

[2006-01-14]

The Market for Martyrs*

Laurence R. Iannaccone
George Mason University

January 2006

* This work was supported in part by grants from the Mercatus Center at George Mason University and the Project on Religion, Political Economy, and Society at Harvard University. Early versions of this paper were presented at the 2004 Meetings of the American Economic Association, and at workshops at Stanford, George Mason University, the University of Washington, the Australian Defence Force Academy, and the Virginia Modeling, Analysis and Simulation Center. I have benefited from the suggestions of numerous colleagues and workshop participants, including Eli Berman, Bryan Caplan, Roger Finke, Marion Goldman, Eva Meyersson Milgrom, Charles Rowley, Todd Sandler, Rodney Stark, Carolyn Warner, Rhys Williams, and many others. Send comments to Larry@EconZone.com.

The Market for Martyrs

Laurence R. Iannaccone
George Mason University

Abstract

Injury-oriented sacrifice is a market phenomenon grounded in exchanges between a relatively small supply of “martyrs” and a relatively large number of “demanders” who benefit from the martyrs’ acts. Contrary to popular perception, it is because of limited demand rather than limited supply that such markets rarely flourish. Suicidal attacks almost never profit the groups best equipped to recruit, train, and direct the potential killers. Once established, however, the markets are hard to shut down from the supply side –because so few “martyrs” are required and because terrorist “firms” can readily substitute across different methods and recruits. On the other hand, relatively small changes in the political and economic environment can combine to undermine the market’s demand side.

The Market for Martyrs

Laurence R. Iannaccone
George Mason University

The horrific attacks of September 11, 2001 left scholars, journalists, and the general public struggling to make sense of suicide terrorism. As subsequent research has shown, the seemingly obvious explanations miss the mark. Contrary to the initial claims of pundits and politicians, the typical suicide bomber is neither poor nor ignorant; he has no history of mental illness or attempted suicide; he is not especially aggressive or desperate; and he has no special reason to hate his victims.¹ Exceptional rates of poverty, ignorance, grievance, oppression, or hatred likewise fail to predict when and where the attacks originate.

Social scientists have drawn upon many methods and disciplines to better understand this most deadly way of dying. But in most of this work, religion receives surprisingly little attention relative to that which is given to poverty, politics, conflict, indoctrination, history, and psychology.² As I see it, the tendency to downplay religion is both inefficient and misleading. Over the past two generations, social scientists have learned a great deal about religious extremism. From hundreds of case studies and scores of surveys, sociologists have amassed numerous empirical generalizations about so-called “cults,” “sects,” and “fundamentalisms.” More recently, economists have developed theories that explain these findings in terms of rational choice, collective production, and market structure. Together, these two bodies of research have much to tell us about suicide bombing and related forms of militancy.

Thus, my first challenge is to link the lessons of generic religious extremism to the exceptional case of violent extremism. The link is far from obvious; for despite the prevalence of extremism in all religious traditions the vast majority of extremists do no harm and often much good. Religious extremism typically manifests itself in distinctive dress and grooming, restrictive diet, voluntary poverty, ceaseless worship, communal living, rigorous chastity, liberal charity, and aggressive proselytizing. Such behavior may strike outsiders as bizarre and irritating, or even fanatical and illegal, but rarely does it involve violence, much less murder. As we shall see, however, extremist groups of all kinds display similar attributes, experience similar problems, and adopt similar strategies.

My second challenge is to embed the sociological insights regarding extremism and extremist groups within a “market for martyrs” – an economic framework that helps us understand why (and when and where) violent extremism develops, how it is sustained, why it has proved difficult to defeat, and why it arises so rarely. Although this market operates in accordance with standard economic principles, it bears limited resemblance to most previously-explored economic models of crime, suicide, hatred, war, terrorism, or commercial activity.³

Lessons from the Sociology of Religion

Studies of so-called “cults” supply numerous examples and generalizations relevant to all deviant religious movements, especially those whose demands impose great costs upon their members. Despite the chasm separating the Krishna-chanting followers of Swami Prabhupada from the suicide-bombing followers of Osama Bin Ladin, studies of the former have relevance for the latter.

From the late-1960s through the mid-1980s, sociologists devoted immense energy to the study of New Religious Movements.⁴ They did so in part because NRM growth contradicted traditional theories of secularization, not to mention the sensational mid-sixties claims that God was “dead” (Cox 1966; Murchland 1967). NRM’s also were ideal subjects for case study research, on account of their small size, short histories, distinctive practices, charismatic leadership, devoted members, and rapid evolution. But above all, the NRM’s attracted attention because they *scared* people.

We have trouble recalling the fear provoked by groups like the Krishnas, Moonies, and Rajneeshes. Their years of explosive growth are long past, and many of their “strange” ideas have become staples of popular culture.⁵ But they looked far more threatening in the seventies and eighties, especially after November 18, 1978 – the day that Jim Jones orchestrated the murder of a U.S. Congressman followed by the mass murder/suicide of more than nine hundred members of his *People’s Temple*.

The NRM’s of the sixties and seventies aggressively proselytized and solicited on sidewalks, airports, and shopping centers all over America. They recruited young adults to the dismay of their parents. Their leaders promoted bizarre beliefs, dress, and diet. Their members often lived communally, devoted their time and money to the group, and adopted highly deviant lifestyles.

Cults were accused of gaining converts via deception and coercion; funding themselves through illegal activities; preying upon the young, alienated, or mentally unstable; luring members into strange sexual liaisons; and using force, drugs, or threats to deter the exit of disillusioned members. The accusations were elaborated in books, magazine articles, newspaper accounts, and TV drama. By the late-1970s, public concern and media hype had given birth to anti-cult organizations, anti-cult legislation, and anti-cult judicial rulings. The public, the media, many psychologists, and the courts largely accepted the claim that cults could “brainwash” their members, thereby rendering them incapable of rational choice, including the choice to leave.⁶

We now know that nearly all the anti-cult claims were overblown, mistaken, or outright lies. Americans no longer obsess about Scientology, Transcendental Meditation, or the Children of God. But a large body of research remains. *It witnesses to the ease with which the public, media, policy-makers, and even academics accept irrationality as an explanation for behavior that is strange and (apparently or actually) dangerous.*

It is remarkable how closely the 1970's debate over NRM's mirrors contemporary debate over militant Islam, and suicide bombers in particular. Just as we now wonder who in his right mind joins Al Qaeda or Islamic Jihad, so our predecessors wondered what sort of (crazy) person was drawn to International Society of Krishna Consciousness or the Bhagwan movement of Shree Rajneesh. Then as now, the most popular explanations have emphasized grievance, deprivation, and psychopathology. Media profiles of suicide bombers have thus described problems at home, frustration at work, failed relationships, and exposure to religious intolerance, poverty, unemployment, limited skills, and labor market discrimination. Others have emphasized psychological problems – ranging from ignorance and prejudice, to alienation, anxiety, need for authority, and outright mental illness. Twenty-five years ago, the mainstream media told the same stories about converts to cults.

But as studies of cults piled up, it became apparent that the media stereotypes were totally off base (as were many academic theories). Most cult converts were children of privilege raised by educated parents in suburban homes. Young, healthy, intelligent, and college educated, they could look forward to solid careers and comfortable incomes.⁷

Psychologists searched in vain for a prevalence of “authoritarian personalities,” neurotic fears, repressed anger, high anxiety, religious obsession, personality disorders, deviant needs, and other mental pathologies. They likewise failed to find alienation, strained relationships, and poor social skills. In nearly all respects – economically, socially, psychologically – the typical cult converts tested out normal. Moreover, nearly all those who left cults after weeks, months, or even years of membership showed no sign of physical, mental, or social harm. Normal background and circumstances, normal personalities and relationships, and a normal subsequent life: this was the “profile” of the typical cultist.

Yet cult life itself was anything but normal. The more deviant groups did demand complete commitment; members did renounce everyday jobs and did turn over all they earned; and some groups did adopt strange sexual practices, ranging from strict celibacy to institutionalized promiscuity. Many cults did encourage their members to withdraw from secular society and severely limit communication with family and friends. Daily activities did revolve around prayers, chants, meditation, sermons, study, proselytizing, and fund-raising. In short, the members *did* sacrifice the relationships, rewards, and activities of normal life. Cult membership was very costly.⁸

Costly, but *not* crazy: In case after case, conversion and commitment turned out to be products of rational choice and social attachments, rather than deception or coercion. This well-established fact deserves elaboration, for it is by no means obvious, and it extends directly to suicide bombing.

