Article

Foreign Aid as a Counterterrorism Tool: More Liberty, Less Terror?

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Abstract
Is foreign aid effective in reducing terrorism? The existing evidence is mostly negative. We argue that this pessimistic outlook on the efficacy of aid as a counterterrorism tool is partly a function of focusing on only one type of aid: economic aid. Governance and civil society aid can dampen the participation in and support for terrorism by altering the political conditions of a country. We expect countries that receive high levels of governance and civil society aid to experience fewer domestic terrorist incidents than countries that receive little or none. Using a sample of aid eligible countries for the period from 1997 to 2010, we find that governance and civil society aid is effective in dampening domestic terrorism, but this effect is only present if the recipient country is not experiencing a civil conflict. Our findings provide support for the continued use of democracy aid as a counterterrorism tool.

Preventing terrorist attacks is one of the most significant challenges that nation-states face today. The urgency and importance of this problem creates strong incentives for

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policy makers to design efficient counterterrorism policies. It is against the backdrop of this imminent threat that foreign aid has come to the forefront of the American foreign policy as a potential counterterrorism tool (Windsor 2003). Over the last decade, policy makers of most Western democracies have embraced the idea that in order to eradicate terrorism, one must first fight poverty. Although fighting terrorism by foreign aid continues to find resonance in the policy circles, the scholarly community is more skeptical of this policy, given the scant empirical evidence linking poverty to terrorism or other types of militancy (e.g., Krueger and Maleckova 2003; Krueger 2007; Blair et al. 2013).

We contend that foreign aid can work through channels other than improving economic growth to fight terrorism. Building upon the insights from the recent foreign aid and terrorism literatures, we emphasize an alternative causal pathway by which foreign aid earmarked for good governance and civil society aid can reduce terrorism by improving the level of civil rights and liberties in a country, which affect both the participation in and support for terrorism.

Our argument rests on two empirical observations. First, recent scholarship has accumulated substantial evidence linking the political conditions of a country, in particular the level of civil liberties and the strength of the rule of law, to the frequency of terrorist attacks (e.g., Krueger and Laitin 2008; Krueger and Maleckova 2003; Krueger 2007; Abrahms 2007; Choi 2010; Piazza 2011, 2017). Political repression and weak rule of law reduce state legitimacy, radicalize political moderates, and push the aggrieved individuals toward terrorism by not providing peaceful channels to express discontent (Krueger 2007; Choi 2010; Piazza 2017).

The second empirical observation that motivates our research is the recognition that not all types of foreign aid are aimed at improving economic conditions of a recipient country (Finkel, Pérez-Liñán, and Seligson 2007; Dietrich 2011; Winters and Wright 2010; Young and Findley 2011). Some aid programs address issues such as poverty, health, and education, while others are extended to promote good governance and civil society. It is this latter category of aid programs that, we believe, has a unique capacity to effectively address one of the root causes of terrorism: low levels of civil rights and liberties.

Bringing these two separate empirical findings together, we deduce that the number of domestic terrorist attacks in a country that receives high levels of good governance and civil society aid is likely to be lower than that of countries that receive little or no aid. Our grievance-based argument suggests that governance and civil society aid dampens terrorism by promoting civil liberties and creating alternative venues for people to express their discontent with the regime and hence reducing the willingness of individuals to join and support terrorist organizations.

Our article makes several important contributions to the foreign aid and counterterrorism literatures. First, it shows that foreign aid can be used to accomplish foreign policy goals beside economic growth: it can be an effective counterterrorism tool. This is in line with some of the formal work on the aid-terrorism nexus (Azam and Thelen 2006, 2008; Bandyopadhyay, Sandler, and Younas 2011, 2014). Second,

it identifies an overlooked channel through which foreign aid can dampen the frequency of terrorist incidents in aid-receiving countries. In particular, it shows that good governance and civil society aid may be an effective tool to dampen an individual's willingness to turn to extremism.

The article proceeds as follows. In the next section, we review the literature on the causes of terrorism. In the third section, we explain how foreign aid can dampen terrorism by improving good governance and civil liberties. Then, we outline our research design and test our hypothesis using a sample of aid eligible countries between 1997 and 2010. We find that good governance and civil society aid is associated with lower rates of terrorist attacks, particularly in countries where terrorism is not a part of a broader civil war. We conclude with a brief review of our argument and discuss the potential policy implications of our findings and avenues for future research.

Causes of Terrorism: Economic versus Political Conditions

The September 11, 2001 attacks sparked a critical policy debate on the use of foreign aid as a counterterrorism tool. If poverty breeds terrorism and aid reduces poverty by promoting socioeconomic development, it has been argued foreign aid can be an effective counterterrorism tool. While the idea that poverty causes terrorism seems intuitively plausible, it has failed to receive consistent empirical support both at the country- and individual-level analyses (e.g., Abadie 2006; Krueger and Maleckova 2003; Krueger and Laitin 2008; Piazza 2006; Shapiro and Fair 2010; Blair et al. 2013).[1] There is also evidence that rather than coming from the poorer segments, terrorist operatives are more likely to come from the midincome and highly educated strata of society (Krueger and Maleckova 2003; Berrebi 2007; Krueger 2007). These findings suggest that improving a country's economic conditions does not necessarily translate into a reduction in terrorist incidents.[2]

The mixed results for economic deprivation open the question of what else might lead individuals to turn to terrorism. While there are many reasons why people may adopt extremist ideology and it is, therefore, not possible to have a "standard" profile of a terrorist, recent discussions in policy circles suggest that poor political conditions provide a breeding ground for extremists. For example, at the 2015 Summit on Countering Violent Extremism, President Barack Obama stated: "We have to address the political grievances that terrorists exploit . . . When people are oppressed, and human rights are denied . . . when dissent is silenced, it feeds violent extremism. It creates an environment that is ripe for terrorists to exploit".[3] Recent scholarship provides strong macrolevel empirical evidence backing this contention. Low levels of civil liberties and political participation, state repression, abuse of physical integrity rights, and weak rule of law are shown to be associated with greater participation in terrorism (e.g., Krueger and Laitin 2008; Li 2005; Piazza 2006, 2011, 2017; Walsh and Piazza 2010; Choi 2010). Microlevel evidence is similarly supportive. In their analysis of terrorist activities in the West

Bank and Gaza, Krueger and Maleckova (2003) and Krueger (2007) show that low levels of political and civil rights are the strongest predictor of participation in, and support for, terrorism.

In this article, we focus on one particular aspect of democracy—civil rights and liberties, such as freedom of expression, associational rights, and personal autonomy—and how low levels or absence of these rights create grievances among citizens and reduce the legitimacy of the state. Our grievance-based argument allows us to highlight the relevant aspects of democracy and test the plausibility of the causal mechanism more clearly.

While there is no scholarly disagreement over the effect of civil rights and liberties on terrorism, several empirical studies have shown that other dimensions of democracy, such as executive constraints and transparency, increase the rate of terrorist incidents (Li 2005; Bell et al. 2014). It is important to emphasize that our study is not about the overall effects of democracy on terrorism. Democracy is a multifaceted concept and depending on the model of democracy one has in mind, some aspects are emphasized over others (e.g., Dahl 1956; Held 1996; Coppedge et al. 2011). The literature on democracy–terrorism is vast and has yet to produce a consensus on the nature and strength of relationship between democratic regimes and the frequency of terrorist attacks (e.g., Eyerman 1998; Eubank and Weinberg 2001; Hamilton and Hamilton 1983; Li 2005; Piazza 2008; Bell et al. 2014; Savun and Phillips 2009). As evidenced by the common use of Polity2 score to measure democracy, most existing studies in this area adopt a minimalist definition of democracy, that is, "electoral democracy," with an emphasis on contestation and competition. Our argument, on the other hand, is based on the pluralist understanding of democracy, that is, "liberal democracy," with an emphasis on civil liberty, rule of law, and integrity rights. States that restrict and violate civil rights and liberties of their citizens can be a breeding ground for terrorism for a number of reasons.

First, restricting citizens' ability to exercise their political and civil rights creates grievances among the individuals, reducing their trust in political institutions and loyalty to the state. The social contract that binds citizens and the state is forfeited when the legitimacy of the state is questioned (Rotberg 2002). Reduced state legitimacy increases support and even legitimizes terrorism among the population. Collective grievances against the state, in turn, help terrorist groups overcome collective action problems in mobilization and recruitment (Crenshaw 1981; Ross 1993; Piazza 2011, 2017).

Second, restrictions on civil liberties in a society imply that the rule of law is too weak to curtail the exercise of state power and suggests a limited presence of legal avenues for political dissent. When citizens cannot address their grievances through legal channels, publicly express their political views, and hold their government responsible for incompetence, the higher the likelihood that dissenting citizens will resort to extralegal measures such as terrorist attacks (Aksoy, Carter, and Wright 2012; Bravo and Dias 2006; Crenshaw 1981; Piazza 2017; Wilson and Piazza 2013).[4]

We argue that one way the international community can help terrorism-stricken countries reduce terrorist incidents is to encourage and enable them to respect the civil rights and liberties of their citizens by providing assistance promoting good governance and civil society.

