

# A Sector-by-Sector Analysis of Aid's Impact on Transnational Terrorism

## **Brief 3**

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In this study, we examine whether foreign aid decreases terrorism. We analyze whether aid targeted at specific sectors, such as education, is more effective than others. We use the most comprehensive databases on foreign aid and transnational terrorism, AidData and ITERATE, rather than the relatively small samples used in most previous studies, and provide a series of statistical tests. Our results suggest that foreign aid decreases terrorism especially when targeted towards sectors such as education, health, civil society, and conflict prevention. These results indicate that foreign aid can be an effective instrument in fighting terrorism, if targeted in the right ways.



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## Overview

In the aftermath of the September 11, 2001 attacks, the Bush Administration elevated foreign aid as a key instrument in the “War on Terror.” Aid has been repeatedly identified as an important counterterrorism policy option. In the 2002 State of the Union Address, for example, President Bush argued that “[w]e have a great opportunity during the time of war to lead the world toward the values that will bring lasting peace.” His subsequent budget reflected this claim by offering a nearly \$750 million increase in foreign aid spending.

The basic rationale is that aid promotes human capital through education, thereby freeing up resources to complement existing counterterrorism efforts (Azam and Thelen 2008). Aid may also reduce grievances that motivate the use of violence (Bueno de Mesquita 2005). Additionally, donors may tie foreign aid receipts to the counterterrorism efforts of recipient governments (Bandyopadhyay, Sandler and Younas 2011a), thereby more directly supporting or requiring counterterrorism.

Existing empirical tests have offered support for the pacifying effects of foreign aid (Azam and Delacroix 2006, Azam and Thelen 2008), even finding that aid is more effective than military intervention (Azam and Thelen 2010). Existing empirical analyses, though, suffer from important weaknesses. First, despite making arguments about sectoral-level aid, all empirical tests aggregate each distinct type of aid to examine overall patterns. Second, existing arguments make sector-level claims, but ignore other sectors which could have substitutable effects.

Third, extant tests average both aid and terrorism data over time, creating cross-sectional observations rather than time-series cross-sectional data, thereby losing potentially important variation over time. Furthermore, these methodological choices leave the door open for possible reverse effects, in which terrorism could precede the allocation of aid.

The primary contribution of this paper is empirical: we test a sectoral-level argument that captures many of the dynamics in previous studies using a large number of recipient countries (approx. 140) and a long period of time (1973-2004). We begin by testing for a general aid and terrorism relationship. Using a measure of “aggregated aid,” we find evidence of a negative relationship between overall levels of aid and terrorism. We then consider the untested argument about education aid more directly by including separate measures for education aid and general budget aid, followed by a consideration of substitutable effects of aid, such as health aid, or aid tied to counterterrorism.

## Critics of Aid’s Effect on Terrorism

The appeal of foreign aid as a foreign policy instrument to fight terrorism is intuitive: it is not overly expensive or time-consuming to increase foreign aid, other governments are often eager to obtain increased foreign aid revenues, and donors can quickly claim they have taken action against a potential threat.

A large number of people inside and outside of the aid establishment, however, have serious questions about whether aid is having much impact. If aid is not consequential in most studies of aid effectiveness, then this raises questions about whether aid could have an impact on terrorism.

But even if we assume that aid succeeds in alleviating poverty or raising education levels, it is still unclear whether these intermediate factors would reduce terrorism. Some studies assert that there is no direct connection between socioeconomic conditions and the individuals who participate in terrorism; terrorist leaders are more likely to recruit educated and highly skilled individuals to run their various cells throughout the world. Other studies assert that terrorism may, in fact, be sensitive to certain economic conditions such as economic opportunity costs. And social ills, such as economic discrimination, may indeed encourage violence, even of educated individuals who do not rank among the poorest. Thus, aid could potentially serve a counterterrorism function with respect to improving economic circumstances.

Finally, even if aid increases a recipient country’s counterterrorism efforts, such government action could counter-intuitively exacerbate conditions conducive to terrorism. Because most terrorist groups operate in opposition to the central government, aid that increases the institutional capacity of, or popular support for, the government may be perceived as a strategic or cultural threat that potential terrorist groups may choose to challenge.

## Data and Methodology

Data on our dependent variable is from the ITERATE database (Mickolus et al. 2008), which captures transnational terrorist events worldwide. We measure the dependent variables as the count of terrorist events occurring in the country that receives aid.

We use multiple regression techniques appropriate for these data to investigate the impact aid has on terrorist attacks. We lag all of the variables to account for time effects.

Our key independent variable is non-military foreign aid, collected from AidData (Tierney et al 2009). Because aid reporting tends to be lumpy (aid reported in some years, but

not others) whereas aid flows typically occur each year, we smooth the aid data using a moving average of Aid/GDP or Aid/Population based on the previous three years plus the current year.

We also disaggregate aid into a number of different sectors: education, conflict, governance, civil society, and health. We then estimate the results separately for each of these sectors. The goal of these additional categories is to more accurately test some of the theoretical mechanisms identified in the literature. For example, education aid may increase human capital, health aid may help individuals be more productive in school and in jobs, conflict aid may feed directly into counter-terrorism and other conflict resolution activities, and general budgetary support may make governments more stable relative to potential terrorists.

We incorporate a set of controls consistent with arguments and findings in the quantitative terrorism literature. We control for alternative factors including: executive constraints and participation, per capita income, population, armed conflict, previous terrorist attacks, and regional effects.

We also estimate our models with and without a fix for endogeneity: the possibility that donors give more aid to countries with high instances of terrorism.

## Results

The initial results are not statistically different from zero, but once accounting for endogeneity the results are negative and statistically significant, implying that aid has a pacific effect, reducing terrorism overall.

### *Education aid*

Without adjusting for endogeneity, the results are negative but indeterminate. After accounting for endogeneity, education aid has a negative influence on the count of terrorist attacks, while controlling for general budget aid, which has a negative but not statistically significant relationship. Notably, on average, a one standard deviation increase in education aid is expected to decrease the count of terrorist attacks by over 71%.

### *Conflict aid*

Regardless of controlling for endogeneity, results suggest that as this level of aid increases, counts of attacks will decline. On average, a one standard deviation increase in this form of aid is expected to decrease counts of terrorist attacks by more than 32%.

### *Health aid*

It appears that health aid also has a terror-reducing effect with or without concern for endogeneity (a one standard deviation increase is expected to decrease terrorism by almost 39%). Taken together with the results for education aid, these results suggest that conflict aid and health aid may be substitutable for education aid in their effects on decisions to employ violence.

### *Governance and civil society aid*

In both cases, the measures are negative but only significant for governance and civil society aid after accounting for endogeneity, indicating one more potentially substitutable aid sectors. A one standard deviation increase in this form of aid is expected to decrease terrorism by almost 40%.

### *General budget and agriculture aid*

In the case of general budget assistance, the relationship is positive and significant, though not substantively very large in the models that account for endogeneity, which further reinforces the finding that general assistance may not be as effective as sector-specific aid. The results for agriculture aid are negative, similar to education, conflict, governance, and civil society, but not statistically significant, which indicates that not all sectors of aid serve similar purposes as education, conflict, and the other sectors reported above.

## Conclusion

Our results indicate that aid can reduce terrorism if targeted towards the appropriate sectors. While aid targeted at education and conflict prevention/resolution had negative and statistically significant effects on terrorism, they were not unique. Indeed, other sectors of aid, such as health and civil society, also appear to reduce terrorism. These findings point to the need to theorize about a variety of causal pathways through which aid could reduce terrorism and, further, to continue to refine empirical tests to capture these mechanisms.

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