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978-1-107-00456-6 - The Political Economy of Terrorism: Second Edition

Walter Enders and Todd Sandler

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THE POLITICAL ECONOMY OF TERRORISM, SECOND EDITION

The Political Economy of Terrorism, Second Edition, presents a widely accessible political economy approach to the study of terrorism. It applies economic methodology – theoretical and empirical – combined with political analysis and realities to the study of domestic and transnational terrorism. In so doing, the book provides both a qualitative and quantitative investigation of terrorism in a balanced, up-to-date presentation that informs students, policymakers, researchers, and the general reader of the current state of knowledge. Included are historical aspects, a discussion of watershed events, the rise of modern-day terrorism, examination of current trends, the dilemma of liberal democracies, evaluation of counterterrorism, analysis of hostage incidents, and much more. The new edition expands the coverage of each chapter, adds a new chapter on terrorist network structures and organization, accounts for changes in the Department of Homeland Security and the USA PATRIOT Act, and discusses insurance against terrorism.

Rational-actor models of terrorist and government behavior and game-theoretic analysis are presented for readers with no prior theoretical training. Where relevant, the authors display graphs using data from International Terrorism: Attributes of Terrorist Events (ITERATE), the Global Terrorism Database (GTD), and other public-access data sets.

Walter Enders holds the Bidgood Chair of Economics and Finance at the University of Alabama. He has published numerous research articles in such journals as the *Review of Economics and Statistics*, *Quarterly Journal of Economics*, *American Economic Review*, *Journal of Economics Literature*, *Journal of Business and Economic Statistics*, and the *American Political Science Review*. He is on the editorial board of the *Journal of Conflict Resolution*. Dr. Enders's *Applied Econometric Time-Series* is a leading book in the field. In 2003, he was the corecipient with Todd Sandler of the National Academy of Sciences Award for Behavioral Research Relevant to the Prevention of Nuclear War.

Todd Sandler is the Vibhooti Shukla Professor of Economics and Political Economy at the University of Texas at Dallas. He has written or edited twenty-one books, including *Global Collective Action*; *Economic Concepts for the Social Sciences*; *The Political Economy of NATO* (with Keith Hartley); and *Global Challenges: An Approach to Economic, Political, and Environmental Problems*, as well as more than two hundred journal articles in economics and political science. His work on terrorism dates back to 1983.

Professors Enders and Sandler coauthored the first edition of this title.

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The Political Economy of Terrorism

Second Edition

WALTER ENDERS

University of Alabama

TODD SANDLER

University of Texas at Dallas



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*To Linda Enders
and to the memory of Henry Sandler (1939–2005)*

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Frontmatter

[More information](#)

Contents

| | |
|---|------------------|
| <i>List of Tables and Figures</i> | <i>page</i> viii |
| <i>Preface</i> | xiii |
| 1. Terrorism: An Introduction | 1 |
| 2. The Dilemma of Liberal Democracies | 28 |
| 3. Statistical Studies and the Dynamics of Terrorist Behavior | 61 |
| 4. Counterterrorism | 103 |
| 5. Transference | 138 |
| 6. International Cooperation: Dilemma and Inhibitors | 170 |
| 7. Hostage Taking | 201 |
| 8. Terrorist Groups and Their Organization | 238 |
| 9. Before and After 9/11 | 269 |
| 10. The Economic Impact of Terrorism | 288 |
| 11. Homeland Security | 317 |
| 12. The Future of Terrorism | 345 |
| <i>References</i> | 363 |
| <i>Author Index</i> | 379 |
| <i>Subject Index</i> | 383 |

Tables and Figures

TABLES

| | |
|---|----------------|
| 1.1. Some Terrorist Tactics | <i>page</i> 11 |
| 1.2. Historical Terrorist Campaigns | 22 |
| 2.1. Supporting and Inhibiting Factors for Terrorism in a Liberal Democracy | 32 |
| 2.2. Odds Ratio for Presence of Terrorist Group | 34 |
| 2.3. Features Distinguishing between Left-Wing and Fundamentalist Terrorists | 57 |
| 3.1. Key Variables in ITERATE | 68 |
| 3.2. Number of Incidents by Type (1968–2008): ITERATE Data | 69 |
| 3.3. Cyclical Properties of the Terrorist Time Series | 81 |
| 3.4. Impact of Metal Detectors on Skyjackings: Intervention Analysis | 86 |
| 3.5. Interventions | 90 |
| 3.6. Effects of the Interventions | 91 |
| 3.7. Number of Incidents by Type (1970–2007): GTD Data | 97 |
| 3.8. Cross-Correlations of Domestic and Transnational Incidents | 100 |
| 4.1. Proactive and Defensive Measures against Terrorism | 112 |
| 5.1. Target Substitution and Statistically Significant Changepoints | 160 |
| 5.2. Description of the Intervention Variables | 164 |
| 5.3. Results of the VAR | 166 |
| 6.1. Essential Asymmetries between Terrorists and Targeted Governments | 182 |

