The events on 11 September 2001 (henceforth 9/11) served as a wake-up call to the world that transnational terrorism poses grave risks. The four simultaneous hijackings on 9/11 represent watershed terrorist incidents for a number of reasons. First, the deaths associated with 9/11 were unprecedented: the human toll was equal to the number of deaths from transnational terrorism from the start of 1988 through the end of 2000 (Sandler, 2003). Second, the losses associated with 9/11 topped $80 billion and caused insurance companies to end automatic coverage of terrorist-induced losses. Since 9/11, many companies have been unable to afford terrorism insurance. Third, 9/11 showed that ordinary objects can be turned into deadly weapons with catastrophic consequences. Despite the huge carnage of 9/11, the death toll could have been much higher had the planes struck the towers at a lower floor. Fourth, 9/11 underscored the objectives of today’s fundamentalist terrorists to seek maximum casualties and to induce widespread fear, unlike the predominantly left-wing terrorist campaigns of the 1970s and 1980s that sought to win over a constituency. Fifth, 9/11 mobilized a huge reallocation of resources to

1 On the implications of 9/11 for the insurance industry, see Kunreuther and Michel-Kerjan (2004a) and Kunreuther, Michel-Kerjan, and Porter (2003). Approximately half of the losses from 9/11 were covered by the insurance companies, including $11 billion in lost business, $2 billion of workers’ compensation, $3.5 billion in property losses at the World Trade Center, and $3.5 billion of aviation liability. To address insurers’ unwillingness to provide terrorism insurance following 9/11, the US Congress passed the Terrorism Risk Insurance Act (TRIA) of 2002 to cover up to $100 billion of terrorism insurance until the end of 2005.

homeland security – since 2002, the US Department of Homeland Security (DHS) budget has grown by over 60% to $36.2 billion for the fiscal year 2004 (DHS, 2003). In fiscal year 2005, the DHS budget grew another 10% to $40.2 billion (DHS, 2004). A little over 60% of DHS’s budget goes to defending against terrorism on US soil. This expenditure is small compared to proactive measures taken in fighting the “war on terror,” including the invasion against the Taliban and al-Qaida in Afghanistan on 7 October 2001. Still other proactive spending involves improving intelligence, tracking terrorist assets, and fostering cooperative linkages with other countries. Sixth, protective actions taken by rich developed countries have transferred some attacks against these countries’ interests to poorer countries – for example, post-9/11 attacks in Egypt, Indonesia, Morocco, Kenya, Saudi Arabia, and Turkey.

The events of 9/11 heightened anxiety worldwide and resulted in trade-offs in terms of trading reduced freedom for greater security; society had not been willing to surrender as much freedom prior to 9/11. Society lost innocence on that fateful day that it will never regain. The threat of catastrophic terrorist events – though their probability is low – is etched indelibly in everyone’s mind. The Madrid train bombings on 11 March 2004 have made Europe more aware that large-scale terrorist events can occur on European soil. The anxiety that terrorists seek to create is amplified by people’s proclivity to overreact to low-probability but ghastly events.

The study of terrorism has been an active field of research in international relations since the early 1970s and the start of the modern era of transnational terrorism (that is, terrorism with international implications or genesis). Of course, the interest in the study of terrorism grew greatly after 9/11, with many new courses being taught at the undergraduate level worldwide. Subscriptions to the two field journals – Terrorism and Political Violence and Studies in Conflict & Terrorism (formerly Terrorism) – that publish scholarly articles increased following 9/11. General journals in the social sciences are now more willing to publish articles on terrorism. Grant opportunities to study terrorism have also increased greatly through DHS, government agencies, and private foundations. These opportunities can now be found not only in the United States but worldwide. Scholarly conferences on terrorism have also grown in number in the last few years.

