<table>
<thead>
<tr>
<th>1. AGENCY USE ONLY (Leave blank)</th>
<th>2. REPORT DATE</th>
<th>3. REPORT TYPE AND DATES COVERED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21.Sep.05</td>
<td>DISSERTATION</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. TITLE AND SUBTITLE</th>
<th>5. FUNDING NUMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FINANCING TERROR: ANALYSIS AND SIMULATION TO AFFECT TERRORIST ORGANIZATIONS' FINANCIAL INFRASTRUCTURES.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. AUTHOR(S)</th>
<th>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAJ KISER STEPHEN D</td>
<td>PARDEE RAND GRADUATE SCHOOL</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8. PERFORMING ORGANIZATION REPORT NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>CI04-1262</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)</th>
<th>10. SPONSORING/MONITORING AGENCY REPORT NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>THE DEPARTMENT OF THE AIR FORCE</td>
<td></td>
</tr>
<tr>
<td>AFIT/CIA, BLDG 125</td>
<td></td>
</tr>
<tr>
<td>2950 P STREET</td>
<td></td>
</tr>
<tr>
<td>WPAFB OH 45433</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11. SUPPLEMENTARY NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>12a. DISTRIBUTION AVAILABILITY STATEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unlimited distribution</td>
</tr>
<tr>
<td>In Accordance With AFI 35-205/AFIT Sup 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>13. ABSTRACT (Maximum 200 words)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14. SUBJECT TERMS</th>
<th>15. NUMBER OF PAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>212</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>16. PRICE CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>17. SECURITY CLASSIFICATION OF REPORT</th>
<th>18. SECURITY CLASSIFICATION OF THIS PAGE</th>
<th>19. SECURITY CLASSIFICATION OF ABSTRACT</th>
<th>20. LIMITATION OF ABSTRACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Form 298 (Rev. 2-89) (EG)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DISTRIBUTION STATEMENT A
Approved for Public Release
Distribution Unlimited
THE VIEWS EXPRESSED IN THIS ARTICLE ARE THOSE OF THE AUTHOR AND DO NOT REFLECT THE OFFICIAL POLICY OR POSITION OF THE UNITED STATES AIR FORCE, DEPARTMENT OF DEFENSE, OR THE U.S. GOVERNMENT.
Financing Terror: Analysis and Simulation to Affect Terrorist Organizations' Financial Infrastructures

Major Steve Kiser
Doctoral Fellow
RAND Graduate School
15 September 2004

Abstract

This dissertation examines modern terrorist financing and counter-finance policies through an in-depth narrative as well as computer simulation. The background of terrorist financing is developed through three case studies, examining the methods and functions of financial systems by the Palestinian Liberation Organization (PLO), the Provisional Irish Republican Army (PIRA), and the Tamil Tigers of Elam (LTTE). With that background, an in-depth case study of al Qaeda and its affiliates’ financial infrastructures is conducted, noting key similarities, differences and developments between its fiscal operations and those of other terrorist groups. That case study is used to inform a computer simulation regarding al Qaeda’s ability to collect and use money for terrorist operations. The simulation finds that completely stopping the flow of money to terrorist organizations is impossible. Furthermore, it finds that in the short term, the most effective policy at decreasing terrorist funding is to attack a terrorist group’s capacity to collect funds—arresting financiers, shutting down front or shell businesses and closing false charities are examples. In the long term, undermining the appeal of al Qaeda’s ideology is key to reducing terror money supply. Passing better laws, better enforcement of those laws and increasing law enforcement presence are moderately effective policies, while increasing the length or severity of punishment for financing terror was found to be the least effective. The dissertation concludes with a list of policy recommendations, including better integrating counter-finance policies within the broader counter-terrorism strategy, defining clear short- and long-term goals regarding terror money, finding and exploiting secondary and tertiary effects of targeting terrorists’ finances, and viewing terrorist finances as a source of intelligence as well as a target to be attacked.
Financing Terror: Analysis and Simulation to Affect Terrorist Organizations’ Financial Infrastructures

Major Steve Kiser
Doctoral Fellow
RAND Graduate School
15 September 2004

Abstract

This dissertation examines modern terrorist financing and counter-finance policies through an in-depth narrative as well as computer simulation. The background of terrorist financing is developed through three case studies, examining the methods and functions of financial systems by the Palestinian Liberation Organization (PLO), the Provisional Irish Republican Army (PIRA), and the Tamil Tigers of Elam (LTTE). With that background, an in-depth case study of al Qaeda and its affiliates’ financial infrastructures is conducted, noting key similarities, differences and developments between its fiscal operations and those of other terrorist groups. That case study is used to inform a computer simulation regarding al Qaeda’s ability to collect and use money for terrorist operations. The simulation finds that completely stopping the flow of money to terrorist organizations is impossible. Furthermore, it finds that in the short term, the most effective policy at decreasing terrorist funding is to attack a terrorist group’s capacity to collect funds—arresting financiers, shutting down front or shell businesses and closing false charities are examples. In the long term, undermining the appeal of al Qaeda’s ideology is key to reducing terror money supply. Passing better laws, better enforcement of those laws and increasing law enforcement presence are moderately effectively policies, while increasing the length or severity of punishment for financing terror was found to be the least effective. The dissertation concludes with a list of policy recommendations, including better integrating counter-finance policies within the broader counter-terrorism strategy, defining clear short- and long-term goals regarding terror money, finding and exploiting secondary and tertiary effects of targeting terrorists’ finances, and viewing terrorist finances as a source of intelligence as well as a target to be attacked.
Financing Terror:
A Model to Analyze and Affect Al Qaeda’s Financial Infrastructure

Submitted as a Requirement for Doctorate in Philosophy
Pardee RAND Graduate School

Stephen D. Kiser
15 September 2004
Financing Terror: Analysis and Simulation to Affect Terrorist Organizations’ Financial Infrastructures

Major Steve Kiser
Doctoral Fellow
RAND Graduate School
15 September 2004

Abstract

This dissertation examines modern terrorist financing and counter-finance policies through an in-depth narrative as well as computer simulation. The background of terrorist financing is developed through three case studies, examining the methods and functions of financial systems by the Palestinian Liberation Organization (PLO), the Provisional Irish Republican Army (PIRA), and the Tamil Tigers of Elam (LTTE). With that background, an in-depth case study of al Qaeda and its affiliates’ financial infrastructures is conducted, noting key similarities, differences and developments between its fiscal operations and those of other terrorist groups. That case study is used to inform a computer simulation regarding al Qaeda’s ability to collect and use money for terrorist operations. The simulation finds that completely stopping the flow of money to terrorist organizations is impossible. Furthermore, it finds that in the short term, the most effective policy at decreasing terrorist funding is to attack a terrorist group’s capacity to collect funds—arresting financiers, shutting down front or shell businesses and closing false charities are examples. In the long term, undermining the appeal of al Qaeda’s ideology is key to reducing terror money supply. Passing better laws, better enforcement of those laws and increasing law enforcement presence are moderately effectively policies, while increasing the length or severity of punishment for financing terror was found to be the least effective. The dissertation concludes with a list of policy recommendations, including better integrating counter-finance policies within the broader counter-terrorism strategy, defining clear short- and long-term goals regarding terror money, finding and exploiting secondary and tertiary effects of targeting terrorists’ finances, and viewing terrorist finances as a source of intelligence as well as a target to be attacked.
“Good morning. At 12:01 a.m. this morning, a major thrust of our war on terrorism began with the stroke of a pen. Today, we have launched a strike on the financial foundation of the global terror network...We will starve the terrorists of funding, turn them against each other, rout them out of their safe hiding places and bring them to justice.”

President George W. Bush, 24 September 2001

Following the tragedies of September 11th, 2001, the United States’ first financial strike in the global war on terror (GWOT) came in the form of Executive Order (EO) 13224, which targeted the financial bases of 27 different terrorist-related entities, to include organizations and individuals closely associated with the Al Qaeda organization. Following that EO, both domestic and international policy-making bodies crafted nearly a dozen major initiatives and created nearly as many new organizations, all with the purpose of attacking terrorist financial networks. Subsequently, the international community designated 315 entities as terrorist organizations or groups/entities related to them, and seized over $136 million in money and other assets in over 1,400 accounts worldwide, making the financial dimension one of the most active fronts in the global war on terror.

However, despite the centrality and level of activity in the financial war on terrorism, precious little data, analysis or other serious inquiry into the effectiveness of such a policy exists. Indeed, the Government Accounting Office (GAO) highlighted this need in December 2003, pointing out that despite national strategy guidance, no

---

2 Executive Order 13224 blocks the assets of organizations and individuals linked to terrorism. While the original EO listed only 27 such entities, it is updated regularly. As of March 2004, well over 2,000 such groups, entities, and individuals are covered by the Executive Order. See the US Department of the Treasury’s Office of Foreign Assets Control brochure explaining EO 13224 and what entities are targeted by it at http://www.treas.gov/offices/eotffc/ofac/sanctions/t11ter.pdf, available on-line as of 18 March 2004.
governmental agency has conducted an in-depth analysis of creative terrorist financing.\textsuperscript{5} Further, the Departments of Treasury and Justice both lamented the lack of a guiding framework and appropriate metrics to measure the effectiveness of targeting terrorist funding.\textsuperscript{6} Without a framework of analysis, accurate and usable measures of success, or conceptual understanding of how targeting money affects a terrorist organization’s operations—including access to replacement funding—implementing such a policy is unlikely to be effective. Furthermore, not fully exploring what the financial strategy can contribute—and just as importantly what it cannot contribute—to the overall global war on terrorism may create unrealistically high expectations among policymakers and taxpayers alike.

The goal of this dissertation is to develop a model that enables policymakers and analysts to understand how terrorist financial networks work, how current policies targeting those networks will affect them, how terrorist organizations are likely to react to those policies, and what more can be done. Given the centrality of Al Qaeda and its affiliates in the global war on terror, this dissertation specifically explores the questions of how US and international counter-terrorism policies affects those organizations’ financial support networks, and how Al Qaeda and its affiliates are likely to react to those initiatives? I will then derive a series of recommendations based on the model developed in the dissertation.

Motivating the Problem

A vigorous inquiry into the policy-related effects of targeting terrorist financing is required and overdue. At least four distinct phenomena motivate the need for this study:

-- the longevity and (more recently) breadth of financially-focused counter-terrorism policies in the United States’ and international community’s strategy to fight terrorism;
-- the perceived importance of money to a terrorist organization’s ability to operate, and the specific importance of money to a global organization like Al

Qaeda;

-- the centrality of financially-focused counter-terrorism policies in the overall strategy to combat terrorism;

-- the lack of any such rigorous study to date.

Longevity and Breadth

The United States government began attacking terrorist financial networks with President Ronald Reagan in 1986—fifteen years before 9/11—when he sought to use the powers of the International Economic Emergency Powers Act (IEEPA) to freeze the assets of states suspected of supporting terrorists and terrorist organizations. Subsequently, President William Clinton expanded the financially centered counter-terrorist policies available to law enforcement and intelligence organizations through a variety of legal mechanisms, to include IEEPA, various money-laundering statutes, and most significantly, the Antiterrorism and Effective Death Penalty Act. The number of and power of policy tools available to US law enforcement and intelligence personnel mushroomed after 9/11; the most significant of these include EO 13224, various elements of the USA PATRIOT Act, UN Security Resolution 1373, refocusing the international Financial Assets Task Force towards terrorist financing, and creation of various voluntary financial oversight organizations such as the Egmont Group.

Yet for the enduring nature and recent expansion of this avenue of attack against terrorists, analysis on the efficacy of such an approach is limited to descriptive enumerations of various successes and failures of its implementation. Indeed, documents outlining the US’s counter-terrorism strategy neither explain in detail the goals of depriving terrorists of funding, how dismantling financial networks negatively impacts terrorist organizations and their ability to function and operate, or how financially-focused initiatives complement non-financial counter-terrorism strategies. It is reasonable to posit that having less money probably impedes a given terrorist organization; however, fully exploring the reactions of a terrorist group facing an assault on its financial base will yield a richer and more elegant understanding of that dynamic.