Tables and Figures ix

| | |
|--|-----|
| 6.2. Global and Regional Conventions and Treaties Relating to Controlling International Terrorism | 190 |
| 6.3. International Efforts against the Funding of Terrorism | 196 |
| 7.1. Select Key Hostage-Taking Incidents Prior to 1986 | 210 |
| 7.2. Select Hostages Captured during 1982–1992 Lebanon Hostage Crisis | 214 |
| 7.3. Select Hostages Captured during 2004 in Iraq | 217 |
| 7.4. Significant Determinants of Various Aspects of Hostage Incidents | 228 |
| 7.5. Hostage-Taking Change-points for Transnational Terrorism | 235 |
| 8.1. Major Terrorist Groups by Motive and Number of Attacks | 242 |
| 10.1. Insured Losses from Terrorist Attacks and Disasters | 291 |
| 10.2. The Direct Costs of 3/11 in Constant 2009 US Dollars | 295 |
| 11.1. Highlights of USA PATRIOT Act (HR 3162) | 320 |
| 11.2. Key Directorates, Offices, and Mission Agencies of the Department of Homeland Security | 323 |
| 11.3. Department of Homeland Security: Responsibilities of Component Parts | 326 |
| 11.4. Department of Homeland Security Budgets: Fiscal Years (FY) 2009, 2010, and 2011 | 330 |
| 11.5. Homeland versus Nonhomeland Security Funding Breakdown, 2009, 2010 | 332 |
| 11.A1. Total Budget Authority by Organization as of 31 January 2004 | 344 |
| 12.1. Potential Mass-Casualty Terrorist Attacks | 350 |
| 12.2. Select Mass-Casualty Terrorist Attacks | 351 |
| 12.3. Select Consequence Scenarios for CBRN Attacks | 353 |
| 12.4. Inhibiting and Promoting Factors Regarding Terrorists’ Use of WMDs | 356 |
| 12.5. Past Incidents of Chemical, Biological, and Radiological Terrorism | 358 |

FIGURES

| | |
|---|----|
| 2.1. Terrorism–civil liberties constraint | 39 |
| 2.2. Indifference map for terrorism–civil liberties trade-off | 40 |
| 2.3. Social equilibrium | 41 |
| 2.4. Alternative equilibriums | 42 |

| | |
|---|-----|
| 2.5. Influence of increased counterterrorism | 43 |
| 2.6. Transnational terrorist incidents: 1968–2008 | 49 |
| 2.7. Proportion of US transnational terrorist incidents: 1968–2008 | 50 |
| 2.8. Suicide incidents: Quarterly, 1981–2005 | 58 |
| 2.9. Victims of suicide incidents: Quarterly, 1981–2005 | 58 |
| 3.1. Annual number of sunspots | 62 |
| 3.2. All incidents and bombings | 70 |
| 3.3. Hostage takings and assassinations | 71 |
| 3.4. Threats and hoaxes | 73 |
| 3.5. Incidents with deaths and casualties | 74 |
| 3.6. The proportion of death incidents | 75 |
| 3.7. Typical intervention functions | 83 |
| 3.8. US domestic and transnational skyjackings | 85 |
| 3.9. Domestic casualty incidents using the modified GTD data | 99 |
| 3.10. Transnational casualty incidents using the modified GTD data | 99 |
| 4.1. Terrorists' resource constraints | 106 |
| 4.2. Prisoners' Dilemma | 113 |
| 4.3. Chicken and assurance game | 115 |
| 4.4. Two-target preemption game | 118 |
| 4.5. Six-nation preemption game | 118 |
| 4.6. Asymmetric preemption scenario | 120 |
| 4.7. Two-target deterrence game | 122 |
| 4.8. Deterrence versus preemption – symmetric case | 124 |
| 4.9. Deterrence versus preemption – asymmetric case | 125 |
| 4.10. Weakest-link security risk | 127 |
| 4.11. Best-shot security innovation | 130 |
| 4.12. Proactive measures in two countries | 132 |
| 4.13. Defensive measures in two countries | 134 |
| 4.14. Terrorists versus the government | 135 |
| 5.1. Expected utility of a potential skyjacker | 141 |
| 5.2. Indifference curves for terrorist and nonterrorist actions | 145 |
| 5.3. The optimal allocation | 147 |
| 5.4. Increasing the cost of terrorist attacks | 147 |
| 5.5. Reduction in terrorists' resources | 148 |
| 5.6. Substitutability between attack modes | 150 |
| 5.7. A benevolent strategy | 153 |
| 5.8. Substitutions between attack modes | 165 |

