

Insurgency BAAD: Dynamics of Terrorism and Counterterrorism Campaigns

BACKGROUND

While there has been excellent country-specific quantitative analyses recently on the impact of counterterrorism and counterinsurgency (see Chenoweth and Dugan 2012; Lyall and Wilson 2009), much of the study of counterterrorism and counterinsurgency has tended to provide case evidence and comparisons (e.g. Alexander 2002, Bhoumik 2004, De Graaf 2011). Even fewer studies provide cross-national quantitative evidence on efficacy (Ackerman and LaFree 2009).

This brief provides an initial analysis of the factors that make governments more likely to use “carrots” (rewards for refraining from violence), “sticks” (use of police and military force), or “mixed” approaches (that is, both inducements and coercion within the same year) to counter insurgent organizations (some of which use terrorism as a strategy and some of which do not). The brief also analyzes the relationship between such policies and the lethality of the organization.

METHODOLOGY

This analysis was conducted using the Big Allied and Dangerous Version 2.0 - Insurgent (BAAD2-I) dataset (Asal et al. 2015). BAAD2-I includes information on all “code-able” organizations (that is, entities that are clearly distinct, bounded in terms of their membership, and persistent across time) that appear for at least one year in the Uppsala Conflict Database Program (UCDP) dataset (Themnér and Wallensteen 2011) during the period 1998-2012. UCDP includes only those insurgent organizations that (1) engaged in battle with a government that (2) resulted in at least 25 battle deaths (3) during at least one year between 1998 and 2012.

The unit of analysis is the organization-year. The team observed the following counterterrorism strategies against insurgent organizations as the dependent variable:

- Carrot/reward strategies: peace talks, negotiations, ceasefires or any deals in which the government offers incentives for the group to end violence or concedes to the group in any way
- Stick/punishment methods: includes routine police work, investigating crimes, arresting members, bringing cases to courts and any military actions against the group
- Mixed: if both types occur in one year then it is a mixed strategy for that year

Explanatory variables for the analysis included:

- The number of rivals the organization had in a given year;
- The number of allies the organization had in a given year;
- Whether or not the organization controlled territory;
- Whether or not the organization engaged in the illicit drug trade to fund itself;
- The size of the organization in a given year;
- Whether or not the country under consideration had a democratic government;
- The number of battle deaths associated with the organization in a given year; and
- The number of fatalities due to terrorist attacks by the organization in a given year.

To examine what organizational factors impact the strategy applied to each organization, the team used a logit model for each of the different strategies. We lagged the independent variables one year to deal with potential endogeneity. To account for correlations within organizational observations, standard errors are clustered by organization.

To examine the impact of strategy on the lethality of an organization, we modeled fatality counts with a time-series cross-sectional negative binomial estimator. All independent variables are lagged a year to examine how they influence future fatalities. To take into account country specific factors involved in CT strategy, we included country fixed effects and clustered standard errors by organization. A Hausman test suggests that the fixed effects model is preferred to the random effects model.

FINDINGS

The analysis shows that there is great variance in the counterinsurgency tactics that governments employ against target organizations. Some insurgent organizations were not targeted at all or very rarely while others were targeted with a “stick” approach every year that they appeared in the data.

WHAT POLICIES WERE APPLIED?

Table 1 shows the distribution of strategies employed by governments against insurgent organizations. Governments most frequently employ exclusively “stick” or punishment strategies against insurgent organizations and only rarely use exclusively “carrot” or reward-based strategies. Interestingly, governments take no action against insurgent organizations in more than 27 percent of the years. Table 2 shows the organizations that are targeted for the most years with each CT strategy.

Table 1: Frequency of strategies used, 1998-2012

Type of Strategy	# Years in the Data when this is happening	% of total
No CT government action in that year	379	27.31%
Carrot in that year	58	4.18%
Mixed in that year	325	23.41%
Stick in that year	626	45.10%

Table 2: The ten organizations targeted the most for each strategy, 1998-2012¹

Stick	Mixed	Carrot
Abu Sayyaf Group	Communist Party of the Philippines, Marxist-Leninist	Kachin Independence Army
Al-Qa'ida	Movement for Democracy in Liberia	Myanmar National Democratic Alliance Army
Eastern Turkestan Islamic Movement	United Tajik Opposition	Somali Reconciliation and Restoration Council
Karen National Union	Democratic Karen Buddhist Army Brigade 5	Convention of Patriots for Justice and Peace
National Liberation Front of Tripura	Armed Forces Revolutionary Council	Democratic Front for the Liberation of Rwanda
Palestinian Islamic Jihad	Cocoyes	Niger Delta People's Volunteer Force
Popular Front for the Liberation of Palestine	Free Syrian Army	Allied Democratic Forces
Real Irish Republican Army	Patriotic Movement of Ivory Coast	Al-Gama'at Al-Islamiyya
Shining Path (SL)	Sudan People's Liberation Movement-North	Liberation Tigers of Tamil Eelam
Kosovo Liberation Army	Armed Forces for a Federal Republic	Harakat Ras Kamboni