Aid to the Rescue: Using Aid to Fight Terrorism

Donors give foreign aid for a variety of reasons (Alesina and Dollar 2000). Therefore, as Young and Findley (2011) suggest, an appropriate evaluation of the effectiveness of foreign aid as counterterrorism tool necessitates the disaggregation of different types of aid. Young and Findley (2011) show that aid targeted to promote education, health, and civil society is particularly effective in dampening terrorism. While our study builds on Young and Findley (2011), it differs from their study in a number of important respects. First, we extend their focus on transnational terrorism to domestic terrorism, which is the more common and costly form of terrorism. We also believe that the improvements in political conditions through aid should be more germane to domestic terrorism than transnational terrorism. Second, we focus on governance and civil society aid and further theorize how improvements in political conditions of a country accounted by foreign aid can reduce the frequency of domestic terrorist attacks. Young and Findley (2011) show that while civil society aid is usually associated with a reduction in transnational terrorism, the relationship between governance aid and transnational terrorism is less determinate. Third, we provide a mediation analysis to test the causal mechanism linking civil society and governance aid to domestic terrorism. Finally, we focus on a period in which democracy aid became increasingly prominent as a policy tool and should have also experienced greater efficacy.

While the use of economic assistance was the modus operandi of the foreign aid programs of most Western countries during the Cold War, democracy promotion programs, especially by the United States, have seen a dramatic increase since 1990s (Carothers 1999; Diamond 1995). According to Carothers (1999), democracy promotion programs consist of "aid that is specifically designed to foster a democratic opening in a non-democratic country or to further a democratic transition in a country that has experienced a democratic opening" (6). Following the increase in democracy assistance programs around the world, the effectiveness of such programs has been a target of scholarly investigation. While the earlier studies on democracy aid were not uniformly sanguine about its effectiveness, they suffer from important limitations, such as relying on the case studies of a particular country or region and/or using aggregate measures of foreign aid rather than aid earmarked for democracy promotion.[5] Finkel, Pérez-Liñán, and Seligson (2007) provide the first comprehensive examination of democracy assistance programs extended by the US Agency for International Development (USAID) and show that democracy aid is a significant predictor of democratization in recipient countries.[6] Recent empirical studies give additional credence to Finkel, Pérez-Liñán, and Seligson's (2007)

finding: democratic aid flows are positively associated with a move toward democracy in recipient countries (e.g., Kalyvitis and Vlachaki 2010; Scott and Steele 2011; Wright 2009).

External democracy assistance can promote democracy and reduce the appeal of terrorism in aid recipient countries in multiple ways. Providing support to proreform civil society organizations is one of the central components of democracy promotion programs. A strong civil society presence reduces the state's ability to repress and curtail the civil liberties of its citizens, which are shown to affect an individual's willingness to support terrorism (Piazza 2006, 2011; Walsh and Piazza 2010; Wilkinson 2011; Young and Findley 2011). Relatedly, democracy assistance can dampen citizens' participation in terrorism by supporting community participation programs which are designed to bring citizen groups and local leaders together to address local grievances and problems. The ability to participate in local governance through local councils and town hall meetings empowers individuals and enhances the communication between the citizens and the government. Community participation programs also increase the trust in state institutions, making citizens stakeholders in the regime and thereby reducing the appeal of terrorism as a strategy to express grievances. For example, in early 2000s, the USAID was heavily involved in conflict mitigation and community stabilization programs in Chad's remote north and helped the Association of Nomads and Herders to create a youth branch of its organization. As the USAID Senior Deputy Assistant Administrator for Africa stated in his 2009 testimony to the Senate Subcommittee on African Relations: "The promotion of youth participation in organizations such as this one helps to build stronger ties between youth and their communities, and provides them with a voice in society. Empowering youth in this way can greatly reduce the feeling of marginalization that feeds recruitment into extremist groups."[7]

Democracy assistance programs also contribute to good governance by strengthening a country's judicial institutions and the rule of law. Aid funds can contribute to a state's legal infrastructure since they "can be used for legal reforms, administration of justice, training judges, helping write detailed constitutions, and providing resources to improve citizens' access to justice" (Savun and Tirone 2011, 236; Wright, Dietrich, and Ariotti 2015). Only when citizens have confidence in legal procedures and courts are they more likely to subscribe to established laws as a means of dispute resolution rather than turning to physical violence (Choi 2010, 944). Therefore, a strong rule of law is associated with a reduction in participation in and support for terrorism (Choi 2010).

One potential factor which may impact the relationship between civil liberties and terrorism is the presence of other types of political violence. Our argument assumes that terrorist attacks are undertaken in part as a response to the lack of civil liberties. However, terrorism may also be utilized as a tactic in the execution of a civil war. The strategic decision to utilize terrorism may be made to satisfy any number of different goals. For example, Stanton (2013) finds that rebel groups are more likely to use terrorism against democratic governments than authoritarians due

to the former group's heightened sensitivity to civilian losses. Groups may also adopt terrorism to extend conflict duration, even when such tactics may reduce the likelihood of receiving concessions in a negotiated settlement (Fortna 2015). Whatever the motivation, it is clear that political violence is positively associated with terrorism (Gassebner and Luechinger 2011). However, when these attacks are part of a larger conflict, the difference between terrorism and other types of civil violence diminishes. Sambanis (2012) argues that when states are "in the midst of a civil war, violence is used regularly and in such situations, we cannot easily distinguish terrorism from routine political violence" (6).

The causes of terrorism that takes place during a civil war are, therefore, likely to be distinct from those that occur outside a civil war, particularly when it comes to the role of foreign aid. It is unlikely that improved levels of civil rights and liberties will be effective in decreasing terrorism when the attacks are undertaken to serve a broader strategic goal in an armed conflict between governments and domestic rebel groups. Therefore, we anticipate that foreign aid will be more likely to be effective in decreasing the frequency of terrorist attacks when the recipient country is not experiencing other types of domestic political violence. Correspondingly, we offer the following hypothesis:

> **Hypothesis:** Among countries that are not experiencing a civil conflict, high levels of governance and civil society aid is associated with lower rates of domestic terrorist incidents.

Research Design, Empirical Models, and Findings

Data and Methods

Following Enders and Sandler (2006), we define terrorism as "the premeditated use or threat to use violence by individuals or subnational groups in order to obtain a political or social objective through the intimidation of a large audience beyond that of their immediate victims" (3). Terrorism is considered domestic "when an incident involves perpetrators, victims, and an audience of the country in which the incident occurs" (Enders and Sandler 2006, 6). Our focus is on domestic terrorism, which is far more common and costlier than transnational terrorism (Abadie 2006; Sánchez-Cuenca and de la Calle 2009).[8] We also expect that by making domestic politics more inclusive and reducing the incentives for engaging in terrorism, aid would have greater impact on domestic rather than foreign policy of an aid receiving country. In other words, higher levels of civil rights and liberties are less likely to affect terrorism from abroad than home-grown terrorism.[9]

We test our hypothesis on a sample of democracy aid eligible countries for the 14-year period from 1997 to 2010.[10] We focus on this period for a number of reasons. First, aid for governance and civil society promotion increased substantially in the post–Cold War period (Savun and Tirone 2011), and this increase accelerated

in the early 2000s.[11] In our data, the median government and civil society aid allocation was approximately US$10 million in 2000, while the corresponding figure was US$46 million in 2010, with an increase in the respective averages of over 200 percent during the same period.[12] This increase was precipitated in part by an increased focus by governments on using foreign aid as a policy tool to combat terrorism in the post-9/11 environment (Young and Findley 2011), making it a particularly salient period for assessing the ability of this type of aid to reduce terrorism. Finally, research has shown that aid efficacy increased in the Cold War period, including aid given for economic development and democratic promotion (e.g., Dunning 2004; Bearce and Tirone 2010), so if aid is to have an effect, it would be most likely to do so in this time frame.

Our dependent variable, *total attacks*, is a count of the number of domestic terrorist attacks occurring in a country year. The original source for data on terrorist attacks is the National Consortium for the Study of Terrorism and Responses to Terrorism's Global Terrorism Database (GTD) (2012). However, the GTD does not distinguish between domestic and transnational attacks, so to make this distinction we utilize the data from Enders, Sandler, and Gaibulloev (2011), who separate the GTD data into the two types.[13] We sum the number of incidents by country year to convert the data from the incident to the country-year format.[14]

The primary explanatory variable is *government and civil society aid*, the amount of aid earmarked for good governance and civil society. In our primary models, we use the data from AidData.org, which reports figures in tens of millions of constant 2009 US dollars (Tierney et al. 2011).[15] AidData principally draws on the data from the Organisation for Economic Co-operation and Development's (OECD) Creditor Reporting System Database. The OECD defines aid aimed at good governance as aid intended to enhance "the accountability, efficiency, and effectiveness of the official sector," while aid for civil society is intended to "integrates participation and pluralism, including the right of opposition, into the political life of the country and provide a basis for legitimacy of the government" (OECD 2010, 4).[16]

The OECD also codes aid given for conflict prevention, peace, and security under the broader umbrella of government and civil society aid. These programs include assistance for participation in civilian peace building, participation in international peacekeeping operations, land mine removal, and the demobilization of child soldiers, among others. We separate this aid from the government and civil society aid measure and include it as an additional regressor, *conflict aid*.[17]

While the poverty-terrorism linkage has been questioned in the scholarly community, it is possible that economic assistance programs can affect the rate of terrorist incidents in a country either directly by reducing poverty or indirectly by changing the structural conditions that influence terrorism. *Official development assistance* measures the total aid received by a country minus the corresponding amount of government and civil society aid.