Tables and Figures xi

| | |
|--|-----|
| 6.1. Transnational external costs | 173 |
| 6.2. Transnational external benefits | 175 |
| 6.3. Mixed externalities | 177 |
| 6.4. Prisoners' Dilemma viewed from period two of two-period game | 183 |
| 6.5. Freezing assets: Coordination game | 185 |
| 7.1. Percentage of hostage-taking missions | 205 |
| 7.2. Proportion of kidnappings to all hostage-taking missions | 206 |
| 7.3. Annual number of domestic hostage-taking missions | 207 |
| 7.4. Game tree for hostage event | 223 |
| 8.1. Regular networks (n, r) | 250 |
| 8.2. Nonregular networks and their densities | 251 |
| 8.3. Terrorist wings' actions as complements | 257 |
| 8.4. Terrorist wings' actions as substitutes | 258 |
| 9.1. All incidents with US victims | 271 |
| 9.2. Proportion of incident types by income group | 281 |
| 9.3. Casualty incidents by region | 282 |
| 10.1. Macroeconomic variables and 9/11 | 296 |
| 10.2. Net capital stock held by foreigners in Spain | 311 |
| 10.3. US FDI in selected areas | 313 |
| 11.1. US Department of Homeland Security expenditures: 2003–2011 | 329 |
| 12.1. CBRN terrorist incidents: 1960–2004 | 359 |

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Preface

The first edition of this book was published in 2006. Since its publication, there has been a tremendous amount of research in economics, political science, operations research, and related fields on terrorism. This is due to the continued security threat to society posed by terrorism and to the large quantity of resources allocated to defensive and offensive counterterrorism measures. Another driver of this interest has been the funding made available by the US Department of Homeland Security (DHS), the US Department of Defense, the European Union, and other institutions for the study of terrorism and the practice of counterterrorism. The Science and Technology agency in the DHS has funded twelve Homeland Security Centers of Excellence to study various terrorism-related issues – for example, protecting critical infrastructure against terrorist attacks and preparing for biological terrorism. Some of these centers have degree programs to teach students about the analysis of terrorism, so the need for an up-to-date version of our book has grown.

This second edition is a substantial revision of the first edition; nevertheless, the new edition maintains the structure, analytical orientation, and accessibility of the first edition. The new edition incorporates a number of key changes. First, it brings topics up to date in terms of current thinking and the recent literature. In particular, there is now a lot more insight and knowledge about the economic impact of terrorism, the prospects for international cooperation to thwart terrorism, and the efficacy of alternative counterterrorism tools. Recent research articles have incorporated more agents – for example, terrorist operatives, the general population, and targeted governments – into the strategic analysis of terrorism. There are more models that address suicide terrorism. Second, the new edition updates the statistical displays to include terrorist-event data through 2008. Unlike the first edition, which focused on transnational terrorism, the second

edition also investigates domestic terrorism. Statistics on domestic terrorist incidents come from the Global Terrorism Database, maintained at the University of Maryland. Third, the new edition accounts for changes with respect to DHS, the USA PATRIOT Act, insurance against terrorist incidents, and other institutional concerns. Fourth, the new edition uses recent terrorist incidents – for example, the attempted downing of a Northwest Airlines flight on 25 December 2009, the failed terrorist plot to blow up transatlantic flights with liquid explosives in August 2006, and the Mumbai armed attacks on 26 November 2008 – as relevant illustrative examples.

The new edition expands the coverage of each chapter so that topics from the first edition are discussed in greater detail. Moreover, new topics are added to each chapter – for example, the study of target substitution is addressed in Chapter 5; an analysis of hostage-taking dynamics is included in Chapter 7; and the psychic costs of terrorism and the Life Satisfaction Approach are considered in Chapter 10. In addition, key factors affecting hostage-taking dynamics are indicated in Chapter 7. More graphs and tables have been added throughout the second edition. There is also a new chapter on terrorist groups and their organization. Among other things, this chapter considers how terrorist groups trade off their functionality and connectivity for security when determining their institutional form. This new chapter also investigates characteristics of terrorist groups based on their orientation – that is, religious, nationalist/separatist, left-wing, or right-wing. The longevity of terrorist groups is also discussed, along with their tendency to splinter into more groups. In addition, dynamic issues, including recruitment, are investigated.

Since its publication we have used the book in many classes that we have taught on terrorism. These in-class experiences have provided us insights into where concepts and analyses in the first edition needed clarification and/or expansion. We drew from these experiences and student feedback in order to improve the book.