7 Interview with Chris Verbeek, Federal Bureau of Investigation. 11 February 2004.
Money is Perceived as Important to Terrorist Organizations

Many policymakers and analysts believe quite strongly that money is important for a terrorist organization to survive and especially to operate. Conventional wisdom suggests that a deprivation of funds will bring some corresponding decrease in a given terrorist group’s ability to operate, and, specifically its latitude to carry out attacks. Less money means fewer weapons, reduced recruiting, training and reconnoitering capabilities, less capacity, and a diminished ability to purchase technology or pay specialists to provide needed expertise. All these inputs are needed to conduct terrorist attacks; should a group have less money to acquire them, conventional wisdom suggests it will be able to mount fewer attacks. Indeed, in a series of 28 interviews with various analysts, professors and policymakers, 17 rated money as “highly important”, eight rated money as “somewhat important”, while only three rated money as “not very important” for a global terrorist organization to function.8

Furthermore, a review of statements by prominent policymakers belies a conviction that financial deprivation can deliver a mortal blow to Al Qaeda. President Bush, Secretary of State Powell, former Secretary of the Treasury Paul O’Neil, Secretary of Homeland Security Ridge, other cabinet officials, and several Congresspersons have all indicated a belief that the United States and the international community has the capability to “succeed in starving the terrorists of funding,”9 that “starving terrorists of funding remains a priority and a success in the war on terrorists,”10 and “we will dismantle terrorist financial networks.”11 Furthermore, these same officials reflect a belief that without financial support, terrorist organizations will be unable to function effectively. For example, US Secretary of State Colin Powell flatly claimed “For money

---

is the oxygen of terrorism. Without the means to raise and move money around the world, terrorists cannot function."\textsuperscript{12}

\textit{Centrality of Financial Counter-terrorism Policies}

Comparisons of counter-terrorism functional categories are difficult for at least two reasons. First, much of the data that could be used to create useful comparative metrics are classified. Next, specific data such as the number of personnel, size of the budget, time spent, number of new laws passed or new organizations created are all useful but incomplete ways of ranking the importance of various counter-terrorist policy approaches. The ultimate goal is to reduce or eliminate terrorist activity; measuring the amount of resources assigned to that task is simply not a valid or reliable way of forecasting whether or not that ultimate goal is reached. These difficulties notwithstanding, several empirical trends suggest that attacking terrorist financing is a central piece of the US and international community’s war on terror.

First, the number and scope of new laws and new organizations targeting terrorist financing in the wake of 9/11 are significant. The United States and the international community took six principal steps in the fall of 2001 to pursue financial underwriters of terrorism:

1. President Bush signed EO 13224, giving the United States greater power to freeze terrorist-related assets;

2. The UN Security Council passed Resolutions 1373, 1390, 1455 and 1526 that require member nations to join in the effort to disrupt terrorist financing;

3. Congress passed and President Bush signed the USA PATRIOT Act; sections 326, 238, and 300 broaden and deepen information sharing and the regulatory net for the US financial system; section 411 created the Terrorism Exclusion List (TEL), which prohibits anyone entering the US who is accused of financially supporting terrorism;

4. The international community directed multilateral institutions such as the Financial Action Task Force (FATF) and the international financial institutions (IFIs) to focus on terrorist financing, in which at least 171 countries are participating; furthermore,

a smaller collection of countries known as the Egmont group was created and has set
even higher standards for cooperation and information sharing through their financial
intelligence units, or FIUs;¹³

(5) The US opened Operation Green Quest – an inter-agency task force that
augmented existing counter-terrorist efforts by bringing the full scope of the US
government’s financial expertise to bear against systems, individuals, and organizations
that serve as sources of terrorist funding; and

(6) The US began sharing information across the federal government, the private
sector, and among international allies to crack down on terrorist financiers.¹⁴

This collection of new institutions, new laws, and cooperation between
institutions was described as “an immense undertaking” and as “no less than the military
campaign” by various US officials.¹⁵ Given these characterizations and the sheer breadth
and depth of these new initiatives, depicting the financial strategy as a central component
of the global war on terror is not unreasonable.

In addition to new laws and organizations, considerable resources are devoted to
the counter-financial initiatives as well. Accurately characterizing the actual level of
human and capital resources devoted to the financial war on terror is problematic, for the
reasons stated above. However, even without a solid baseline for analysis, certain
evidence exists which suggests that both personnel and material devoted to the financial
war on terror has increased substantially since 9/11. Both the Central Intelligence
Agency (CIA) and Federal Bureau of Investigation (FBI) significantly boosted the
number of analysts devoted to the counter-terrorism mission in the wake of the

¹³ The US FIU is the Financial Crimes Enforcement Network, or FinCEN.
¹⁴ “Contributions by the Department of Treasury to the Financial War Against Terrorism: Fact Sheet.”
¹⁵ Ibid, p. 3.
September 11th attacks; before the strikes, for example, 2,700 FBI agents worked on counter-terrorism cases, whereas 4,100 worked on such cases as of 2003, with counter-terrorism stated as the Bureau’s top goal. Whether or not this general increase in personnel was also witnessed specifically in financial intelligence units is unknown, although the Financial Crimes Enforcement Network (FinCEN) “increased their number of analysis to just under 200” since 9/11. Assuming other law enforcement and national security agencies with financial counter-terrorism missions experienced a similar increase in human resources is not unreasonable. In addition to an increase in human resources, fiscal resources for financial counter-terrorism policies increased as well. For example, FinCEN’s budget has grown by approximately 25 percent since 9/11, and the unit has expanded its gateway access from 1,100 users to nearly 2,000 users. Additionally, the Treasury’s Office of Foreign Assets Control (OFAC) enjoyed a 3.6 percent budget increase from its 2002 budget of $26 million.

19 FinCEN, created in 1990, supports law enforcement investigations to prevent and detect money laundering, terrorist financing and other financial crimes. It serves as the nation’s central clearinghouse for broad-based financial intelligence and information sharing on financial crimes.
21 OFAC manages and enforces economic sanctions and embargo programs against targeted foreign governments and groups that pose threats to the national security, foreign policy, or economy of the United States. This specifically includes sanctions programs against terrorists, terrorist governments and terrorist organizations.
Study is Unique

Despite the significant developments in targeting our adversary's finances, no methodologically rigorous examination exists regarding the efficacy of a financial war on any non-state actor. This general void in policy analysis includes the more specific question of how such a strategy will affect a terrorist organization's ability to operate. As mentioned earlier, the GAO and the Departments of Treasury and Justice (DoT, DoJ, respectively) publicly state that no effective method yet exists to measure the success of the general financial war on terrorism, with the DoT going so far as to ask the private and academic sectors for help in developing a systematic way of doing so.\textsuperscript{23} Furthermore, the Treasury specifically critiqued its own Office of Foreign Assets Control (OFAC) as "lacking long-term performance goals with specific targets, which makes it difficult to determine whether or not outcome goals are achieved" and that "new measures are needed" in order to determine the effectiveness of OFAC programs.\textsuperscript{24} The Office of the Inspector General in the Department of the Treasury did specifically praise FinCEN as making inroads towards using artificial intelligence in sifting through mountains of financial data to search for specific targets and irregularities, develop leads and support investigations. However, the same report went on to say that such systems were merely tools rather than programs, and as such, no way of measuring their success in combating money laundering and associated crimes was possible.\textsuperscript{25}

\textsuperscript{23} 2002 National Money Laundering Strategy. p. 3.
These reasons—the centrality of financial counter-terrorism policies in the general war on terror, the belief that such policies are effective, and that the policy-making community clearly stated the need for such efforts—make this dissertation both timely and relevant. Creating a methodologically rigorous and quantitatively and qualitatively plausible model addressing terrorist financial networks is the first step in refining policies aimed at dismantling those networks and eventually broadening the policy-making horizon with respect to the financing of terror.

**Literature Review**

Terrorism, although not a recent phenomenon, is a relatively recent subject of intellectual inquiry. Prior to 1970, relatively little research on terrorism existed; David Rapoport, professor emeritus of political science at University of California-Los Angeles, lamented on that relative dearth of material when he was preparing a series of lectures on the topic in 1969. Since then, the literature ballooned. The current body of terrorism literature is voluminous; various sources place the number of books on the subject at over four thousand, with thousands more journal, magazine and other scholarly articles available. The considerable size of this literature is the result of many factors, three of which are germane for this dissertation. One is the significance of Al Qaeda attacks over the last decade, punctuated by the spectacular strikes on the World Trade Center and Pentagon on September 11th, 2001. The resulting demand for information related to those attacks and its perpetrators helped create a veritable cottage industry of terrorism experts and authors. Second, the complex nature of terrorism lends itself to a wide range of

---


27 BooksInPrint (part of FirstSearch) database search; this database contains all books published since 1979.
research interests—historical, cultural, religious, political, economic, psychological and organizational factors, among others, all have relevant and researchable elements in the terrorism field. Finally, terrorism is continuing to develop as a legitimate scholarly field, with students increasingly pursuing it as an area of academic specialization.

A systematic method for detailing the relevant literature is therefore useful. A logical “top-down” progression best examines the literature pertinent to the specific question of terrorist financial networks. Developing a general understanding of terrorist groups, organizational behavior, strategic choice and other general, comprehensive topics requires a review of the broad classics of terrorism studies. The US policies targeting Al Qaeda finances falls squarely within the broader subject of counter-terrorism strategies pursued by a liberal democracy, requiring examination of the major works in that area. Logically narrowing the literature field further, subject matter expertise specifically on the Al Qaeda organization entails an evaluation of at least part of that growing body of work and research. The most specific and narrow portion of the literature review, focusing on documents, court cases, government testimonies and other analyses explicitly examining terrorist financing, caps this effort.

Classical Terrorism Literature

The great terror analysts such as Martha Crenshaw, Brian Jenkins, Walter Laqueur, David Rapoport, Grant Wardlaw, Paul Wilkinson and Bruce Hoffman populate classical terrorism literature. This body of work largely focuses on broad themes and questions: Why do terrorist organizations exist? How has terrorism changed over time? Why do organizations choose terror as a tactic to achieve their goals? What are those goals, and what predicate activities do they pursue in support of them? How do terrorist
organizations make decisions? How do such organizations survive and grow? What environments seem to breed terrorists?

Given those broad themes, the classical literature itself can be sub-divided into historical, religious, case study, strategic frame, and general commentary efforts. Beginning a literature view with historical texts provides the reader with the advantage of putting current events in proper perspective. Many excellent books provide this perspective, tracing the development of non-state political violence in general and how terrorism has become a primary component of modern political violence. Each of these works provides a broad historical basis for the contemporary issue they are addressing, be it the increase in terrorist violence, the increase in Islamic violence, or the history of terrorist financial dealings.

The important, germane and common thread in all these terror histories is the decreasing importance of geography and locality in the terrorist phenomenon. The respective works show that early modern terrorism (such as terrorism associated with decolonization, like the Front de Libération Nationale (FLN), or National Liberation Front, in Algeria) was local in both input and output. Acquisition of resources—obtaining recruits, weaponry, money and other supplies—was largely a local effort by local leaders; operation and ambitions generally did not extend beyond state borders. However, these authors note that more contemporary terrorism is marked by an ability to

---

operate regionally and globally, and increasingly uses technology to further remove geographic constraints on operations. Tracing these trends is important when researching financial networks; terrorist organizations with local resource inputs are presumably easier to affect by attacking that limited base, whereas a globally networked terrorist organization, capable of acquiring and moving substantial sums of money around the world, presents a more difficult financial target.