Another form of foreign assistance consists of aid given by the United States for the purpose of military development in recipient states.[18] *US military aid* is a record

of US military assistance to the recipient country in tens of millions of constant 2011 US dollars. The data for this measure come from the USAID (http://gbk.eads.usai dallnet.gov/data/detailed.html. Accessed August 5, 2013).

Political engagement and civil liberties are a critical component of our argument. We use the *empowerment rights index*, a measure covering factors such as ease of movement, freedom of speech and religion, and electoral self-determination, as a measure of a country's political conditions. The data for this measure come from the Cingranelli–Richards (CIRI) Human Rights Data Set (Cingranelli, Richards, and Clay 2014). The scale runs from 0 to 14, with higher values representing increases in empowerment rights. Our expectation is that higher values of the empowerment rights index should be associated with a lower frequency of terrorist attacks. Although we believe this measure best represents our conception of liberal democracy, we also use the Freedom House *civil liberties* measure (which we rescale so the highest value of 7 is the highest level of civil liberties and 1 the minimum) and the CIRI *physical integrity rights index* as two alternative indicators to assess the robustness of our results.[19]

As we believe that aid should be successful in reducing terrorism in particular in the absence of other types of civil violence, we construct a *civil conflict* measure data from the Peace Research Institute of Oslo's and Uppsala Conflict Data Program Armed Conflict Data Set v.4-2012 (Gleditsch et al. 2002; Themnér and Wallensteen 2012). We code a country as being involved in a civil conflict if there are twenty-five or more battle deaths in a given year.

In addition to the aid, civil liberty, and conflict measures, our models include four common country-level variables that measure a state's vulnerability to terrorist incidents. It is likely that the number of terrorist incidents in the immediate past affects the number of present incidents (Li and Schaub 2004; Li 2005). To ascertain the underlying propensity of a particular country to experience a terrorist attack, we generate *average prior attacks*, which is the average number of terrorist incidents in a particular country over the preceding three years. The results are robust to various measures of average prior attacks over the preceding years, including two-, four-, and five-year periods.[20]

GDP is the gross domestic product of a country, measured as the logged value of millions of constant 2005 US dollars, while *population* is the country's population measured in logged millions of individuals. Data for each of these two measures come from the World Bank's World Development Indicators. *Democracy* captures the institutional aspects of democracy, with emphasis on contestation and competition, and is based on the Polity IV project's twenty-one-point measure of autocracy and democracy, where -10 is a consolidated autocracy and $+10$ is a consolidated democracy (Marshall, Jaggers, and Gurr 2011).[21]

We estimate our models using zero-inflated negative binomial regression.[22] The dependent variable, total attacks, is a count variable with a variance exceeding the mean, indicating overdispersion which is best handled using a negative binomial model. The second consideration is whether all countries are at risk of observing an

event, or if there are possibly two different data generating processes present. In other words, are all countries generally at risk or is the likelihood of terrorism in some countries so low that we may differentiate between the absence of an attack in those countries from those at greater risk but without an event in a given year? Given the general rarity of terrorist attacks, we believe the former case is more likely and, therefore, use the zero-inflated model to differentiate "meaningful" zeroes from others, which we interpret as the difference between countries at risk of an attack and those with negligible risk. All the right-hand side variables are lagged two periods prior to our observation of total attacks to reduce the likelihood of simultaneity between aid and terrorist attacks and to also account for the fact that aid programs generally take some time to produce desired outcomes (Clemens et al. 2012).

Results

The first point of examination relates to our differentiation between terrorism occurring during a civil conflict versus terrorist incidents that take place in peacetime. Our argument, based on other existing literature, is that these are substantively different phenomena. Splitting the sample with respect to civil conflict supports that these are two fundamentally different populations.[23] The average number of terrorist attacks in countries with an active civil conflict is 32, while for those without the number drops to almost 1. Furthermore, nearly 80 percent of the nonconflict country years experienced no terrorist attacks, while only 25 percent of active conflict country years recorded no terrorist incidents. This suggests that rather than pooling conflict and nonconflict countries, a better strategy would be to analyze each population separately (Sambanis 2012).[24]

Table 1 presents the results of the zero-inflated negative binomial models. Model 1–1 shows the results of our estimates for the entire pooled sample, while models 1–2 and 1–3 show the results for samples including only countries without civil conflict and with civil conflict, respectively. Each model uses a parsimonious specification including only our aid measures and average prior attacks to make sure that the observed relationship between aid and the dependent variable is not an artifact of model specification.

We account for the risk of terrorism in the zero-inflated negative binomial model by using a lagged value of total attacks in the first-stage inflation equation. The first stage, that is, inflation model, estimates the likelihood that a zero in the second stage is the outcome of a different data generating process than that presumed by the model, or in other words not an outcome generated by the variables included on the right-hand side of the model predicting terrorism. This helps differentiate between countries which are at risk of terrorism but have not experienced an event in that year versus those which have a negligible risk of an event. This distinction also has theoretical importance for the impact of our measure of government and civil society aid. For aid to reduce the likelihood of a terrorist attack, there has to be a

Table 1. Zero-Inflated Negative Binomial Estimations—Basic Models.

Variable	(1–1) All Observations	(1–2) Noncivil Conflict	(1–3) Civil Conflict
Government and civil society aid	−0.00219 (0.00455)	−0.0179*** (0.00526)	0.00207 (0.00368)
Official development assistance	0.333*** (0.0821)	0.402*** (0.123)	0.295*** (0.110)
Conflict aid	0.248* (0.141)	0.481** (0.190)	−0.0414 (0.131)
US military aid	0.119 (0.0745)	−0.163 (0.111)	0.239*** (0.0912)
Civil conflict	2.153*** (0.330)		
Average prior attacks	0.0128* (0.00659)	0.0581*** (0.0139)	0.00762 (0.00588)
Constant	−1.077*** (0.379)	−1.455*** (0.495)	1.354** (0.585)
Inflation model			
Total attacks (lagged)	−1.669*** (0.407)	−1.449*** (0.305)	−1.645 (1.388)
Constant	1.068*** (0.204)	1.094*** (0.240)	−0.0395 (0.432)
$\ln(\alpha)$	0.812*** (0.124)	0.821*** (0.162)	0.702*** (0.149)
Observations	1,404	1,168	236

Note: Robust standard errors clustered by country in parentheses. All variables except "civil conflict" lagged two years.
*$p < .1$.
**$p < .05$.
***$p < .01$.

positive risk of terrorism: since the risk of a terrorist attack has a natural lower boundary of zero, it would be impossible for aid to decrease the risk of terrorism further if it is already at its minimum. In the inflation model, the lagged value of total attacks is negative, indicating that an increase in the number of attacks in the immediate past reduces the likelihood of a zero in the observed year. The statistically significant α shows that the negative binomial regression is a more appropriate modeling choice over a standard Poisson estimator.

The second stage estimates the impact of the explanatory variables on the number of terrorist attacks after the excess zeroes have been controlled for in the first stage. Government and civil society aid is statistically insignificant in model 1–1, which includes the entire sample. Consistent with our discussion in the preceding section, civil conflict is a strong positive predictor of terrorist attacks, supporting our belief that the most theoretically appropriate sample for our analysis is those countries which are not in the middle of an active civil conflict. Model 1–2 shows that once we exclude countries with an ongoing civil conflict, government and civil society aid becomes negative and statistically significant.

Further evidence in support of our separation of conflict and nonconflict countries is seen in Model 1–3, where the coefficient on government and civil society aid is statistically insignificant. The lack of significance suggests that running the model on the full sample would attenuate the terrorism-reducing

properties of civil society aid in nonconflict countries, as seen in model 1–1, and would induce Type II error.

Table 2 displays models with additional control variables. Government and civil society aid is again insignificant in the pooled sample (model 2–1), but negative and statistically significant in countries without an ongoing civil conflict (model 2–2).[25] Turning to the magnitude of the estimated effect of aid on terrorism in model 2–2, the calculated incidence rate ratio of .984 indicates that a US$10 million increase in government and civil society aid reduces the incidence of terrorist attacks by 1.6 percent, *ceteris paribus*, while the mean aid allocation (around US$60 million) would reduce the threat by approximately 9.6 percent.