The “Brainwashing” Myth:⁹

It took a mountain of empirical evidence to establish that cult conversion and retention were largely matters of choice, and rational choice at that. Scholars initially viewed rational choice as the *least* likely explanation for anything as bizarre and costly as cult membership. If converts lacked histories of ignorance, deprivation, grievance, alienation, or mental abnormality, then they *must* be victims of extensive indoctrination, extreme social pressure, and systematic psychological persuasion that overwhelmed their capacity for rational choice. The most popular variant of this view came to be known as the “brainwashing” or “coercive persuasion” theory of conversion.

The term “brainwashing” was introduced in the 1950s to describe the indoctrination methods that Chinese and Korean communists used to elicit false confessions and political repudiations from prisoners of war. These victims were indeed coerced – held in confinement, deprived of food, water, and sleep, often tortured, threatened with death, and thereby forced to act, speak, and perhaps even think in ways that bore little relationship to their original beliefs and commitments. In the 1970s, however, Margaret Singer (1979), Richard Ofshe (1992), and others re-introduced “brainwashing” to describe the recruitment practices of the Moonies and other so-called cults. A spate of lurid books and news reports painted the Moonies as masters of mind control who duped and kidnapped unsuspecting youth, and forced them to attend indoctrination camps. Captive, sleep-deprived, and buzzed on sugar, the recruits were subjected to mind-numbing lectures, repetitive chanting, “love bombing,” and other insidious practices that overwhelmed their judgment, individuality, and personal will.

The truth, however, bore no relation to the sensational stories. NRM’s did indeed devote tremendous energy to outreach and persuasion, but they employed conventional methods and enjoyed very limited success. By the mid-1980s, researchers had so thoroughly discredited “brainwashing” theories that both the Society for the Scientific Study of Religion and the American Sociological Association agreed to add their names to an amicus brief denouncing the theory in court (Richardson 1991). The brainwashing myth collapsed under the weight of numerous case studies.

One of the most comprehensive and influential studies was *The Making of a Moonie: Choice or Brainwashing?* by Eileen Barker (1984). Barker could find no evidence that Moonie recruits were ever kidnapped, confined, or coerced. Participants at Moonie retreats were not deprived of sleep; the lectures were not “trance-inducing”; and there was not much chanting, no drugs or alcohol, and little that could be termed “frenzy” or “ecstatic” experience. People were free to leave, and leave they did. Barker’s extensive enumerations showed that among the recruits who went so far as to attend two-day retreats (claimed to be Moonie’s most effective means of “brainwashing”), fewer than 25% joined the group for more than a week and only 5% remained full-time members one year later. And, of course, most contacts dropped out before attending a retreat. Of all those who visited a Moonie centre at least once, not one in two-hundred remained in the movement two years later. With failure rates exceeding 99.5%, it comes as no surprise that full-time Moonie membership in the U.S. never exceeded a few thousand. And this was one of the most

successful New Religious Movements of the era! When researchers began checking (as opposed to merely repeating) the numbers claimed by leaders, defectors, and journalists, they found similarly low retention rates in nearly all “cults.”¹⁰

Networks of Faith:

This is not to say that outreach *always* failed. Some conversions did occur, and they followed consistent patterns. In place of the sensational stories and traditional theories, the case studies identified *social networks* and *social capital* as key to effective recruitment and retention. Later I shall argue that the same social processes operate in militant religious groups, including those that employ suicide-attacks.

The seminal work on cults, conversion, and social networks came from yet another study of the Moonies. By sheer luck, John Lofland and Rodney Stark (1965) chose to study the group back in the mid-1960s, when it was still microscopically small – a dozen young adults who had just moved to San Francisco from Eugene, Oregon. The group was led at the time by Young Oon Kim, a former professor of religion in Korea who had come to Oregon in 1959 to launch the Unification Church’s first American mission.

Lofland and Stark discovered that all the current members were united by close ties of friendship predating their contact with Miss Kim. The first three converts had been young housewives and next door neighbors who befriended Miss Kim after she rented a room from one of them. Subsequently, several of the husbands joined, followed by several of their friends from work. When Lofland and Stark began their study, the group had yet to convert a single stranger.

This recruitment pattern was not what the Miss Kim had sought or expected. During her first year in America she had tried to win converts through lectures and press releases. Later, in San Francisco the group also tried radio spots and public meetings in rented halls. But these methods yielded nothing. All the new recruits during Lofland and Stark’s period of observation were old friends or relatives of prior converts, or people who formed close friendships with one or more group member.

Proselytizing bore fruit only when it followed or coincided with the formation of strong social attachments, typically family ties or close personal friendships. Successful conversion was not so much about selling beliefs as it was about building ties, thereby lowering the social costs and raising the social benefits associated with changing one’s religious orientation. The converse was also true. Recruitment failure was all but assured if a person maintained strong attachments to a network of non-members. Many people spent time with the Moonies and expressed considerable interest in their doctrines but never joined. In nearly every case, these people had strong ongoing attachments to non-members who disapproved of the group. By contrast, those who joined were often newcomers to San Francisco and thus separated from their family and friends.

In short, *social attachments lie at the heart of conversion, and conversion tends to proceed along social networks.* This discovery has been replicated in scores of subsequent studies

all over the world, with groups as varied as the Hare Krishna, Divine Light Mission, Nichiren Shosha Buddhism, a UFO cult, fundamentalist Christian communes, Mormons, Catholic Charismatics, Christian Scientists, and the Bahai (Robbins 1988: 80).

Stated somewhat more abstractly, the fundamental sociological “law” of conversion asserts that *conversion to religious groups almost never occurs unless the recruit develops stronger attachments to members of the group than to non-members*. Among other things, the law explains why the establishment of a new religion, cult, or sect almost always begins with the conversion of the founder’s own family members and close friends.¹¹ The law likewise predicts that *as long as people remain deeply attached to the social networks of one faith, they rarely ever switch to another faith*. Thus, the Mormon missionaries who called upon the Moonies were immune to the appeals of Miss Kim and her followers, despite forming warm relationships with several members. The typical convert was religiously unattached, and most were not actively searching for answers to religious questions. The Moonies quickly learned that they were wasting their time at church socials or denominational student centers. They did far better in places where they came in contact with the unattached and uncommitted. This finding too has been replicated in subsequent research (see Stark and Bainbridge 1985; Stark and Finke 2000). Hence, *new religious movements draw most of their converts from among those who are religiously inactive or only loosely attached to their current religion*.

Absent direct observation, all these points are easy to miss, because people’s retrospective descriptions of their conversion experiences tend to stress theology.¹² As long as the group views belief as central to its mission, converts will face strong pressure to make doctrine the center of their subsequent testimonies. As Robbins (1988: 81) observes, citing studies by Greil and Rudy (1984), Heirich (1977), and others, “Ideological pressure often leads converts to construct testimonials of the ‘I once was lost but now am found’ variety.” These retrospective accounts are best seen as *products* of the converts’ new identities rather than descriptions of their antecedents.¹³ Social attachments are the horse that pulls the cart of ideological change.

Because conversion is a social process, it rarely is sudden. Instead, people who have encountered a new religion through their friends or family go through a gradual process of learning and listening and questioning before finally embracing the new faith. Typically, they take a quite active role in this process.¹⁴ Conversion involves introspection as well as interaction. People question, weigh, and evaluate their situations and options. Nor does the introspective process end with early professions of faith. Members of religious groups continue to assess their commitment, and many recant.

Conversion Revisited:

Having reviewed several of the case studies that demolished major myths about cult conversion, let us consider the applicability of these findings to suicide bombing and radical Islam. In light of what we know about cults, and what we are learning about suicide bombing, I conjecture that nearly all of the following behavioral regularities carry over from deviant cults to the militant religious groups that perpetrate acts of terror.

The typical convert is normal in nearly all respects – economically, socially, psychologically:

- Typical converts are *not* plagued by neurotic fears, repressed anger, high anxiety, religious obsession, personality disorders, deviant needs, and other mental pathologies.
- Typical converts are *not* alienated, frustrated in their relationships, or lacking in social skills.
- Typical converts are young, healthy, intelligent, with better than average backgrounds and prospects.

Conversion to radical groups rarely occurs unless the recruit develops stronger attachments to members of the group than to non-members:

- People with relatively few or relatively weak social ties are more likely to join.¹⁵
- People with strong ties are very unlikely to convert – included those who are married with children, home-owners, people well-established in their jobs, occupations, and neighborhood.
- Groups tend to grow through pre-existing social networks.
- Social barriers (whether economic, regional, ethnic, language, or religious) tend to block paths of recruitment.
- New religious movements draw most of their converts from among those with low levels of religious activity and commitment.