The religious component of terrorism is a common theme in the terrorist literature. Terrorism migrated from a tool of the state to a tool of those fighting the state. The underlying legitimacy for fighting the state in the 1960s and 1970s was typically political, although some groups proclaimed a religious faith as the core of their movement. The modern terrorist landscape is exactly opposite—the majority of terrorist groups are religious in nature, most of them being violent Islamist groups. Studying the rise of religion as a justification of terrorist violence is important to any student of political violence, especially contemporary terrorism.29

Dozens of case study books exist, where the authors do not aim to provide broad hypotheses or comprehensive theories of terrorism, but explore the details of specific groups, individuals or causes. While too numerous to examine here, many of the first case studies examined the European political terrorist groups of the 1960s-1980s, (to include the Irish Republican Army (IRA), the German Baader-Meinhoff Gang (aka the Red Army Faction, or RAF), the Italian Red Brigades (BR), the Greek November 17th group (N17-RO), the Basque Euzkadi Ta Askatasuna, or "Basque Fatherland and Liberty

---

(ETA), among others) and nationalist/separatist terrorist groups (such as the Palestinian Liberation Organization (PLO), and the Algerian FLN). To reiterate an important point established in the history of terrorism literature, the bulk of these case studies highlight the rather well defined nature of many terrorist groups since World War II. Case studies of the IRA and its various splinter groups (such as the Provisional IRA (PIRA) and Official IRA (OIRA)) and the PLO often focus on how these two groups were exemplars at breaking the mold of the “contained” terrorist group. While the IRA and PLO differed in that the former largely contained its attacks to the UK while the latter (together with its affiliated groups) conducted attacks in multiple nations, both developed substantial international funding sources, and thus serve as a useful analytical baseline for this thesis.

Modern case studies deal almost exclusively with Islamist terror groups in general and the Al Qaeda organization specifically, and will be covered in detail in the following pages. In short, the plethora of Al Qaeda commentaries following 9/11 examines a variety of different aspects of the group; however, nearly all of them mention in varying degrees of detail its capability to acquire resources and ability to conduct operations in a networked and international fashion. It is the discussions in these studies regarding Al Qaeda’s capabilities at obtaining financial support that is most germane to this dissertation.

Finally, much of the classical literature attempts to put a strategic frame around terrorism as a phenomenon. This literature addresses why groups or individuals choose terrorism to pursue their goals instead of other available courses of action. Some see the

---

30 See especially Adams, James. *The Financing of Terror: How the Groups that are Terrorizing the World Get the Money to Do It*. (Simon and Schuster, New York, 1986). Adams writes two in-depth case studies specifically looking at the international financing aspect of both the IRA and PLO.
resort to terrorism as strategic choice aimed at pursuing long-term goals,\textsuperscript{31} while others (including economists\textsuperscript{32}) see the choice of terrorism as the product of collective rationality.\textsuperscript{33} Still yet others have used sophisticated quantitative techniques\textsuperscript{34} and game theory\textsuperscript{35} to look for empirical reflections of rational choice.

A thorough reading of this literature is important to debunk the notion that terrorism is an irrational activity that cannot be comprehended in traditional terms. Terrorist organizations clearly exhibit elements of rational, utility-maximizing decision-making thinking. This literature suggests that by deciding to engage in terrorism in the first place, and through organizational growth, survival calculations (i.e. recruitment, use of resources, target selection, etc.) and actual operations, groups have goals and institute methods in direct pursuit of those goals. This is an important realization; creating intuitive models based on the assumption of organizational rationality is therefore permissible and useful.


Liberal State Responses to Terrorism

The next logical subject to review is the literature regarding how a state that defines itself on the basis of norms consistent with a liberal democracy, such as the United States, responds to terrorist activity. Terrorism is particularly vexing to liberal democracies; such states typically have greater restraint on their range of responses to terrorism than do authoritarian or dictatorial governments. The tension represented between security and freedom can be truly troublesome, especially when crafting counter-terrorism policies. What might be an effective counter-terrorism policy in instrumental terms may not be acceptable to a liberal democracy steeped in a tradition of limited government, individual rights, and an expectation of privacy.36 These works are particularly useful when examining terrorist financial networks. Will liberal democracies acquiesce to greater transparency in financial matters? Is there economic space that is large enough for terrorist organizations to acquire, move and use financial assets, but so small that only an extensive government involvement would create transparency in those spaces? Would the citizens of a liberal state tolerate such an extensive government involvement, even in the face of a terror threat?

Al Qaeda Literature

The majority of books, studies, articles and commentary regarding Al Qaeda emerged following the 9/11 attacks. This being said, quality works on the group were written before those attacks. Journalists who were witness to the rise of Al Qaeda wrote the majority of the pre-9/11 books. Two of the best include Ahmed Rashid’s Taliban\(^\text{37}\) and Peter Bergen’s Holy War, Inc.\(^\text{38}\) Rashid (a Pakistani journalist) accounts the Taliban’s rise to power following the departure of the Soviet Army, as well as describes the subsequent interactions and shared religious beliefs that link it with Al Qaeda. In addition to being an interesting commentary on how a dictatorial state legitimized its actions through religion, Rashid describes how Al Qaeda was essentially a state within a state and how the symbiotic relationship between itself and the Taliban allowed Al Qaeda to grow. Bergen (a CNN reporter) is one of the first writers to describe the organization using a business vernacular. Understanding Al Qaeda’s “multi-national corporation” structure is particularly important in understanding how it acquires and moves resources, and as such, Bergen’s work is very useful. Examining Al Qaeda through businesses model lenses helps lay the groundwork for the financial infrastructure analysis.

Many thoughtful volumes written after 9/11 contribute to the knowledge regarding Al Qaeda. A popular book is Rohan Gunaratna’s seminal work, Inside Al Qaeda. Gunaratna provides a considerable number of facts, details and specific pieces of information from hundreds of interviews with Al Qaeda operatives and graduates of the group’s training camps in Afghanistan. While other post-9/11 books do delve into


greater detail in narrow areas, few match Gunaratna’s general breadth and depth on the subject.

Again, reporters have written some of the useful post-9/11 books on Al Qaeda, a fact that perhaps explains their novel-like readability. Each work provides interesting and useful background into the way Al Qaeda operated and organizationally functioned. Other books by more academically grounded researchers tend to specifically focus on a particular aspect of Al Qaeda, such as the religious nature of the organization. Many others are simply general primers. Government analysts have also contributed to the general literature, often in unique ways. However, as is the case with terrorist literature writ large, it is not necessary to examine all the works on the subject as many are repetitive, not academic rigorous, or not relevant to this thesis.

**Terrorist Financing Literature**

Treatment of terrorist financing—how terrorist organizations acquire, move and use money and money equivalents—is a subject that is often treated as a tertiary topic. Only four books are devoted specifically to terrorist financing, while Gunaratna provides

---


42 This is particularly true with two books written by an anonymous CIA analyst. See *Through Our Enemies’ Eyes: Osama bin Laden, Radical Islam and the Future of America*. (Dulles, VA: Brassey’s, Inc., 2003); and *Imperial Hubris: Why the West is Losing the War on Terror*. (Dulles, VA: Brassey’s, Inc., 2004).
a 10-page summary of Al Qaeda’s financial activities, and Corbin threads her book with the business and funding aspect of the organization. The first book ever devoted exclusively to the topic is James Adams’ *The Financing of Terror*, which is a combination reporter’s commentary and case study of the PLO and PIRA. This book is exceptionally important in that it was the first major work to recognize the complexity and international nature of terrorist financing developed by these two groups, and thus sets a very useful analytical baseline from which to compare Al Qaeda’s financing efforts.

Analysts recently added three additional books exploring the role of money in terrorism. *Modern Jihad: Tracing the Dollars Behind the Terror Networks* by Loretta Napoleoni is a systemic look at the international economic system, organized crime, narcotics, gems and weapons smuggling, and the linkages between economies run by armed groups and western economies. While a portion of Napoleoni’s work is simply a repeat of Adams’ work, it does compile information regarding Al Qaeda’s financing that is generally available from other sources. It is still, however, a fascinating examination of the complexities of modern terrorist financing and it expands the reader’s horizon of how contemporary terrorist organizations function. In that respect, it is revealing and surprising even for those who are well versed in terrorism.

Next, *Washington Post* reporter Douglas Farah published the exceptionally interesting volume *Blood from Stones: The Secret Financial Network of Terror*. As the

---

43 Gunaratna, pp. 61-71.
44 Adams, James. *The Financing of Terror: How the Groups that are Terrorizing the World Get the Money to Do it.* (Simon and Schuster, New York, 1986.)
Post’s West African bureau chief, Farah investigated Al Qaeda’s financial links to the diamond trade in Sierra Leone and Liberia. From there, he explored the complex relationship of commodities, informal money transferal systems, charities and corrupt banks and how Al-Qaeda used each to acquire, store and move funds throughout the world. It is an intriguing account that has more information specifically regarding Al Qaeda’s finances than any other volume available.

Lastly, an edited volume by Mark Pieth entitled Financing Terrorism\textsuperscript{47} presents a series of essays exploring how international and national financial institutions, laws and other structures are used to frustrate terror financing and how they can be strengthened. It also explores the similarities and differences between terrorist financing and other financial crimes (such as money laundering), as well as the role money plays in terrorist organizations as compared to other criminal groups.

Academic literature regarding terrorist financing is more plentiful. Several interesting articles examine the flow of money in various Irish terrorist groups on either side of that conflict. For example, Andrew Silke shows how drinking clubs, drugs, theft, extortion, graft and fraud all helped fill the coffers of both Republican and Loyalist groups.\textsuperscript{48}

A different aspect of terrorist financing includes those books that address the merging of terrorist organizations and other non-state actors. The developing cooperation appears most advanced between terrorist organizations and smuggling groups, primarily


drug cartels, particularly in South America. These cooperative relationships are also on the rise with transnational criminal networks and syndicates. These works are important as they explore the tendency for violent, non-state actors to merge in some ways, increasing the likelihood that each will adopt the “best practices” or best technologies of the other. Indeed, such a process may be currently occurring with Al Qaeda—an important development with that organization.

Other books address terrorism resources in general. Who provides and how terrorists acquire resources are important predicate issues to the question of terrorist financing. Various works examine the trends of what type of political actor provides support for violent non-state actors (including terrorist organizations), what form the support takes, and how the support is provided.

Despite the relative dearth of books specifically addressing modern terrorist financing, the U.S. government and United Nations have published several documents, strategies and statements on the topic. Every federal department publishes some terrorist-related material, much of which focuses on terrorist financing. Additionally,

---

congressional testimony is rich with commentary on terrorist financing, with particular focus on Islamist terrorism. The Senate has held the most extensive hearings on the subject:

- Almost two months to the day after the September 11th attacks, the Senate Subcommittee on International Trade and Finance of the Banking, Housing and Urban Affairs committee held hearings on the hawala and other informal wealth-transfer mechanisms, specifically as they pertained to terrorist activity, which provided significant initial information about this important aspect of terrorist financing.

- The Senate Finance Committee held hearings regarding the effectiveness of the new national money laundering strategy, the challenges of attacking terrorist financing, and document fraud and identity theft.

- The House of Representative also held several related hearings, to include hearings on the effectiveness of US counter-finance terrorist policies and implementation of various elements of the USA Patriot Act.

---

54 The hawala system of money transfer is a traditional method used in many parts of the world. These systems provide mechanisms for the remittance of currency or other forms of monetary value—most commonly gold—without physical transportation or use of contemporary monetary instruments. One hawaladar simply calls another hawaladar, provides information on who is to receive money, and the servicing hawaladar simply provides that person money. The two hawaladars then balance the account between them through various mechanisms that are difficult or impossible to trace. For a more in-depth explanation, see Mohammed El-Qorchi, “Hawalas,” Finance and Development, Volume 39, No. 4, December 2002. Produced by the International Monetary Fund. Available on-line at http://www.imf.org/external/pubs/ft/fandd/2002/12/elqorchi.htm as of 17 June 2004.