The purpose of this book is to present a widely accessible political economy approach that combines economic methods and political analysis. Where possible, we apply theoretical and statistical tools so that the reader can understand why governments and terrorists take certain actions even when, on occasion, these actions may be against their interests. Often, we are able to explain behavior that appears counterintuitive.
once the underlying strategic interactions among agents (for example, among targeted governments) are taken into account. Throughout the book, we provide insights that run counter to conventional wisdom but that are supported by the data. Our reliance on statistical analysis means that we do not eyeball the data in order to draw conclusions that may not hold up to statistical scrutiny. Our approach relies on statistical inference, which is less apt to change tomorrow as new terrorist groups with new objectives and modes of action come on the scene. Our intention is to offer a fresh approach that can inform not only students but also researchers, practitioners (for example, insurers), policymakers, and others interested in an up-to-date treatment of the political economy of terrorism.

DEFINITIONS OF TERRORISM

Terrorism is the premeditated use or threat to use violence by individuals or subnational groups in order to obtain a political or social objective through the intimidation of a large audience beyond that of the immediate victims. Two essential ingredients characterize any modern definition of terrorism: the presence or threat of violence and a political/social motive. Without violence or its threat, terrorists cannot make a political decision maker respond to their demands. Moreover, in the absence of a political/social motive, a violent act is a crime rather than an act of terrorism. Terrorists broaden their audience beyond their immediate victims by making their actions appear to be random, so that everyone feels anxiety. In contrast to a drive-by shooting on a city street, terrorist acts are not random but well-planned and often well-executed attacks where the terrorists account for risks and associated costs as well as possible gains.

In addition to violence and a political motive, a minimalist definition hinges on three additional factors: the victim, the perpetrator, and the audience. Of these three, the most controversial is the identity of the victim. Is an attack against a passive military target or a peacekeeper a terrorist act? The Israelis include an assault against a passive military target as a terrorist attack, whereas other countries may not if the military person is part of an occupying force. Virtually all definitions consider terrorist attacks against civilians as terrorism. The data set International Terrorism: Attributes of Terrorist Events (ITERATE) includes terrorist actions against peacekeepers, but not against an occupying army, as acts of terrorism.\(^3\) While not as contentious as the victim, the perpetrator also presents some controversy. If a state or government uses terror tactics

\(^3\) On ITERATE, see Mickolus (1980, 1982) and Mickolus, Sandler, and Murdock (1989).
against its own citizens (for example, Stalin’s reign of terror), is this terrorism? We apply the convention to call such actions state terror but not terrorism. In our definition, the perpetrators are individuals or subnational groups but not the state itself. States can, however, support these subnational terrorist groups through safe havens, funding, weapons, intelligence, training, or other means. When a state assists a terrorist group, the resulting terrorist act is known as state-sponsored terrorism. Libya is accused of state sponsoring the downing of Pan Am flight 103 over Lockerbie, Scotland, on 21 December 1988, and agreed in 2003 to compensate the victims’ families. The US Department of State brands a number of nations – Cuba, Iran, Libya, North Korea, Sudan, and Syria – as state sponsors of terrorism.4 Finally, the audience refers to the group that the terrorist act is intended to intimidate. For example, a terrorist bomb aboard a commuter train is meant to cause anxiety in the public at large, because such bombs can be placed in any train or public place. The audience thus extends beyond the immediate victims of the attack. On 9/11, al-Qa’ida’s audience was everyone on the planet, not just the unfortunate victims associated with the four hijackings and their aftermath.

Why do terrorists seek such a wide audience? Terrorists want to circumvent the normal political channels/procedures and create political change through threats and violence. By intimidating a target population, terrorists intend that this population will apply pressure on political decision makers to concede to their demands. From a rational calculus viewpoint, political decision makers must weigh the expected costs of conceding, including possible counter grievances from other groups,5 against the anticipated costs of future attacks. If the latter costs exceed those of conceding, then a besieged government should rationally give in to the demands of the terrorists. Suicide attacks have gained prominence since 1983, because they raise the target audience’s anxiety and, in so doing, greatly increase the government’s anticipated costs from future attacks. This follows because a suicide attack kills on average thirteen people, while a typical terrorist incident kills less than one person (Pape, 2003). Thus, governments have more readily given in to modest demands following suicide campaigns – for example, Hezbollah’s car bombing of the US Marine barracks in Lebanon on 23 October 1983 resulted in the US withdrawal from Lebanon, whereas the October 1994–August 1995

4 In the April 2003 issue of Patterns of Global Terrorism 2002, the US Department of State (2003) also included Iraq on this list.
5 Such other groups may view government concessions as an invitation to engage in their own terror campaigns.
Hamas suicide campaign against Israel led to the partial Israeli withdrawal from the West Bank (Pape, 2003, Table 1). Concessions also encourage more terrorism as the government loses its reputation for toughness – these reputational costs must also be weighed against the gains of giving in (e.g., released hostages or an end to attacks). Terrorist tactics are more effective in liberal democracies, where governments are expected to protect lives and property. Understandably, suicide campaigns have been almost exclusively associated with liberal democracies.