Conversion is a process involving repeated social interactions, and recruits participate extensively and intentionally in their own conversions:

- Conversions are almost always incremental, although behavioral changes may be fairly sudden.
- The form and timing of institutionalized rites of passage (such as baptisms or public testimonies) rarely corresponds to the actual form or timing of conversion.
- The conversion process often involves reinterpreting one's own life story so as to emphasize past levels of discontentment, sinfulness, or spiritual longing.
- Analogous reconstructions often follow defection from movements.¹⁶
- Belief typically *follows* involvement. Strong attachments draw people into religious groups, but strong beliefs develop more slowly or never develop at all.
- High rates of involvement and sacrifice can coexist with doubt, uncertainty, and high probability of defection.
- Intensity of commitment is *not* synonymous with certainty of belief or stability of attachment.
- Those who leave radical groups after weeks, months, or even years of membership have little difficulty returning to normal activities, beliefs, and relationships.

Recent studies on religiously-oriented terrorism confirm many of these conjectures, and the mass of relevant evidence continues to grow. The most striking results concern the personal characteristics of suicide bombers, the role of groups, and the importance of social networks.

The substantial body of empirical results reviewed or derived by Krueger and Maleckova (2003: 141) thus finds “little direct connection between poverty or [poor] education and participation in terrorism.” Moreover, Berrebi (2003) finds that Palestinian suicide bombers have substantially *more* schooling and *better* economic backgrounds than the average Palestinian. Berrebi’s statistical portrait reaffirms the portrait that emerges from Nassra Hassan’s (2001) interviews with potential Palestinian suicide-bombers, which in turn sounds exactly like a quote from the literature on cult converts: “None of [the bombers] were uneducated, desperately poor, simple minded or depressed. Many were middle class and, unless they were fugitives, held paying jobs. ... Two were the sons of millionaires.”

Studies have likewise established the critical role of intense *groups* in recruiting, training, and directing suicide bombers. David Brooks (2002: 18-19) aptly describes Palestinian suicide bombing of the past several years as “a highly communitarian enterprise ... initiated by tightly run organizations that recruit, indoctrinate, train, and reward the bombers.” Although the organizations seek to motivate potential bombers in many ways, the “crucial factor” is “loyalty to the group,” promoted by “small cells” and “countless hours of intense and intimate spiritual training.” As Kramer (1991) has emphasized, the “social dimension” was no less crucial in the Lebanese suicide attacks of the mid-1980s. Although these “self-martyrs” sacrificed themselves, they were also sacrificed by others ... [who] selected, prepared, and guided” them. For more on the activities of the bomber’s “sponsors,” see also Hoffman (2003: 43).

The role of social networks is most thoroughly documented in *Understanding Terror Networks* by Marc Sageman’s (2004), a forensic psychiatrist, PhD. political sociologist, and former Foreign Service officer who worked closely with Afghanistan’s *mujahedin*. Sageman documented what he calls the “global Salafi jihad” based on numerous sources, including biographical information that he collected on 172 radical Islamic terrorists. His results confirm that, as with cult converts of the 1970s, nearly all these people were recruited through existing social networks.¹⁷ Moreover, the vast majority were “cut off from their cultural and social origins, far from their families and friends” when they joined (p. 92). Preexisting ties also determined the small cells that perpetrated subsequent acts of terror, including the Hamburg cell responsible for the September 11 attacks. Indeed, Sageman has mapped the entire jihad as a globe-spanning network of cells linked through four major hubs.

These are by no means the only examples of recent findings recapitulating those of literature on cults. Many others can be gleaned from recent work by Cronin (2003), Reuter (2004), Gambetta (2005), Pape (2005), and Bloom (2005). I expect the parallels to continue piling up as we acquire more data on suicide bombers. But the point, of course, is *not* to simply wait for the parallels to pile up. Scholars should actively mine the established literature on cults and sects for additional insights, predictions, and theories.

Lessons from Economics

From the sociology of religion we obtain numerous facts about the members, activities, and organizational structure of deviant religious groups. From economics, by contrast, we obtain a body of theory that integrates these facts within a broad framework that I call the “market for martyrs.” The market is typically economic insofar as it emerges from rational choice, including choices concerning production, consumption, exchange, cooperation, and competition. Nevertheless, the market is unlike a standard commercial market for good and services, nor does it have much in common with the non-standard market models that economists have previously developed to explain crime, war, civil conflict, hatred, or suicide. The distinctive features reflect my decision to model extremist groups as religious “clubs.”

The Supply Side:¹⁸

Let us view militant religious groups as religious firms that “produce” acts of violence (directed at third-party victims) in exchange for benefits both material and social. A group’s leaders act as managers and employers insofar as they recruit, train, and supervise the supply of (sometimes suicidal) labor that constitutes a key input in the firm’s violent “outputs.” Outside “customers,” “investors,” or “owners” who value these outputs may be the primary source of funds required to operate the business. The analogy to a standard commercial firm is obviously not perfect, but to minimize typographical clutter I will avoid the quotation marks henceforth.

Finding people willing to work, and especially die, in this line of business would seem to be management’s greatest challenge. Given the pathological character of suicide (and murder), it comes as no surprise that nearly everyone – the press, the public, policy-makers, and most scholars – views labor supply as the central problem and puzzle of suicide bombing. I contend, however, that this seriously misinterprets the situation, focuses on the wrong side of the market, and suggests the wrong strategies for deterrence.

Supply of killers: Sadly, the basic supply of labor is readily available. Many people can be induced to steal, riot, vandalize, kill, or commit other acts of violence, protest, and civil disobedience. Indeed, every society devotes substantial effort to limit the prevalence of such activities. Increased risk of capture, injury, or death certainly reduces supply, but we keep in mind that the number of “martyrs” is very small relative to the total number working for radical religious “firms.” *Ex ante*, the typical worker may face risks less than those endured by most front-line soldiers.

Supply of self-sacrifice: Rational people do not *readily* sacrifice their health, status, income, comfort, freedom, much less their life. But most people *do* endure substantial costs for reasons other than personal benefit. Apparently rational individuals routinely risk wealth, health, and even life for family and friends, and sometimes even strangers. Nearly everyone *claims* willingness to suffer and even die for their most cherished values, and a non-trivial number make good on their claims. As Stark (1996) has shown,

the Early Christian martyrs faced death in a manner that is (probably) best interpreted as voluntary, deliberate, and rational.¹⁹

Standard strategies: Groups and societies routinely induce people to kill *and* die for causes far removed from their personal well-being or “genetic fitness.” Military training is the prime example. The most effective soldiers are not those with nothing to live for, but rather those with something they are willing to die for. (The best recruits are also young, single, healthy, capable, and intelligent males.) Effective military units make very limited use of battle pay, family bequests, and other material rewards. Status and honor are more important motivators, as is demonizing the enemy and maintaining a shared sense of moral conviction about the enterprise. Above all, it is critical that (in addition to the requisite skills and knowledge) the soldiers of a unit build strong mutual bonds of trust and affection.

Rational sacrifice: The evidence thus suggests that prospective “martyrs” respond rationally to changes in expected costs and benefits. The most salient benefits include: fame, honor, recognition, the perceived value of the suicidal act, rewards to family and friends, anticipated personal rewards in this life or the next, and harm and humiliation imposed on enemies. In general, the stream of expected benefits will start well before the suicidal act (as when the volunteer is honored by his comrades or rewarded by his leaders) and extend well beyond its conclusion. Socially constructed benefits weigh heavily in the actor’s calculations, as do the subjective probabilities attached to the anticipated outcomes. A rational actor will weigh the net benefits against the relevant costs, including anticipated pain and suffering, costs to loved ones, risk of failure, humiliation, capture, execution, reprisals, and so forth.

Supply-side deterrence: The preceding observations help us better appreciate the difficulties of supply-side deterrence. Supply-side strategies fall prey to fundamental problems:

*Terrorist firms can function effectively even if the supply of suicide-killers is extremely small. Even a few successful suicide bombings can cause widespread terror.*²⁰

Standard criminal penalties (such as fines, imprisonment, and execution) have minimal impact on the expected costs and benefits confronting a rational suicide bomber.

