter λ_i represents the "legal capital" of the country, which might defuse some of the militancy of the potential terrorists. As mentioned in the introduction, Roberts (2003) has emphasized the quest for justice that seems to underlie the popular adhesion to political Islamism in the Middle East in general and in Algeria in particular. Hence, λ_i is meant to capture the existing institutional capital that might

mitigate this sense of injustice in country i , and thus has a negative impact on $v(k_i, m_i, \lambda_i)$. The terrorist organization also incurs a cost $\omega(h_i, k_i, r_i, m_i)$ for perpetrating its attacks. This function is naturally assumed to be increasing and convex with respect to h_i , and increasing in r_i and m_i . The impact of k_i is less clear-cut, and probably combines two opposing effects. There is a positive impact, as more educated people have a higher opportunity cost, which the terrorist organization will probably take into account. There is another impact going in the opposite direction, as more educated people are probably more efficient at performing the attacks (Bueno de Mesquita, 2005). However, we do not need to make a firm assumption regarding the marginal effects of repression and education on the terrorist organization's costs, as they do not affect the model's main predictions. The latter only depend on the cross-second partial derivatives, i.e., the impact of these variables on the marginal cost of perpetrating an attack for the terrorist organization. We naturally assume that repression increases the marginal cost of an attack, as does the military intervention too. Denoting cross-second derivatives by subscripts, this means that $\omega_{hr} > 0$ and $\omega_{hm} > 0$.

The time line of the game is as follows: (i) the donor offers the aid-cum-military support contract; (ii) the government exerts the agreed level of repression and chooses its preferred education level, both assumed perfectly observable and contractible by the two parties; (iii) the terrorists launch their attacks h_i ; and lastly (iv) the aid is delivered and consumed. Using backward induction, we first derive the terrorist organization's best-response function, as a function of the government's policy variables. Then, the "attacks supply curve" is derived at the country level, by bringing in the government's preferred mix of repression and education expenditures, under the foreign power's influence.

The terrorist organization chooses its number of attacks h_i with a view to maximize:

$$\theta_i v(k_i, m_i, \lambda_i) h_i - \omega(h_i, k_i, r_i, m_i). \quad (4)$$

Its best-response function $h_i = h(\theta_i, \lambda_i, k_i, r_i, m_i)$ may be derived from the first-order condition $\theta_i v(k_i, m_i, \lambda_i) = \omega_h(h_i, k_i, r_i, m_i)$, where $\omega_h(-)$ is the derivative of the cost with respect to the level of attacks. Denoting $\omega_{hh} > 0$, $\omega_{hr} > 0$, $\omega_{hm} > 0$ and ω_{hk} the relevant second derivatives of the cost function, the latter implies:

$$\begin{aligned} \frac{\partial h_i}{\partial \theta_i} = \frac{v(k_i, m_i, \lambda_i)}{\omega_{hh}(-)} > 0, \quad \frac{\partial h_i}{\partial \lambda_i} = \frac{\theta_i}{\omega_{hh}(-)} \frac{\partial v(-)}{\partial \lambda_i} < 0, \quad \frac{\partial h_i}{\partial r_i} = \frac{-\omega_{hr}(-)}{\omega_{hh}(-)} < 0, \\ \frac{\partial h_i}{\partial k_i} = \frac{\theta_i \partial v(-) / \partial k_i - \omega_{hk}(-)}{\omega_{hh}(-)} \quad \text{and} \quad \frac{\partial h_i}{\partial m_i} = \frac{\theta_i \partial v(-) / \partial m_i - \omega_{hm}(-)}{\omega_{hh}(-)} \end{aligned} \quad (5)$$

The first three partial effects are fairly intuitive: more militant groups produce more attacks, while a better legal capital and a greater repression effort by the government reduce the number of attacks. The fourth effect is ambiguous, as more human capital increases the value of terrorist attacks while its impact on the marginal cost of these attacks is itself ambiguous. This is compatible with the ambiguous impact of education on the level of terrorist activity predicted by both Bueno de Mesquita (2005) and Azam (2005). Similarly, the impact of the foreign power's military intervention is ambiguous, depending on its relative impact on the value of the attacks and on their cost.

The Attacks Supply Curve

Like in Azam and Thelen (2008), we decompose the donor's problem as follows:

(i) *Aid composition problem*: the efficient attacks supply curve is determined for each country by minimizing the number of attacks $h_i = h(\theta_i, \lambda_i, k_i, r_i, m_i)$, using s_i and r_i as control variables, given a_i and m_i , the government's participation constraint (3) and its preferred education policy (2). The second-order condition requires the terrorists' best-response function to be quasi-convex in s_i and r_i , after substituting for the government's education policy (2), and the government's participation constraint (3) to be concave in the same space.