Some Alternative Definitions

To show how definitions may vary, we investigate a few official ones, starting with that of the US Department of State, for which “terrorism means premeditated, politically motivated violence perpetrated against noncombatant targets by subnational groups or clandestine agents, usually intended to influence an audience” (US Department of State, 2003, p. xiii). An interesting feature of this definition is the characterization of the victims as “noncombatants,” meaning civilians and unarmed or off-duty military personnel. Accordingly, a bomb planted under a US soldier’s private vehicle in Germany is an act of terrorism. This nicely illustrates how the designation of a victim can be quite controversial. The State Department’s definition is silent about whether a threat is a terrorist act.

The US Department of Defense (DoD) defines terrorism as “the unlawful use or threatened use of force or violence against individuals or property to coerce or intimidate governments or societies, often to achieve political, religious, or ideological objectives” (White, 2003, p. 12). Three contrasts between the DoD’s and the State Department’s definition are worth highlighting. First, the threat of violence is now included. Second, the noncombatant distinction is dropped, so that the roadside bombing of a US convoy in Iraq would be terrorism. Third, religious and ideological motives are explicitly identified. Even two departments of the same government cannot fully agree on the definition. Nevertheless, these definitions identify the same five minimalist ingredients – violence, political motivation, perpetrator, victim, and audience. The definitional problem lies in precisely identifying these ingredients. Slightly different definitions of terrorism also characterize those of the Federal Bureau of Investigation (FBI), the Defense Intelligence Agency, and the Vice President’s Task Force on Terrorism of 1986 (White, 2003, p. 12).

The political nature of defining terrorism comes into focus when the official UN definition is examined: “terrorism is the act of destroying or
injuring civilian lives or the act of destroying or damaging civilian or gov-
ernment property *without the expressly chartered permission of a specific
government*, this by individuals or groups acting independently . . . in the
attempt to effect some political goal” (emphasis added) (White, 2003,
p. 12). A difficulty with this definition is that it may not brand a state-
sponsored skyjacking or bombing as an act of terrorism if it is sanctioned
by a specific government – for example, Iran’s action to maintain the
takeover of the US embassy in Tehran on 4 November 1979 for 444 days.
Loopholes such as this arise when so many nations have to agree on a def-
inition and governments do not want to tie their own hands in the future.
Since 9/11, the United Nations has ignored its official definition and taken
a more pragmatic approach, branding violent acts perpetrated by subna-
tional groups for political purposes as terrorism (United Nations,2002b,
p. 6). This new pragmatic definition agrees closely with our definition.

Another definitional issue concerns distinguishing terrorism from war-
fare. In its classic sense, war targets combatants with weapons that are
highly discriminating in order to limit collateral damage on civilians.
Unlike war, terrorism targets noncombatants in a relatively indiscrim-
inate manner, as 9/11 or the downing of Pan Am flight 103 illustrates.
Unfortunately, the firebombings of Dresden and Tokyo during World
War II blur the wartime distinction about noncombatants and discrimi-
nating attack. For our purposes, we distinguish warfare and terrorism in
this standard way despite some issues of this kind. The Dresden and Tokyo
bombings were not terrorist attacks, because they were perpetrated by
governments, not subnational groups, during a declared war.

Definitions are essential when putting together data to examine propo-
sitions, trends, and other aspects of terrorism. A well-defined notion is
needed so that events can be classified as terrorism for empirical pur-
poses. To this end, we rely on our definition, which takes a middle ground
with respect to other definitions and comes close to the US Department
of State’s definition and the pragmatic UN definition following 9/11.