This edition presents a widely accessible political economy approach that combines economic methods with political analysis and realities. In so doing, the book provides both a qualitative and quantitative investigation of terrorism in a balanced, up-to-date presentation that informs students, practitioners, policymakers, researchers, and the general reader of the current state of knowledge. We also indicate fruitful areas for future research. Most books on terrorism focus on historical, cultural, factual, and conceptual details and shy away from rational-choice-based analyses backed by statistical inference. Our book presents not only the historical and conceptual issues, but also scientific-based analyses of the behavior of terrorists and government policymakers. Moreover, we are concerned with knowing how

these adversaries make rational decisions in a strategic interactive framework. That is, how do the choices of the terrorists influence governments' counterterrorism policies, and how do these policies affect the choices of the terrorists? Strategic interactions among targeted governments are also investigated. Since the publication of the first edition, these strategic analyses have become more complex, with the actions of more agents being incorporated into the studies. To establish the relevancy of the theories presented, we display data and review statistical findings from a variety of studies.

Although we are particularly interested in rational-choice models and their empirical verification, we are no less interested in the history of terrorism, the causes of terrorism, and the dilemma faced by liberal democracies. Unlike most other books, this book identifies rational explanations for observed behavior – for example, why terrorist groups often cooperate and form networks, while targeted governments are slow to cooperate. We address many questions, including the following: When confronted with a common terrorist threat, why do targeted governments rely on defensive measures that merely deflect attacks to soft targets, and often eschew proactive responses that would reduce the threat for all governments? Why do countries fail, at times, to adhere to a stated policy of not conceding to hostage takers' demands when it is in their long-run interests never to concede? Which counterterrorism policies work best? How successful have terrorists been in creating economic consequences for targeted countries? Could the 9/11 attacks have been predicted with advanced forecasting tools, and how has transnational terrorism changed since 9/11?

By applying simple economic models and statistical analyses, our book provides a unique and important perspective on the study of terrorism. This perspective is increasingly being applied by researchers at the Centers of Excellence funded by the DHS. It is also used by researchers funded by other grant-giving organizations. To better understand terrorism and to counter its threat, society must utilize varied techniques and knowledge from many disciplines – for example, history, sociology, law, psychology, operations research, statistics, and economics. Our book draws upon insights from all of these disciplines. If one looks through a typical book on terrorism, especially those used in college courses, one will find few, if any, statistical displays of the incidence of terrorist events over time. More important, these books do not present any analysis or explanation of these patterns of events. Most books rely, instead, on some “watershed” events or case studies to draw some general principles. By contrast, we present data on terrorist events over time to bolster our investigation of numerous watershed incidents. Thus, our book is rich in detail about past terrorist events and the changing pattern of terrorism.

Our book is intended for use in college-level economics, political science, and public policy courses on terrorism. The book is also appropriate for classes at military colleges. Our approach will particularly appeal to teachers who want to emphasize a rational-choice basis for understanding terrorism and policies to ameliorate its threat. The book assumes no pre-knowledge of the techniques used. Thus, the game-theoretic methods are explained in detail for readers who have never seen a game matrix or game tree. The book is also useful for researchers who are new to the field and who may be driven to study terrorism because of their interest in the topic or the availability of funding from numerous sources since 9/11. Our book allows a researcher to gain the requisite background in the field, because we have incorporated a rich and diverse set of references and techniques. The interested reader can consult our plentiful references for further details about a particular approach or analysis. In addition, the book should interest people in DHS, the intelligence community, the defense sector, law enforcement, and the insurance industry, all of whom have to address myriad issues concerning modern-day terrorism. Our book provides a different way of thinking about terrorism.

We have profited from perceptive comments on various drafts from anonymous reviewers. We have received helpful support and counsel from Scott Parris, the economics editor at Cambridge University Press. We also appreciate the efforts of the production staff at Cambridge, who transformed the typescript into a book. We acknowledge our debt to our coauthors of articles, where some of the concepts applied here were originally developed. Prominent on this list are Dan Arce, Subhayu Bandyopadhyay, Patrick Brandt, Jon Cauley, Khusrav Gaibullov, Kate Ivanova, Paan Jindapon, Harvey Lapan, Kevin Siqueira, and John Tschirhart. Others include Scott Atkinson, Peter Flemming, Beom S. Lee, Dwight Lee, Edward Mickolus, B. Peter Rosendorff, Adolfo Sachsida, John Scott, Xuejuan Su, Donggyu Sul, and Javed Younas. This project has succeeded because of the support of our wives – Linda Enders and Jeannie Murdock – and our children. Todd Sandler acknowledges that his research was funded, in part, by the DHS through the Center for Risk and Economic Analysis of Terrorism Events (CREATE) at the University of Southern California, grant numbers 2007-ST-061-000001 and 2010-ST-061-RE0001. However, any opinions, findings, and conclusions or recommendations are solely those of the authors and do not necessarily reflect the views of DHS or CREATE.

Tuscaloosa and Dallas
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