Then, the first-order conditions can be solved to yield the following government's expenditure functions:

$$s_i = s(\theta_i, \lambda_i, \varepsilon_i, a_i, m_i) \text{ and } r_i = r(\theta_i, \lambda_i, \varepsilon_i, a_i, m_i). \quad (6)$$

These functions can then be substituted in the terrorists' best-response function, using (2) as well, to get the following structural equation for the efficient attacks supply curves:

$$h_i = h(\theta_i, \lambda_i, \varepsilon_i, a_i, m_i). \quad (7)$$

(ii) *Aid-cum-military support allocation problem*: the donor's optimal allocation of aid and military support across countries is determined by minimizing the total cost of its relations with the recipient countries, including both the cost of the aid-cum-military support packages and the cost $\psi(H)$ inflicted by the terrorist attacks, taking all the efficient attacks supply curves (7) as constraints. Because of the debate regarding the true motivations of military interventions mentioned in the introduction, we assume that the latter might be motivated by other considerations than just the war on terror. In order to take this into account, we define $v_i \geq 0$ as the "geo-strategic" value attached by the foreign power to the military intervention over and above its impact on terrorist attacks. Then the foreign power seeks to minimize the following sum, subject to all the efficient attacks supply curves (7):

$$A + \sum_i (1 - v_i) m_i + \psi(H). \quad (8)$$

The second-order condition requires the efficient attacks supply curves derived at (7) to be convex in a_i and m_i . We also assume that they are not necessarily monotonic in these two arguments, i.e., that they are potentially U-shaped. The donor has no reason to leave any positive rent to the local government, so that we can immediately infer that (3) will hold with equality. Then, minimizing (8) subject to all the attacks supply curves (7) allows us to establish proposition 1.

Proposition 1: (i) The allocation of the aid-cum-military support across countries will be such that the efficient attacks supply curves (7) have the following signs $\forall i \in \{1, \dots, n\}$:

$$\begin{aligned} \frac{\partial h_i}{\partial \theta_i} = \frac{v(k_i, m_i, \lambda_i)}{\omega_{hh}(-)} > 0, \quad \frac{\partial h_i}{\partial \lambda_i} = \frac{\theta_i}{\omega_{hh}(-)} \frac{\partial v(-)}{\partial \lambda_i} < 0, \\ \frac{\partial h_i}{\partial \varepsilon_i} = \frac{-\partial \delta / \partial \varepsilon_i}{\psi'(H) \partial \delta / \partial s_i} < 0, \quad \frac{\partial h_i}{\partial a_i} = \frac{-1}{\psi'(H)} < 0 \quad \text{and} \quad \frac{\partial h_i}{\partial m_i} = \frac{v_i - 1}{\psi'(H)}. \end{aligned} \quad (9)$$

(ii) The aid-cum military support packages will be governed by the following reduced-form equations $\forall i \in \{1, \dots, n\}$:

$$a_i = a(\theta_i, \lambda_i, \varepsilon_i, v_i, H) \quad \text{and} \quad m_i = m(\theta_i, \lambda_i, \varepsilon_i, v_i, H). \quad (10)$$

Proof: Proposition 1 can be proved by following similar steps to the ones used in Azam and Thelen (2008), including its appendix.

A noticeable property of the attacks supply curves (7), is thus is that the signs of the impacts of the educational capital and of aid and military intervention do not depend on the terrorists' parameters, but only on the cost functions entering the donor's and the government's objective functions. The assumption that the value attached by the terrorists to the attacks $v(k_i, m_i, \lambda_i)$ is increasing in the level of human capital is irrelevant for these predictions, suggesting that the observed education level of the terrorists mentioned in the introduction is irrelevant for aid policy. Proposition 1 tells us that in any case, more educational capital ends up reducing the number of terrorist attacks at the cross-country level, because its effect is more than compensated by an adjusted level of repression; for a given aid level, a higher level of educational capital allows the local government to reach its human capital objective at a lower cost, and thus frees some resources for performing more repression. Hence, for some values of the parameters, the donor might elicit more repression from the recipient government by earmarking more funding to education.

The new result brought out by proposition 1, relative to Azam and Thelen (2008), is the ambiguous impact of the military interventions m_i , which is not included in that paper. Proposition 1 thus predicts that the military intervention will be effective against terrorism in country i if $\nu_i < 1$, i.e., if the “geo-strategic” value of the intervention is not “too strong”. Otherwise, m_i is chosen beyond the level that minimizes the number of terrorist attacks, and thus has a positive impact on the latter, if $\nu_i > 1$. Notice also that the chosen level of m_i entails, as shown at (9), that the sign of its impact will be country-specific, as it depends on $\nu_i - 1$. The econometric analysis performed below takes this predicted heterogeneity across countries into account in a simple fashion that reflect the debate described above. Moreover, the two reduced-form equations for a_i and m_i given by (10) suggest that this factor of heterogeneity ν_i should be taken as one of the instrumental variables for estimating the structural attacks-supply curve (7) in the empirical analysis below.

3. Data Sources and Econometric Method

The empirical analysis presented below aims at testing the main predictions of our model of the determinants of the number of transnational terrorist events² per country of origin of the perpetrators.

Data Sources

We use two different sources for the dependent variable. The first one is the ARQADE dataset, derived from information once available on the *International Policy Institute for Counter-Terrorism* (ICT) website, also used in Azam and Delacroix (2006) and Azam and Thelen (2008). Due to some explanatory variables coming from International Country Risk Guide (proprietary of the PRS group) described below, the sample used here is restricted to

²Events such that the location, the target, the victims and the perpetrators belong to at least two different countries.