Transnational Terrorism

Another essential distinction is between domestic and transnational ter-
rorism. *Domestic terrorism* is homegrown and has consequences for just
the host country, its institutions, citizens, property, and policies. In a
domestic incident, the perpetrators, victims, and audience are all from
the host country. In addressing domestic terrorism, a country can be self-
reliant if it possesses sufficient resources. Antiterrorist policies need not
involve other countries insofar as neither the terrorist acts nor the government’s responses need impose costs or confer benefits on foreign interests. Domestic terrorist campaigns result in a country taking antiterrorist measures to limit the threat.

Most terrorist events directed against the United States do not occur on its soil. The kidnapping in January 2002 and subsequent murder of reporter Daniel Pearl in Pakistan; the destruction of the Al Khubar Towers housing US airmen in June 1996 near Dhahran, Saudi Arabia; and the bombing of the US embassies in Kenya and Tanzania in August 1998 are but three gruesome examples of transnational terrorism. Terrorism is transnational when an incident in one country involves perpetrators, victims, institutions, governments, or citizens of another country. If an incident begins in one country but terminates in another, then it is a transnational terrorist event, as is the case for a hijacking of a plane in country A that is made to fly to country B. An attack against a multilateral organization is a transnational incident owing to its multicountry impact, as in the case of the suicide car bombing of the UN headquarters in Baghdad on 19 August 2003. The toppling of the World Trade Center towers was a transnational incident because victims were from ninety different countries, the mission had been planned abroad, the terrorists were foreigners, and the implications of the event (for example, financial repercussions) were global.

With transnational terrorism, countries’ policies are interdependent. Efforts by the European countries to secure their borders and ports of entry may merely shift attacks aimed at their people and property abroad, where borders are more porous (Enders and Sandler, 1993, 1995; also see Chapter 5). US actions that deny al-Qaida safe havens or that destroy its training camps limit the network’s effectiveness against all potential targets, thereby conferring a benefit on other countries. Intelligence on a common transnational terrorist threat that is gathered by one nation can benefit other potential target countries. As such, transnational terrorism raises the need for countries to coordinate antiterrorist policies, a need that countries had resisted until 9/11. Even now, this coordination can be much improved (see Chapters 6 and 7).

OTHER ASPECTS OF TERRORISM

The motives of terrorists may vary among groups. Traditionally, many terrorists are motivated by ethno-nationalistic goals to establish a homeland for an oppressed ethnic group. The Tamils in Sri Lanka fall into this
Table 1.1. *Some Terrorist Tactics*

**Terrorist Operations**
- Hostage missions (e.g., skyjacking, kidnapping, and barricade and hostage taking)
- Bombings
- Assassinations
- Threats and hoaxes
- Suicide attacks
- Armed attacks
- Sabotage
- Nuclear-related weapon attacks
- Chemical or biological attacks

**Other Actions**
- Bank robberies
- Propaganda
- Legitimate efforts to gain political recognition

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category, as did the Sudanese People Liberation Army’s (SPLA’s) struggle against the Muslim majority in the north of Sudan. The Palestinians are also applying terrorism as a way to gain a state. Terrorism may also be motivated by nihilism, left-wing ideology, religious suppression, intolerance, social injustice, or issue-specific goals. In recent years, some groups have resorted to terrorism to establish a fundamentalist-based regime (Hoffman, 1998). For example, Harakat ul-Jihad-I-Islami/Bangladesh wants to establish Islamic rule in Bangladesh; Al-Jihad (also known as the Egyptian Islamic Jihad) wishes to set up an Islamic state in Egypt; and Jemaah Islamiyah intends to create a pan-Islamic state out of Indonesia, Malaysia, Singapore, the southern Philippines, and southern Thailand (US Department of State, 2003). Many other rationales – for example, publicizing an alleged genocide, a millennium movement, and animal protection – have motivated terrorists’ violence against innocent victims.

