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Research Report

Highlighting the Major Trade-Offs Concerning Anti-Terrorism Policies

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European Security Economics

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POLICY BRIEFING

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Highlighting the Major Trade-Offs Concerning Anti-Terrorism Policies.

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- **What are the risks involved in the occurrence of terrorism?**
- **What are the major policy options in fighting terrorism?**
- **Are the current policy options (cost) effective?**

Summary: Human-induced security, or terrorism, is a threat to wellbeing in Europe and beyond. In this Policy Briefing, we investigate the risks involved in terrorism, both with respect to the likelihood and with respect to the consequences of acts of terrorism.

Furthermore, we provide a basic analysis of existing anti-terrorism policies, the costs involved in them and their effectiveness. We show that terrorism is a very broad term, but that one can make a number of broad policy recommendations, including the fact that the rational economic approach to terrorism recognizes that terrorists respond to the incentives they are provided with.

Introduction

While one might expect that the economic analysis of terrorism focuses mainly on the understanding of what economic circumstances affect the occurrence of terrorism and how the occurrence of terrorism affects economic outcomes, this is a very simplistic view. In reality, the contributions of economists to the analysis of security stems mostly from a methodological contribution by employing economic modeling and econometric tools to questions of security. Using these, economists contribute to the understanding of the behavior of individuals and groups that engage in terrorist activities, in order to propose policies that can effectively stop them.

Within the EUSECON project, several research avenues are explored that contribute to the stock of knowledge on this topic. This particular Policy Briefing is substantially based on Müller (2011), but it is part of a greater body of work initiated by EUSECON project partners.

Insecurity is broader than just terrorism

While in this briefing, we focus on the role of terrorism, it is important to remember that insecurity has a much broader basis. In fact, it is widely recognized that terrorism is only a subcategory of the broad spectrum of insecurities that we currently face as a society.

The first distinction that is made in the analysis of insecurity is between natural (e.g. natural disasters), accidental (e.g. industrial accidents) and purposeful (e.g. terrorism or crime) security threats.

While both natural and accidental insecurity are highly regrettable, the policy implications thereof need to be found primarily in coping and preventative solutions. For example, in the case of natural disasters, it is pivotal to have early warning systems in place and effective plans for evacuation if the need arises. In the case of accidental insecurity, there needs to be a focus on prevention. While industrial incidents can always occur in any case, the probability of occurrence is affected by the kind of security regulations that industrial production facilities are confronted with. In addition, preventative policy measures, such as limiting potentially dangerous industrial zones to non-residential areas, can save many lives.

Purposeful human-induced insecurity is different though. It is distinct from the other forms of security because of the *aim* of agents to harm another person or their property, or to *accept* harm to others as a side-effect. Terrorism is defined as the use of violence to achieve a political objective (Enders and Sandler, 1993), which hints at three important characteristics: 1) It pursues a political goal, 2) it directly targets civilians and 3) the actual targeted audience is the state. Thus, terrorism is of a two-sided asymmetrical nature (Stepanova, 2008), in which perpetrators and the state play opposing roles.

What is the true risk of terrorism?

The risk of terrorism is defined as a function of threat, vulnerability, and consequences, conditional on anti-terrorism measures taken by private and public agents. The probability of a country becoming a terrorist target depends on various factors. These factors include the attractiveness of the country or a given location in that country for terrorist aims, the motivations and drivers of terrorism, and the capabilities of a terrorist group or network to conduct successful attacks, both in general and in that county in particular. The capability of a terrorist group or network refers to its ability to recruit 'productive' terrorists, to organize and finance themselves, to plan an attack and to manage the necessary logistics, to name but a few of these features.

There is a wide range of academic studies looking at the characteristics of individuals taking part in terrorist activities. Contrary to the common perception, these studies do not find that terrorist engagement is associated with poor education, low economic status, or irrationality (e.g. Krueger and Maleckova, 2003). Indeed, they find that there is only marginal evidence that economic conditions or education are associated with terrorism and instead point towards factors like political instability, demography, institutions and societal polarization.

Extreme events, like terrorism, can lead to individuals overestimating the assessed risk

According to the classification of Krugman (2004), the costs of terrorism can be divided between 1) economic costs imposed by the damage done to buildings and infrastructure; the loss of life; and the disruption to the economy; 2) costs involved in the behavioral response to terrorism; and 3) the costs induced by security spending and anti-terrorism measures. Research finds that there is an important distinction between one-off and persistent terrorism. Singular events appear to have only short-term impacts on both economic growth and the performance of the stock market, whereas a persistent reign of terror, such as in the Basque Region, can have a considerable long-term impact.