132 countries. Table A1 shows the number of terrorist events by source country included in the present sample. Thus, for example, the West Bank and Gaza Strip are not included in the analysis. The number of terrorist events is computed from a set of 1080 terrorist incidents, taking place between January 1990 and March 2004³. In this sample, the terrorist attacks originated from 70 source countries⁴. Krueger and Maleckova (2003) and Krueger and Laitin (2003) have used the same source. The other one is constructed from *the International Terrorism: Attributes of Terrorist Events* (ITERATE) data set (compiled by Mickolus *et al.* 2006). ITERATE also focuses on transnational attacks where terrorism is defined as “the use, or threat of use, of anxiety-inducing, extra-normal violence for political purposes by any individual or group, whether acting for or in opposition to established governmental authority, when such action is intended to influence the attitudes and behavior of a target group wider than the immediate victims”. These data record key information about the date, the country location, the incident type and, for many events, the country of origin of the perpetrators. Thus, we compute the number of terrorist events according to the perpetrator’s nationality⁵ from a set of 2185 events taking place between January 1990 and December 2004. With this data and the sample used, the terrorist attacks originated from 95 countries. For each database, the transnational terrorist attacks are aggregated over the period 1990 to 2004 to produce the total number of attacks originating from each country.

We use the standard measure of foreign aid, namely Official Development Assistance (ODA). This variable aggregates the disbursements of loans and grants by official agencies of the members of the Development Assistance Committee (DAC) to promote economic development and welfare in the recipient countries. Data are measured in constant 2006 U.S. dollars and the source is the online OECD Development Database on CRS Aid Activities. In

³Alexandra Delacroix has produced this data set when she was a master 2 student at Toulouse University.

⁴In this database, a terrorist attack perpetrated by more than one terrorist from different countries of origin is counted several times, one for each nationality involved.

⁵ If more than one nationality is involved then the event is attributed to the country where most of the members in the group have their citizenship. So each event is counted only once.

the sample used in this article, 24 countries are aid donors, mainly OECD member countries. To measure the educational capital, we use the gross enrollment rate in secondary education, i.e., the ratio of total enrollment, regardless of age, to the population of the age group that officially corresponds to the level of secondary education. This is admittedly a fairly gross proxy, which we instrument below for the sake of controlling for measurement error. To control for the level of economic development, and thus to mitigate the risk of finding a spurious correlation with aid and the level of education due in fact to under development, we add GDP per capita in constant 2000 U.S. dollars. The source of the data for the gross enrollment rate in secondary education and GDP per capita is the World Bank's online World Development Indicators (WDI).

To test the impact of the military approach to deter terrorism, we focus on US overseas military interventions, using the number of US soldiers deployed in the host country. As emphasized by Pape (2006), for example, in his analysis of the presence of American forces in Iraq and in the Arabian Peninsula, all the campaigns of terrorist organizations have the common goal of getting foreign military forces out of the terrorists' country of origin. The strategy and the targets attacked by Al-Qaeda suggest that their principal motive is to end foreign military occupation of the Arabian Peninsula and other Muslim regions. Between 1980 and 1990, the US military forces on the Arabian Peninsula were less than 800 soldiers as opposed to on average 10,000 soldiers between 1990 and 2001. A strong presence of foreign troops may thus cause an increase in "militancy" in the country which affects the number of terrorist incidents, especially the presence of US troops in Middle East as mentioned by Pape (2006). Thus, our proxy for foreign military intervention is the average number of US military personnel⁶ over the period covered. As mentioned in section 2, we do not consider the "direction of the intervention", i.e., whether the intervention is supporting the incumbent

⁶The source of the active duty military personnel strengths by country is the Directorate for Information Operations and Reports (U.S. Department of Defense). Considering the number of US soldier in US equal to zero as they have other organizations to fight terrorism in the country.

government or helping to replace it with a more favorable one. Like for the amount of aid and educational capital, a military intervention is liable to be endogenous, as a response to the presence of highly militant groups in the country. Another useful variable for capturing some aspects of “militancy” is an “ethnic tension” index. Basuchoudhary and Shughart (2007) show that this variable affects significantly the level of terrorist attacks by country of origin. We use the same IRIS-3 data set (International Country Risk Guide, proprietary of the PRS group) where ethnic tension is an assessment of the degree of tension within a country attributable to racial, nationality or language divisions. The methodology is not published, but they argue that this index is a better measure of ethnic polarization than ethnic fractionalization since it is more sensitive to the definition of the different groups. It assigns numbers ranging from 0 to 6 to each country, higher values originally indicating lower ethnic tension. In order to have an increasing order and to facilitate the interpretation of the results, we use the same index but ranging from -6 to 0 with higher values (close to 0) indicating higher ethnic tension.

We also use dummy variables for capturing this “militancy” aspect: “Camp David” (Egypt and Israel), China and India, Latin American countries, Sub-Saharan countries, former USSR countries, ASEAN countries before 1990 (Indonesia, Malaysia, Philippines, Singapore and Thailand) and OECD countries before 1990. Azam and Delacroix (2006) and Azam and Thelen (2008) have shown that these dummy variables contain some relevant information for identifying the equations. They may also control for other country characteristics such as geography and civilization.

