

Addressing Terrorist Threats in a Globalized World
Assessing Counterterrorism: Intelligence and Other Policies
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1. Executive Summary

This project had three subcomponents. The first subcomponent investigates proactive and defensive counterterrorism measures by two countries that are simultaneously targeted by the same terrorist threat (e.g., al-Qaida). We investigate how the behavior of voters in their choice of policymaker can influence each country’s choice of countermeasures against the common threat. Our analysis shows that domestic politics add another layer of concern when addressing a transnational terrorist group. The theoretical framework includes a policymaker in each of two targeted countries, the voters in each of the two countries, and the terrorists. Past studies without the addition of voters have shown that there is a tendency to overspend on defensive measures and to underspend on proactive measures. Results are different in the new studies: in the case of defensive measures, voters’ choice of policymakers can curb the tendency to overspend, while, in the case of proactive measures, voters’ choice of policymaker can worsen the tendency to underspend. Voters are responding to two primary motives: the avoidance of backlash attacks directed at the heavier-handed proactive country and a desire to free ride on the security efforts of other targeted countries.

The second subcomponent investigates the role and value of intelligence when the government is uninformed about the terrorists’ preferences for violence. That is, the government does not know the terrorists’ desire for a large-scale attack. Of particular importance is the degree to which such large-scale attacks are tied to the government’s nonconcessionary stance, its belief about terrorists’ types, and militant terrorists’ desire to provoke a government’s overreaction leading to a backlash by terrorists’ supporters. A provoked government can lose world support by appearing to be no better than the terrorists. The policy implications of this characterization are twofold: deriving the optimal government proactive response under conditions of asymmetric information, and determining the value of intelligence so that this policy response can be further tailored to the type of terrorists that the government confronts.

The third subcomponent is part of the high-profile Copenhagen Consensus, which examines how money allocated to addressing some of the world’s most-pressing challenges will help humankind. We examined the control of transnational terrorism on a global scale. In particular, we proposed five “solutions or ways to mitigate” transnational terrorism – i.e., increased defensive (homeland security) measures, an enhanced war on terrorism, increased cooperation through INTERPOL, business as usual in the post-9/11 period, and more sensitive foreign policy. For each solution, we valued the associated benefits and costs to see the payback per dollar spent. In the case of both increased defensive and proactive measures, the payback was very disappointing. The biggest net return came from increased international cooperation where little money is currently spent. The cost side was relatively easy to calculate, but the benefit side was difficult, because we have to compute the value of a counterfactual – how many attacks would have occurred without one of these new policies. The study is innovative and thought-provoking.

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2. Research Accomplishments

Our work on proactive and defensive counterterrorism policies has added new participants – i.e., the voters – to the analysis. In so doing, our studies produce important changes in the conventional wisdom regarding overspending on defensive measures and underspending on offensive or proactive counterterrorism measures.

Our work on intelligence shows the importance of government's beliefs about the types of terrorists that they confront. These beliefs are important in choosing the optimal counterterrorism response. The value of more accurate beliefs is examined in a theoretical framework in terms of the avoidance of large-scale attacks. Too callous of a proactive policy can with some adversaries incite backlash attacks that are costly.

An important question is: what is the payback from increased homeland security or enhanced proactive measures? Without answers to such questions, counterterrorism budgets could grow without bound. Our Copenhagen Consensus study is the first to come up with a methodology that addresses this question and derives benefit-cost ratios for a host of counterterrorism policies. Calculations are based on terrorism's impact on Gross Domestic Product (GDP), the value of lives lost in terrorist attacks, and the cost of proposed counterterrorism measure.

3. Applied Relevance

Our studies of counterterrorism and domestic politics provide a more accurate picture of the inefficiencies associated with governments acting independently against a common terrorist threat. Since countries decide their counterterrorism policies independently, it is essential to know the potential inefficiencies that may arise from these independent choices. In fact, the benefits of transnational cooperation can only be calibrated if one understands the inherent inefficiencies that characterize governments' actions.

Our efforts to value alternative counterterrorism strategies may yield the greatest applied relevancy as governments must try to get the highest payoffs from alternative counterterrorism policies. Tough economic times mean that governments must carefully consider where they can get the greatest payback.

