

Editorial

Introduction to the special issue on: Understanding, quantifying and modelling the terrorist threat

This special issue of the *Journal of Policy Modelling* presents a selection of the best papers presented at the conference on “Policy Implications of Terrorism”, held in Lisbon on 16 June 2008, at the Instituto Superior de Economia e Gestao, Technical University of Lisbon. The conference was organized by UECE—Research Unit on Complexity and Economy and was supported by the Portuguese Fundação para Ciencia and Tecnologia (Portuguese Public Foundation for Science) and by the FLAD—Fundação Luso-Americana para o Desenvolvimento. Ten papers were presented by leading researchers on terrorism, from which five have been selected based on their theoretical and empirical contribution and their implication for policy.

The papers study a variety of important problems and issues associated with terrorism.

The first paper, written by Daniel Arce and Todd Sandler presents an evolutionary game theoretic model developed to investigate how fundamentalism can evolve within a society. Their framework allows the analysis of group effects in an asymmetric game, which is essential to understand intra-state conflict. They show that fundamentalist dominance is inversely related to the extent that fundamentalists are ostracized, and their intolerance of others. In the presence of counterfeit behaviour and sufficient between-group interaction, fundamentalist intolerance induces much of the society to display fundamentalist traits. They establish that a fair and open society decreases the effectiveness of counterfeitable fundamentalism.

In the second paper, Patrick Brandt and Todd Sandler analyse the dynamics of hostage taking terrorism. For terrorists, hostage taking incidents are among the most dangerous activities, however they resort to such attacks because they result in high payoffs in terms of publicity, ransoms and recruitment. The paper analyses time series for kidnappings, skyjackings, and other hostage events using the Poisson autoregressive model to identify the lag structure and the impacts of covariates. The authors also apply a reversible-jump Markov model to identify change points for the three series. They find that each hostage series has different change points caused by a variety of circumstances. Skyjackings and kidnappings arrival rates are negatively correlated, implying that policies that discourage skyjackings may encourage kidnappings, calling for multiple policy interventions. Skyjackings and other hostage events are positively correlated, which makes a single policy intervention efficient. The paper establishes significant empirical support for the no-concession policy.

In the third paper Bruno Frey points out that most international terrorist groups of the 21st century are no longer organized in a strict hierarchical form. Rather, they function as informal

networks which makes their members much more difficult to identify and capture. These groups imitate the “global franchise” models of international businesses such as McDonald’s or Starbucks. According to Frey terrorism is impossible to eradicate, as a consequence he tackles the question: “What can business do to cope more successfully with terrorism?”. He puts forward six concrete proposals, three to reduce terrorists’ incentives to attack business premises; and three to minimize the costs to businesses of terrorist attacks.

The fourth paper written by Kollias, Messis, Mylonidis and Paleologou examines empirically the effectiveness of counter terrorism policy in Greece during the period of 1974–2004 [including the 2004 Olympic Games]. They focus on investment expenditure in domestic security and public order. Their results suggest that such investment has a lagged and significant negative impact on terrorist attacks, showing that counter-terrorist infrastructure and equipment can be an effective policy measure in the fight against terrorism.

Last, but not least, the article by Prieto-Rodriguez, Gabriel Rodriguez, Salas and Suarez-Pandiello propose a methodology to measure the social impact of terrorism. They construct a multidimensional index of terrorism by aggregating different dimensions of terrorism, such as killed people, injured people, bombs, kidnappings and targets. For this aggregation they estimate the weight of each dimension by regressing the social impact of terrorism on these dimensions. This method is applied to evaluate the social impact of ETA terrorism in Spain from 1993 through 2005.

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