*The diversity of perceived benefits associated with self-sacrifice sustains many different sources of supply and many different methods of recruitment. If opponents block one source or method, firms readily substitute toward others.*²¹

As Israel has learned at great cost, terrorists substitute at every conceivable margin. Seek out those who fit certain profiles, and the supply shifts toward different ages, gender, appearance, and so forth. Destroy the homes of the killers’ families, and supporters increase material assistance. Go so far as to kill the family members – a level of reprisal beyond anything known in Israel – and the firms will recruit more heavily among those whose relatives are distant or dead. All early suicide bombers were “young, male, and

single,” but as Hoffman (2003: 42) notes, quoting a senior Israeli Defense Force officer, “There is no clear profile anymore – not for terrorists and especially not for suicide bombers.” Some recent bombers have been middle-aged, some married, some female, and some have had children. The stereotypical young male Arab with a bulky backpack has given way to bombers wearing Israeli military fatigues, or made up like Ultra-Orthodox Jews, or even disguised as expectant mothers.

The problem of substitution is compounded by the endogenous and social character of critical supply-side benefits. Actions that make successful suicide attacks more costly or difficult tend also to increase the fame, honor, and admiration accorded to those who succeed.²² Hence:

*Reducing the probability of suicide-mission success may not yield comparable reductions in the net benefits to perpetrators and may actually increase the benefits.*²³

The Demand Side:

Careful consideration of both supply and demand is a hallmark of economic analysis. In the case of suicide bombing, however, demand has received vastly less attention than supply, and market structure has received almost no attention at all. Claims about the methods, motives, and mental state of the killers have dominated discourse in much the way that methods, motives, and mental states dominated discourse about cult converts in the 1970s. In the case of cults, presumptions about the irrationality of recruits led to correspondingly distorted views of the organizations they joined. Leaders were seen as: (a) irrational – paranoid, delusional, or just plain “crazy”, (b) power-hungry – lusting for authority, admiration, and fame, (c) avaricious – craving luxury, wealth, or sex; or (d) angry, jealous, fearful, hate-filled, or frustrated – seeking vengeance or victory over competitors, enemies, and the prevailing social order.

Similar fallacies warp our thinking about the groups and especially the group leaders who recruit, train, and direct suicide bombers. After realizing that the bombers had little in common with Oklahoma City bomber Timothy McVeigh or Unabomber Ted Kaczynski – fanatical loners with twisted personal visions – writers began to emphasize the fanaticism of terrorist groups and the twisted motives of their leaders. The religion studies, however, reveal leaders as *social entrepreneurs*, whose creativity, salesmanship, and management shape a subculture that evolves as leaders, followers, and outsiders interact (see Stark 1991; Stark and Bainbridge 1979). Economic models are ideally suited to extend this insight.

The modern (“new institutional”) theory of the firm provides a good starting point. Although textbooks traditionally model firms in terms of simple production functions, actual production is immensely complicated. Even simple outputs require hundreds of inputs, numerous intermediate steps, and immense coordination. To limit the scope and complexity of their own activities, firms obtain intermediate products from other firms or the general market for goods and services, confining themselves to the relatively few things that cost less to do internally (Williamson 1975).

Complex structures: In contrast to legitimate businesses, terrorist firms face the threat of capture, imprisonment, or execution. This does much more than merely raise costs; it forces the firm to adopt internal structures that are larger, more complex, and more vertically integrated than would otherwise be efficient. The terrorist firm incurs high “transaction costs” when working with other firms or the general market. To avoid detection, the firm must conduct its market transactions through complex, covert, and costly channels. This is, of course, especially true when seeking specialized inputs such as explosive devices or military hardware. Subcontracting is similarly costly insofar as it raises the risk of detection through covert surveillance, intercepted communications, betrayal, or capture of the subcontractor. Vertical integration minimizes these external costs, but does so at the cost of larger and more complex internal forms of organization, including division of the firm into many different sub-units. The proliferation of sub-units is especially pronounced for terrorist and revolutionary organizations, which face such grave risks from defection or discovery, that they typically divide themselves into numerous small cells (which also help to reduce free-riding).

Team production: Costs and complexity are further increased by the need to obtain workers able to kill and willing to die. One cannot hire such people as one does office clerks, or even contract killers. They must be “produced” through a *social* process that involves recruitment, interaction, and training. Tremendous effort is required to build commitment, maintain obedience, and prevent defection. With greater sacrifice comes more selective recruiting, more intense training, and more extensive group activity. Not just any group structure will suffice. Successful groups have strong rules, strong social boundaries, strong sanctions for disobedience, and strong leadership hierarchies. Successful groups tend also to be religious – a fact we will consider further below.

Competitors, defectors, free-riders: Free-riding is the bane of collective action, and the problem is especially severe for terrorist organizations, where failure often leads to imprisonment or execution. The firm confronts numerous difficult trade-offs. Larger groups encourage free-riding and are easier to identify or infiltrate, but smaller groups require more outside support and may be less able to identify, recruit, and train effective “martyrs.” Other internal threats include take-over bids and schism, neither of which can be blocked through the legal maneuvers open to legitimate organizations. A profitable “market” also attracts competing firms, who in this case have little incentive to play fair. They may seek to block the firm’s recruitment, take credit for its successes, solicit spies, bribe defectors, tip off authorities, or murder personnel.

The high cost of incompetent, unreliable, or untrustworthy workers leads us to predict that suicide bombers will tend to be relatively well educated, mentally stable, and socially well-adjusted – a profile that recent studies tend to confirm. Even if it were relatively easy to enlist volunteers from among the poor, ignorant, desperate, enraged, or alienated fringe of society, working with such people would prove far too risky. No rational person trusts his fate to a co-worker with a death-wish.

Who pays? Even if all other problems can be solved, the terrorist firm may have no effective way to “sell” its product. Although no one cares to call suicide attacks a “public good,” the consequences are public in the sense of being non-excludable and non-rival. Hence even if many people attach great value to the attacks, each individual person will have no incentive to pay for the product either before or after the fact. Standard economic solutions are largely out of the question, because they require collective action that virtually guarantees detection by authorities.

The Role of Religion:

The impediments to success in the suicide-bombing business are so great that one wonders how such businesses ever form, much less thrive. It is no coincidence that religion plays a major role in nearly all such groups.^{24, 25} A shared and salient religion provides resources for overcoming many of the problems reviewed above.²⁶ No *single* characteristic of religion is key, and that itself helps account for its impact.

Consider, for example, the *supernatural* content of many religious “technologies” – the defining feature of religion according to many contemporary scholars (including Stark and Bainbridge 1987; Stark and Finke 2000). One may seriously question a cleric’s claims that action “A” will lead to afterlife reward “R,” but this much is sure: no strictly secular system can offer any hope of “R” at all. In the market for martyrs, a faith-based firm that (credibly) offers immense *personal* rewards in exchange for death enjoys an obvious *ceteris paribus* advantage over its non-religious competitors.

Journalists have touted the motivating power of afterlife rewards (including the infamous “72 virgins”) as have many scholars and some economists.²⁷ But I would suggest that we need to shift the emphasis from the recruit to the recruiters. Beliefs in heaven and hell are so pervasive that they tell us almost nothing about the identity of martyrs.²⁸ But very few *organizations* are adept at reinforcing those beliefs and shaping their content. It follows that the would-be suppliers of suicide attacks have strong incentives to ally their firms with religious organizations, and especially those types that foster exceptionally strong belief, commitment, and solidarity.

The advantages of a sectarian-religious orientation extend far beyond the recruitment of martyrs. Sectarian groups are uniquely adept at avoiding free-rider problems and hence, uniquely well-suited for producing collective goods. The distinctive demands of a sectarian group, which impose large and apparently gratuitous costs on its members, reduce free-riding both by screening out the uncommitted and by raising participation rates among those who remain. As Iannaccone (1992) and others have shown, the collective benefits of this odd but effective strategy account not only for the success of high-cost religious groups but also for their many distinctive characteristics. These include: distinctive lifestyles; high levels of commitment and high rates of group involvement; strong social bonds within the group and barriers to socialization outside the group; clear distinctions between members and non-members; claims to an exclusive truth; strict penalties for violating group norms; wide-ranging activities that provide substitutes for goods, services, and social benefits that non-members obtain via market

exchange or multiple groups; and disproportionate, but by no means exclusive, appeal to people with relatively limited secular opportunities.²⁹

For terrorist groups, the advantages of a sectarian orientation are huge. These are groups in which “free-riding” has the potential to land the entire organization in prison or worse. So also, these are groups whose survival is threatened by every transaction with outsiders. Nearly every standard sectarian characteristic benefits a terrorist group, an observation most certainly false for commercial firms or legal associations. Berman’s (2003) penetrating analysis of Hamas, Taliban, and radical Jewish groups shows how the sectarian strategy for collective commitment enhances the efficacy of radical militias, both in theory and in practice.