59 Epstein, Matthew and Evan Kohlmann. “Arabian Gulf Financial Sponsorship of Al Qaeda via U.S.-Based Banks, Corporations and Charities. Testimony before the House Committee on Financial Services Subcommittee on Oversight and Investigations. 11 March 2003. The authors are both Senior Terrorism

---

It is interesting to note that many of the actions pertaining to terrorist financing taken since 9/11 address trying to obtain better information regarding how exactly terrorists acquire and move their assets, rather than specifically expanding powers to seize those assets. Unfortunately, the weakness of these documents is that they are political in nature; sifting out fact from conjecture and political opinion from objective assessment is sometimes difficult.

Government research services, primarily the Congressional Research Service (CRS) and the GAO, have also weighed in on the subject of terrorist financing. The most useful and germane report to this dissertation comes from the GAO, “Terrorist Financing: U.S. Agencies Should Systematically Assess Terrorists’ Use of Alternative Financing Mechanisms.” Released in November 2003, this document specifically addresses creative ways terrorist organizations acquire, store and move money and money equivalents, and how terrorist organizations attempt to evade US efforts to seize their assets. Other GAO reports regarding money laundering, narcotics, weapons and human smuggling and other black economy topics are worthwhile inasmuch they give the


61 See GAO reports GAO-03-813, COMBATING MONEY LAUNDERING: Opportunities Exist to Improve the National Strategy. (27 October 2003); GAO-04-403T, Combating Terrorism: Evaluation of Selected Characteristics In National Strategies Related to Terrorism (3 February 2004); GAO-02-1021, COMBATING TERRORISM Department of State Programs to Combat Terrorism Abroad (6 September 2002); GAO-03-170 Highlights COMBATING TERRORISM: Funding Data Reported to Congress Should Be Improved (22 November 2002); and GAO summary “Investigations of Terrorist Financing, Money Laundering, and Other Financial Crimes”; available on-line at www.gao.gov; as of 1 July 2004. See CRS reports “Intelligence and Law Enforcement: Countering Transnational Threats to the U.S.,” (1 December 2001); “Foreign Support of the U.S. War on Terrorism” (7 October 2002); “National Commission on Terrorism Report: Background and Issues for Congress” (6 February 2001); “Taliban and the Drug Trade” (5 October 2001); and “Terrorism: Section by Section Analysis of the USA PATRIOT Act” (10 December 2001), available on-line at http://www.usembassy.it/policy/crs_archive.htm as of 1 July 2004.

reader a broader understanding of the complexities of illicit economic activity. All the GAO reports list the strengths and weaknesses of the new policies and systems, and specifically point to a lack of information and intelligence gaps in the financial war on terror. The GAO and CRS reports are the best resources of any government agency, as they are non-partisan and written by professional researchers.

The judicial branch offers additional insight into terrorist financing through details of court cases. These cases include the indictments and evidence against many Al Qaeda operatives and leaders, some of whom are in US custody (such as Ramzi Yousef, Mohammad Salameh and Omar Abdel Rahman) and others that are still eluding authorities (Osama bin Laden). Within these indictments are details of illegal business transactions, money laundering, terrorist funding activities and other financial facts used to build cases against these specific individuals. The vast majority of the information and testimony included in these cases are not pertinent to this effort; however, it is some of the most complete and detailed accounting of how Al Qaeda and its affiliates acquired, hid, moved and used money and money equivalents in terrorist operations.

The Place of the Dissertation in the Literature on Terrorism

This dissertation seeks to bring many of these disparate themes outlined above together. It specifically examines the effects of counter-terrorism policies attacking Al Qaeda’s financial strength, as pursued by the United States and much of the rest of the world, and how this will affect Al Qaeda’s financial networks and ability to operate. Drawing on organizational theory, basic microeconomics, a historiography of Al Qaeda

---

63 The most relevant cases are United States of America v Mohammad A. Salameh, et al. (S593 Cr. 180 (KTD)), United States of America v. Omar Ahmad Ali Abdel Rahman, et. al. (S593 Cr. 181 (MBM)), United States of America v. Ramzi Ahmed Yousef, Abdul Hakim Murad, Wali Khan Amin Shah (S1293 Cr. 180 (KTD)), United States of America v. Eyad Ismoil (S1293 Cr. 180 (KTD)), and United States of America v. Usama bin Laden et al. (S798 Cr. 1023).
and some modeling theory, this dissertation aims to explore in detail the effects of financially focused counter-terrorism policies on the organization and function of Al Qaeda's financial network.

Since 9/11, Al Qaeda's status as an important topic of research is considerably heightened. Unfortunately, effectiveness of counter-terrorism policy is not a topic of many methodologically rigorous studies. This is understandable; many of the most strident counter-terrorism policies—especially financially focused ones—were crafted only within the last two years. This is an important shortcoming that must be addressed. In a world of limited resources and growing dangers, and specifically in a United States with soaring deficits and many vulnerabilities, maximizing the result from counter-terrorist policies is urgently important.

Methodology

Analyzing terrorist groups is an inherently difficult task. Hard data on such groups are rare, and often the information that does exist is confidential and controlled by government authorities. Conducting field research is problematic, as terrorists do not open their organizations to outsiders. These challenges are compounded when researching the specific question regarding terrorist financing. Detailed information regarding such a group's financial dealings is expectedly sensitive and therefore still more protected than information regarding other aspects of a terrorist group's organization. Further complicating matters is the simple fact that this dissertation focuses on Al Qaeda. This is a complex organization supported by a web of intricate financial infrastructures that literally spans the globe.
Given these challenges in obtaining sufficient data, this dissertation is necessarily exploratory. Three primary modeling steps are needed: creating appropriate frameworks of Al Qaeda's financial infrastructure, properly specifying the relationships within those frameworks, and using the appropriate modeling tool to explore those relationships.

Step 1: Creating Appropriate Frameworks

Creating useful frameworks of analysis to analyze both Al Qaeda's financial infrastructure and counter-terrorist policies aimed at disrupting them is the first step in the modeling process. This thesis bases its analysis on a financial framework developed by the GAO in December 2003. The model differentiates among basic functions of such a system: activities that earn or acquire money or money-equivalents, mechanisms that store the acquired wealth, and means or systems to move the acquired wealth to areas where it can be utilized.64 This paper expands the GAO model by differentiating between those activities or mechanisms that are internal or intrinsic to the terrorist group as compared to activities or mechanisms that depend on an external entity or on systems or mechanisms not controlled by the group. Enumerating the activities, systems and instruments that modern, complex terrorist organizations use to earn, move and store wealth and then characterizing them as either internal or external to the organization helps illuminate aspects of that particular group's financial network. Creating these snapshots over time provides an insight into the evolution of such networks. The model in Figure 1 emerges, with some types of activities included for illustrative purposes:

<table>
<thead>
<tr>
<th>Earning</th>
<th>Moving</th>
<th>Storing</th>
</tr>
</thead>
</table>
| Internal | Front businesses  
Collecting for fake charities  
Donation at churches/mosques  
Drugs | Bulk cash smuggling  
Unregistered informal transfer systems  
Over/under billing between front businesses | Conflict gems/gold  
Banks sympathetic to group |
| External | Individual donations  
Donations from charities | Wire transfers  
Business transactions | Fake bank accounts |

Figure 1: Basic Model of Terrorist Financial Networks with Representative Activities

Applying this model to Al Qaeda provides the following:

<table>
<thead>
<tr>
<th>Earning</th>
<th>Moving</th>
<th>Storing</th>
</tr>
</thead>
</table>
| Internal | Osama bin Laden's wealth  
Front businesses  
Wealthy Al Qaeda members  
Commodity Trading  
Drug Trade | Bulk cash smuggling  
Unregistered informal transfer systems (hawala)  
Over/under billing b/w front/shell businesses | Conflict gems/gold  
Tanzanite  
Banks sympathetic or controlled by AQ |
| External | Individual donations  
Donations from charities  
Returns on investments  
State sponsors(?) | Wire transfers  
Business transactions  
Bank account transfers | Bank accounts  
Stocks, bonds |

Figure 2: Basic Model Applied to Al Qaeda

Due to Al Qaeda’s inherently dynamic nature, the importance of each of these mechanisms has varied with time. For example, Osama bin Laden’s own wealth and donations from wealthy individuals made up the bulk of Al Qaeda’s revenue in the early days of the organization. As those donations became more risky throughout the 1990s, front businesses and front charities increased in importance. Since many states and financial institutions are actively hunting terrorist accounts in the post-9/11 period, commodity trading, smuggling and the drug trade has, accordingly, gained preeminence in Al Qaeda’s financial infrastructure.
Step 2: Properly Specifying Relationships Within the Framework

The various components of Al Qaeda's infrastructure all carry certain risks and rewards. For example, in the absence of sanctions or enforcement, having external wealthy sponsors is very useful in that it means Al Qaeda does not have to internalize the fund-raising function completely and does not carry the risk associated with pursuing activities to raise its own cash. Conversely, it carries the risk of losing some autonomy of action due to its possible dependence on those external sources of funds. On the other hand, internalizing the fundraising function takes resources away from operational tasks, and also increases the risk to the organization with respect to getting caught while raising these funds. When achieved through criminal activity, typically it also generates a smaller average “per event” return than receiving funds externally, which requires a more active pursuit of cash. That said, monies procured by internal activities can be spent as the organization sees fit, with no concern for pleasing an external benefactor.

While the preceding example specifically refers to acquiring funds, relationships within and between each of these three functional areas exist. Factors including the types of laws passed by the US and the international community, level of enforcement of those laws, and risk aversion of Al Qaeda and its potential donors are all elements of the decision-making calculus that shapes the financial infrastructure.

Each of the tradeoffs implicit in these relationships in various environments can be modeled using fairly simple difference equations. For example, a decision to accept money from an external donor is a function of the size of the donation (S), the risk inherent in the transmission of funds to the group (which could be modeled as a function of laws (L) and the level of enforcement of those laws (E)), and of the potential loss of
some autonomy (A). This could simply be written as \( f(S) - f(L \times E) - f(A) \). Sensitivity analyses could test various functional forms within that equation. For example, \( f(S) \) could be \( \log(S) \), \( L \) and \( E \) could be normalized to be between 0 and 1, and \( f(A) \) could be an exponential function.

The critical variables to be modeled are those values that are reasonably believed to be included in terrorist decision-making (primarily functionality and risk) and those elements affected by various counter-terrorism policies.

**Step 3: Using Modeling Software to Demonstrate**

I intend to initially use Excel and Analytica software to explore basic relationships between the variables described above. Once the complete model is specified (defined as all the relationships expressed via difference equations), I will use the Computer-Aided Reasoning System (CARS) to model these relationships. This tool has a number of advantages. First, several variables can be symbolically displayed in a very simple graphic user interface (GUI), rather than reading a series of numerical charts or spreadsheets each time a single variable changes. Second, CARS enables the modeler to use a series of “slider bars” to change any given variable, and the GUI adjusts in real time. Next, CARS enables efficient and extensive sensitivity analysis, a crucial aspect for a model with a large number of variables.

An example of the CARS GUI is given below, under a pre-defined environment and set of circumstances. The colored spheres represent ten different terrorist groups. The relative size of each sphere indicates the amount of money pooled with that particular group. The X-axis indicates their relative dependence on internal vs. external
funding sources (closer to the origin is internal, further from the origin is external). The y-axis suggests relative average size of each individual revenue source. In the current configuration, one group (represented by the gray sphere) receives 100 percent of the terrorism money in the system, and is fairly dependent on outside sources in acquiring those funds.

Figure 3: CARS representation of terrorist groups by amount of cash pooled.