Finally, to capture the impact of the level of legal capital in each country, for describing the sense of “justice” suggested by Roberts (2003) as an important determinant of popular support for political Islamism and other radical positions, we use the “Law and Order” component of the IRIS-3 data set. Many empirical studies aiming at clarifying the link between democracy and terrorist incidents use variables capturing civil liberties or political

rights, with the possible endogeneity bias that this may entail. In our theoretical framework modeled above, variables of this kind are optimized out in defining the structural equation, as they are closely related to “repression”. On the other hand, the strength of the legal system may be regarded as exogenous because of the longer time needed to change these institutions compared to the level of repression imposed by the government. This indicator is made from two components, which are assessed separately. The “Law” one represents the strength and the impartiality of the legal system while the “Order” one is an assessment of popular observance of the law. This index also assigns numbers ranging from 0 to 6 with higher values indicating sound legal institutions and a strong court system.

Table A2 in the appendix provides some summary statistics for these data. A majority of countries have an ODA per capita between 0 and 50 dollars and countries receiving more than 100 dollars are the poorest ones. The majority of countries have a gross secondary school enrollment rate between 90 and 100% but many others have a much lower rate, especially among developing countries. The average value of ethnic tension is -4.06 and the higher values (close to 0) indicating a higher ethnic tension are not only assigned to developing countries; for example Israel has a value of -1.56. Finally, the average value of Law and Order is 3.83. The countries with a value of 6 are only democratic countries, while autocratic countries⁷ do not always stand for the lowest values. For example Libya, Oman, Saudi Arabia and Vietnam have above average values for ethnic tension and law and order.

Econometric Method

The dependent variable is the number of terrorist events per source country, which only has non-negative integer values, while many countries are the source of no attacks at all. Hence, the attacks supply curve cannot be analyzed by standard least squares estimation and we present only the results of the negative binomial specification.

⁷Using the definition of the Freedom House indexes on political rights and civil liberties.

One of our key predictions is that the amounts of foreign aid and educational capital affect negatively the number of attacks originating from the recipient countries. However, the aid may be allocated with a view to control the terrorist attacks originating from the recipient country by defraying the recipient government costs of such an effort, or to entice the latter to fight terrorism within its sphere of influence by some in-kind contributions reducing the cost of some other public investments. Therefore, we only present the results controlling for endogeneity, as the theoretical model predicts that the number of attacks per source country, the amount of aid received, and the level of the foreign military intervention are simultaneously determined. To account for this, we use a version of the Hausman test (Wooldridge 1997). This procedure has two stages: first, a reduced-form equation is estimated for each endogenous variable using exogenous regressors. Then, the resulting residuals are computed and included in the initial model. If the residuals are jointly significant according to a Wald test, the endogeneity assumption is not rejected. The additional benefit of this approach is that it removes the endogeneity bias that would otherwise affect the estimates.

We also test the ambiguous impact of a military solution to deter terrorist attacks. The war on terror may only be one of a number of competing foreign policy goals, and in this analysis we bring out the role of oil as an alternative goal, as explained in the introduction.

4. Empirical Results

From our theoretical model, we expect negative and significant impacts of the amount of aid received and the level of education on the number of terrorist attacks per source country. We also expect that a military intervention in a country with low geo-strategic value may be effective to deter terrorism, with the opposite prediction for a country where the intervention is more driven by geo-strategic interests than by the war on terror. First, we present the reduced-form equations of the endogenous variables and then the structural model

corrected for the endogeneity bias.

Reduced-Form Equations

For each endogenous variable we use all the exogenous variables of the structural model and various instruments as regressors. Table 1 shows that all our reduced-form equations are significant and provide an acceptable starting point for the subsequent analysis.

Some economic variables such as per capita GDP and population size explain to some extent the need for aid. As instrument for the educational capital we use the under-5 mortality rate⁸. This is a slow-moving variable which may be regarded as pre-determined, and is clearly related to past investments in favor of human capital, especially for women. For capturing geo-strategic considerations, we use the shortest distance to an oil-exporting country. We only consider countries where oil exports amount on average to more than 30% of merchandise export (source WDI online) during the period 1990-2004. Then, for each country we computed the distance between its capital-city and the capital-city of the nearest oil-producing country. The latter countries have thus a distance to oil wells equal to zero.

In our sample, 24 countries are aid donors and only developing countries receive aid. Hence, these variables are truncated at zero and lead us to use the standard Tobit regression. In Table 1, equation [1] is the reduced-form equation for per capita ODA with only exogenous explanatory variables. The resulting model is globally significant. Beside the variables listed above, we include a series of dummy variables to control for other country characteristics like civilization (e.g., Sub-Saharan African countries). We also tried to add dummy variables capturing the colonial past of each country but most of the time they turned out to be insignificant.

⁸ Source of Data: WDI online.