Religion confers still other benefits. If a terrorist group can locate itself *within* a larger sectarian group, it immediately gains access to a tight social network of loyal sect members who are (a) unlikely to betray fellow sect members, (b) accustomed to the demands of sect life, (c) committed to (or at least immersed in) a shared set of supernatural beliefs, and thus (d) ideal candidates for recruitment.³⁰ The sect also provides a natural (and non-free-riding) source of funding and payment for services rendered. These facts help us understand the success of groups like Hamas, whose terrorist cells make up a small portion of a much larger (but supportive) organization that operates like a legitimate sectarian religious organization that harnesses collective action so as to produce religious instruction, secular education, health care, political action, and other services.

A terrorist group likewise benefits from locating itself within a broad religious *tradition* that differs from that of its enemies. Support and sympathy (or at least absence of animosity) are more likely to span its entire subculture; sympathy for the injuries inflicted on the (heathen/infidel) enemy are more likely to be limited; and the enemy will have a much harder time penetrating the group’s organization and network because doing so means *also* penetrating a different subculture. Members of the tradition or sects within the tradition also provide access to entirely legitimate institutions (such as churches or mosques) and globe-spanning networks that facilitate the transmission and coordination of information, individuals, materials, and funds.

Having listed so many ways in which religion aids the suicide-bombing firm, I must acknowledge the potential dangers of “kitchen sink” explanation. Long lists of reasons are a theorist’s nightmare and an affront to Occam’s razor. In this case, however, multiplicity may in fact be necessary.

A fundamental characteristic of religion is that it constitutes a uniquely general technology. There is literally *nothing* that falls beyond the theoretical limits of supernatural production and exchange. Consider the consequences. People call upon religion for everything – health, wealth, salvation, power, long life, immortality, eternal bliss, military victory, and, yes, even good sex. Major religious traditions thus evolve into immense systems of beliefs, behavior, and institutions with links to every

conceivable human activity and concern. Strong religious organizations almost never specialize in just a few niche products or a few niche needs.

Diversity of output is yet another feature that serves the needs of terrorists, and it mirrors the advantages of product “bundling.” Product bundling is used by commercial firms to persuade different types of customers to pay the same relatively high price for a collection of products, such as a newspaper, year-long theatre subscription, or three-day pass to all the attractions in Disneyland. In similar manner, many different types of people can be persuaded to join and remain loyal to a religious group that offers members an array of benefits, including for example intense camaraderie, status, honor, identity, purpose, an exalted calling, dramatic rituals, powerful emotional experiences, and the prospect of heavenly rewards. Single-purpose groups are more fragile, being susceptible to defection whenever a member loses faith in the group’s one product, purpose, or principal activity.

A more complete account would, of course, consider the many ways in which religions might undermine the activities of would-be terrorists. It is entirely possible, and I think entirely true, that in most times and places religious commitment, teachings, and institutions tend to block acts of violence at the individual, group, and social level. The starting point for any analysis of religious militancy and terrorism should be its infrequency in all religious traditions, especially when compared to secular ideologies such as nationalism, communism, fascism, and even democracy or the great secular associations we call “governments,” “nations,” and “ethnicities.” My point, however, is not that religion raises or lowers overall rates of terrorism, militancy, warfare, insurgencies, or violence. Rather, my point is that insofar as religion *can* be utilized it *will* be utilized and *will* prove so highly advantageous in this murderous business that it will tend to dominate the market for martyrs.

Beyond religion:

Throughout this paper I have emphasized religion, and especially its demand-side consequences. I have done so because studies of suicide bombing tend either to ignore religion or to address it in a theological-historical manner that overlooks insights from the economics and sociology of religion. My emphasis, however, should not obscure the many non-religious forces operating in the market for martyrs. Though beyond this paper’s scope, these too are well suited for economic analysis. For example, the goals of (rational) terror-cell leaders are broader than is suggested by standard profit-maximizing models. Leaders operate within a complex market in which successful attacks yield fear and admiration that enhance political and economic power. Suicide bombing also has an “expressive” or “non-instrumental” dimension, analogous to expressive political acts that people value for reasons that go beyond concrete material or political gains. But above all, suicide terrorism has become just one of many tools employed by the weaker parties in *asymmetric* conflicts. Its use is thus constrained by what Robert Pape (2003; 2005) calls “the strategic logic of suicide terrorism.” Because its effectiveness depends heavily upon the response it generates among supporters, sympathizers, opponents, potential victims, and third-parties, the tactic must be analyzed in relation to the many alternative

tools and technologies that could conceivably be substituted for it, ranging from full-scale warfare to peaceful coexistence.

Conclusions: Toward a Less Violent Future

Lost in most studies of religious militancy is a crucial fact: religious extremism almost never leads to violence. Thousands of “sects” and “cults” flourish in every region of the world and every religious tradition. Their deviant beliefs and behavior cover every conceivable aspect of life and many demand astonishing levels of commitment and obedience. Yet very few turn to crime, fewer still embrace violence, and virtually none encourage murder or suicide. Inevitably, the exceptions receive tremendous attention in the news, research literature, and popular consciousness; but this is precisely *because* they are so exceptional. To put the numbers in perspective, consider that the United States is home to several thousand religious organizations (Melton 1991; Melton 1986) but in the past two generations only two religious leaders have ordered killings: Jim Jones of the People’s Temple and David Koresh of the Branch Davidians.³¹ And only two groups have embraced suicide: the People’s Temple and Heaven’s Gate. The remaining 99.9% of American religious groups (who probably account for 99.999% of actual members) are guilty of doing nothing even remotely similar.³² Keeping this fact in mind is exceedingly difficult when books on fundamentalism routinely carry titles like *Terror in the Mind of God* (Juergensmeyer 2001) or *The Battle for God* (Armstrong 2001).

Efforts to combat religious militancy must be grounded in a more accurate understanding of extreme and deviant religions. Studies of religious militancy typically suffer both from sample bias (insofar as they ignore non-militant religious groups) and interpretive bias (insofar as they equate the militant *rhetoric* of many groups with the militant *actions* of just a few). Thus Juergensmeyer structures the chapters of his book so as to emphasize parallel “cultures of violence” among American Christians, Middle-Eastern Muslims, and religious-national groups. But in contrast to the militant Muslim culture of Hamas, Al Qaeda, Hezbollah, the Brotherhood, and Islamic Jihad, the American Christian “culture” consists of the few individuals guilty of abortion clinic attacks who received almost no support and whose actions have been emphatically denounced by virtually all conservative Christian leaders and organizations, even those strongly opposed to abortion.³³

It is the contrast between violent Islamic militancy and non-violent Christian activism that deserves our attention, *not* the few strained similarities. And here again, demand-side factors hold the key. Among the evangelical Christians and orthodox Catholics in America, many millions view the act of abortion as murder, the acceptance of abortion as immoral, and the legality of abortion as grossly unjust. Anti-abortion theology is fully-developed and routinely preached in churches all over America. And tens of thousands of anti-abortion “true believers” already devote substantial portions of their time and money to anti-abortion activities. Thus the *potential* supply of militant anti-abortion “martyrs” is vast. But the *actual* supply remains effectively zero, because no Christian organizations have entered the business of recruiting, training, and launching anti-

abortion militants. The absence of effective demand cannot be attributed to Christian history or theology, for violence is all too common in both. Rather, it reflects contemporary realities – social, legal, economic, and political – that make religiously sponsored violence unprofitable for American religious “firms.” Any church or preacher advocating anti-abortion killings, much less planning them, would suffer huge losses in reputation, influence, membership, and funding, not to mention criminal prosecution and imprisonment. Disaster would likewise befall religious firms seeking to profit from virtually any form of criminality or violence in America and, indeed, in much of the world.

The “market conditions” insuring the non-profitability of religious militancy exceed the scope of this paper, but obviously these merit careful study.³⁴ Eli Berman and I have elsewhere discussed specific policies that can help reduce religious militancy (Iannaccone and Berman 2006). As one might guess, we focus on demand side strategies. For example, we argue that militant theologies are most effectively neutralized by competing theologies, which are in turn most effectively produced by competing religious groups. (Secular government propaganda is less likely to be believed, in part because the motives of the government are so often suspect, but also because secular institutions *never* enjoy much credibility in matters pertaining to the supernatural.) We also resurrect Adam Smith’s (1965 [1776]: 745) argument that open religious markets encourage religious moderation by facilitating the entry of numerous competing religious groups. Competition begets pluralism, and pluralism begets civility and moderation – not because it is embraced as a matter of principle, but because there exists no other practical alternative when no *single* denomination or group of denominations has the power to commandeer the coercive power of the state.³⁵ Moreover, insofar as the state continues to regulate religious activity, it is important that legal and fiscal treatment not discriminate among groups. *Equal* treatment undermines the incentives for religious militancy, because it radically reduces the potential gains associated with religiously-oriented political action. Finally, we observe that religious radicals are less likely to flourish and less likely to embrace violence when there is strong competition in their *non-core* markets – including the markets for education, health care, economic assistance, and political representation.