The same presentation, given an increase in terrorist risk aversion, suggests that money will pool with smaller groups at the sub-state level, as illustrated by CARS GUI below:
CARS also aids deeper inquiry into policy implications. Given there is much that is not known (and indeed, much that is unknowable due to intelligence limits) about Al Qaeda's financial infrastructure, this modeling effort is conducted under deep uncertainty. CARS allows the programmer to create many different scenarios under different formats. For example, in addition to changing the parameter values of a given model, one can also change the parameters themselves and compare that to previous models quite easily. Various distributions in key parameters can replace deterministic functions, allowing for appropriate comparisons. In each of these permutations, the modeler can identify those parameters that are robust to a change in the model and those that are not.
Chapter 2: Terrorist Financing—History and Context

Terrorism is generally perceived as being the pursuit of political ends through violent means and certainly, in the popular perception, involves such things as bank robberies and the kidnapping or killing of innocent civilians. In part, this remains true, but a high degree of sophistication has been added to this so that the terrorist is now more likely to conform to the image of a middle-ranking clerk than to a gun-toting hoodlum.65

John Adams, The Financing of Terror

Adams' astute observation, made over fifteen years ago, is one of the earlier published insights to the complicated organizational and functional nature of contemporary terrorism. Large, modern terrorist groups are complex entities that adopt advanced organizational models, reflect functional differentiation, and recruit and retain individuals with specialized skills. Modes and methods of terrorist violence—kidnappings, hijackings, assassinations and flying jumbo jets into skyscrapers, to name but a few—are still far more spectacular than the mundane organizational details and financial dealings of terrorist groups; however, the success of modern terrorist groups ultimately rely heavily on these mundane underpinnings. Without the appropriate mix of money, talent, organization, and command and control structures, terrorist groups in the modern day are not likely to prosper. Consequently, it is precisely these unexciting aspects of terrorism that present vulnerabilities, and should be targeted with effective policy. While terrorist violence will continue to make the news, the antecedents to those attacks must be included in any comprehensive strategy to combat terrorism.

This chapter partially characterizes the importance of those antecedents by examining the specific role of money in three key contemporary terrorist groups: the

Liberation Tigers of Tamil Elam (LTTE), the Palestinian Liberation Organization (PLO) / Palestinian Authority (PA), and the Provisional Irish Republican Army (PIRA).

**Money and Terror**

Terrorism is clearly a cost-effective method of making a political statement at a broad level and to a broad audience. Terrorist tactics are commonly perceived to be activities that can be inexpensively implemented,\(^6^6\) while defense against and recovery from terrorism is often costly. Furthermore, through the psychology of fear, terrorists are able to artificially inflate their perceived danger to the entity they target. A common anguish is that the Sept 11th attacks cost only $500,000\(^6^7\) or that the bombing of the USS Cole only cost $50,000,\(^6^8\) while the costs to the US economy range as high as $105 billion in New York alone,\(^6^9\) while costing the US economy $1.2 billion a month in subsequent defense.\(^7^0\) Given the relatively small and asymmetric sum of money required to wreak such havoc and destruction, one may legitimately question the feasibility and effectiveness of attempting to strangle the flow of funds to terrorist groups. However, as the conceptual framework presented in Chapter 3 suggests, the extent and complexity of a terrorist organization's activities are enabled by a large and diversified financial base; a terrorist group with the geographic span of Al Qaeda clearly needs more money than does a group with more local and less ambitious goals. Indeed, over the long term, developing a reliable and steady flow of funds and sufficiently capable financial infrastructure may

---


\(^6^8\) Interview, Arnaud de Borchgrave, Center for Strategic and International Studies. 5 Feb 2004.


be one of the most important fundamental and enabling factors for the development of a
large, sophisticated terrorist group.\footnote{Horgan, Taylor, p.3.} The converse may also be true; preventing a group
from developing a reliable financial network may help thwart that organization’s growth,
curtail that group’s ability to effectively respond to policies crafted against it, and
ultimately, bring the very survival of the group into question.

Case Studies

Before detailing what is known regarding Al Qaeda’s finances, examining the role
of money in other complex contemporary terrorist groups is useful. Part of the utility of
comparative case studies is to provide context. When compared to other modern terrorist
groups’ financing efforts, al Qaeda’s efforts appear to be more evolutionary than
revolutionary. Debunking the al Qaeda financial myth—that it has taken the financing of
terror to a new level—is itself an important contribution to the terrorism discussion.
Additionally, an examination of how other complex terrorist groups evolved and adapted,
specifically in their fund-raising efforts, to various counter-terrorism policies helps
validate the terrorist funding models developed in Chapter 3.

The three terrorist organizations selected for this comparative analysis are
appropriate case studies for at least three reasons. First, PIRA and the PLO pioneered the
establishment of financial infrastructures in foreign countries to sustain their guerrilla and
addition to being the first, these groups are also among the best. The networks and structures built by the LTTE, PLO and PIRA built remain among the most developed and complex yet observed. Indeed, the PLO’s financial systems and structures have been described as “the prototype for many of today’s terrorist organizations.”

Although the PLO and PIRA have declared an end to violence and are considering democratic paths to power, subsequent terrorist groups, including the LTTE and Al Qaeda, are emulating the strategies and the practices they developed to raise and manage funds. Finally, each of these groups passed a ill-defined but unambiguously present economic threshold necessary for survival. As Adams points out, “To survive, terrorist groups need to cross an economic divide that separates those who live a hand-to-mouth existence from those who can actually plan ahead. All those [terrorist groups] groups [that] have come and gone...have failed to cross that divide.”

This particular accomplishment places the LTTE, the PLO, PIRA, and al Qaeda all squarely in the same camp.

The Liberation Tigers of Tamil Elam

The LTTE’s financial infrastructure is among the most complex of any terrorist group. Given the now-fractured nature of Al Qaeda’s financial empire, the LTTE likely has the most formidable infrastructure of any terrorist group in the world. While the LTTE did not pioneer international terrorist financing, it deftly wielded the tools of globalization that brought such financing to a more lucrative and sophisticated level.

Despite the LTTE’s stature, less open-source information is available on this group than the other groups selected as case studies, for at least three different reasons.

75 Adams, p. 401.
First, the LTTE is a global – local group; its resource infrastructures are global in nature, but its area of operations is almost exclusively Sri Lanka. Given that terrorist operations typically garner more inquiry than terrorist infrastructure, interest in the LTTE’s operations is greater in the sub-continent region than it is in the West. Indeed, the LTTE’s struggle did not attract much western interest until the suicide bombing of the Central Bank Building in Colombo on January 31st, 1996; the group was subsequently designated as a foreign terrorist organization by the U.S. State Department, a designation which makes it a crime to belong to the LTTE or raise funds for it.77

Secondly, the LTTE’s violent struggle is relatively new, beginning largely in the 1980s, whereas the PLO and PIRA have operated decades longer. Furthermore, the groups most important to the group’s international support—the United Kingdom, Australia and Canada—viewed the LTTE’s efforts as a legitimate sub-state insurgency until approximately 1999. In that year Canada joined the U.S. in naming the Tigers a terrorist organization and banning certain front groups for the organization. The U.K. followed suit in 2001. Before then, however, there was no real attempt to develop an in-depth understanding of the organization’s fund-raising activities in those countries.

Third, authorities appear to simply have had more success in cracking other group’s financial infrastructures, making more information available. As stated earlier, countries important to the LTTE’s resource base only recently began cracking down on the front organizations carrying the LTTE’s fiduciary responsibilities. These groups include the United Tamil Organization (UTO) in the U.K., the Federation of Associations

of Canadian Tamils (FACT) in Canada, the Tamil Coordinating Committee; the Eelam Tamil Associations of Canada, Quebec, and British Columbia; and the Tamil Rehabilitation Organization in Switzerland. Successfully combating these organizations will take time, effort and resources, and the results will not be immediate.

**Total Wealth and Revenues**

The LTTE’s total wealth is currently unknown, but is estimated in the hundreds of millions of dollars. It’s revenue sources are varied, to include contributions (voluntary or otherwise) from various Tamil Diasporas around the globe, a plethora of legitimate companies and commercial holdings, and perhaps in drug and arms smuggling. Annual revenue estimates for the group range up to $50 million.

The Tamil Diaspora appears to be the fundamental source of the LTTE’s funds. The group’s financial infrastructure is truly global in nature, and essentially integrates the entire Tamil Diaspora into a single support system for the Tamil operatives in Sri Lanka. As of 2001, the Tigers were represented in 54 different countries around the globe. Coupled with its creative and extensive propaganda efforts, the LTTE focuses on countries with large Tamil expatriate communities, especially the United Kingdom, Canada, and Australia. Much of this money is procured through a baseline “tax” imposed on Tamil families living abroad. For example, in 1999 the minimum “contribution” for Tamil families in Canada was $240. Conservative estimates suggest such contributions generate as much as $1.5 million a month for LTTE operatives.

---

79 Chalk.
81 Ibid, p. 44.
effective propaganda, these donations are often voluntarily; however, the LTTE has shown little hesitation in resorting to coercion and intimidation to fill their coffers.

Additionally, some wealthy Tamils around the globe appear to be quite generous to the LTTE. For example, Shad Sunder, a wealthy Tamil living in California, has advocated an independent Tamil state since the early 1980s, and reportedly donated approximately $4 million to the LTTE over the past 12 years.

The LTTE also procures funds by siphoning off donations to non-governmental organizations (NGOs), aid organizations and other benevolent entities that finance Tamil social service and development programs in Sri Lanka. Those engaged in this type of fund-raising appear to operate openly, especially in areas where NGO activity is not closely monitored. For example, some reports suggest that the LTTE used Canadian schools as a mechanism to raise money for their cause. Additionally, in Norway NGOs do not need to register with the government before engaging in fund-raising activities, and the LTTE appears to have taken advantage of that relative lack of oversight. Some organizations estimate suggest that up to $5 million annually goes to Tamil causes, some of which is diverted to the LTTE.

A more recent LTTE fund-raising method includes the smuggling of illegal immigrants. According to various western intelligence agencies, the LTTE is now a pivotal organization in smuggling refugees out of Sri Lanka and India and into the west.

---

84 Bynam, et al. p. 51
85 Ibid.
86 "LTTE Terror Allies Use Toronto Schools for Fundraisers" Daily News (Canada) 17 June 2000.
The organization charges between $18,000 and $32,000 per person, making it an exceptionally lucrative practice.88

Finally, the LTTE has created an extensive network of legitimate businesses, enterprises, and commercial holdings. The LTTE appears to be a source of start-up capital for Tamils hoping to open a business; the owner and the LTTE then split the subsequent profits of the business. Interests in the gold and jewelry trade, wholesale commodity freight and distribution, and provision of local Tamil computer, telephone and bus services appear to be the most common businesses opened under these arrangements.89 While inadequate data prevents an accurate estimate of the value of these businesses, at least one report suggests that as of 1999, these businesses generated approximately $6.5 million.90

Moving and Storing Mechanisms
Little is known regarding the LTTE’s storage and movement practices. However, the numerous benevolent organizations, legitimate businesses and interests that aid the LTTE provide a protective veneer over the organization. These legitimate organizations also may provide the LTTE access to the rather efficient money-storage and transmission mechanisms such established businesses use for more orthodox purposes. Business transactions, wire transfers, under- and over-invoicing between businesses, and traditional, yet informal money transfer mechanisms provide multiple avenues for the LTTE to move funds around the world.

For similar reasons, storing procured wealth probably poses little problem for the LTTE. The front businesses and other organizations over which the LTTE exerts control

89 Ibid, pp. 53-54.
or influence provide ample access to mainstream storage mechanisms, such as bank accounts. Furthermore, the organization can invest its wealth, and probably owns real estate and other hard assets through intermediaries in the Tamil Diaspora. The LTTE could also use “distributing savings,” wherein businesses or other interests that support the LTTE may retain some funds in their own accounts, above and beyond their normal period donations. Non-traditional storage and transmission mechanisms, such as the gems, precious metals, and even holding humans they intend to smuggle until the group needs the cash may also be part of the LTTE’s financial dealings.