Further assessing the substantive impact of this result, Figure 1 shows the predicted number of domestic terrorist attacks at varying levels of government and civil society aid and average prior attacks, with all other variables set to their means.[26] We see that increasing levels of aid results in lower levels of predicted terrorist incidents. When a country does not receive governance and civil society aid and the average level of prior attacks is 0, the predicted number of attacks is approximately 1. This number drops to nearly 0 when governance and civil society aid increases to its maximum value. When the average number of prior attacks increases to twenty, which is nearly the observed maximum in the sample, the predicted number of attacks is almost three without aid, and once again nearly becomes zero as aid approaches the sample maximum.

Also consistent with our expectations, increasing values of the empowerment rights index decreases the frequency of terrorist attacks, but not in countries with an active civil conflict (model 2–3). This result holds for our alternative measure of domestic rights, civil liberties and *physical integrity rights*, both of which also reduce terrorism but do not alter the result for governance and civil society aid.

Of the remaining variables, civil conflict, GDP (*logged*), population (logged), and average prior attacks achieve statistical significance in at least one of the models and increase the rate of terrorist attacks. US military aid is statistically significant in models 2–2 and 2–3 but switches signs: it reduces the number of terror incidents when there is no active civil conflict but increases them when there is. Democracy is also positive and statistically significant, consistent with some arguments that democracies are more vulnerable to terrorism than other regime types (e.g., San-Akca 2014). Government and civil society aid is also positively signed and statistically significant in model 2–3. However, this result is driven primarily by the Iraq and Afghanistan conflicts, as when we rerun the model excluding these countries, the coefficient becomes statistically insignificant.[27]

After providing preliminary evidence that civil society and governance aid and the level of civil rights and liberties are both significant predictors of domestic terrorism, we next move to test our contention that aid dampens terrorism through its positive effect on the level of civil rights and liberties using mediation analysis (Baron and Kenny 1986; Hayes 2013). Model 3–1 uses the mediator, empowerment

**Table 2.** Zero-Inflated Negative Binomial Estimations.

Variable	(2–1) All Observations	(2–2) Noncivil Conflict	(2–3) Civil Conflict	(2–4) Noncivil Conflict	(2–5) Noncivil Conflict
Government and civil society aid	0.000957 (0.00458)	−0.0182** (0.00705)	0.00819** (0.00417)	−0.0185*** (0.00652)	−0.0180*** (0.00633)
Official development assistance	−0.124 (0.146)	0.0455 (0.177)	−0.322* (0.195)	0.0832 (0.165)	−0.00929 (0.166)
Conflict aid	0.254* (0.143)	0.476** (0.186)	0.0606 (0.172)	0.347** (0.171)	0.470** (0.202)
US military aid	0.275*** (0.0768)	−0.0187 (0.275)	0.348*** (0.0897)	0.000101 (0.243)	0.0596 (0.262)
Empowerment rights	−0.0312 (0.0413)	−0.0827 (0.0634)	0.0380 (0.0440)		
Civil liberties				−0.390** (0.183)	
Physical integrity rights					−0.288*** (0.0824)
Democracy	0.0277 (0.0238)	0.0533* (0.0288)	−0.00143 (0.0308)	0.0880*** (0.0336)	0.0456** (0.0201)
GDP (logged)	−0.116 (0.129)	−0.0511 (0.139)	0.0439 (0.148)	0.0455 (0.140)	0.0754 (0.139)
Population	0.644*** (0.230)	0.415 (0.294)	0.644*** (0.165)	0.344 (0.254)	0.179 (0.273)
Civil conflict	1.844*** (0.280)				
Average prior attacks	0.00664 (0.00471)	0.0541*** (0.0127)	0.00259 (0.00191)	0.0588*** (0.0145)	0.0449*** (0.0104)
Constant	0.269 (1.072)	−0.253 (1.036)	1.051 (1.374)	−0.348 (1.006)	−0.164 (1.104)
Inflation model					
Total attacks (lagged)	−1.438*** (0.541)	−1.487*** (0.407)	−0.503** (0.204)	−1.532*** (0.462)	−1.509*** (0.452)
Constant	1.007*** (0.239)	0.949*** (0.316)	0.00808 (0.370)	0.878*** (0.314)	0.812*** (0.317)
ln(α)	0.667*** (0.146)	0.781*** (0.170)	0.392*** (0.161)	0.784*** (0.170)	0.768*** (0.174)
Observations	1,134	945	189	968	944

Note: Robust standard errors clustered by country in parentheses. All variables expect "civil conflict" lagged two years. GDP = gross domestic product.
*p < .1.
**p < .05.
***p < .01.

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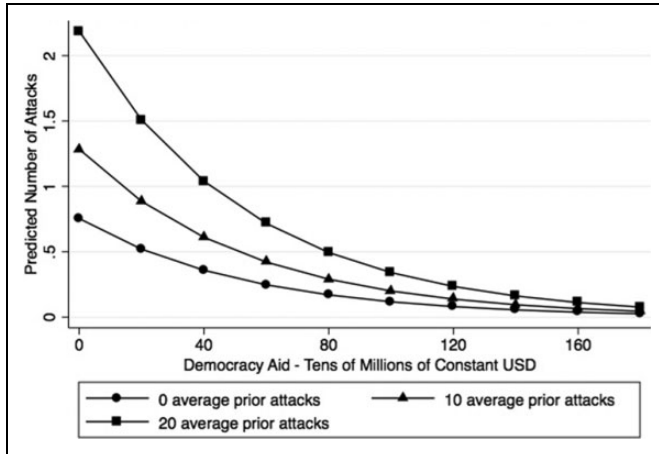
Figure 1. Predicted attacks by democracy aid and average prior attacks.

rights index, as the dependent variable in our sample of noncivil war countries.[28] As expected, increases in governance and civil society aid are positively associated with improvement in civil liberties and rights. To examine whether empowerment rights is a channel through which aid reduces terrorism, we include a measure of empowerment rights contemporaneous with the observed number of terrorist attacks (and thus two years after the observed allocation of aid).[29] If governance and civil society aid does in fact reduce terrorism by increasing the level of civil rights and liberties, as our theory suggests, we should observe that the empowerment rights index should be negative and statistically significant while reducing the impact of aid flows on terrorism. This is what we observe in model 3–2: increasing empowerment rights reduces terrorism, but governance and civil society aid decreases in magnitude and statistical significance from what is observed in model 2–2.[30]

We also utilized an alternative approach to evaluate the direct and indirect effects of governance and civil society aid on terrorist attacks. We used the models constructed in Table 3 as the basis of structural equations model with empowerment rights as an observed endogenous variable, creating a direct path between governance aid and terrorism and an indirect path with empowerment rights as an intervening variable.[31] The results are consistent with our expectations; while the total effect of governance and civil society aid on total attacks is negative and statistically significant, there is a statistically significant indirect path by which government and civil society helps suppress total terror attacks through its impact on empowerment rights.[32]

While not an exhaustive test of the microfoundations of our argument, these results provide supportive evidence that the empowerment rights mediate the relationship between civil society and governance aid and domestic terrorism.

Table 3. Mediation Analysis.

Dependent Variable	(3–1) Empowerment Rights Index	(3–2) Total Attacks
Government and civil society aid	0.0518*** (0.0175)	−0.0148* (.00809)
Contemporaneous empowerment rights index		−0.0985* (.0588)
Official development assistance	1.639*** (0.210)	0.109 (.186)
Conflict aid	−0.214 (0.372)	0.470** (.200)
US military aid	−1.574*** (0.400)	−0.0287 (.280)
Democracy	0.412*** (0.0391)	0.0700*** (.0270)
GDP (logged)	0.336 (0.216)	−0.0470 (.141)
Population	−2.457*** (0.313)	0.343 (.293)
Average prior attacks	0.0284 (0.0232)	0.0549*** (.0134)
Constant	4.079** (1.743)	−0.309 (.965)
Inflation model		
Total attacks (lagged)		−1.604*** (.540)
Constant		0.911*** (.314)
ln(α)		0.572*** (.179)
Observations	881	875

Note: Robust standard errors clustered by country in parentheses. Model (3–1) estimated via ordinary least squares with robust standard errors clustered by country. All variables except "contemporaneous empowerment rights index" lagged two years. GDP = gross domestic product.
*$p < .1$.
**$p < .05$.
***$p < .01$.

Robustness Tests

There are a number of issues regarding our empirical testing which deserve further consideration. The first issue is potential selection between aid flows and terrorism. If donors give greater amounts of aid to countries that are more likely to experience terrorist incidents, then the model estimating aid and frequency of attacks would possibly be biased.[33] This type of selection would bias the estimation against finding that civil society aid reduces domestic terrorism, making any findings of a negative effect of aid compelling.

Consistent with this possibility, we utilize an alternative estimation strategy that conceptualizes the terrorism and aid nexus as a two-step process, akin to "gatekeeping" models of aid allocation. Using a variation of the traditional Heckman selection model, our selection model uses a two-stage estimator in which the first stage estimates the likelihood of observing a positive, nonzero outcome in a particular observation and the second stage estimates the impact of the independent variables on the observed count of the dependent variable using a truncated sample of only positive observations.