4. Research Highlights, Findings

- When domestic politics is considered, the underprovision of proactive measures is exacerbated as voters avoid backlash attacks and free ride on the actions of other targeted countries.
- Domestic political considerations limit the overprovision of defensive measures.
- In Western Europe, terrorism has a small, but significant annual growth-retarding effect of 0.4 percent for each attack per million people. In populous countries, a targeted country can withstand a large number of attacks with little growth consequence. Development serves a prophylactic to economic consequences from terrorism.
- The greatest payback from alternative counterterrorism policies come from increased international cooperation. At current levels, increase defensive measures had a disappointing payback.
- Incentives are not yet aligned properly to encourage international cooperation. Given that the greatest threat comes from a global terrorism network, at-risk countries need to work on aligning these incentives.

5. Collaborative Projects

Certainly some of the game theory papers that we have produced are complementary to those produced by Vicki Bier and her team. Our game-theoretic papers take a different approach by emphasizing the transnational aspects of counterterrorism; the Wisconsin group focuses on terrorism where a single country is targeted. Although the Wisconsin group accounts for substitution of targets by terrorist within a country, this group does not consider target substitution between countries or how terrorists may make targeted governments work at cross-purposes. Our work addresses these concerns.

Based on our Copenhagen Consensus study, we have begun a research relationship with INTERPOL in an attempt to better evaluate and value the net benefits from international cooperation. In particular, we want to do a benefit-cost analysis of the information and coordination resources provided by INTERPOL.

6. Research Products

Research Products		#
7a	# of peer-reviewed journal reports published	1
7a	# of peer-reviewed journal reports accepted for publication	3
7a	# of non-peer reviewed publications and reports	1
7a	# of scholarly journal citations of published reports	28
7b	# of scholarly presentations (conferences, workshops, seminars)	19
7b	# of outreach presentations (non-technical groups, general public)	2
7c	# of products delivered to DHS, other Federal agencies, or State/Local	0
7c	# of patents filed	0
7c	# of patents issued	0
7c	# of products in commercialization pipeline (products not yet to market)	0
7c	# of products introduced to market	0

Sandler, Todd - University of Texas at Dallas	Ref.	Not Ref.
1. Sandler, T., Arce, D., Enders, W., "Transnational Terrorism," <i>Björn Lomborg, Global Crises, Global Solutions</i> , 2 nd Edition, Cambridge: Cambridge University Press, forthcoming, 2009		x
2. Arce, D., Sandler, T., "Terrorist Spectaculars: Backlash Attacks and the Focus of Intelligence," in review	x	
3. Bandyopadhyay, S., Sandler, T., "The Interplay between Preemptive and Defensive Counterterrorism Measure: A Two-Stage Game," under publication review	x	
4. Siqueira, K., Sandler, T., "Defensive Counterterrorism Measures and Domestic Politics," <i>Defense and Peace Economics</i> , Vol 19, December 2008	x	
5. Gaibullov K., Sandler, T., "Growth Consequences of Terrorism in Western Europe," <i>Kyklos</i> , Vol 61:3, 411-424, 2008	x	
6. Ivanova, K., Sandler, T. "CBRN Attack Perpetrators: An Empirical Study," <i>Foreign Policy Analysis</i> , 3:3, 273-294, October 2007	x	

7. Education and Outreach

Khusrav Gaibullov is finishing up his PhD under my direction. Thus far, we have written three papers on terrorism. Two papers have been accepted for publication at the *Journal of Peace Research* and

Kyklos and a third paper is revised and resubmitted to *Economics and Politics*. I have also taught an undergraduate seminar on “The Political Economy of Terrorism” during the spring 2008 semester.

Education and Outreach Initiatives	#
# of students supported (funded by CREATE)	0
# of students involved (funded by CREATE + any other programs)	1
# of students graduated	0
# of contacts with DHS, other Federal agencies, or State/Local (committees)	1
# of existing courses modified with new material	1
# of new courses developed	0
# of new certificate programs developed	0
# of new degree programs developed	0

In February 2008, I lent my expertise to a National Academy of Sciences Workshop on assessing and countering the threat of improvised explosive devices (IEDs). In particular, I explained the theoretical and empirical tools that I developed through my projects at CREATE.

