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0521851009 - The Political Economy of Terrorism
Walter Enders and Todd Sandler
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The Political Economy of Terrorism

The Political Economy of Terrorism presents a widely accessible approach to the study of terrorism that combines economic methods with political analysis and realities. It applies economic methodology – theoretical and empirical – along with political analysis to the study of domestic and transnational terrorism. In so doing, the book provides both a qualitative and a 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 of the subject. Included in the treatment are historical aspects of the phenomenon, a discussion of watershed events, the rise of modern-day terrorism, examination of current trends, the dilemma of liberal democracies, evaluation of counterterrorism, and analysis of hostage incidents. 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 the data set *International Terrorism: Attributes of Terrorist Events* (ITERATE) and other data sets.

Walter Enders holds the Bidgood Chair of Economics and Finance at the University of Alabama. He has published numerous research articles in eminent journals such as the *Review of Economics and Statistics*, *Quarterly Journal of Economics*, *American Economic Review*, *Journal of Economic Literature*, *Journal of Business and Economic Statistics*, and the *American Political Science Review*. Professor Enders's *Applied Econometric Time-Series* is a leading book in the field. He is a current holder (along with Todd Sandler) of the National Academy of Sciences' Estes Award for Behavioral Research Relevant to the Prevention of Nuclear War for their pathbreaking work on understanding terrorism.

Todd Sandler holds the Robert R. and Katheryn A. Dockson Professorship of International Relations, Economics, and Law at the University of Southern California. He has written or edited nineteen 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*, all published by Cambridge University Press, as well as more than two hundred journal articles in economics and political science. Professor Sandler's work on terrorism dates back to 1983. In 2003, he was the corecipient (with Walter Enders) of the National Academy of Sciences' Estes Award for Behavioral Research Relevant to the Prevention of Nuclear War.

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CAMBRIDGE UNIVERSITY PRESS
 Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore, São Paulo

Cambridge University Press
 40 West 20th Street, New York, NY 10011-4211, USA

www.cambridge.org
 Information on this title: www.cambridge.org/9780521851008

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First published 2006

Printed in the United States of America

A catalog record for this publication is available from the British Library.

Library of Congress Cataloging in Publication Data

Enders, Walter, 1948–
 The political economy of terrorism / Walter Enders, Todd Sandler.
 p. cm.
 Includes bibliographical references and index.
 ISBN 0-521-85100-9 – ISBN 0-521-61650-6
 1. Terrorism. 2. Terrorism – Economic aspects. I. Sandler, Todd. II. Title.
 HV6431.E54 2006
 303.6'25 – dc22 2005016251

ISBN-13 978-0-521-85100-8 hardback
 ISBN-10 0-521-85100-9 hardback

ISBN-13 978-0-521-61650-8 paperback
 ISBN-10 0-521-61650-6 paperback

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

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Preface

Prior to the four hijackings of 11 September 2001 (hereafter 9/11), the study of terrorism was an active field of research, with many new books appearing each year. Since 9/11, the study of terrorism is an even more active field of research, with even more books appearing each year. Hence, one must wonder why another book merits one's attention.

This book 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 a 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. 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 the 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? The strategic interactions among targeted governments are also investigated. 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 other books, this book identifies rational explanations for

observed behavior – for example, why terrorist groups cooperate and form networks with one another, 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?

By applying simple economic models and statistical analyses, our book provides a unique perspective on the study of terrorism. This perspective is increasingly being used at the Centers of Excellence, funded by the Department of Homeland Security. To better understand terrorism and to counter its threat, society must apply varied techniques and knowledge from many disciplines – for example, history, sociology, law, psychology, statistics, and economics. Our book draws 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 classes on terrorism. The book will also be 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 references for further details about a particular approach or analysis. In addition, the book should interest people in the Department of Homeland Security,

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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 two anonymous reviewers. We have received helpful support and counsel from Scott Parris, the economics editor at Cambridge University Press (CUP). We also appreciate the efforts of the production staff at CUP, who transformed the typescript into a book. Sara Fisher typed and retyped the many drafts of the book; we appreciate her care and cheerfulness. 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, Jon Cauley, Harvey Lapan, Kevin Siqueira, and John Tschirhart. Others include Scott Atkinson, Dwight Lee, B. Peter Rosendorff, and John Scott. This project succeeded because of the support of our wives – Linda Enders and Jeannie Murdock – and our children. Todd Sandler acknowledges research funding from the Center for International Studies, University of Southern California.

Tuscaloosa and Los Angeles
April 2005

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