

Foreign Aid as a Counterterrorism Tool: Can Democracy Aid Reduce Terrorism?

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October 11, 2014

Research Question

Can foreign aid reduce the frequency of terrorist attacks in recipient countries?

Argument in Brief

A particular type of foreign aid, i.e. democracy aid programs, can reduce the rate of domestic terrorist incidents by improving the political conditions in aid-receiving countries

Political Conditions and Terrorism

1. State repression and weak rule of law increase support for terrorism:

- grievances and dissatisfaction with the government
- limited legal avenues for political dissent

Political Conditions and Terrorism

2. Weak democratic governance and rule of law enable the operation of terrorist organizations:

- easier to operate and solicit financing with low risk of capture
- easier to distort information about the government activities

Democracy Promotion Aid

Democracy promotion programs reduce terrorism by:

- helping democratizing states develop and strengthen political institutions
- strengthening judicial institutions and the rule of law
- supporting pro-reform civil society organizations
- support community participation in local governance

Hypothesis

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States that receive high levels of democracy aid experience fewer terrorist incidents than states that receive no or low levels of democracy aid, holding everything else constant

Research Design

- **Sample:** Non-OECD countries between 1996-2011
- **Dependent Variable:** *Total Attacks*; the number of domestic terror incidents in a country-year (Global Terrorism Database, Enders et al. 2011)
- **Estimation Method:** Zero-Inflated Negative Binomial and Modified Hurdle Model

Research Design

Primary Explanatory Variable: Governance and Civil Society
Aid: aid commitments in millions of constant 2009 USD
(Aiddata.org, Tierney et al. 2011)

Control Variables

- Average Prior Attacks
- Other forms of foreign aid:
 - Development Aid: Aiddata
 - Conflict Aid: Aiddata
 - Military Aid: USAID
- GDP
- Population
- Democracy

Research Design

1996-2011	Min	Max	Mean
Number of Domestic Terrorism Incidents	0	673	7
Incidents without a Civil War	0	101	1
Incidents with a Civil War	0	673	32

Zero Inflated Negative Binomial Model

2nd stage	Pooled Sample	Non-Civil War States	Civil War States
Governance and Civil Society Aid	0.000242 (0.000531)	-0.00146** (0.000733)	0.000540 (0.000666)
Inflation Stage			
Lagged Total	-1.438*** (0.346)	-1.549*** (0.374)	-0.467*** (0.154)
ln(alpha)	1.093*** (0.135)	0.858*** (0.163)	0.714 (0.712)

Robust standard errors clustered by country in parentheses

*** $p < 0.01$, ** $p < 0.05$

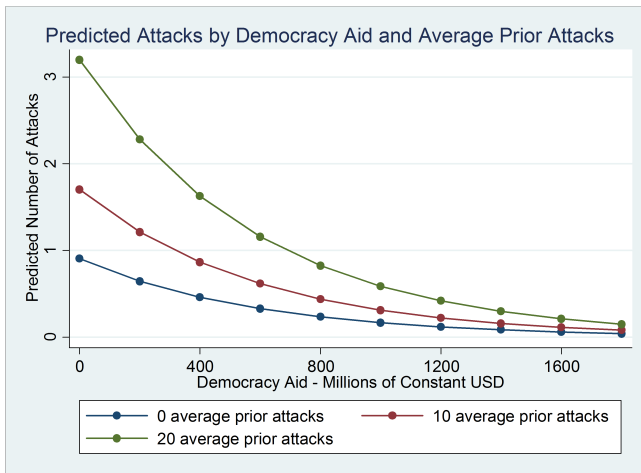
Analysis

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- A million dollar increase in *Government and Civil Society Aid* **reduces** the incidence of terrorist attacks by 0.16%, *ceteris paribus*
- An average aid allocation (~\$60 million) **reduces** the rate of terrorist attacks by 9.6%, *ceteris paribus*