**Applying the Model**

Given the relative scarcity of information regarding LTTE’s financial infrastructure, applying the model still reveals interesting trends. First, state sponsorship is not part of the group’s infrastructure. The bulk of fundraising appears to be through mechanisms the LTTE completely or largely controls. This self-sufficiency and autonomy set it apart from other terrorist groups around the world. Second, the Tigers have a quite diversified portfolio of revenue-generating activities. While an exact longitudinal analysis of the group’s financial postures is difficult, the Tigers achieve a diversified set of revenue streams much more quickly than the PLO or PIRA; a worldwide infrastructure appears to have been functioning shortly after the Tamil movement turned violent, whereas the PLO took nearly a decade and PIRA took over two decades to fully develop their transnational finances.

<table>
<thead>
<tr>
<th>Earning</th>
<th>Moving</th>
<th>Storing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal</td>
<td>Taxes on Tamil Diaspora&lt;br&gt; Businesses capitalized by LTTE funds&lt;br&gt; Donations from wealthy Tamils&lt;br&gt; Human smuggling</td>
<td>Couriers&lt;br&gt; Smuggling&lt;br&gt; Internal business transactions</td>
</tr>
</tbody>
</table>
The Palestinian Liberation Organization

The original complex, global terrorist financial network is unquestionably the Palestinian Liberation Organization. Dating back nearly four decades, the financing model developed and implemented by the PLO is the standard blueprint that subsequent complex international terrorist groups emulated. Indeed, the PLO is often credited as the first “state within a state,” referring to the period between 1970 and 1982, when the organization settled and essentially controlled most of southern Lebanon.91 Understanding the strengths and weaknesses of the PLO’s model for funding their terror activities is essential to understanding how other terrorist organizations—especially al Qaeda—currently operate.

Total Wealth and Revenues

The PLO’s total amassed wealth was enormous. Due to the complexity and shadowy nature of PLO’s financial empire, estimates characterizing it vary substantially. The British National Criminal Intelligence Services (NCIS) estimated in 1993 the PLO’s fortune to be approximately $10 billion.92 The US Central Intelligence Agency (CIA) suggested the figure could range as high as $14 billion.93 Other estimates, previously mentioned, put the PLO’s annual operating budget in the 1980s at nearly $400 million.

---

92 Ehrenfeld.
per year, or averaging over $1 million per day. The PLO obtained these enormous revenues through a variety of local and international sources and moved through a complex web of organizations. The entire system evolved over time in response to changing internal and external factors.

Revenue Acquiring Activities and Mechanisms

Originally, the precursor organizations to the PLO obtained nearly all of their operating income in the form of donations from wealthy Palestinians who fled to Lebanon upon creation of the state of Israel. These organizations further benefited from the subsequent creation of Palestinian refugee camps in Lebanon, as they became a magnet for humanitarian aid from Arab states. The Palestinians also developed three primary financial institutions, the Palestinian National Council, the Executive Committee, and the Palestine National Fund (PNF). The Palestinian Liberation Organization itself formed in 1964, with the PNF quickly taking control of nearly all the PLO’s financial activities. From these basic sources of income and rudimentary organizations, the various Palestinian factions developed an impressively diversified financial base, with at least four legal principal sources of income:— official contributions from Arab states; — donations from wealthy Palestinians, international governmental organizations (IGOs), NGOs and charities — the Palestinian Liberation Tax Fund (a “tax” on Palestinian worker’s wages

---

94 Adams, pp. 114-5.
95 Ibid, p. 109
96 The use of the word “legal” in these case studies exclusively describes the predicate business activity itself, not the intent of the business to fund terrorist groups. The use of the word “legal” in this context in no way condones the financial support of terrorist organizations.
The first step in expanding the PLO's and its offshoots financial base came in the form of donations from Arab states. This external aid came both from goodwill and extortion. As an organization capable of carrying out attacks against vulnerable Arab leaders, the PLO did not hesitate to use the threat of violence to secure promises of financial aid.98 Other Arab states had friendlier relations with the PLO, and countries such as Kuwait, Egypt, Saudi Arabia, Libya and Syria provided small amounts of funding to PLO pre-cursor organizations in the 1950s and early 1960s.99 Ironically, it was the increasing success of the PLO as a terrorist organization that heightened its credibility in the Arab world, which translated into greater levels of funding by them in the following two decades. Its perceived effectiveness in conducting attacks, coupled with its violent opposition to Israel, led to several hundreds of millions of dollars pledged to the PLO in the 1970s alone. Some estimates suggest that from 1973 to 1986, the PLO never received less than $100 million annually from Arab states, with the figure usually exceeding $250 million.100 Libya appears to have offered the most, averaging $100 million a year in donations until approximately 1983, where funding appears to have been cut in response to U.S. pressure.101 Furthermore, non-Arab states, such as the Soviet Union and its satellite states, as well as sympathetic states in Africa and South America, contributed funds as well.102 However, state support for the PLO began plummeting in the late 1980s, as the hope for a Palestinian state faded and the Soviet Union moved closer to

98 Adams, p. 55.
99 Ibid.
100 Adams, p. 59.
101 Ibid, pp. 64-65.
insolvency. Furthermore, Yasser Arafat became increasingly independent in his actions and policies, possibly as a result of the numerous donor organizations and the proximity of the PLO to financial self-sufficiency. This independence caused supporting governments to perceive they garnered less and less influence over the PLO despite their monetary support, and such external support began declining. Overt state support for the PLO essentially dried up in August 1990, when Yasser Arafat’s support for the Hussein regime in the Persian Gulf War proved too unpopular with his remaining benefactors.

Donations from wealthy individuals, charities, NGOs and IGOs also filled the PLO’s coffers. Indeed, wealthy individuals appear to have had a far greater commitment to the PLO’s cause. Several Saudi princes, Lebanese businessmen, and wealthy Palestinians reliably donated sums exceeding $100,000 when asked. Furthermore, the United Nations-designated “Day of Solidarity with the Palestinian People”—November 29th—turned into an annual fund-raising rally for the PLO. In recent years, as the Palestinian Authority (PA) has gradually replaced the PLO as the locus of the Palestinian cause, donor states, charity organizations, the European Union (EU), the United Nations (UN) and World Bank (WB) have donated money to the Palestinian cause—some of which may have gone to PLO forces operating in Lebanon. This support from the European Union to the Palestinian Authority continued even after the start of the second intifada. Not until February 2003 did the European Anti-Fraud Office of the European

103 Ibid, p. 119.
105 Adams, p. 58.
106 Ibid
Union demand an investigation of the misuse of funds given to the PA by the EU, despite significant evidence that such funds were being appropriated for nefarious purposes.

Another lucrative source of income for the PLO is the Palestinian Liberation Tax Fund. Palestinians worldwide were obliged to donate between 3.5 and 7 percent of their income in the form of taxes to the PLO; in Libya and Algeria, the governments actually deducted that amount before workers received their paychecks. Saudi Arabia, Qatar, Kuwait and the United Arab Emirates (UAE) provided PLO workers in their country an easy way of rendering payment by organization collection points. However, for the same reasons that official state support for the PLO ended in 1990, Kuwait and the UAE no longer provide this collection service for the PLO. Estimates of annual revenue collected from this tax range as high as $50 million annually.

The PLO had an enviable investment portfolio, with a quite successful and lucrative history of performance. In 1970 the PLO formed the Palestinians Martyrs' Sons Enterprises (SAMED), primarily to provide vocational training to children of Palestinians who died or were jailed. However, SAMED also helped the PLO to invest and develop its economic activities. The organization reportedly bought or invested in farms throughout Africa, industrial plants in the Middle East, clothing and weapons factories, real estate in Europe, newspapers, duty free shops in Africa, and even airlines

---

110 Adams, p. 118.
111 Israel Government Press Office April 15, 1997: “Where is the money?”
112 Rubenberg, p. 66.
in Nicaragua and the Maldives.\textsuperscript{114} Using the funds collected from other sources, the PLO allegedly further diversified its portfolio by purchasing stocks on the US, French, London, German, Belgian and Japanese exchanges, as well as investing in a wide variety of money market certificates. Apparently, the PLO was so flush with cash that by 1981, it earned money by acting as a bank itself, lending the Nicaraguan government $12 million.\textsuperscript{115}

In addition to these conventional methods of acquiring funds, the PLO reportedly participated in illegal and criminal acts as well. While not a universal statement, the illegal revenue-generating activities appears to have been pursued largely by smaller factions within the PLO, and not always sanctioned by PLO leadership. Especially while in southern Lebanon, various factions of the group raised funds through protection rackets, extortion, smuggling, kidnapping, and possibly in various drug-related activities, especially heroin.\textsuperscript{116} Furthermore, these factions within the PLO often levied their own “taxes” on their members and individuals under their control, above and beyond the taxes levied by the Palestinian Liberation Tax Fund. In reality, these activities were simply extortion and were not popular with supporters. Interestingly, many of these factions implemented progressive systems, charging those individuals with higher incomes a greater percentage of their salaries than those with lower incomes.\textsuperscript{117} Some of this may resulted in wealth redistribution, as some of this money did go for various social programs in various Palestinian neighborhoods.

\textsuperscript{114} Ibid.
\textsuperscript{115} Adams, p.120.
\textsuperscript{116} Napoleoni, pp. 42-45.
\textsuperscript{117} Adams, p. 118.
Burglary and theft played an important role in raising funds, especially among certain factions within the PLO. In one of the greatest bank heists of all time, on January 22nd, 1975, the PLO, the Phalange (a violent Christian organization) and a safe-breaking Mafia team from Italy broke into the British Bank of the Middle East, and made away with between $50-100 million dollars. The robbery apparently was planned for days, as several workers from both the bank and surrounding businesses were told days in advance not to come to work on the 22nd or 23rd. After three days of digging through walls and liberal use of explosives, the temporary coalition made away with between $50 – 100 million dollars.  

Other sources suggest various PLO factions also engaged in illegal arms deals, counterfeiting, fraud and money laundering to raise funds. The PLO appeared to have been involved in counterfeiting merchandise prior to its transformation to the Palestinian Authority (PA) in 1993; the PA probably makes several million dollars a year counterfeiting CDs, DVDs, clothing, cosmetics and books. Furthermore, raids on various PA offices found extensive evidence of counterfeiting various currencies, suggesting the PLO may have been involved in such activity as well. The PA also was apparently involved in arms smuggling as late as 2002, when Israeli commandos stormed the Karine A, a Palestinian-owned ship that was carrying approximately 50 tons of

\[119\] Ehrenfeld, p. 3.
\[120\] Bohbot, Amir. “This is How the Counterfeiting Industry Finances Terror,” Maariv Hayom, 14 August 2002.
Iranian and Russian-made weapons, apparently headed for the Gaza Strip.\textsuperscript{122} Other outright criminal activities, such as car theft, shakedowns, protection money and extortion appear to be pursued by various PLO/PA factions.\textsuperscript{123}

\textbf{Moving and Storing Activities and Mechanisms}

The PLO developed quite sophisticated methods of storing and moving the substantial amounts of money—sometimes up to $5 million a day\textsuperscript{124}—raised by its financial network. The group initially appeared to rely on more conventional methods of transferring funds, opening financial offices in several different Arab countries as it was developing its political infrastructure. These offices were primarily intended to help collect the Liberation Tax, but also proved useful in transferring funds to various countries as needed.\textsuperscript{125} Additionally, after the United Nations granted the PLO observer status in 1974, the PLO was able to open 77 offices throughout the world in the ensuing decade—all of which could facilitate the transfer of funds.\textsuperscript{126} This recognition coupled with subsequent development of its financial networks also led to greater revenue for the PLO. Officials within the PNF suggested that a mere seven years after UN recognition, their assets increased sixteen to seventeen-fold.\textsuperscript{127}

The various businesses, banks, offices and other financial interests in which the PLO invested for the purposes of making money is also useful in moving money. Financial interests on nearly every continent—often in the form of front businesses with ties to the PLO unbeknownst to law enforcement agencies—allowed the PLO to cloak the


\textsuperscript{123}Ehrenfeld, "Funding Evil.


\textsuperscript{126}Adams, p. 114.