Terrorists employ varied modes of attack to create an atmosphere of fear and vulnerability. Some common tactics are displayed in Table 1.1. Hostage missions are logistically complex and risky, and include kidnappings, barricade and hostage taking (that is, the takeover of a building and the securing of hostages), skyjackings, and the takeover of nonaerial

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6 The SPLA and the Sudanese government signed an accord in January 2005 that ended hostilities. This long-term struggle between the SPLA and the Muslim majority must not be confused with the state terror of the Sudanese government directed against the inhabitants of Darfur in 2004 and 2005.
means of transportation. Ransoms from kidnappings have been used by some terrorist groups as a revenue source to support operations. This is especially true of some Latin American terrorists who have kidnapped business executives for ransom. Bombings can take many forms, including explosive, letter, and incendiary bombs. Bombings are by far the favorite tactic of terrorists, accounting for about half of all terrorist incidents (Sandler and Enders, 2004). Assassinations are politically motivated murders. Threats are promises of future action, while hoaxes are false claims of past actions (for example, falsely claiming that a bomb is aboard a plane). Suicide attacks can involve a car, a lone terrorist carrying explosives, or some other delivery device (for example, a donkey cart). Other terrorist modes of attack involve armed attacks (including sniping and shootouts with authorities) or sabotage.

Since the 20 March 1995 sarin attack on the Tokyo subway by Aum Shinrikyo, the growing worry has been that terrorists will resort to weapons of mass destruction (WMD) in the form of a nuclear weapon, a radiological (“dirty”) bomb, a chemical weapon, or a biological weapon (see Chapter 11). The dirty bomb consists of a conventional bomb that disperses radioactive material, which contaminates an area for years to come and causes delayed deaths. Other terrorist actions involve bank robberies or criminal acts to finance operations. In some cases, terrorists also spread propaganda and use legitimate political actions to induce change. For example, Hamas, Hezbollah, the Irish Republican Army, and Euskadi ta Askatasuna (ETA) have political wings that promote the group’s viewpoint.

Terrorists must allocate resources between terrorist attacks and legitimate means for achieving political goals. Ironically, actions by the authorities to limit protest may close off legitimate avenues of dissent and push terrorists into engaging in more attacks. Even among attack modes, terrorists must weigh expected costs and expected benefits from different actions in order to pick the best combination for their campaigns.

POLITICAL APPROACH TO THE STUDY OF TERRORISM

The primary contributors to the study of terrorism during the last thirty-five years have been the political scientists, who have enlightened us on terrorist campaigns, groups, tactics, motives, finances, state support, and trends. Much of their analysis has been comparative — for example, when researchers distinguish among terrorist groups or countries harboring terrorists. The comparative approach has taught us much about what
is common and what is different among terrorist groups. For instance, political scientists have characterized many of the European terrorist organizations coming out of the antiwar protests of the late 1960s as “fighting communist organizations” with a Marxist-Leninist ideology, an anticapitalist orientation, a desire to limit casualties, and a need for an external constituency (Alexander and Pluchinsky, 1992). Over the last few decades, political scientists have identified the changing nature of terrorism – for example, the rise of state sponsorship in the early 1980s and the more recent increase in fundamentalist-based terrorism. Political scientists have also analyzed the effectiveness of antiterrorist policies, but typically without applying statistical inference – Brophy-Baermann and Conybeare (1994) is an important early exception. Since 9/11, political scientists have been more interested in empirical analyses of terrorism. Until recently, political scientists rarely relied on rational-actor models of terrorist behavior – for example, Bueno de Mesquita (2005) applied such models.

An advantage of the political science approach has been its eclectic, multidisciplinary viewpoint encompassing historical, sociological, and psychological studies. Historical studies identify common features among terrorist campaigns and indicate how the nature of terrorist tactics and campaigns has evolved over time. Sociological analyses examine norms and social structure within terrorist organizations. In recent psychological studies, researchers have identified internal and external variables associated with the escalation of violence in terrorist events. Factors that induce an individual to become a suicide bomber include both sociological – the approval of a group – and psychological considerations. Other psychological studies indicate the personality traits of different types of terrorists, including those who use the internet to coordinate attacks.

ECONOMIC APPROACH TO THE STUDY OF TERRORISM

Economic methodology has much to offer to the study of terrorism because it adds theoretical models and empirical analyses that have not been prominent. The application of economic methods to the study of terrorism started with Landes (1978), who applied the economics of crime and punishment to the study of hijackings in the United States. His study...