The model also allows for the second stage to incorporate the impact of included variables in the first stage by estimating the inverse Mills ratio and then including it in the second-stage equation. The first stage accounts for the possibility that aid is extended to countries at a higher risk of experiencing terrorism. If this bias is present, it would present itself as a positive relationship between aid flows and terrorist attacks. In the second stage, the dependent variable is the number of positive (nonzero) attacks, which is regressed on the explanatory variables plus the inverse Mills ratio. The inverse Mills ratio is a proxy for the underlying likelihood of an attack as estimated in the first stage and thus removes any bias arising from limiting the sample to instances where an attack was observed. The coefficient in the second stage, therefore, represents the relationship between aid flows and terrorist attacks controlling for possible selection in the relationship between aid distributions and terrorism. The overdispersed nature of total attacks, however, makes the ordinary least squares approach used in traditional Heckman selection models inappropriate for our purposes.

We, therefore, adopt a modified approach, where consistent with the Heckman model, we use a dichotomous measure of terrorist attacks in the first stage and predict and store the generated nonselection hazard. We then alter the traditional Heckman model by including the nonselection hazard as a regressor in the second stage using zero-truncated negative binomial regression. Due to the presence of our aid measures in the creation of the nonselection hazard in the first stage, the second-stage equation then estimates the impact of aid flows on the number of terrorist attacks having already accounted for their impact on the underlying probability of an attack. This allows us to address both issues within a single estimation approach.

Table 4 presents the results of this estimation strategy.[34] Model 4–1 is the first-stage equation using a dichotomous dependent variable derived from total attacks, while model 4–2 is the second-stage zero-truncated negative binomial estimation including the estimated nonselection hazard. We also introduce a series of regional dummies for Asia, Latin America, and the Middle East in the first stage for model identification.[35] In the first stage, government and civil society aid is positively and statistically significantly associated with the likelihood of experiencing a terrorist event (using a one-tailed test), which is consistent with our concerns over possible selection. This suggests that aid is more likely to go places at high risk of terrorism. However, in the second stage, which estimates the positive count of total attacks when the number is greater than zero, the estimated effect of civil society and governance aid is negative and statistically significant. The incidence rate ratio indicates a decrease in number of attacks by 4 percent, conditional on the other factors in the model. The nonselection hazard is also statistically significant, suggesting that the processes are not independent from one.

A second potential threat to the reliability of our findings is the use of the zero-inflated negative binomial model, which can be sensitive to the specification of the

Table 4. Robustness Tests.

Variable	Modified Selection Model		Negative Binomial Models		
	(4–1)	(4–2)	(4–3)	(4–4)	(4–5)
	First Stage	Zero-Truncated Negative Binomial	Empowerment Rights	Civil Liberties	Physical Integrity
Government and civil society aid	0.0102 (0.00698)	−0.0449*** (0.0152)	−0.0241*** (0.00835)	−0.0223*** (0.00742)	−0.0208*** (0.00729)
Official development assistance	−0.0894 (0.0690)	0.531** (0.268)	−0.0676 (0.182)	0.00162 (0.179)	−0.107 (0.168)
Conflict aid	0.297** (0.133)	−0.761 (0.675)	0.878*** (0.277)	0.613** (0.254)	0.752*** (0.292)
US military aid	0.172 (0.121)	0.255 (0.354)	0.128 (0.322)	0.131 (0.266)	0.179 (0.281)
Empowerment rights index	−0.00535 (0.0307)	−0.0555 (0.117)	−0.0520 (0.0696)		
Democracy	0.0191 (0.0177)	−0.0843 (0.0697)	0.0524 (0.0366)	0.110** (0.0451)	0.0592** (0.0242)
GDP	−0.0367 (0.0648)	0.431 (0.273)	−0.0369 (0.164)	0.0749 (0.170)	0.0853 (0.163)
Population	0.344*** (0.111)	−1.219** (0.579)	0.653** (0.325)	0.510* (0.297)	0.345 (0.305)
Asia	0.479*** (0.190)				
Latin America	−0.170 (0.172)				
Middle East	0.160 (0.254)				
Nonselection hazard		−4.193** (1.917)			
Average prior attacks			0.110*** (0.0277)	0.110*** (0.0227)	0.0837*** (0.0207)
Civil liberties				−0.445** (0.225)	
Physical integrity rights					−0.330*** (0.0907)
Constant	−0.997* (0.535)	−14.467*** (5.200)	−1.958* (1.176)	−1.674 (1.174)	−1.194 (1.257)
ln(α)		19.518 (0.087)			
Observations	631	171	945	968	944

Note: Robust standard errors clustered by country in parentheses. GDP = gross domestic product.
*p < .1.
**p < .05.
***p < .01.

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inflation stage. To ensure that our results are not an artifact of this modeling choice, we reestimate the noncivil conflict models from Table 2 for each of our measures of domestic rights and liberties in models 4–3 through 4–5 using a standard negative binomial regression. Encouragingly, the results obtained in model 2–2 are robust to this alternative model specification.

Third, we test for a nonmonotonic effect of democracy on domestic terrorist attacks.[36] A few studies in the literature have shown a heterogeneous effect of regime type on transnational terrorism (e.g., Abadie 2006; Kurrild-Klitgaard, Justesen, and Klemmensen 2006; Testas 2004). To test for this possibility, we reestimated the model 2–2 and included empowerment rights index squared and Polity squared terms. While postestimate testing found no evidence of a nonmonotonic effect for Polity, there was a statistically significant interaction between the empowerment rights index and empowerment rights index squared. However, the inclusion of these terms did not alter the magnitude or significance of governance and civil society aid.[37]

The final issue that needs further consideration is our sample construction. Our results suggest that good governance and civil society aid is an effective counterterrorism strategy against terrorist attacks that take place "outside" the scope of an active civil war. However, rebel groups often resort to terrorism immediately "before" the onset of a civil war to provoke the state for a disproportionate response (Findley and Young 2012). Similarly, terrorism can be used as a tactic to spoil the peace process immediately "after" civil wars (Findley and Young 2012; Kydd and Walter 2006). By excluding terrorist attacks that take place only "during" an active civil war from our sample, we may have missed terrorist attacks that are related to but happen immediately before or after the incidence of war. To account for this possibility, we expand our modeling strategy to account for civil violence in the three years prior to as well as following an active civil war. Encouragingly, our result holds over this expanded period.

Conclusion

Terrorism is still an imminent threat to many states around the world. Designing effective counterterrorism policies, therefore, remains to be a priority for policy makers. In this article, we propose that a particular type of foreign aid, that is, good governance and civil society aid, can be an effective tool in reducing the number of domestic terrorist attacks. We argue that civil society and governance aid can help aid-receiving countries to fight terrorism by improving the domestic political conditions that affect both support for and participation in terrorism.

Our general finding that civil society and governance aid has the potential to reduce domestic terrorism is an encouraging one. Contrary to the arguments that suggest terrorism is immune to the effects of aid because it is not borne

out of economic circumstances, we show that governance and civil society aid provides a potentially peaceful way to assist afflicted governments without having to resort to invasive counterterrorism responses. Our findings, therefore, provide additional rationale for policy makers to continue using democracy assistance programs to promote both democracy and security in aid-receiving countries.

Our results also suggest a number of interesting directions for future research. One potential question we plan to explore is whether the identity of aid donors makes a difference in the effectiveness of aid in reducing the risk of terrorism. We suspect that aid from the United States may have a stronger backlash from the citizens of the aid-receiving countries than aid from other donors (Bandyopadhyay, Sandler, and Younas 2011). Another interesting angle we would like to explore is whether the type of aid-delivery channels donors use conditions the effectiveness of aid in providing security benefits to aid-receiving countries. The recent literature suggests that aid delivered through non-governmental organizations (NGOs) can be more effective than aid given directly to governments of aid-receiving countries (Dietrich 2013; Radelet 2004).

Appendix A

Table A1. Summary Statistics.

Variable	N	Mean	Standard Deviation	Minimum	Maximum
Terror attacks	1,134	7.519	35.535	0	673
Average prior attacks	1,134	6.838	27.854	0	457
Government and civil society aid	1,134	7.688	17.901	0	216.375
Official development assistance	1,134	3.916	1.468	0	8.678
Conflict aid	1,134	0.33	0.597	0	4.108
US military aid	1,134	0.443	0.935	0	6.477
Empowerment rights index	1,134	7.451	3.771	0	14
Civil liberties	1,134	4.042	1.476	1	7
Physical integrity rights index	1,134	4.263	2.011	0	8
Democracy	1,134	2.48	6.147	−10	10
Gross domestic product	1,134	9.59	1.763	5.854	15.062
Population	1,134	2.462	1.335	0.353	7.195
Civil conflict	1,134	0.172	0.378	0	1
Asia	1,134	0.183	0.386	0	1
Latin America	1,134	0.205	0.404	0	1
Middle East	1,134	0.128	0.334	0	1

Appendix B

Table B1. Structural Equation Modeling—Direct, Indirect, and Total Effects.