Analysis



Robustness Tests

Empirical Concerns

- Construction of the inflation model
- Endogeneity of aid flows to terrorism
- Fixed Effects Model
- Regional Dummies
- Other Controls

Conclusion

- Democracy aid can improve political conditions and thereby reduce participation in, and support for, terrorism
- Democracy aid can strengthen state institutions and rule of law and thereby dampen the ability of terrorist organizations to operate
- The security benefits of democracy aid are visible in countries that are not involved in an active civil war
- "Democracy promotion" and the "fight against terrorism" are not mutually exclusive foreign policy goals

Thank you

Table 1. Summary Statistics

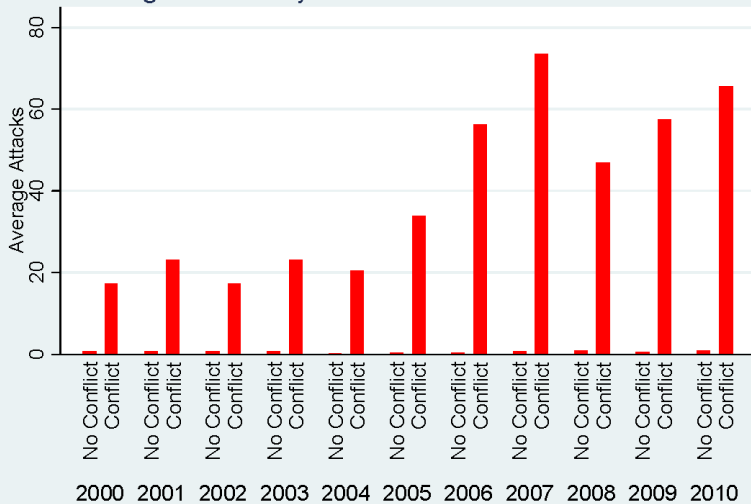
	N	Mean	Standard Deviation	Minimum	Maximum
<i>Terror Attacks</i>	1,885	7.396	33.49	0	673
<i>Average Prior Attacks</i>	1,648	7.588	30.66	0	457
<i>Government and Civil Society Aid</i>	1,885	65.05	163.7	0	2,164
<i>Government Aid</i>	1,885	52.80	150.7	0	2,071
<i>Civil Society Aid</i>	1,885	12.25	27.36	0	424.9
<i>Official Development Assistance</i>	1,821	1,236	3220	0	58,685
<i>Conflict Aid</i>	1,885	8.951	39.43	0	998.2
<i>U.S. Military Aid</i>	1,821	82.04	522.7	0	10,265
<i>Democracy</i>	1,788	1.792	6.276	-10	10
<i>GDP</i>	1,662	83,611	279,405	116.7	4195000
<i>Population</i>	1,885	42.21	156.5	0.251	1,344
<i>Civil Conflict</i>	1,885	0.198	0.399	0	1
<i>Asia</i>	1,885	0.175	0.380	0	1
<i>Latin America</i>	1,885	0.212	0.409	0	1
<i>Middle East</i>	1,885	0.153	0.360	0	1

Table 2. Zero-Inflated Negative Binomial Estimations, Base Models			
	(2-1) All Observations	(2-2) Non-Civil Conflict	(2-3) Civil Conflict
<i>Government and Civil Society Aid</i>	0.000242 (0.000531)	-0.00146** (0.000733)	0.000540 (0.000666)
<i>Official Development Assistance</i>	0.00005 (0.00005)	0.000184** (0.00007)	0.00008 (0.000103)
<i>Conflict Aid</i>	0.00634*** (0.00195)	0.0106** (0.00448)	0.00221 (0.00162)
<i>U.S. Military Aid</i>	0.000232 (0.000204)	-0.000275 (0.000185)	0.00008 (0.000141)
<i>Average Prior Attacks</i>	0.0292*** (0.00926)	0.0686*** (0.0165)	0.00901 (0.00855)
<i>Constant</i>	1.463*** (0.331)	-0.0223 (0.234)	2.683*** (0.623)
Inflation Model			
<i>Total Attacks (lagged)</i>	-1.521*** (0.306)	-1.452*** (0.301)	-0.803 (7.844)
<i>Constant</i>	1.449*** (0.184)	1.187*** (0.240)	-0.112 (1.646)
<i>ln(alpha)</i>	1.093*** (0.135)	0.858*** (0.163)	0.714 (0.712)
Observations	1,404	1,168	236
Robust standard errors clustered by country in parentheses			
*** p<0.01, ** p<0.05, * p<0.1			