Table 1: Reduced-Form Equations

Variables	ODA per capita [1]	Secondary School [2]	Number of US troops (log) [3]
Intercept	415.8640*** (44.9824)	90.8945*** (20.7915)	-0.5440 (3.4163)
GDP p.c.	-0.0046*** (0.0011)	0.0002 (0.0003)	0.0000 (0.0001)
Population (log)	-21.2183*** (2.3828)	-0.8158 (1.0455)	0.3690** (0.1854)
Under 5 Mortality Rate (per 1000)	0.0272 (0.0521)	-0.2530*** (0.0473)	-0.0091** (0.0041)
Distance to Oil Wells	0.0017 (0.0022)	0.0005 (0.0012)	-0.0001* (0.0001)
ASEAN	3.5632 (8.7300)	-7.6589 (5.7200)	0.5939 (0.9444)
“Camp David”	137.7570** (65.6344)	11.8916* (6.0904)	1.5399 (1.0725)
China and India	36.6723*** (12.7517)	-7.0305 (6.2090)	-1.0818 (1.0605)
Latin America	-0.5364 (12.9289)	-3.7451 (5.0844)	-0.0709 (0.6603)
OECD	-45.0048** (19.2546)	22.3952*** (6.0958)	1.8437 (1.1592)
USSR	-23.1255*** (8.5321)	15.3398*** (3.7784)	-1.9472*** (0.5193)
Sub-Saharan	-12.9368* (7.4574)	-11.6100 (7.5759)	-0.8193 (0.7447)
Ethnic Tension	7.0829 (4.4003)	0.5277 (1.3857)	-0.0635 (0.1736)
Law and Order	2.5345 (4.1492)	1.7205* (0.9578)	-0.4273 (0.2591)
Observations	132	132	132
LR statistic	150.00***	53.07***	12.87***
Pseudo- or Adjusted R ²	0.679	0.786	0.367

Note: Equation [1] is a Tobit regression while [2] and [3] are least squares regressions estimated by maximum likelihood. Robust standard errors are in parentheses.

* significant at 10 %, ** significant at 5 %, *** significant at 1 %.

The Structural Attacks-Supply Equation

Table 2 presents the results using the ARQADE dataset with ODA per capita. In each equation, we add the corresponding residuals from the reduced-form equations presented above and the relevant F-test for their joint significance, for the sake of controlling for endogeneity. In all these equations, the amount of ODA per capita and the level of secondary education have the expected significant negative impact on the number of terrorist events originating from each country. Equation [4] does not take into account the military intervention, and its results can be directly compared with those obtained in Azam and Thelen (2008). Taking into account more control variables like the level of ethnic tension and law and order do not significantly change their conclusions. The level of foreign aid and the level of secondary education have a significant and negative impact, while the significant residuals vindicate the endogeneity assumption.

Regarding the impact of military intervention, the results are somehow ambiguous and depend on whether we take into account the geo-strategic interest captured by the distance to oil wells or not. In equation [5], the number of US troops deployed in the country affects positively the number of terrorist events by country of origin of the perpetrators. This provides some support for the Pape (2006) hypothesis described above. However, this does not take into account the heterogeneity regarding the motivations for intervention introduced in our theoretical framework. In order to capture such an effect, we add in equations [6] and [7] an interaction term between the number of US troops and the distance to oil wells described above. This excludes the oil-exporting countries from the interaction term, and gives more weight to countries, the further away they are from oil-producing regions. The results support the hypothesis that a military intervention motivated by the war on terror and not by geo-strategic interests is effective, as the interaction term has a significant negative sign. A deployment of US troops reduces the number of terrorist attacks coming from the host

country, if the latter is located far from oil wells, in our sample. Moreover, equation [6] shows that the positive term loses its statistical significance, suggesting that oil-exporting countries are influential outliers in our sample. On average in our sample, oil-exporting countries, which account for about 20 % of the sample, host 20 % more US soldiers than the others and produce more than twice as many terrorist attacks. Hence, removing this variable, and leaving only the interaction term yields an acceptable equation allowing us to conclude that military interventions are effective against terrorism except when they take place in an oil-producing country. In the latter case, they might be counter-productive as far as the war on terror is concerned, but this impact is not estimated with any precision.

Taken individually, the residuals of the ODA per capita and secondary school enrollment reduced-form equations are always significant, while those for military intervention are not always significant. This result strengthens the hypothesis that a military deployment of troops may not always be motivated by the threat of terrorism in the country, but by some other interest instead. However, they are significant in equation [7] where military interventions in oil-exporting countries are *de facto* excluded. Moreover, we find that the more relevant joint test for endogeneity in each equation confirms the presence of some potential bias, as predicted by our theoretical framework.

Regarding the other control variables, per capita GDP is never significant, as in Krueger and Maleckova (2003). Nevertheless, it is useful to disentangle the effect of foreign aid from that of under-development. Three of the geographical dummy variables are significant most of the time. "Camp David", indicating Egypt and Israel, and the dummy for OECD member countries have a positive and significant impact on the number of terrorist events per source country. In our sample, six OECD countries have produced at least six terrorist attacks (Spain (31), Turkey (28), Greece (11), France (7), Ireland (6) and Italy (6)). Finally, the dummy for Sub Saharan countries has a negative and significant coefficient. The

“ethnic tension” and “law and order” variables are significant with a positive and negative impacts, respectively, vindicating Basuchoudhary and Shughart (2007) and Roberts (2003).