	Direct Effects		Indirect Effects	Total Effects
	(B1)	(B2)	(B3)	(B4)
Variable	Empowerment Rights Index	Total Attacks	Total Attacks	Total Attacks
Government and civil society aid	0.051*** (0.017)	−0.019 (0.016)	−0.007* (0.004)	−0.026* (0.016)
Official development assistance	1.665*** (0.209)	−0.016 (0.111)	−0.241** (0.120)	−0.256** (0.109)
Conflict aid	−0.309 (0.368)	0.454 (0.400)	0.045 (0.063)	0.499 (0.430)
US military aid	−1.610*** (0.383)	−0.037 (0.182)	0.233* (0.123)	0.195 (0.162)
Empowerment rights		−0.145** (0.071)		−0.145** (0.071)
Democracy		0.087** (0.038)		0.087** (0.038)
Gross domestic product	0.364* (0.214)	−0.137 (0.087)	−0.053 (0.039)	−0.189* (0.100)
Population	−2.484*** (0.309)	0.493** (0.220)	0.359** (0.173)	0.852*** (0.274)
Average prior attacks	0.025 (0.022)	0.277*** (0.065)	−0.004 (0.004)	0.273*** (0.064)
Democracy (residuals)	0.412*** (0.038)		−0.060** (0.029)	−0.060** (0.029)
Observations		867		

Note: Robust standard errors clustered by country in parentheses. All variables except "empowerment rights index" lagged two years.
*$p < .1$.
**$p < .05$.
***$p < .01$.

Appendix C

Table C1. Additional Robustness Tests.

	Nonmonotonic Effects
Variable	(C1)
Government and civil society aid	−0.0183** (0.00740)
Official development assistance	−0.0244 (0.152)
Conflict aid	0.524*** (0.188)
US military aid	−0.138 (0.244)

Table C1. (continued)

|	Nonmonotonic Effects
Variable	(C1)
Empowerment rights index	0.274 (0.187)
Democracy	−0.0720 (0.130)
Gross domestic product	−0.0167 (0.166)
Population	0.444 (0.287)
Average prior attacks	0.0487*** (0.0135)
Empowerment rights index squared	−0.0231* (0.0118)
Democracy squared	0.00451 (0.00539)
Constant	−1.312 (1.552)
Inflation model	
Total attacks (lagged)	−1.500*** (0.411)
Constant	0.956*** (0.321)
$\ln(\alpha)$	0.725*** (0.188)
Observations	945

Note: Robust standard errors clustered by country in parentheses.
*$p < .1$.
**$p < .05$.
***$p < .01$.
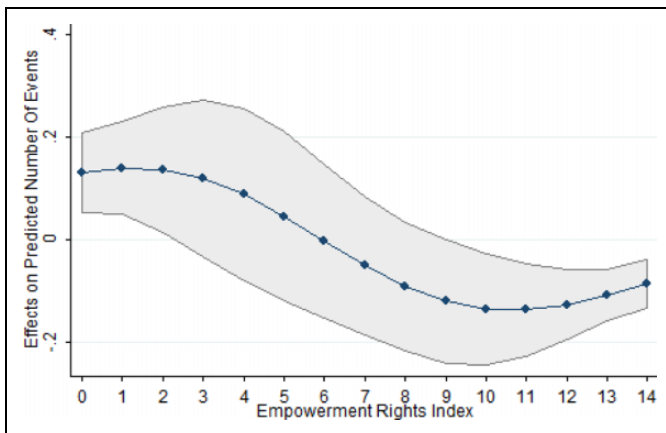
Figure C1. Average marginal effect of empowerment rights index.

Declaration of Conflicting Interests

Funding

Supplemental Material

The supplemental materials are available at http://journals.sagepub.com/doi/suppl/10.1177/0022002717704952.

Notes

1. There is no consensus on the effect of foreign aid on economic development, either (e.g., Hansen and Tarp 2001; Rajan and Subramanian 2008).
2. A number of scholars find a positive correlation between low socioeconomic development and the incidence of terrorism (e.g., Blomberg and Hess 2008; Burgoon 2006; Bueno de Mesquita 2005). On the other hand, a recent study by Enders, Hoover, and Sandler (2016) shows that the relationship between gross domestic product (GDP) per capita and terrorism is nonlinear.
3. Available at http://www.whitehouse.gov/the-press-office/2015/02/19/remarks-president-summit-countering-violentextremism-february-19-2015.
4. Research on political protest similarly shows that harsh state repression escalates antigovernment mobilization and increases the incentives of individuals to protest against the government (e.g., Francisco 1995; Opp and Roehl 1990).
5. A number of studies conclude that democracy aid is either ineffective or counterproductive, that is, it retards democratic development (e.g., Djankov, Montalvo, and Reynal-Querol 2008; Knack 2001, 2004). However, these studies conflate the effect of democracy assistance programs with the effect of aid given for purposes other than democratization by utilizing Official Development Assistance as a measure of aid.
6. It is important to note that Finkel, Pérez-Liñán, and Seligson (2007) also find that the US Agency for International Development (USAID) aid given for human rights (a subsector of rule of law) is negatively associated with the respect for human rights. The authors suggest that this unexpected result may be due to endogeneity, measurement error, or a true negative effect where "an authoritarian regime, facing increasing international pressures on the human rights front, may become more zealous and intensify their efforts against the opposition" (434).
7. For more information on the USAID's work on Chad, see http://www.usaid.gov/news-information/congressional-testimony/written-testimony-usaid-senior-deputy-assistant. A similar USAID program was launched in Yemen in 2012 to support the National Dialogue Conference, which includes the representatives of Yemen's political parties, youth community members, civil society organizations, and various ethnic groups, with the goal of reducing further violence and instability in the country. More information on this program can be found at http://www.usaid.gov/results-data/success-stories/yemenis-take-airways-plan-country's-future. Accessed on April 20, 2014.

8. According to the Memorial Institute for the Prevention of Terrorism's (MIPT) Knowledge Base, from 1998 to 2008, only 9.2 percent of recorded terrorist events were international in nature.

9. While our argument is more applicable to domestic terrorism, we ran additional models on transnational terrorism and find that while good governance and civil society aid reduces the rate of transnational terrorist attacks, the coefficient just misses the conventional level of statistical significance.

10. Since Organisation for Economic Co-operation and Development (OECD) member countries are generally ineligible for democratization aid, we exclude highly developed OECD member countries from our sample, leaving 136 countries under analysis. The end year was limited by the latest year available in the Enders, Sandler, and Gaibulloev (2011) data.

11. There is also a noticeable uptick in domestic terrorism in the Enders, Sandler, and Gaibulloev (2011) data set in the period leading up to the end of the Cold War, reaching a peak in the early 1990s, presumably associated with the changing power of the larger global coalitions. Since governance and civil society did not acquire its more prominent role until after this period, we did not want to examine its effect when terrorism was increased by other external factors.

12. We omit countries experiencing civil conflict from this assessment to avoid the potential large influence of US aid to Iraq and Afghanistan.

13. See Enders, Sandler, and Gaibulloev (2011) for details on the rules distinguishing domestic terrorist incidents from transnational ones. We thank Todd Sandler for providing their updated data for the period from 2008 to 2010.

14. The summary statistics of the key variables are presented in Appendix A.

15. Specifically, we use Version 2–1, which was accessed August 7, 2013.

16. For all aid measures, we use aid commitments rather than aid disbursements due to data availability.

17. We classify aid with purpose codes from 15000 to 15150 as government and civil society aid and purpose codes 15200–15261 as conflict aid.

18. For a number of empirical reasons, we decided to log three of the four aid measures: conflict, development, and military assistance. First, logging each of the aid variables greatly increases the collinearity between them, increasing the risk of Type II error and decreasing model performance. Second, conflict, development, and military aid variables exhibit the greatest degree of skewness and are therefore most suitable for transformation. Finally, this is the modeling strategy that is the most efficient among a number of alternatives using the Akaike information criterion and Bayesian information criterion.

19. The physical integrity rights index covers issues including disappearances, extrajudicial killing, and torture, with the maximum value of 8 representing full government respect for these rights and 0 no government respect. The lack of physical integrity rights has been found to increase terrorism (Gassebner and Luechinger 2011; Walsh and Piazza 2010).

20. Due to space limitations, the results are not shown but available from the authors.

21. Our primary result holds if we use Vreeland's (2008) X-polity measure, which removes components of the *Polity* measure related to conflict. Results available from the authors.

22. Due to concerns over the incidental parameters problem in maximum likelihood estimations first identified by Neyman and Scott (1948), we do not use unit fixed effects in our regressions. As part of our robustness tests, we estimated a population averaged model to account for possible unit effects, and the results were consistent with our primary findings.

23. The full table of summary statistics is available in Appendix A.

24. Given our argument that terrorist attacks which take place outside the scope an active civil war are fundamentally different than those that are used as a tactic in a civil conflict, separating the populations is preferred over using an interaction between civil conflict and aid. This would suggest a modifying effect of conflict on aid, while we believe that there are two different processes leading to the presence or absence of attacks.