Media stories about our Copenhagen Consensus were featured in *The Economist*, the *Wall Street Journal*, BBC World, *Dallas Morning News*, and many other places. I was contacted by Ronald Noble, the Secretary-General of INTERPOL, to extend our study. INTERPOL has offered to provide data so that we can do a more detailed study. I am scheduled to meet with Ronald Noble on October 24, 2008 in Lyon, France. I had a conference phone call with the INTERPOL research office on September 30, 2008.

Gave 19 seminars and 2 public presentations.

Conferences

- Sandler, T., “Economic Consequences of Terrorism,” University of Oklahoma, Norman, OK, June 29, 2008
- Sandler, T., “The Benefits and Costs of Homeland Security,” Keynote Address, Summer Workshop on Teaching about Terrorism, University of Oklahoma, Norman, OK, June 29, 2008
- Sandler, T., Brandt, P., “Hostage Taking: Understanding Terrorism Event Dynamics,” Technical University of Lisbon, Lisbon, Portugal, June 16, 2008
- Sandler, T., “Fitting In: Group Effects and the Evolution of Fundamentalism,” Technical University of Lisbon, Lisbon, Portugal, June 16, 2008
- Siqueira, K., Sandler, T., “Defensive Counterterrorism Measures and Domestic Politics,” Canadian Economic Association annual meetings, Vancouver, Canada, June 8, 2008
- Sandler, T., “Economic Consequences of Terrorism,” University of Oklahoma, Norman, OK, June 8, 2008
- Sandler, T., “Transnational Terrorism,” expert panel at *The Copenhagen Consensus*, Copenhagen, Denmark, May 20, 2008
- Sandler, T., “Transnational Terrorism,” Youth Forum, *Copenhagen Consensus*, Copenhagen, Denmark, May 19, 2008
- Sandler, T., Brandt, P., “Hostage Taking: Understanding Terrorism Event Dynamics,” conference on terrorism and policy, University of Texas at Dallas, Dallas, TX, May 15-16, 2008
- Sandler, T., Arce, D., “Deterrence: Credibility and Proportionality,” conference on terrorism and policy, University of Texas at Dallas, Dallas, TX, May 15-16, 2008
- Gaibullov, K., Sandler, T., “Growth Consequences of Terrorism in Western Europe,” conference on terrorism and policy, University of Texas at Dallas, Dallas, TX, May 15-16, 2008

- Sandler, T., “Hostage Taking: Understanding Terrorism Event Dynamics,” *International Studies Association Annual Meeting*, San Francisco, CA, March 26-30, 2008
- Sandler, T., Arce, D., “Deterrence: Credibility and Proportionality,” *International Studies Association Annual Meeting*, San Francisco, CA, March 26-30, 2008
- Sandler, T., “Collecting Data on Terrorism: Roundtable on Different Databases of Terrorist Incidents,” *International Studies Association Annual Meeting*, San Francisco, CA, March 26-30, 2008
- Sandler, T., “Applying Analytical Methods to Study Terrorism,” *International Studies Association Annual Meeting*, San Francisco, CA, March 26-30, 2008
- Sandler, T., Siqueira, K., “Defensive Counterterrorism Measures and Domestic Politics,” *International Studies Association Annual Meeting*, San Francisco, CA, March 26-30, 2008
- Sandler, T., “Understanding Terrorism Event Dynamics,” workshop on civil war and conflict, International Peace Research Institute Oslo, Oslo Norway, March 5-6, 2008
- Sandler, T., “Research on Transnational Terrorism,” workshop on conflict, Department of International Affairs, University of Georgia, Athens, GA, January 11, 2008
- Sandler, T., “Terrorist Backlash, Terrorism Mitigation and Policy Delegation,” *American Economic Association Annual Meeting*, New Orleans, LA, January 6, 2008

Outreach Presentations:

- Sandler, T., Participant at National Academy of Sciences Workshop, Improvised Explosive Devices and Terrorism, Irvine, CA, February 13-16, 2008
- Sandler, T., “The Politics and Economics of Terrorism,” Whitman College, Walla Walla, WA, September 20, 2007