\textsuperscript{127}Ibid.
inter- and intra-national movements of their funds.\textsuperscript{128} Funds used for illegitimate purposes, to include terrorist operations, could simply be moved from businesses or official PLO offices to similar organizations in the vicinity of impending operations, and distributed to local operatives from there. Any investigation into money transfers between these offices would easily be masked as a legitimate transmission, rather than one designed to support terrorist activities.

Just as the PLO had legitimate and criminal sources of revenue, it had legitimate and criminal methods of moving funds as well. The PLO apparently made use of offshore banking centers from Monaco, Nauru, Cyprus, the Bahamas, and Hong Kong.\textsuperscript{129} Furthermore, the Bank of Credit and Commerce International—eventually shut down for its involvement in several illegal financial deals with nefarious organizations throughout the world—had relationships with several terrorist organizations and governments that supported terrorism,\textsuperscript{130} all relationships available for exploitation by the PLO. Al Taqwa (“Fear of God”), a network of companies based in the Bahamas, Switzerland and the tax haven of Liechtenstein, is accused of handling financial transactions for several terrorist groups, including the PLO.\textsuperscript{131} Smuggling bulk cash or goods (arms, merchandise or jewels) also provided a vector of transferring wealth and value. The use of traditional money transfer systems, primarily the hawala system, was also probably used.

\textsuperscript{128} It is worth noting that significant international cooperation in moving illicit funds did not develop until the 1990s, when money laundering was recognized as a global problem requiring a global response. This is discussed further in Chapter 2. See Jonathan Winer, “Globalization, Terrorist Finance, and Global Conflict”. Financing Terrorism. (Basil, Switzerland: Kluwer Academic Publishers, 2004). pg. 7.
\textsuperscript{129} Ehrenfeld, “Funding Evil.”
\textsuperscript{130} Napoleoni, p. 117-8.
Application of the Financial Model for the PLO

Applying the financial model presented above, the financial networks of PLO precursor organizations (1947-1964), a snapshot of those early networks appears below.

Early revenue is not known, although it is certainly less than revenue collected in subsequent years. Additionally, the rudimentary methods of transferring wealth would have been overwhelmed by large and persistent cash infusions. As a result, the early financial networks were quite simple:

<table>
<thead>
<tr>
<th>Earning</th>
<th>Moving</th>
<th>Storing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donations from wealthy</td>
<td>Couriers</td>
<td>Bulk cash</td>
</tr>
<tr>
<td>Palestinians</td>
<td>Smuggling</td>
<td>Arms</td>
</tr>
<tr>
<td>External</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arab state donations</td>
<td>Couriers</td>
<td>Bank accounts</td>
</tr>
<tr>
<td>Palestinian Diaspora</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanitarian charities</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the PLO’s most active period (1964-1991), the financial network developed significantly. Both internal and external methods of raising, moving and storing revenue were developed. Of note, during this period several Palestinian officials claimed the ultimate aim of the PLO was financial self-sufficiency.\(^1\)\(^3\)\(^2\) Consequently, the front business and investment arm of the PLO was especially developed. On the other hand, the PLO was also able to secure substantial, if erratic, funding from a variety of states. Revenue generated from criminal activities (with the obvious exception of narcotics) appears to be more the work of various PLO factions than directives from central PLO authorities.

<table>
<thead>
<tr>
<th>Earning</th>
<th>Moving</th>
<th>Storing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal</td>
<td>Moving</td>
<td>Storing</td>
</tr>
<tr>
<td>Front/shell businesses</td>
<td>Palestinian-controlled</td>
<td>Bulk cash</td>
</tr>
<tr>
<td>Drug sales/trafficking</td>
<td>front/shell businesses</td>
<td>Arms</td>
</tr>
<tr>
<td>Extortion, theft, burglary</td>
<td>Couriers</td>
<td>Drugs</td>
</tr>
</tbody>
</table>

\(^{132}\) Adams, p. 87.
The diversity in revenue-generating activities by the PLO was displayed after the mid-1980s and especially after 1991 when the loss of state revenue did not appear to significantly affect PLO operations, terrorist or otherwise; the PLO appeared to be able to successfully tap other sources of income to make up the deficit. What may have been more significant is the loss of Arab states’ support in collecting the Liberation Tax, as Libya, Saudi Arabia, Kuwait and the UAE refused to do so in the wake of the Persian Gulf War. On the other hand, the PLO’s morphing into the PA opened a different avenue of fund-raising, as a significant portion of the known funding for the PA after the 1993 Oslo Accords came from IGOs such as the European Union, individual states (to include the United States and Israel), and world financial bodies (to include the World Bank). However, the external funding from such legitimate sources came with demands for transparency and oversight, with the intent being that such funds are not spent on terrorist operations. The post-1991 financial model for the PLO/PA is:

<table>
<thead>
<tr>
<th>Earning</th>
<th>Moving</th>
<th>Storing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal</td>
<td>Front businesses</td>
<td>Front businesses</td>
</tr>
<tr>
<td></td>
<td>Drug sales/trafficking</td>
<td>Couriers</td>
</tr>
<tr>
<td></td>
<td>Extortion, theft, burglary</td>
<td>Charities</td>
</tr>
<tr>
<td></td>
<td>Counterfeiting (extensive)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Arms deals</td>
<td></td>
</tr>
<tr>
<td>External</td>
<td>Palestinian Diaspora</td>
<td>Couriers</td>
</tr>
</tbody>
</table>

---

133 Ehrenfeld, “Funding Terror.”

Several important transformations are important to note. First, a definite pattern of diversification over time exists, and is observable in resource-acquiring, storing and moving activities and mechanisms. This diversification increased the PLO’s total financial resource base and increased its options in moving and storing its wealth. Importantly, increasing the number of donor states and individuals decreased its dependency on any individual donor, and therefore increased its autonomy.

Second, diversification of resource-acquiring activities tended to be at least as much internal as external. The external nature of those funds made those pre-cursor organizations dependent on their donors, many of who wanted to see the PLO oppose Israel. Thus, the majority of these early funds were earmarked for military training or purchasing arms. However, when the PLO and affiliated organizations developed lucrative internally-controlled sources of revenue, such as business activities, investment income, and an expansion into criminal activity, they could afford to rely even less on state and individual donations. This diversification of internally-controlled financial mechanisms only added to the PLO’s autonomy and further decreased its dependency on outside actors.

Third, diversification of financial networks had a geographic component as well. Initially, the PLO precursor organizations depended largely on individuals and organizations within the Middle East for revenue, and were able to move wealth primarily within that region. However, expansion of their financial networks to other countries made those networks more robust, as was evidenced by the marginal effects of

---

<table>
<thead>
<tr>
<th>(voluntary donations)</th>
<th>Wire transfers</th>
</tr>
</thead>
<tbody>
<tr>
<td>IGOs, NGOs, non-Arab states</td>
<td>Investments</td>
</tr>
</tbody>
</table>
Israel's 1982 invasion of Lebanon. While that region was exceptionally important to the
PLO's financial well-being, by 1982 the PLO had financial offices in Kuwait, Amman,
Tunis and Algiers, in addition to the main financial office in Beirut. This geographic
 diversification only increased in the subsequent decade. While attacking the PLO's
financial network was never truly a strategy pursued by any country, such a strategy
would have been complicated by the international nature of the networks.

Fourth, various factions within the PLO developed their own independent sources
of income, much of which were criminal. Local factions within southern Lebanon ran
their own smuggling, counterfeiting, and racketeering schemes. Various PLO sub-groups
added additional taxes to their supporters and others under their control.

These developments all appear to be beneficial to the PLO in various ways. As
mentioned, a diverse set of revenue-acquiring activities increased the PLO's autonomy.
The diversification—both geographically and in types of activity—also hardened the
PLO's financial base, making it less vulnerable to any individual exogenous shock.
Interestingly, internal methods of raising, storing and moving revenue appear to be less
vulnerable and more reliable than external sources. For example, the PLO lost vast sums
of money held for it in Kuwait following Iraq's 1990 invasion. Furthermore, funds held
in Lebanese banks were similarly lost upon Israel's 1982 invasion. Furthermore, state
sponsorship was erratic at best, and states typically added stipulations or conditions to
their support, whereas a well-diversified stock and bond portfolio or collection of
businesses provided a reasonably predictable rate of return. The PLO's financial

136 Adams, p. 115-6.
137 Napoleoni, p. 45.
diversification—especially into internally-controlled activities—enabled it to withstand the loss of some its external financial base.

**The Provisional Irish Republic Army**

The PIRA is similar to the LTTE in the sense that the vast majority of its operations are focused in a single area, whereas its financial infrastructure is international. The group obtained money and other resources from all over Europe, Libya, and the United States, but its area of violent operations were almost exclusively in the United Kingdom and Ireland.\(^{138}\) This smaller area of operations suggests a smaller financial requirement than the LTTE and PLO, and what is known about PIRA finances supports that notion. Despite a smaller total financial requirement, PIRA exhibited every bit the international nature and creativity that the LTTE and PLO displayed in terms of acquiring, moving and storing funds.

**Total Budget and Revenues**

Annual PIRA budget estimates vary considerably depending on the source, with figures ranging from £6.5 million to £15 million ($9.75 million to $22.5 million, assuming a $1.50 per British pound exchange rate).\(^{139}\) In the years leading up to the Good Friday Accords,\(^ {140}\) these estimates shrank, and by 1993, the Northern Ireland Office estimated PIRA's annual budget to be closer to £5.3 ($8 million). Despite that decline, in 2002 the Police Services of Northern Ireland (PSNI) estimated that PIRA's

---

\(^{138}\) The possible exception that would challenge this typology comes from reporting which suggested IRA bombmakers were selling their expertise to Colombia guerillas in 2002.

\(^{139}\) Horgan and Taylor discuss the variety of these estimates in “Playing the Green Card,” previously cited. pp. 9-10.

fund-raising capacity still stood at $7.7 – 12.3 million — well above their estimated budgetary requirements at the time.

These funds were spent on weapons, munitions, training, salaries, payments to material supporters (primarily owners of safehouses), and welfare payments to the families of jailed PIRA members. Additionally, PIRA incurred significant expenses from the activities of its political wing, Sinn Féin, including costs related to the maintenance of their offices and other premises, election and campaigning costs, and salaries.

Revenue-Acquiring Activities and Mechanisms

Unlike the relatively uncomplicated expenses outlined above, the sources of PIRA’s income are quite complex and sophisticated. Few external entities gave money in the early days of PIRA activity, although they external sources appeared to be quite important. The “Provisionals” (who began moving away from the “Officials” in 1969) enjoyed a steady stream of cash and weapons from the United States. Several factors contributed to this steady support. First, a large Irish diaspora existed in the US. Seventy percent of the approximately 9 million self-identified Catholic Irish in the US live in Northeastern states, where social and economic structures help maintain a Catholic-Irish

142 Ibid, pp. 5-9.
144 The Irish Republican Army emerged in its modern form in 1956, when it initiated a new wave of terrorism in protest of Protestant discrimination against Catholics in Northern Ireland. In 1969, the IRA split with the Provisionals (“Provos”) arguing that force was the only way to get the British to leave Ireland, and the Officials (the OIRA) suggesting a more peaceful, political solution. The Officials lost influence, and the Provisionals essentially became the modern IRA. The PIRA split into other factions in the period leading up to the Good Friday Accords. The splinter groups include the Real IRA (which continued a terrorist campaign until 1998), the Continuity IRA, and the Irish National Liberation Army. See the Council for Foreign Relations terrorism website, “Terrorism: Questions and Answers.” Available on-line at http://www.cfr.org/reg_issues.php?id=131111, as of 21 May 2004.
identity.\textsuperscript{145} Organizations sympathetic to the Irish cause (such as \textit{Clann na Gael}, the US branch of the Irish Republican Brotherhood) provided a ready structure and organization that enabled fundraising.\textsuperscript{146} Next, Irish militants, to include former members of the IRA (such as Michael Flannery, a former member of the North Tippery Brigade\textsuperscript{147}) were active parts of this diaspora, and were able to tap into the Irish nationalism in the US. Indeed, in 1970 Flannery helped create a formal non-governmental organization, Northern Aid—NORAID—that had the express purpose of aiding PIRA. NORAID benefited from the troubles that began in 1968, events that expanded Irish-American consciousness in general. Money flowed both to NORAID as well as other, already-existing Irish-based working class organizations,\textsuperscript{148} including the Ancient Order of Hibernians, Friends of Sinn Féin (FOSF), the Irish National Caucus, Friends of Ireland, and Americans for a New Irish Agenda. NORAID was able to make use of these organizations for its own purposes as well, by targeting their members as potential donors and sympathizers.\textsuperscript{149} According to official documents provided by NORAID to the US Department of Justice (DOJ), the organization raised and sent a total of $3 million to Northern Ireland between 1970 and 1986, with an addition $600,000 sent between 1986 and 1999.\textsuperscript{150} This number is probably well below the actual amount raised by NORAID, as some of the monies procured are suspected to have been sent to individuals and organizations considered criminal by the US DOJ, and therefore would not be reported.