25. The Vuong's test returned a *z* value of 3.11, which is statistically significant at the .01 level for model 2–2, suggesting that the zero-inflated negative binomial model is preferred to the standard negative binomial regression. These results are also robust to the use of regional controls, the inclusion of GDP squared (Enders, Hoover, and Sandler 2016), and the inclusion of the average number of transnational terror attacks in the preceding three years. The results are available from the authors.

26. To predict and graph the estimated number of attacks using Stata's *margins* command, we converted the continuous aid measure to a categorical measure and substituted this into model 2–2 to generate the results presented in Figure 1. As with the original continuous measure, this new categorical measure was itself statistically significant and negative.

27. Omitting outliers such as Iraq did not change our primary results in model 2–2.

28. We estimated model 3–1 using ordinary least squares regression. Due to the fact the democracy and civil liberties are correlated but theoretically distinct in our argument and governance and civil society aid may also improve those aspects of democracy, which are unrelated to terrorism, we estimate the impact of governance and civil society aid using the same model specification as model 3–1 (plus additional regional controls for model identification) and then use the residuals of this estimation for the measure of democracy in model 3–1. In this way, we hope to isolate the impact of governance and civil society aid on civil liberties outside of its impact on democracy more broadly.

29. We use the value of empowerment rights which is contemporaneous with our dependent variable since we anticipate that aid will take some time to impact civil liberties, an assumption supported by the results from model 3–1.

30. The statistical difference of the estimates for governance and civil society aid between models 2–2 and 3–2 is confirmed via postestimate testing.

31. We thank an anonymous reviewer for suggesting this approach.

32. The full table of direct, indirect, and total effects is presented in Appendix B.

33. For example, Dreher and Fuchs (2011) find that the share of aid donors extends to strengthen governance and the civil society is reduced rather than increased in reaction to terrorist attacks.

34. In these models, we use only observations without an active conflict.
35. The regional dummies are subsequently omitted from the second stage of the analysis to aid in model identification.
36. We thank an anonymous reviewer for this suggestion.
37. These results are presented in Appendix C.

References

Abadie, Alberto. 2006. "Poverty, Political Freedom, and the Roots of Terrorism." *The Economics and National Security* 96 (2): 50-56.

Abrahms, Max. 2007. "Why Democracies Make Superior Counterterrorists?" *Security Studies* 16 (2): 223-53.

Aksoy, Deniz, David Carter, and Joseph Wright. 2012. "Terrorism in Dictatorships." *Journal of Politics* 74 (3): 810-26.

Alesina, Alberto, and David Dollar. 2000. "Who Gives Foreign Aid to Whom and Why?" *Journal of Economic Growth* 5 (1): 33-63.

Azam, Jean-Paul, and Véronique Thelen. 2006. "Aid and the Delegated Fight against Terrorism." *Review of Development Economics* 10 (2): 330-44.

Azam, Jean-Paul, and Véronique Thelen. 2008. "The Roles of Foreign Aid and Education in the War on Terror." *Public Choice* 135 (3/4): 375-97.

Bandyopadhyay, Subhayu, Todd Sandler, and Javed Younas. 2011. "Foreign Aid as Counterterrorism Policy." *Oxford Economic Papers* 63 (3): 423-47.

Bandyopadhyay, Subhayu, Todd Sandler, and Javed Younas. 2014. "Foreign Direct Investment, Aid, and Terrorism." *Oxford Economic Papers* 6 (1): 25-50.

Baron, Reuben, and Kenny, David. 1986. "The Moderator-mediator Variable Distinction in Social Psychological Research—Conceptual, Strategic, and Statistical Considerations." *Journal of Personality and Social Psychology* 51 (6): 1173-82.

Bearce, David H., and Daniel C. Tirone. 2010. "Foreign Aid Effectiveness and the Strategic Goals of Donor Governments." *The Journal of Politics* 72 (3): 837-51.

Bell, Sam, Chad Clay, Amanda Murdie, and James Piazza. 2014. "Opening Yourself Up: The Role of External and Internal Transparency in Terrorism Attacks." *Political Research Quarterly* 67 (3): 603-14.

Berrebi, Claude. 2007. "Evidence about the Link Between Education, Poverty and Terrorism among Palestinians." *Peace Economics, Peace Science and Public Policy* 13 (1): 1-36.

Blair, Graema, Christine Fair, Neil Malhotra, and Jacob Shapiro. 2013. "Poverty and Support for Militant Politics: Evidence from Pakistan." *American Journal of Political Science* 57 (1): 30-48.

Blomberg, S. Brock, and Gregory Hess. 2008. "From (No) Butter to Guns? Understanding the Economic Role in Transnational Terrorism." In *Terrorism, Economic Development and Political Openness*, edited by Philip Keefer and Norman Loayza, 83-115. Cambridge, UK: Cambridge University Press.

Bravo, Ana Bela Santos, and Carlos Manuel Mendes Dias. 2006. "An Empirical Analysis of Terrorism: Deprivation, Islamism and Geopolitical Factors." *Defence and Peace Economics* 17 (4): 329-41.

Bueno de Mesquita, Ethan. 2005. "The Quality of Terror." *American Journal of Political Science* 49 (3): 515-30.

Burgoon, Brian. 2006. "On Welfare and Terror: Social Welfare Policies and the Political-economic Roots of Terrorism." *Journal of Conflict Resolution* 50 (2): 176-203.

Carothers, Thomas. 1999. *Aiding Democracy Abroad: The Learning Curve*. Washington, DC: Carnegie Endowment for International Peace.

Choi, Seung-Whan. 2010. "Fighting Terrorism through the Rule of Law?" *Journal of Conflict Resolution* 54 (6): 940-66.

Cingranelli, David L., David L. Richards, and K. Chad Clay. 2014. "The CIRI Human Rights Dataset." Accessed April 14, 2014. http://www.humanrightsdata.com/Version 2014.04.14.

Clemens, Michael A., Steven Radelet, Rikhil R. Bhavnani, and Samuel Bazzi. 2012. "Counting Chickens When They Hatch: Timing and the Effects of Aid on Growth." *The Economic Journal* 122 (561): 590-617.

Coppedge, Michael, John Gerring, David Altman, Michael Bernhard, Steven Fish, Allen Hicken, Matthew Kroenig, Staffan I Lindberg, Kelly McMann, Pamela Paxton, Holli A Semetko, Svend-Erik Skaaning, Jeffrey Staton, and Jan Teorell. 2011. "Conceptualizing and Measuring Democracy: A New Approach." *Perspectives on Politics* 9 (2): 247-67.

Crenshaw, Martha. 1981. "The Causes of Terrorism." *Comparative Politics* 13 (4): 379-99.

Dahl, Robert A. 1956. *A Preface to Democratic Theory*. Chicago, IL: University of Chicago Press.

Diamond, Larry. 1995. *Promoting Democracy in the 1990s: Actors and Instruments, Issues and Imperatives*. New York: Carnegie Corporation of New York.

Dietrich, Simone. 2011. "The Politics of Health Aid: Why Corrupt Governments Have Incentives to Implement Aid Effectively." *World Development* 39 (1): 55-63.

Dietrich, Simone. 2013. "Bypass or Engage? Explaining Donor Delivery Tactics in Aid Allocation." *International Studies Quarterly* 57 (4): 698-712.

Djankov, Simeon, Jose G. Montalvo, and Marta Reynal-Querol. 2008. "The Curse of Aid." *Journal of Economic Growth* 13 (3): 169-94.

Dreher, Axel, and Andreas Fuchs. 2011. "Does Terror Increase Aid." *Public Choice* 149 (3/4): 337-63.

Dunning, Thad. 2004. "Conditioning the Effects of Aid: Cold War Politics, Donor Credibility, and Democracy in Africa." *International Organization* 58 (2): 409-23.

Enders, Walter, Gary Hoover, and Todd Sandler. 2016. "The Changing Nonlinear Relationship between Income and Terrorism." *Journal of Conflict Resolution* 60 (2): 195-225.

Enders, Walter, and Todd Sandler. 2006. *The Political Economy of Terrorism*. Cambridge, UK: Cambridge University Press.

Enders, Walter, Todd Sandler, and Khusrav Gaibulloev. 2011. "Domestic versus Transnational Terrorism: Data, Decomposition, and Dynamics." *Journal of Peace Research* 48 (3): 319-37.

Eubank, William, and Leonard Weinberg. 2001. "Terrorism and Democracy: Perpetrators and Victims." *Terrorism and Political Violence* 13 (1): 135-64.

Eyerman, Joe. 1998. "Terrorism and Democratic States: Soft Targets or Accessible Systems." *International Interactions* 24 (2): 151-70.

Findley, Michael G., and Joseph K. Young. 2012. "Terrorism and Civil War: A Spatial and Temporal Approach to a Conceptual Problem." *Perspectives on Politics* 10 (2): 285-305.