Table 3. Zero-Inflated Negative Binomial Estimations, Full Models			
	(3-1) All Observations	(3-2) Non-Civil Conflict	(3-3) Civil Conflict
<i>Government and Civil Society Aid</i>	0.000344 (0.000508)	-0.00157** (0.000654)	0.000880*** (0.000285)
<i>Official Development Assistance</i>	0.00006 (0.00006)	0.000158** (0.00008)	0.000008 (0.00005)
<i>Conflict Aid</i>	0.00583*** (0.00190)	0.00930** (0.00425)	0.00285 (0.00174)
<i>U.S. Military Aid</i>	0.000299 (0.000194)	-0.00451 (0.00297)	0.000122** (0.00006)
<i>Democracy</i>	0.0103 (0.0332)	0.0225 (0.0228)	0.0110 (0.0267)
<i>GDP</i>	-0.000001 (0.0000006)	-0.000001 (0.0000008)	-0.0000006 (0.000002)
<i>Population</i>	0.00146 (0.00107)	0.00218 (0.00199)	0.00174 (0.00137)
<i>Average Prior Attacks</i>	0.0237** (0.0110)	0.0641*** (0.0160)	0.00388 (0.00382)
<i>Constant</i>	1.540*** (0.407)	0.0383 (0.252)	2.917*** (0.355)
<i>Inflation Model</i>			
<i>Total Attacks (lagged)</i>	-1.438*** (0.346)	-1.549*** (0.374)	-0.467*** (0.154)
<i>Constant</i>	1.460*** (0.205)	1.199*** (0.263)	0.0479 (0.348)
<i>ln(alpha)</i>	1.055*** (0.153)	0.797*** (0.176)	0.572*** (0.176)
Observations	1,162	968	194
Robust standard errors clustered by country in parentheses			
*** p<0.01, ** p<0.05, * p<0.1			

Table 4. Modified Hurdle Model		
	(4-1)	(4-2)
	First Stage	Zero-Truncated Negative Binomial
<i>Government and Civil Society Aid</i>	0.00195*** (0.000661)	-0.00391*** (0.00122)
<i>Official Development Assistance</i>	-0.000001 (0.00002)	0.000172* (0.000102)
<i>Conflict Aid</i>	0.00612* (0.00356)	0.000723 (0.00292)
<i>U.S. Military Aid</i>	-9.38e-06 (0.00139)	0.00406 (0.00954)
<i>Democracy</i>	0.0145 (0.0115)	-0.0690 (0.0513)
<i>GDP</i>	0.0000008* (0.0000005)	-0.000002 (0.0000009)
<i>Population</i>	-0.000620 (0.000793)	0.000719 (0.00239)
<i>Asia</i>	0.764*** (0.183)	
<i>Latin America</i>	-0.264* (0.155)	
<i>Middle East</i>	0.270 (0.209)	
<i>Nonselection Hazard</i>		-2.659*** (0.733)
<i>Constant</i>	-0.909*** (0.0888)	-12.90*** (1.086)
<i>ln(alpha)</i>		18.69*** (0.0577)
Observations	643	174
Robust standard errors clustered by country in parentheses		
*** p<0.01, ** p<0.05, * p<0.1		

Average Attacks by Year and Presence of Civil Conflict



Robustness Tests

Modified Hurdle Model

	1st stage	2nd stage
Governance and Civil Society Aid	0.0002*** (0.001)	-0.004*** (0.001)
Non-Selection Hazard		-2.659*** (0.733)
Observations	643	174