Table 2: Number of Terrorist Events Originating from Each Country

Variables	[4]	[5]	[6]	[7]
Intercept	9.0961*** (3.2702)	8.8848*** (3.2235)	3.2002 (3.8384)	3.1459 (3.8025)
GDP p.c.	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)
Population (log)	0.1063 (0.1383)	0.0971 (0.1482)	0.3670** (0.1807)	0.3764** (0.1640)
ODA p.c.	-0.0406*** (0.0101)	-0.0395*** (0.0101)	-0.0249** (0.0115)	-0.0250** (0.0116)
Secondary Enrollment (% gross)	-0.0564*** (0.0130)	-0.0575*** (0.0143)	-0.0462*** (0.0148)	-0.0457*** (0.0136)
OECD	1.6794** (0.6626)	1.6239** (0.7468)	1.7342** (0.7200)	1.7720*** (0.6423)
“Camp David”	7.1912*** (1.2955)	6.8896*** (1.2970)	4.9892*** (1.4523)	5.0388*** (1.4041)
Sub-Saharan	-3.6157*** (0.6680)	-3.5009*** (0.6927)	-3.0009*** (0.7191)	-3.0263*** (0.7003)
Ethnic Tension	0.5773*** (0.1277)	0.5824*** (0.1294)	0.4388*** (0.1448)	0.4351*** (0.1384)
Law and Order	-0.4624*** (0.1790)	-0.4375** (0.2060)	-0.5539*** (0.2116)	-0.5703*** (0.1778)
Number of US Troops in the Country (log)	-	0.0906** (0.0451)	0.0268 (0.2453)	-
Interaction Nb. US troops x dist. to oil	-	-	-0.0001** (0.0000)	-0.0001** (0.0000)
Endog. Bias ODA p.c.	0.0528*** (0.0122)	0.0515*** (0.0114)	0.0355*** (0.0121)	0.0356*** (0.0122)
Endog. Bias Secondary	0.0685*** (0.0170)	0.0695*** (0.0182)	0.0590*** (0.0185)	0.0584*** (0.0174)
Endog. Bias Military Variable	-	-0.0150 (0.2442)	0.1178 (0.2524)	0.1449** (0.0635)
Observations	132	132	132	132
Log pseudolikelihood	-280.81	-280.09	-277.84	-277.84
Wald statistic	154.789***	203.586***	374.592***	356.266***
Endogeneity Joint Test	26.58***	28.04***	16.09***	20.63***

Note: These equations are negative binomial regressions estimated by maximum likelihood.
Robust standard errors in parentheses.

* significant at 10%; ** significant at 5%; *** significant at 1%

Robustness Checks

Finally, following Shughart (2006), we also tested the hypothesis that terrorism may be a response to the artificial states created after the collapse of the Ottoman and Colonial Empires. We tested this prediction by including dummy variables for the former colonies of France, United Kingdom, Spain and Portugal, and one dummy variable for countries created after the Ottoman Empire was dismantled. The latter countries do not produce more or less transnational terrorist attacks than the others. Probably, a more suitable study for testing this hypothesis might be one of intra-national terrorist attacks perpetrated by some citizens of the target country. The dummy variables controlling for former colonies also failed to be significant most of the time. Therefore, all these variables are excluded from the final regressions.

We have also reproduced all the results presented in table 2 using ODA as a ratio to GDP, instead of to population, without changing any conclusions⁹. The results using the ITERATE dataset are also presented in the appendix (table A3), and they yield mainly the same conclusions regarding the impact of aid, education and military intervention, and they confirm the presence of an endogeneity bias. One difference is that the ethnic tension variable is less often significant with the ITERATE dataset than with the ARQADE one. This is probably due to the different conventions used by the two datasets for selecting the nationality of the perpetrators. Moreover, ITERATE uses “Kurdistan” as a potential nationality of terrorists, what probably reduces the estimated impact of ethnic tensions for the countries with a Kurdish minority.

In order to check how robust are our results relative to foreign military intervention, we also tried to capture these military interventions using two different variables for the numbers of US soldiers, depending on whether the host country was oil-exporting or not. The

⁹ The appendix containing the corresponding tables for this exercise is available from the authors upon request.

results are shown in table A4, where the same pattern identified above emerges.

5. Conclusion

The empirical results presented in this paper provide some support to the theoretical framework presented above. The latter models the aid-cum-military intervention of the foreign power as a way of delegating the fight against terrorism to the recipient governments within their sphere of influence. As in Azam and Thelen (2008), we find that foreign aid is effective for reducing terrorism, and is actually used by donors to this end. Similarly, we find that the donor community can usefully earmark some foreign aid for the education sector, despite the much advertized survey results demonstrating that terrorists generally have a relatively wealthy and educated family background. The reason for this seemingly paradoxical result is that what matters for aid policy is not its impact on potential terrorists, but its effects on the recipient governments. Earmarking some aid in favor of the education sector could be an effective way of eliciting stronger counter-terrorist measures from the recipient government.

We have added military intervention to the toolkit available to the foreign power for reducing the number of terrorist attacks that affect it. The difficult point in this respect is to separate different types of military interventions according to their main motivations. It would be unfair to label military interventions as ineffective, or even counter-productive, if their true aim was not to fight terrorism. In the theoretical model, we have introduced a “geo-strategic” value of the intervention, for capturing these other potential motivations, beyond the war on terror. In the empirical approach, the key variable that we found for sorting out the military interventions by their different motivations is the distance of the country where the intervention takes place from the closest oil-exporting country. If we neglect to take this source of heterogeneity across countries into account, then we find that military interventions

have a counter-productive impact, by increasing the number of terrorist attacks originating from the countries where the US military intervention takes place. However, when due account is taken of the distance from oil of the country hosting the US military intervention, we find that the latter are effective against terrorism. Hence, our econometric findings provide some support to the view that US military interventions are effective against terrorism, except when they take place in oil-exporting countries. Moreover, with this caveat, we find that US military interventions are actually motivated by the war on terror in these cases.