¹ The strategies listed are mutually exclusive; the mixed variable does not contain years where the carrot or stick methods were solely used and the stick variable refers only to years when this strategy was exclusively employed

ORGANIZATIONAL FACTORS RELATED TO THE APPLICATION OF CT POLICIES

Table 3 shows the change in probabilities of the likelihood of that strategy being used by any government against the organization when an independent variable is moved from its minimum to its maximum value based on a logistic regression analysis.

As Table 3 demonstrates, the variables that have the largest impact on any strategy are fatalities and alliances, both of which make a stick strategy more likely. Interestingly, the larger an organization is the less likely it is to be subjected to a purely stick strategy and the more likely it is to be treated with a mixed strategy. Governments are also more likely to use a mixed strategy against organizations with more rivals. Organizations that control territory and organizations that reside in a country with a democratic government are both less likely to face stick counter terrorism measures by domestic and international governments.

Table 3: Change in probability that a strategy will be used against an organization

Variable	Carrot	Mixed	Stick
# of Rivals	--	23%	--
# of Allies	--	--	58.24%
Drugs	--	--	--
Territory	6.95%	--	--
Org. size	--	17.05%	-30.51%
Democracy	-7.94%	--	--
Battle Deaths	--	--	--
Fatalities	--	--	56.51%

All independent variables lagged one year and shifted from min to max
 Probabilities presented if at least $p < 0.10$

IMPACT OF CT POLICIES

The strategy of the state influences the lethality of a militant organization. To interpret the results for these coefficients, they should be compared to the base category of doing nothing. Using either mixed or stick policies against a group last year, increases expected fatalities as compared to inaction. There was no impact on fatalities of using a pure carrot strategy. These results fit with Findley and Young (2007) who suggest that punishment strategies will lead to increased violent activity by militant groups. As Table 4 shows, only the largest groups generate more fatalities (10,000+) as compared to other categories. Mid-sized groups (1,000 to 9,999) do not seem to produce more lethal results than smaller groups (100-999). The age of the group is unrelated to its lethality. Networked groups and groups that control territory are associated with more lethal violence, consistent with Asal and Rethemeyer (2008).

Table 4: Impact of CT Strategies on Lethality of Violent Organizations, 1998-2012

Fatalities	Coef.
Size	
100-999	0.369 (0.427)
1,000-9,999	0.407 (0.440)
10,000+	1.058** (0.472)
Age	0.001 (0.001)
Network	0.869*** (0.232)
Territory	0.606*** (0.142)
CT Strategy	
Carrot	-0.174 (0.399)
Mixed	1.093*** (0.177)
Stick	0.616*** (0.194)
Population	7.25e-10*** (2.13e-10)
Democracy	0.0318* (0.017)
GDP	2.96e-06 (0.0000115)
Constant	-3.251*** (0.459)

N=803; Orgs= 76. Standard errors clustered on group in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

CONCLUSION

These analyses are an initial attempt at modeling different strategies governments use against insurgent organizations; in the future the team plans to implement a range of different modeling approaches to further our understanding of the application and outcome of such strategies. Additionally, in this report we only examines insurgent organizations. It is expected that when terrorist organizations are added or analyzed separately, there will be differences in the factors that affect the application of counterterrorist and counterinsurgent strategies. Nonetheless, the research team believes there are some important results in this initial analysis. As recent complications in understanding groups like ISIS show, many current groups transcend the terror/insurgent group categories and must be examined as hybrid organizations.

In terms of application of strategy, it is clear that the power of organizations is having an effect on government selection of counterterrorism/counter-insurgency strategies. Importantly, governments are much more likely to use exclusively stick CT strategies against insurgents that are able to inflict greater fatalities in terrorist attacks. Like in other work on political violence, violence seems to beget future violence. It appears that insurgent organizations that are targeted with a stick approach—either by itself or mixed with a carrot approach—are much more likely to use lethal terrorism. In the future the research team will examine how stick and carrot strategies impact the behavior of organizations over time and what strategies are most effective over time against violent non-state actors.

RESEARCH TEAM

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