This historical record would seem to support all of these policy recommendations. The “American experiment” is of course the most striking success story for religious freedom, pluralism, and civility. But we observe similar processes in Europe following the progressive disentanglement of churches and states that began with the peace of Westphalia and continues through the present. The recommended policies are easier to implement where there exist strong traditions of religious, economic, and political liberty. But centuries of Western history and more recent developments in the Far East witness to the feasibility of change in all sorts of cultures. And we must continually remind ourselves that religious militancy is actually rather rare, and suicide bombing much rarer still – even in nations characterized by widespread poverty and oppression. It would be a serious mistake to presume that Islamic radicalism must persist until the Middle East attains Western levels of liberty and prosperity.

The long term solution to the problem of suicide bombing and militant religious radicalism lies in changing market conditions. Other approaches (including hunting down leaders, disrupting networks, and “hardening” targets) raise operating costs and induce substitution but leave in place the underlying demand, and hence also the underlying profit opportunities, associated with this line of business. Insights from economics and the sociology of religion help us understand why markets for martyrs can flourish only when numerous exceptional conditions combine. Moreover, they suggest that relatively small changes in those conditions may dramatically disrupt the market. The imperative is to understand the market well enough to identify the modest structural changes and activities most likely to reduce cooperation within terror firms, increase damaging competition between firms, undercut the firms’ ability to collect payment for services rendered, and above all diminish the underlying *demand* for those homicidal services.³⁶

Small improvements in social services, political representation, religious liberty, and economic freedom may not suffice to “win” the war on religious terrorism. But they can substantially reduce the need for more coercive alternatives. And in contrast to direct military or police-style interventions, this combination of policies targets causes rather than consequences.

NOTES

¹ The 9/11 attacks prompted millions of Americans to ask “why do they hate us?” (Ford 2001). The disturbing answer seems to be that the individual attackers had *no* personal reasons to hate the American people, leadership, or nation – certainly none approaching those of other individuals from different times, places, regions, races, religions, and ethnicities. Moreover, the populations from which the attackers were drawn have scant reason to hate Americans compared to the reasons that could be claimed by U.S. opponents in World War I, World War II, Korea, Vietnam, and the Cold War.

² The omission has at least three causes. First, very few social scientists study religion, and fewer still have had any experience or training that relates to religious extremism. Second, 19th century theories of secularization have so thoroughly dominated social-scientific views of religion that the inevitability of religious decline remains an article of faith, and contemporary instances of religious commitment are viewed as aberrant, transitory, and epiphenomenal. Third, attacks on American culture and especially American (Christian) religion have become so common in Western intellectual circles that scholars have difficulty responding to Islamists who harness the same rhetoric to advance a non-Christian culture that promotes violence, repression, patriarchy, ethnocentrism, and theocracy. Popular discourse is similarly constrained, and the stereotype of all non-Christian cultures as victims of Western imperialism makes it politically dangerous for American leaders to link *any* act of terrorism to *any* feature of Islam.

³ For seminal work on the economics of crime, see Becker and Landis (1974); for a provocative model of suicide see Hamermesh and Soss (1974); and for work on terrorism and conflict see Sandler (2004).

⁴ For an overview of the literature, See Robbins (1988).

⁵ We see this influence not only in today’s New Age and Neo-Pagan movements, but also in novels, music, movies, TV shows, video games, university courses, environmentalism, respect for “cultural diversity,” and popular critiques of Christian culture.

⁶ Parents hired private investigators to literally kidnap their adult children and subject them to days of highly-coercive “deprogramming.” Courts often agreed that these violations of normal constitutional rights were justified, given the victim’s presumed inability to think and act rationally. For details, see Bromley (1983), Richardson (1991), Anthony (1990; 1992), and Robbins (1985).

⁷ Rodney Stark (2002) has recently shown that an analogous result holds for Medieval saints – arguably the most dedicated “cult converts” of their day.

⁸ It is true, however, that the costs were decidedly less for the group leaders, who often reveled in worldly luxuries even as they preached heavenly asceticism.

⁹ Portions of this section and the next are based on unpublished work co-authored with Rodney Stark. I appreciate his permission to adapt the material for this essay.

¹⁰ For more on the prevalence and process of cult defection, see Wight (1987) and Bromley (1988).

¹¹ Mohammed's first convert was his wife Khadijah, the second was his cousin Ali, followed by his servant Zayd and then his old friend Abu-Bakr. Joseph Smith founded the Mormon Church on April 6, 1830 after enlisting his brothers Hyrum and Samuel, Oliver Cowdery who boarded with Smith's parents, and two of Cowdery's friends. As Stark has emphasized in a recent paper, similar patterns apply to Abraham, Moses, and even Jesus (see Stark 2001).

¹² When asked why they converted, Moonies invariably noted the irresistible appeal of the *Divine Principles* (the group's scripture), suggesting that only the blind could reject such obvious and powerful truths. In making these claims, converts implied (and often stated) that their path to conversion was the end product of an intellectual search for faith. But Lofland and Stark knew better because they had met them well before they had learned to appreciate the doctrines, before they had learned how to testify to their faith, back when they were not seeking faith at all and when most of them regarded the religious beliefs of their new set of friends as quite odd.

¹³ Most new converts have much to learn about the doctrines of their new religions, and many harbor serious doubts about core beliefs at the time they join. More often than not, the decision to join a deviant group and "play the role of convert" comes well before any fundamental change in personal beliefs, identity, and world-view (Robbins 1988: 81).

¹⁴ Indeed, Lofland (1977: 817) criticized his own "Lofland-Stark" theory for its passive view of converts. Further field work convinced him that people play a major role in converting themselves. Lofland's observations were subsequently verified by other field researchers including Bainbridge (1978), Barker (1984), and Richardson (1985).

¹⁵ Hence conversion is much more common among those who are young, single, and weakly attached to their jobs, careers, residences, neighborhoods, and so forth.

¹⁶ Hence, defectors' accounts about the evils, harms, misery, and exploitation characteristic of cult life often prove to be exaggerated or false. For a related phenomenon showing how real reconstructed memories can seem to a different class of "converts," consider the mid-1980s spate of "recovered" memories of childhood sexual abuse and satanic ritual abuse, nearly all of which turned out to be total fabrications.

¹⁷ See Barrett (2003) for a detailed account of the process by which a particular Indian-born Muslim attending college in America converted to radical Islam and was later recruited into the Muslim Brotherhood.

¹⁸ It is easy to identify the demand and supply sides of a standard textbook market, where a uniform generic good is exchanged for a well-defined currency. In contrast, when complex bundles of goods or services are exchanged for other goods or services, and especially when many key outputs are jointly produced, each party acts as supplier of some things and demand of others. Identifying the “suppliers” and “supply side” becomes a matter of choice and perspective. By analogy to a firm in the business of producing death, I have viewed the killers as suppliers of labor (and their own lives) and those who recruit them as demanders. When speaking of a less radical group, it may be more natural to think in terms of a religious firm supplying religious services to members who demand religious services and pay with their contributions, commitment, and membership.

¹⁹ Christians imprisoned by the Romans faced a low probability of death. Refusal to recant was far more likely to end in release than execution or torture, albeit after some days or weeks of confinement. Moreover, fellow Christians would visit the prisoners, praising their fortitude and praying for their welfare, continued resistance, and eventual release. The many who survived were lionized heroes, and the few who died were honored as saints and martyrs.

²⁰ To appreciate just how small is the requisite supply, note that between 1983 and 2002 the *total* number of suicide-killers was only about 250 (Berman and Laitin 2005). This number contrasts with the many thousands of people who actively engaged in terrorist activities over the same period of time, the tens (or hundreds) of thousands who fought in insurgencies, and the hundreds of thousands (or millions) who fought in conventional wars.