Because our theoretical framework is analyzing the policy choices made by the foreign power endogenously, it does not provide a lot of direct policy recommendations. Nevertheless, some lessons might be drawn cautiously from our results, shedding some light on how foreign aid and military interventions might be used to fight terrorism more effectively. Our findings confirm some results found by others before, like the irrelevance of GDP per capita, emphasized by Krueger (2007). Enhancing economic growth should not be a priority insofar as aid policy is targeted at protecting the political and economic interests of donor countries. In a longer run perspective, our results suggest that two very slow-moving variables like ethnic tension and law and order could be seen as potential proximate targets for exerting some influence on the recipient countries' level of militancy. This is more easily said than done, as these variables are nested in the core of the cultural setting of these countries. Nevertheless, these results suggests that foreign powers should avoid by all means to take any action that might pit one ethnic group against another one, as was done sometimes in colonial times, and also in recent times in some cases. Similarly, donors should emphasize law and order in their interventions, while acknowledging that no magic bullet exists in this domain.

Lastly, the choice made by foreign powers between giving aid and intervening militarily is modeled here as endogenous. We have introduced a "geo-strategic" value that could be seen as reflecting some socio-political processes going on in the donor countries.

The basic point in this respect is that oil-exporting countries seem to attract some military interventions that might entail some negative externalities on the donor countries' public, by increasing the risk of terrorist attacks. Although this impact is not statistically significant in our results when due account is taken of the relevant heterogeneity across countries, it is too strong in simpler equations to be neglected altogether. On the other hand, the rich consumers of the donor countries would also feel a negative externality if the oil market was deeply disturbed, and a political choice has to be made between these two evils. Nevertheless, some recent work by Gelpi *et al.* (2009) suggests that the US public opinion is far from being passive regarding military interventions abroad, and is basing its position on a relatively sophisticated cost-benefit analysis. However, what it seems to be lacking is enough independent information on the precise tradeoffs involved, what makes it prey to the potentially biased information campaigns by the government. For example, our results provide no support to the view that the US invasion of Iraq was motivated by the war on terror, nor likely to have any favorable effect on terrorist activity. Hence the main fallout of the type of analysis performed in this paper might be to draw attention on the finding that military interventions motivated by oil exports might increase the risk of a terrorist attack against the West. Taking this effect into account would probably lead the relevant public opinions to nuance the relative valuation that they attach to aid and military interventions.

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Appendix

Table A1: Number of Events per Source Country (1990:01-2004:03)

Country	Number	Country	Number	Country	Number
India	227	Ethiopia	7	Latvia	2
Colombia	97	France	7	Liberia	2
Israel	58	Venezuela	7	Malaysia	2
Iraq	49	Ireland	6	Netherland	2
Yemen	49	Italy	6	Panama	2
Algeria	47	Jordan	6	Switzerland	2
Pakistan	45	Bangladesh	5	Armenia	1
Angola	41	Ecuador	5	Croatia	1
Russian F.	33	Iran	5	Czech Rep.	1
Spain	31	Japan	5	Emirates	1
Turkey	28	Lebanon	4	Guinea	1
Nigeria	26	Sudan	4	Honduras	1
Sri Lanka	25	U.S.	4	Libya	1
Peru	22	Austria	3	Morocco	1
Sierra Leone	21	Argentina	2	Nicaragua	1
Egypt	19	Azerbaijan	2	Norway	1
Philippines	19	Bolivia	2	Poland	1
Greece	11	Chile	2	Senegal	1
Indonesia	11	China	2	Sweden	1
Uganda	10	El Salvador	2	Tanzania	1
Saudi Arabia	9	Germany	2	Thailand	1
U.K.	9	Kenya	2	Tunisia	1
South Africa	8	Kuwait	2	Zambia	1
Bahrain	7				

Source: ICT (<http://www.ict.org.il>). The complete data set is available in Azam and Thelen (2008).

Tableau A2: Summary Statistics

	Obs.	Mean	Median	Std. Dev.	Min.	Max.
Number of events (ICT)	132	7.75	1	23.76	0	227
Number of events (ITERATE)	132	16.55	3	37.00	0	253
Logarithm of population	132	16.18	16.14	1.56	12.51	20.92
GDP per capita	132	6476.57	1930.97	9134.75	96.86	38952.22
ODA per capita	132	35.78	21.70	43.05	0	239.21
ODA (% of GDP)	132	5.91	1.21	10.17	0	63.99
Secondary school enrol. (% gross)	132	69.88	75.89	32.88	5.5	151.33
Ethnic Tension	132	-4.06	-4.26	1.24	-0.31	-6
Law and Order	132	3.83	3.87	1.28	0.98	6
Number of US troops in the	132	3.54	2.92	2.53	0	11.47
Distance to Oil reserve	132	1353.17	1084.5	1326.18	0	7725
Under-5 Infant Mortality Rate (per	132	63.42	33.38	69.37	4.52	290.95

Source: Computed from Table A1, ITERATE, World Development Indicators and PRS group.