Finkel, Steven, Aníbal Pérez-Liñán, and Mitchell Seligson. 2007. "The Effects of U.S. Foreign Assistance on Democracy Building, 1990-2003." *World Politics* 59 (3): 404-39.

Francisco, Ronald. 1995. "The Relationship between Coercion and Protest: An Empirical Evaluation in Three Coercive States." *Journal of Conflict Resolution* 39 (2): 263-82.

Fortna, Virginia Page. 2015. "Do Terrorists Win? Rebels' Use of Terrorism and Civil War Outcomes." *International Organization* 69 (3): 519-56.

Gassebner, Martin, and Simon Luechinger. 2011. "Lock, Stock, and Barrel: A Comprehensive Assessment of the Determinants of Terror." *Public Choice* 149 (3/4): 235-61.

Gleditsch, Nils Petter, Peter Wallensteen, Mikael Eriksson, Margareta Sollenberg, and Håvard Strand. 2002. "Armed Conflict 1946-2001: A New Dataset." *Journal of Peace Research* 39 (5): 615-37.

Hamilton, Lawrence C., and James D. Hamilton. 1983. "Dynamics of Terrorism." *International Studies Quarterly* 27 (1): 39-54.

Hansen, Henrik, and Finn Tarp. 2001. "Aid and Growth Regressions." *Journal of Development Economics* 64 (2): 547-70.

Hayes, Andrew. 2013. *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-based Approach*. New York: Guilford Press.

Held, David. 1996. *Models of Democracy*. Stanford, CA: Stanford University Press.

Kalyvitis, Sarantis, and Irene Vlachaki. 2010. "Democratic Aid and the Democratization of Recipients." *Contemporary Economic Policy* 28 (2): 188-218.

Knack, Stephen. 2001. "Aid Dependence and the Quality of Governance: Cross-country Empirical Tests." *Southern Economic Journal* 68 (2): 310-29.

Knack, Stephen. 2004. "Does Foreign Aid Promote Democracy?" *International Studies Quarterly* 48 (1): 251-66.

Krueger, Alan B. 2007. *What Makes a Terrorist: Economics and the Roots of Terrorism*. Princeton, NJ: Princeton University Press.

Krueger, Alan B., and David D. Laitin. 2008. "Kto Kogo? A Cross-country Study of the Origins and the Targets of Terrorism." In *Terrorism, Economic Development and Political Openness*, edited by Phillip Keefer and Norman Loayza, 148-73. Cambridge, UK: Cambridge University Press.

Krueger, Alan B., and Jitka Maleckova. 2003. "Education, Poverty and Terrorism: Is there a Causal Connection?" *Journal of Economic Perspectives* 17 (4): 119-44.

Kurrild-Klitgaard, Peter, Mogens K. Justesen, and Robert Klemmensen. 2006. "The Political Economy of Freedom, Democracy, and Transnational Terrorism." *Public Choice* 128 (1/2): 289-315.

Kydd, Andrew, and Barbara Walter. 2006. "The Strategies of Terrorism." *International Security* 31 (1): 49-80.

Li, Quan. 2005. "Does Democracy Promote or Reduce Transnational Terrorist Incidents?" *Journal of Conflict Resolution* 49 (2): 278-97.

Li, Quan, and Drew Schaub. 2004. "Economic Globalization and Transnational Terrorism." *Journal of Conflict Resolution* 48 (2): 230-58.

Marshall, Monty G., Keith Jaggers, and Ted Robert Gurr. 2011. Polity IV Project: Dataset Users' Manual. Center for Systemic Peace: Polity IV Project, Vienna, VA.

National Consortium for the Study of Terrorism and Responses to Terrorism (START). 2012. "Global Terrorism Database [Data file]." Accessed April 8, 2013. http://www.start.umd.edu/gtd.

Neyman, Jerzy, and Elizabeth Scott. 1948. "Consistent Estimation from Partially Consistent Observations." *Econometrica* 16 (1): 1-32.

OECD [Organisation for Economic Co-operation and Development]. 2010. "Reporting Directives for the Creditor Reporting System." Accessed March 20, 2014. https://www1.oecd.org/dac/stats/45917783.pdf.

Opp, Karl-Dieter, and Wolfgang Roehl. 1990. "Repression, Micromobilization and Political Protest." *Social Forces* 69 (2): 521-47.

Piazza, James. 2006. "Rooted in Poverty? Terrorism, Poor Economic Development and Social Cleavages." *Terrorism and Political Violence* 18 (1): 159-77.

Piazza, James. 2011. "Poverty, Minority Economic Discrimination and Domestic Terrorism." *Journal of Peace Research* 48 (3): 339-53.

Piazza, James. 2017. "Repression and Terrorism: A Cross-national Empirical Analysis of Types of Repression and Domestic Terrorism." *Terrorism and Political Violence* 29 (1): 1-17.

Radelet, Steven. 2004. "Aid Effectiveness and the Millennium Development Goals. Center for Global Development." Working Paper Number 39, Washington, DC.

Rajan, Raghuram G., and Arvind Subramanian. 2008. "Aid and Growth: What Does the Cross-country Evidence Really Show?" *The Review of Economics and Statistics* 90 (4): 643-65.

Ross, Jeffery Ian. 1993. "Structural Causes of Oppositional Political Terrorism: A Causal Model." *Journal of Peace Research* 30 (3): 317-29.

Rotberg, Robert. 2002. "Failed States in a World of Terror." *Foreign Affairs* 81 (July/August): 127-40.

Sambanis, Nicolas. 2012. "Terrorism and Civil War." In *Terrorism, Economic Development and Political Openness*, edited by Philip Keefer and Norman Loayza, 174-206. New York: Cambridge University Press.

San-Akca, Belgin. 2014. "Democracy and Vulnerability: An Exploitation Theory of Democracies by Terrorists." *Journal of Conflict Resolution* 58 (7): 1285-310.

Sánchez-Cuenca, Ignacio, and Luis de la Calle. 2009. "Domestic Terrorism: The Hidden Side of Political Violence." *Annual Review of Political Science* 12:31-49.

Savun, Burcu, and Brian J. Phillips. 2009. "Democracy, Foreign Policy, and Terrorism." *Journal of Conflict Resolution* 53 (6): 878-904.

Savun, Burcu, and Daniel C. Tirone. 2011. "Foreign Aid, Democratization, and Civil Conflict: How does Democracy Aid Affect Civil Conflict?" 2011. *American Journal of Political Science* 55 (2): 233-46.

Scott, James M., and Carie A. Steele. 2011. "Sponsoring Democracy: The United States and Democracy Aid to the Developing World, 1988-2001." *International Studies Quarterly* 55 (1): 47-69.

Shapiro, Jacob, and Christine Fair. 2010. "Understanding Support for Islamist Militancy in Pakistan." *International Security* 34 (3): 79-118.

Stanton, Jessica A. 2013. "Terrorism in the Context of Civil War." *Journal of Politics* 75 (4): 1009-22.

Testas, Abdelaziz. 2004. "Determinants of Terrorism in the Muslim World: An Empirical Cross-sectional Analysis." *Terrorism and Political Violence* 16 (2): 253-73.

Themnér, Lotta, and Peter Wallensteen. 2012. "Armed Conflicts, 1946–2011." *Journal of Peace Research* 49 (4): 565-75.

Tierney, Michael J., Daniel L. Nielson, Darren G. Hawkins, J. Timmons Roberts, Michael G. Findley, Ryan M. Powers, Bradley Parks, Sven E. Wilson, and Robert L. Hicks. 2011. "More Dollars than Sense: Refining Our Knowledge of Development Finance Using AidData." *World Development* 39 (11): 1891-906.

Vreeland, James Raymond. 2008. "The Effect of Political Regime on Civil War: Unpacking Anocracy." *Journal of Conflict Resolution* 52 (3): 401-25.

Walsh, James, and James Piazza. 2010. "Why Respecting Physical Integrity Rights Reduces Terrorism." *Comparative Political Studies* 43 (5): 551-77.

Wilkinson, Paul. 2011. *Terrorism versus Democracy: The Liberal State Response*. New York: Routledge.

Wilson, Matthew, and James A. Piazza. 2013. "Conditioning Effects of Authoritarian Regime-type on Terrorist Attacks." *American Journal of Political Science* 57 (4): 941-55.

Windsor, Jennifer. 2003. "Promoting Democratization Can Combat Terrorism." *The Washington Quarterly* 26 (3): 43-58.

Winters, Matthews, and Joseph Wright. 2010. "The Politics of Effective Foreign Aid." *Annual Review of Political Science* 13:61-80.

Wright, Joseph. 2009. "How Foreign Aid Can Foster Democratization in Authoritarian Regimes." *American Journal of Political Science* 53 (3): 552-71.

Wright, Joseph, Simone Dietrich, and Molly Ariotti. 2015. "Foreign Aid and Judicial Independence." Working Paper.

Young, Joseph, and Michael Findley. 2011. "Can Peace be purchased? A Sectoral-level Analysis of Aid's Influence on Transnational Terrorism." *Public Choice* 149 (3/4): 365-81.