²¹ See Olson’s (1962) penetrating analysis of the failure of strategic “precision bombing” campaigns employed by the American military command in WWII. Attempts to cripple German industrial capacity by targeting ball bearing production plants had far less impact than anticipated, not because bombs failed to destroy their targets but rather because the Germans quickly found ways to use fewer ball-bearings, produce bearings elsewhere, rebuild the plants, and so forth. Rapid substitution likewise neutralized allied attempts to deprive the German military of copper, tungsten, and many other “critical” resources, both physical and human. *Economic* constraints nullified the search for technologically “indispensable” resources: “The enemy could always afford to replace most of any industry if that industry was small enough. And it matters not how ‘essential’ an industry might be if the enemy can easily replace that industry once it has been destroyed” (Olson 1962: 142).

²² To better appreciate the role of fame, see Christoph Reuter's (2004) chapter on "the marketing strategists of martyrdom." In it he describes the "coldly rational form of cost-benefit analysis" (p. 58) that guided Hezbollah's use of suicide missions in Lebanon during the 1980s and 1990s. Hezbollah "turned suicide attacks into a precisely controlled, well-directed and sparingly used weapon, deploying it to maximum possible effect" (p. 63). Recognizing the motivating role of fame and honor, Hezbollah used its newspapers, radio stations, and television station to glorify the martyrs names and deeds, and broadcast farewell videos followed by pictures from successful attacks. Widows were official given the title of "martyr widows" and supported from a "martyrs' fund."

²³ To show how the formal process might work, let the p denote the probability of a successful suicide attack and let q denote the probability of failure. Let R denote the socially-constructed rewards for success (and let the "reward" for failure be zero). By assumption, R *increases* as the probability of failure grows (i.e., the derivative $dR/dq > 0$). It then follows that increasing rates of failure actually *raise* a prospective bomber's expected utility ($EU \equiv pR$) as the rate of reward growth is sufficiently "elastic" – i.e., as long as the elasticity $(dR/dq)(q/R)$ exceeds the odds ratio $(1-q)/p$.

²⁴ Three notable exceptions to this generalization are the Japanese Kamikaze of World War II, the Sri-Lankan LTTE, and the Kurdish PKK. Yet religion, or its functional equivalent, may have played a critical role in these cases as well. The many links between State Shinto, emperor worship, and military nationalism in World War II Japan, raise the distinct possibility that the Kamikaze program required a shared religious world-view and faith and perhaps even a shared religious/governmental organization. The "secular" character of the LTTE Tamil Tigers is likewise open to question. The Tiger's organization is Marxist/Leninist and hence officially *anti*-religious. But the quasi-religious character of Marxism in general, and small Marxist "sects" in particular, is well known. Moreover, the "secular" Tigers are members Sri Lanka's Tamil-Hindu minority, fighting for independence from Sri Lanka's Sinhalese-Buddhist majority. The Tamil-Sinhalese conflict, which dates back to independence in 1948, pits a Hindu minority against a Buddhist majority that is itself a tiny minority relative to the Hindu-dominated Indian mainland. Michael Radnu (2003), a specialist in terrorist groups, has argued that "the LTTE [Tamil Tigers] and PKK [Kurdish separatists] are in a sense 'religious' despite their Marxist/separatist." Reuter (2004: 157,165) likewise claims that LTTE founder Vellupillai Prabhakaran built up an army "that operates more like a religious sect than a professional fighting force" and that within the PKK devotion to the leader Öcalan "became a substitute religion."

²⁵ Even in Iraq, where secular leaders direct the insurgency and former Iraqi soldiers make up the bulk of the combatants, the suicide killers are religious extremists from outside Iraq. According to Hiwa Osman, an Iraqi Kurd and training director for the London-based Institute for War and Peace, "[t]he backbone of the insurgency appears to be an alliance between the die-hard [secular] Baathists and the network of [Islamist] terrorists mostly under the command of Abu Musab Zarqawi. ... The Islamist militants

... are particularly useful to the Baathists, because they provide a supply of willing suicide bombers. Suicide attacks are not, in all likelihood, Iraqi operations” (Osman 2005).

²⁶ For an important application of this insight to radical militias in general, and Hamas and Taliban in particular, see Berman (2003).

²⁷ Noteworthy economic examples include Adam Smith’s (1984) discussion of the critical importance of religious constraints on opportunistic behavior, and Azzi and Ehrenberg’s (1975) emphasis of the afterlife motive in their seminal paper on religious participation. For a recent example that directly links suicide-bombing to afterlife motives, see Wintrobe (2003).

²⁸ In the US, for example, more than 80% of the adult population claims belief in Heaven, and more than 70% claims belief in Hell. Moaddil (2003) reports that in recent surveys in Egypt, Jordan, and Iran, “[a]t least 94% of all respondents said they believed in all of the following: God, life after death, existence of a soul, and heaven and hell.”

²⁹ We must not equate *relatively* limited opportunities with *absolutely* limited opportunities. Incompetence is not likely to make someone more productive in a religious sect than in secular society. Conversely, the *relative* cost of sect membership can be low for some categories of educated and affluent people – including the classic 1970’s cult converts who were young, single, not yet established in a career, and (as it turned out) not inclined to remain cult members very long.

³⁰ For a striking example of these principles at work, see Barrett’s (2003) account of how Mustafa Saied, an India-born college student in America was recruited into the Muslim Brotherhood.

³¹ This probably overstates the militancy of Koresh and his Branch Davidians, inasmuch as no history of violence preceded the decision by US the Bureau of Alcohol Tobacco and Firearms to launch a massive raid against the Branch Davidians, surrounding their communal home with more than 75 armed agents who arrived in cars, vans, trucks, and helicopters. For sociological perspectives on the disaster, see Wright (1995).

³² The sensational claims made in the 1980s about “Satanic cults” turned out to be false in almost every respect, and no organized group of Satan worshippers was ever found guilty of murder (Richardson 1994; Richardson, Best and Bromley 1991).

³³ Juergensmeyer’s only other American Christian example is the bombing of the Oklahoma City federal building by Timothy McVeigh, who acted (almost) alone, was not religiously active, and had no close ties to any religious or political groups.

³⁴ See Kalyvas and Sánchez-Cuenca (Kalyvas and Sánchez-Cuenca 2005) for one of the few studies that focuses on the rarity of suicide missions, relative to other forms of terrorism. As they note, the vast majority of religious and secular terrorist groups (including the IRA, the ETA in Spain, the Red Brigades in Italy, and the Shining Path in Peru, and many more) have never engaged in suicide missions. Berman and Laitin (Berman and Laitin 2005) take up a similar question and conclude that suicide missions are undertaken when the relevant targets are so well protected that no other method can work.

³⁵ Smith (1965 [1776]: 745) thus argues that “[t]he interested active zeal of religious teachers can be dangerous and troublesome only where there is, either but one sect tolerated in the society, or where the whole of a large society is divided into two or three great sects; the teachers of each acting by concert, and under a regular discipline and subordination. But that zeal must be altogether innocent where the society is divided into two or three hundred, or perhaps into as many thousand small sects, of which no one could be considerable enough to disturb the publick tranquillity. The teachers of each sect, seeing themselves surrounded on all sides with more adversaries than friends, would be obliged to learn that candour and moderation which is so seldom to be found among the teachers of those great sects, whose tenets [are] supported by the civil magistrate.”

³⁶ As an example of one such feature, consider the role that modern communications technology play in generating the social-symbolic rewards that motivate the martyr, excite and encourage sympathizers, and horrify and terrorize potential victims. The bombings would have vastly less impact on *all* relevant populations in the video recordings, TV broadcasts, 24-hour satellite news, and the Internet.

REFERENCES

- Anthony, Dick (Ed.). 1990. *Religious Movements and Brainwashing Litigation: Evaluating Key Testimony*. New Brunswick, NJ: Transaction Publishers.
- Anthony, Dick, and Thomas Robbins. 1992. "Law, Social Science and the 'Brainwashing' Exception to the First Amendment." *Behavioral Sciences and the Law* 10(1):5-29.
- Armstrong, Karen. 2001. "The Battle for God." New York: Ballantine Books.
- Azzi, Corry, and Ronald Ehrenberg. 1975. "Household Allocation of Time and Church Attendance." *Journal of Political Economy* 84(27-56).
- Bainbridge, William Sims. 1978. *Satan's Power*. Berkeley: University of California Press.
- Barker, Eileen. 1984. *The Making of a Moonie: Choice or Brainwashing?* Oxford: Basil Blackwell.
- Barrett, Paul M. 2003. "Student Journeys Into Secret Circle Of Extremism: Muslim Movement Founded in Egypt Sent Tentacles to University in Knoxville." Pp. A1, A8 in *Wall Street Journal*.
- Becker, Gary S., and W. M. Landes, eds. 1974. *Essays in the Economics of Crime and Punishment*. New York: Columbia University Press for the National Bureau of Economic Research.
- Berman, Eli. 2003. "Hamas, Taliban and the Jewish Underground: An Economist's View of Radical Religious Militias." NBER Working Paper.
- Berman, Eli, and David D. Laitin. 2005. "Hard Targets: Theory and Evidence on Suicide Attacks." UC San Diego mimeo.
- Berrebi, Claude. 2003. "Evidence About the Link Between Education, Poverty and Terrorism Among Palestinians." Princeton, NJ: Princeton University.
- Bloom, Mia. 2005. *Dying to Kill: The Allure of Suicide Terror*. New York: Columbia University Press.
- Bromley, David and Richardson, James T. 1983. *The Brainwashing/Deprogramming Controversy: Sociological, Psychological, Legal, and Historical Perspectives*. New York: The Edwin Mellen Press.
- Bromley, David G. 1988. *Falling From the Faith; Causes and Consequences of Religious Apostasy*. London: Sage Publications.