A larger impact, particularly concerning non-repetitive incidents is the resulting increase in uncertainty. Extreme events, like terrorism, can lead to individuals overestimating actual risk and thus be driven by non-rational expectations. Several studies show that this behavioral change not just affects consumption patterns, but also political preferences. For example, Bozzoli and Müller (2011) show that there is a relationship between terrorist activity and citizen's willingness to trade civil liberties for increased security. Finally, the costs involved in security

responses to the threat of terrorism are a factor needing greater examination.

What kind of anti-terrorism measures are there?

The term 'anti-terrorism measures' includes all measures and policies designed to reduce the risk of terrorism. This includes security measures, whether via regulation or policy, imposed by private and public agents in order to protect either themselves or others, to the engagement in wars against terrorism. Such anti-terrorism measures can differ in various ways. They can either entail public spending or can impose costs on private individuals and companies through rules and regulations.

Economists distinguish between two (non-mutually exclusive) types of classification of anti-terrorism measures: 1) the differentiation between defensive and pro-active measures and 2) the differentiation between deterrent and 'positive' measures.

Terrorists are rational: increasing the costs of one activity leads to substitution towards others

The distinction between defensive and pro-active measures is found in the target of the measure, where the first focuses on the intended victims of terrorism, and the second focuses on the perpetrators of terrorism. The distinction between deterrent and 'positive' (or 'benevolent') measures, on the other hand, can be found in their approach. Deterrent measures aim to make it harder for terrorists and terrorist groups to engage in terrorism, whereas positive measures are intended to create incentives that induce terrorists to choose to refrain from their engagement in such activities. A great challenge for policy is the mixed public-private good nature of security provision concerning terrorism. While defensive measures are largely a private good, pro-active measures have strong public good characteristics. This has the potential to lead to public policy failure, thus stressing the importance of multilateral cooperation and the application of a 'mix' of anti-terrorism measures.

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How (cost-) effective are existing policies?

Effective decision-making regarding anti-terrorism measures should address both the costs of the measures and the benefits thereof. The evaluation of anti-terrorism measures is an important step in exploring to what extent spending on this issue is warranted. From the researcher's point of view, there are two major challenges to be overcome in such analysis. First, there is only limited data available when it comes to anti-terrorism policy since the availability of such data could jeopardize its effectiveness. Second, incidents of terrorism are only recorded at the moment they occur and there is no data on the time of planning, preparation, recruitment and logistics. On top of that, usually only (nearly) successful attacks are recorded, thus creating a systemic data collection bias.

There are some successful analyses. Drakos and Giannakopoulos (2009) find that between 1970 and 2003, authorities became better able to stop potential terrorist attacks, and that such attacks started to tilt more towards material damage rather than loss of life. The most important findings from this study and others like it is that terrorists act rationally: an increase in the relative price of performing one activity leads to a substitution effect away from that activity and toward others. For example, the introduction of metal detectors at American airports led to a migration of potential airplane hijackers to other targets.

Finally, the political economy literature finds that policymakers are often driven more by the behavior of

their electorates than by the real effects of their policies. Thus, the perceptions and preferences of the public regarding terrorist threats are of great importance. That means that decisions could be made on irrational grounds, such as public fears that do not stand up to detailed scrutiny. For that reason, it is very important to take into account the non-monetary aspects of politician's calculations concerning security policy. The result is that, depending on the behavior of the public and the uncertainty regarding the information provided to people, public security can be either under- or overprovided.

Policy recommendations

In this briefing, we give an overview of the different aspects of anti-terrorism research from the policymaker's perspective. For policymakers it is important to remember that terrorists are not as monolithic as expected. Terrorists respond to incentives in the same rational way as other economic actors do. This implies that policy responses should account for substitution effects in terms of time, means, and geographic locations. Due to the public good nature of security provision, anti-terrorism measures should also be flexible and multilateral. Anti-terrorism measures targeting the root causes of terrorism must be carefully chosen and implemented. Finally, while there is some literature evaluating the cost-effectiveness of anti-terrorism measures, this is a field in which much more research is needed.

Credits

This EUSECON Policy Briefing was authored by Olaf J. de Groot from the German Institute for Economic Research and Cathérine Müller from the Institute of Development Studies at the University of Sussex. The views expressed in this briefing are the authors' alone.

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