Table A3: Number of Terrorist Events Originating from Each Country
(Controlling for Endogeneity with ITERATE Data and ODA per Capita)

Variables	(1)	(2)	(3)	(4)
Intercept	9.9231** (4.5952)	10.5551*** (4.0920)	8.5499* (4.6176)	7.3464 (5.0565)
GDP p.c.	-0.0000 (0.0000)	-0.0001 (0.0000)	-0.0001 (0.0000)	-0.0000 (0.0000)
Population (log)	-0.0230 (0.2088)	-0.2157 (0.1782)	-0.1248 (0.2078)	0.0872 (0.2315)
ODA p.c.	-0.0340*** (0.0126)	-0.0317*** (0.0116)	-0.0273** (0.0125)	-0.0285** (0.0130)
Secondary Enrollment (% gross)	-0.0453*** (0.0122)	-0.0558*** (0.0115)	-0.0522*** (0.0116)	-0.0401*** (0.0126)
OECD	2.8911*** (0.8317)	2.1986** (0.8820)	2.1539** (0.8635)	2.8258*** (0.7878)
“Camp David”	5.4773*** (1.7845)	4.1175** (1.6697)	3.4099** (1.7361)	4.4962** (1.7981)
Sub-Saharan	-3.0711*** (0.6073)	-2.4398*** (0.6217)	-2.2826*** (0.6288)	-2.8245*** (0.6254)
Ethnic Tension	0.1562 (0.1345)	0.2212* (0.1245)	0.1489 (0.1351)	0.0708 (0.1445)
Law and Order	-0.5169*** (0.1561)	-0.1458 (0.1915)	-0.1730 (0.1990)	-0.5375*** (0.1608)
Number of US Troops in the Country (log)	-	0.6233*** (0.1821)	0.6063*** (0.1773)	-
Interaction Nb. US troops x dist. to oil	-	-	-0.0000 (0.0000)	-0.0001** (0.0000)
Endog. Bias ODA p.c.	0.0399*** (0.0138)	0.0364*** (0.0128)	0.0312** (0.0133)	0.0333** (0.0138)
Endog. Bias Secondary	0.0501*** (0.0151)	0.0651*** (0.0151)	0.0635*** (0.0149)	0.0482*** (0.0150)
Endog. Bias Military Variable	-	-0.6099*** (0.1859)	-0.5699*** (0.1855)	0.0344 (0.0605)
Observations	132	132	132	132
Log pseudolikelihood	-414.20	-411.33	-410.89	-413.50
Wald statistic	98.303***	115.957***	127.007***	108.738***
Endogeneity Joint Test	15.9***	30.38***	26.47***	17.28***

Note: These equations are negative binomial regressions estimated by maximum likelihood.
Robust standard errors in parentheses.

* significant at 10%; ** significant at 5%; *** significant at 1%

**Table A4: Number of Terrorist Events Originating from Each Country
(Controlling for Endogeneity with ARQADE Data and ODA per capita)**

Variables	(1)	(2)	(3)
Intercept	3.7663 (3.2633)	3.7683 (3.2618)	3.8970 (3.1614)
GDP p.c.	-0.0000 (0.0000)	-0.0000 (0.0000)	-0.0000 (0.0000)
Population (log)	0.3014** (0.1348)	0.3010** (0.1456)	0.3585*** (0.1352)
ODA p.c.	-0.0240** (0.0105)	-0.0240** (0.0105)	-0.0265*** (0.0101)
Secondary Enrollment (% gross)	-0.0494*** (0.0131)	-0.0494*** (0.0143)	-0.0453*** (0.0129)
OECD	2.6766*** (0.6774)	2.6749*** (0.7390)	2.9441*** (0.6962)
“Camp David”	5.1638*** (1.2989)	5.1617*** (1.3988)	5.7945*** (1.2418)
Sub-Saharan	-2.9200*** (0.6642)	-2.9190*** (0.6965)	-3.2027*** (0.6515)
Ethnic Tension	0.4940*** (0.1379)	0.4941*** (0.1405)	0.4741*** (0.1355)
Law and Order	-0.3873** (0.1704)	-0.3867** (0.1910)	-0.5309*** (0.1662)
Nb. of US troops in oil- exporting country (log)	0.2496*** (0.0725)	0.2506 (0.2585)	-
Nb. of US troops in non-oil- exporting country (log)	-	0.0011 (0.2471)	-0.2320*** (0.0687)
Endog. Bias ODA p.c.	0.0371*** (0.0118)	0.0371*** (0.0117)	0.0400*** (0.0113)
Endog. Bias Secondary	0.0643*** (0.0171)	0.0643*** (0.0180)	0.0600*** (0.0164)
Endog. Bias Military Variable	-0.0289 (0.0609)	-0.0300 (0.2527)	0.2100*** (0.0664)
Observations	132	132	132
Log pseudolikelihood	-276.32	-276.32	-276.72
Wald statistic	159.510***	170.984***	175.494***
Endogeneity Joint Test	18.90***	18.68***	31.40***

Note: These equations are negative binomial regressions estimated by maximum likelihood. Robust standard errors in parentheses.

* significant at 10%; ** significant at 5%; *** significant at 1%