- Brooks, David. 2002. "The Culture of Martyrdom." Pp. 18-20 in *The Atlantic Monthly*.
- Cox, Harvey. 1966. *The Secular City: Secularization and Urbanization in Theological Perspective*. New York, NY: Macmillan.
- Cronin, Audrey Kurth. 2003. "Terrorists and Suicide Attacks." CRS Report for Congress.
- Ford, Peter. 2001. "Why Do They Hate Us?" in *The Christian Science Monitor*.
- Gambetta, Diego. 2005. *Making sense of suicide missions*. Oxford ; New York: Oxford University Press.
- Greil, Arthur L., and David A. Rudy. 1984. "What have we learned from process models of conversion? An Examination of Ten Studies." *Sociological Analysis* 17(4):306-323.
- Hamermesh, Daniel S., and Neal M. Soss. 1974. "An Economic Theory of Suicide." *The Journal of Political Economy* 82(1):83-98.
- Hassan, Nasra. 2001. "An Arsenal of Believers." Pp. 36-41 in *New Yorker*.
- Heirich, Max. 1977. "Change of Heart: A Test of Some Widely Held Theories About Religious Conversion." *American Journal of Sociology* 83(3):653-680.
- Hoffman, Bruce. 2003. "The Logic of Suicide Terrorism." Pp. 40-47 in *The Atlantic Monthly*.
- Iannaccone, Laurence R. 1992. "Sacrifice and Stigma: Reducing Free-Riding in Cults, Communes, and Other Collectives." *Journal of Political Economy* 100(2):271-292.
- Iannaccone, Laurence R., and Eli Berman. 2006. "Religious extremism: The good, the bad, and the deadly." *Public Choice*.
- Juergensmeyer, Mark. 2001. *Terror in the Mind of God: The Global Rise of Religious Violence*. Berkeley, CA: University of California Press.
- Kalyvas, Stathis, and Ignacio Sánchez-Cuenca. 2005. "Killing Without Dying: The Absence of Suicide Missions." in *Making sense of suicide missions*, edited by Diego Gambetta. Oxford ; New York: Oxford University Press.
- Kramer, Martin. 1991. "Sacrifice and 'Self-Martyrdom' in Shi'ite Lebanon." *Terrorism and Political Violence* 3(3):30-47.
- Krueger, Alan B. , and Jitka Maleckova. 2003. "Education, Poverty and Terrorism: Is There a Causal Connection?" *Journal of Economic Perspectives* 17(4).
- Lofland, John. 1977. ""Becoming a World-Saver" Revisited." *American Behavioral Scientist* 20(6):805-819.

- Lofland, John, and Rodney Stark. 1965. "Becoming a World-Saver: A Theory of Conversion to a Deviant Perspective." *American Sociological Review* 30(862-875).
- Melton, Gordon J. (Ed.). 1991. *The Encyclopedia of American Religions*. Tarrytown, NY: Triumph Books.
- Melton, J. Gordon. 1986. *The Encyclopedic Handbook of Cults in America*. New York: Garland Publishing, Inc.
- Moaddel, Monsoor. 2003. "Public Opinion in Islamic Countries: Survey Results." *Footnotes* 31(1).
- Murchland, Bernard (Ed.). 1967. *The Meaning of the Death of God: Protestant, Jewish and Catholic Scholars Explore Atheistic Theology*. New York: Random House.
- Ofshe, Richard J. 1992. "Coercive Persuasion and Attitude Change." Pp. 212-224 in *Encyclopedia of Sociology*, edited by Edgar Borgatta and Marie Borgatta. New York: Macmillan Publishing Company.
- Olson, Mancur, Jr. 1962. "The Economics of Target Selection for the Combined Bomber Offensive." *The Royal United Service Institution Journal* 107(November):308-314.
- Osman, Hiwa. 2005. "What Do the Insurgents Want? Different Visions, Same Bloody Tactics." Pp. B01, B04 in *Washington Post*. Washington, DC.
- Pape, Robert A. 2003. "The Strategic Logic of Suicide Terrorism." *American Political Science Review* 97(3):343-361.
- Pape, Robert Anthony. 2005. *Dying to win: the strategic logic of suicide terrorism*. New York: Random House.
- Radnu, Michael. 2003. "Radical Islam and Suicide Bombers." in *E-Notes, October 21*. Philadelphia, PA: Foreign Policy Research Institute.
- Reuter, Christoph. 2004. *My life is a weapon : a modern history of suicide bombing*. Princeton, NJ: Princeton University Press.
- Richardson, James T. 1985. "The active vs. passive convert: paradigm conflict in conversion/recruitment research." *Journal for the Scientific of Religion* 24(2):163-179.
- . 1991. "Cult/Brainwashing Cases and Freedom of Religion." *Journal of Church and State* 33(1):55-74.
- . 1994. "Deconstructing the Satanism Scare: Understanding an International Social Problem." Pp. 25 pages in *Association for the Sociology of Religion*. Los Angeles, CA.

- Richardson, James T., Joel Best, and David G. Bromley (Eds.). 1991. *The Satanism Scare*. New York, NY: Aldine de Gruyter.
- Robbins, Thomas. 1985. "New Religious Movements, Brainwashing, and Deprogramming -- The View from the Law Journals: A Review Essay and Survey." *Religious Studies Review* 11(4):361-370.
- . 1988. *Cults, Converts and Charisma: The Sociology of New Religious Movements*. London: Sage.
- Sageman, Marc. 2004. *Understanding terror networks*. Philadelphia: University of Pennsylvania Press.
- Sandler, Todd, and Walter Enders. 2004. "An Economic Perspective on Transnational Terrorism." *European Journal of Political Economy* 20(2):301-316.
- Singer, Margaret T. 1979. "Coming Out of Cults." *Psychology Today* 12(72-82).
- Smith, Adam. 1965 [1776]. *An Inquiry into the Nature and Causes of The Wealth of Nations*. New York: Modern Library.
- . 1984. *The Theory of Moral Sentiments*. Indianapolis: Liberty Fund.
- Stark, Rodney. 1991. "Normal Revelations: A Rational Model of 'Mystical' Experiences." in *New Directions in the Study of Religion*, edited by David G. Bromley. Greenwich: JAI Press.
- . 1996. *The Rise of Christianity: A Sociologist Reconsiders History*. Princeton, NJ: Princeton University Press.
- . 2001. "Holy Families." *Working Paper*.
- . 2002. "Upper Class Asceticism: Social Origins of Ascetic Movements and Medieval Saints." *Working Paper*.
- Stark, Rodney, and William Sims Bainbridge. 1979. "Cult Formation: The Compatible Models." *Sociological Analysis* 40(4):283-295.
- . 1985. *The Future of Religion*. Berkeley: University of California Press.
- . 1987. *A Theory of Religion*. Bern: Peter Lang Publishing.
- Stark, Rodney, and Roger Finke. 2000. *Acts of Faith: Explaining the Human Side of Religion*. Berkeley: University of California Press.
- Williamson, Oliver E. 1975. *Markets and Hierarchies: Analysis and Antitrust Implications*. New York, NY: The Free Press.

Wintrobe, Ronald. 2003. "Can suicide bombers be rational?" Working Paper: University of Western Ontario.

Wright, Stuart A. 1987. *Leaving Cults: The Dynamics of Defection*. Washington D.C.: Society for the Scientific Study of Religion.

—. 1995. *Armageddon in Waco: Critical Perspectives on the Branch Davidian Conflict*. Chicago: University of Chicago Press.