\textsuperscript{146} Adams, pp. 133-136.
\textsuperscript{147} Guekle, p. 523.
\textsuperscript{148} Guekle, p. 524-5.
\textsuperscript{149} Ibid. See also Horgan and Taylor, "Playing the Green Card." p. 8.
\textsuperscript{150} Ibid.
Europe also provided an external source of funding for PIRA, albeit it in a far different manner. The European Economic Community provided various incentives to farmers in southern Ireland to export produce to the United Kingdom. Various IRA operatives posing as legitimate farmers would export pigs, livestock, grain and even farm animal antibiotics from Ireland into Northern Ireland, for which they would receive sometimes as much as £8 ($12) per animal or £12 ($18) per ton of grain. The operatives would then smuggle the recently exported animals or grain back into Ireland, and “export” them again the next day, filing their subsidy claims in various British Customs posts in Northern Ireland.¹⁵¹ British intelligence believed that in the mid-1980s, at least £8,000 ($12,000) per week went to PIRA coffers through such schemes.¹⁵²

Libya additionally provided PIRA resources, including high-quality weaponry, explosives and money.¹⁵³ Some sources suggest that Muamar Qadafi, bitterly opposed to Prime Minister Margaret Thatcher’s leadership in the UK, sent as much as $20 million total to PIRA from 1968 to the mid-1980s.¹⁵⁴ In addition to the money, Libya sent PIRA high-quality small arms and explosives until the early 1990s.¹⁵⁵ This provision of weapons further improved PIRA’s financial situation, as money previously earmarked for arms could be spent elsewhere.

Internal IRA funding mechanisms are more complex and sophisticated than their external counterparts, encompassing both legal and criminal enterprises. The PIRA ran a

¹⁵¹ Adams, pp. 156-8; Horgan and Taylor, pp. 8-9.
variety of legitimate front businesses that generated reliable profits, much of which would be given to PIRA treasurers. One of the more lucrative of these enterprises was taxicabs. In Dublin and Belfast, Republican-owned cooperatives, some with as many as 300 cabs, provided transportation services that were estimated to generate an annual income of nearly $1 million.\footnote{Anderson, Scott. "Making a Killing: The High Cost of Peace in Northern Ireland." Harper's Magazine, Vol. 288, 1 February 1994. p. 45-54.} The success of these cab operations is due in no small part to the PIRA leadership’s decision to eliminate the competition to taxis, most notably in the sustained fire-bombing campaign of the city-run bus systems.\footnote{Adams, p. 174. See also the Irish Times, 1 June 1978 and the Belfast Telegraph, 26 January 1970 and 1 March 1978.} PIRA also owns or controls a variety of construction firms, shops, restaurants, pubs, drinking clubs, video stores and guesthouses. All of these firms pursue legal business interests and report their income to British taxation authorities; their profit, however, go to activities inimical to the British government’s interests.\footnote{Horgan and Taylor, pp. 7-9.} Another legitimate business involved establishing cooperatives that sold local Irish artistry, including harps and Gaelic memorabilia. While humble in their original vision, some cooperatives grew to include food and butcher shops, hotels and inns, and even construction firms. The co-op not only generated some profits for PIRA, but also created opportunity for the Catholics, a beneficial—if unintended—consequence.\footnote{Adams, p. 176-7.}

Not all of the PIRA-owned businesses are completely legal. According to the House of Commons Northern Ireland Affairs Committee (NIAC), PIRA manufactures and wholesales counterfeit CDs, videos, DVDs, MP3s, perfume and clothing. NIAC

\begin{thebibliography}{9}
\bibitem{157} Adams, p. 174. See also the Irish Times, 1 June 1978 and the Belfast Telegraph, 26 January 1970 and 1 March 1978.
\bibitem{158} Horgan and Taylor, pp. 7-9.
\bibitem{159} Adams, p. 176-7.
\end{thebibliography}
estimates that video piracy alone netted PIRA over $1.5 million per year.\textsuperscript{160} Additionally, some of the construction firms that siphoned money off to PIRA also engaged in illegal activities, such as counterfeiting tax-exemption certificates. These documents enabled PIRA to collect a 30 percent income tax rather than handing it over to the UK government.\textsuperscript{161}

Common criminal activities were also in the PIRA’s repertoire of internal fundraising activities. Outright theft, burglary, income tax frauds, counterfeiting currency, and extortion serve to diversify PIRA’s fundraising activities.\textsuperscript{162} Some schemes were quite imaginative, reflecting a certain level of creativity on the part of the terrorists. One noteworthy scheme involves fuel smuggling. By exploiting different prices for different grades of fuel both in Ireland and Northern Ireland, PIRA could collect about £500 ($750) per truckload of fuel smuggled.\textsuperscript{163} Taking advantage of such opportunities certainly reaffirms Adams’ observation at the opening of this chapter regarding what modern terrorists look like—a thuggish burglar doesn’t develop fuel arbitrage strategies.

PIRA’s ability and willingness to use violence also generated revenue for the organization. These activities included protection rackets, aggravated theft, and kidnapping. Especially in the early 1970s, PIRA recruits would raise funds by selling “protection” to local businesses. In an effort not to excessively antagonize these businesses or attract too much attention, the sums demanded were typically quite

\textsuperscript{161} Adams, 167.
\textsuperscript{162} Ibid, p. 8.
Interestingly, the protection racket evolved into almost a gentlemanly business. By the mid 1980s, any person opening a business in an area controlled by PIRA would be approached by representatives of a genuine security company set up by the Provos, offering seemingly valid protection services. At its base, the practice was still a protection racket, but with the veneer of a courteous business transaction to offer some sort of legitimacy.

While protection rackets, aggravated robbery and theft were quite prevalent and probably generated greater total revenues over the years, kidnapping attracted far greater interest. Some kidnappings—such as the 16 October 1981 kidnapping of Ben Dunne, a prominent member of one of the Irish Republic’s richest families—added $1 million each to the Provisional’s coffers. PIRA at one point stooped to kidnapping expensive racehorses, demanding up to $2 million for the horses’ release.

Illegal narcotics—notably ecstasy and cannabis—also appear to play a role in funding PIRA activities. Some dispute exists between various UK and Irish law enforcement organizations regarding the details of how drug money makes its way to the Provo’s coffers. The Police Service of Northern Ireland believes that the PIRA tolerates narcotic traffickers in return for a cut of the profits—an extension of the racketeering business at which PIRA excels. The United Kingdom’s Organized Crime Task Force suggests a more active and direct role for PIRA in drug dealing. In either case, the result is the same—the sale of drugs in the UK generates revenue for the Provisionals. Other

---

164 Adams, p. 170.  
165 Ibid, p. 171.  
167 Ibid.  
sources, noting PIRA is generally opposed to drugs, suggest it is primarily the Irish National Liberation Army, a small PIRA splinter group, that is involved in all the drug business attributed to the IRA in general.\textsuperscript{169}

Moving and Storing Activities and Mechanisms

Moving and storing revenues posed less of a challenge for PIRA than the PLO due to the local nature of the conflict. While PIRA did receive resources from abroad, the amount of funding derived from external sources is substantially less than that of the PLO. Due to the relatively small area of operations, PIRA did not need elaborate moving and storage mechanisms for funds internally generated; they did, however, require appropriate laundering methods.

Money from the US was largely shipped to offices of support organizations in Dublin or Belfast. Officially, NORAID declared that it sent its funds to the Northern Aid Committee in Belfast, although several other organizations reportedly received funds. One of these organizations was \textit{An Cumann Cabrach}, a charity under PIRA control that, among other things, gave welfare payments to families of jailed PIRA members.\textsuperscript{170} NORAID's early methods of transmission included messengers and couriers, many of whom were thought to be vacationing New York police officers of Irish descent, carrying bulk cash at least twice a month to these offices.\textsuperscript{171} More modern transfer methods may have included wire transfers and deposits in US banks with Irish branches, where members could simply withdraw the funds from ATM machines in Ireland.


\textsuperscript{170} Ibid, p. 524.

\textsuperscript{171} Adams, p. 143.
Moving the proceeds of local revenue-generating activities required laundering. The PIRA chose its legal businesses—largely the taxi and club businesses noted above—to launder the proceeds of its illegal activities. PIRA also established a new entity—the Andersontown Co-operative Industrial and Provident Society—with the express purpose to act as a conduit for PIRA funds.\textsuperscript{172} Interestingly, both the taxi service and the co-op provided very useful social services in the chronically under-developed Catholic areas of Northern Ireland, and the clubs and bars provided a service that was popular and always in demand.\textsuperscript{173} Furthermore, the businesses sometimes charged below-market prices in order to create a revenue gap wherein they could launder illegally generated funds, further helping local Catholics.

External funds began pouring into the Irish conflict in 1969, the same year the Provisionals broke away from the group. Prior to that, the IRA had very little funding and relied primarily on donations from its individual members and petty crime. After 1969, however, PIRA’s financial network developed considerably. In addition to the infusion of outside cash, PIRA significantly diversified in the area of revenue-generating criminal activities:

<table>
<thead>
<tr>
<th>Earning</th>
<th>Moving</th>
<th>Storing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extortion/protection</td>
<td>Front businesses</td>
<td>Bulk cash</td>
</tr>
<tr>
<td>Theft/burglary</td>
<td>Couriers</td>
<td>Businesses</td>
</tr>
<tr>
<td>Illegal narcotics</td>
<td>Laundering</td>
<td>Counterfeit certificates</td>
</tr>
<tr>
<td>Front businesses</td>
<td>(over / under invoicing)</td>
<td></td>
</tr>
<tr>
<td>Pirating/counterfeiting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arbitrage plays</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax evasion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External</td>
<td></td>
<td></td>
</tr>
<tr>
<td>US-based Irish Diaspora</td>
<td>Couriers</td>
<td>Bank accounts</td>
</tr>
<tr>
<td>Libya</td>
<td>Wire transfers</td>
<td>EU accounts</td>
</tr>
<tr>
<td>European Union</td>
<td>ATMs</td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{172} Adams, p. 173.
\textsuperscript{173} Adams, pp. 174-178.
After the loss of Libyan funding in the early 1990s and NORAID funding shortly afterwards, PIRA finances were largely internally generated through criminal activity. Additionally, PIRA added training other terrorist groups as a revenue-generating activity, when some PIRA bomb-making experts provided training and expertise to Fuerzas Armadas Revolucionarios de Colombia (FARC, or the Revolutionary Armed Forces of Colombia), and ETA.\textsuperscript{174}

<table>
<thead>
<tr>
<th>Earning</th>
<th>Moving</th>
<th>Storing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal</td>
<td>Front businesses</td>
<td>Bulk cash</td>
</tr>
<tr>
<td>Extortion/protection</td>
<td>Couriers</td>
<td></td>
</tr>
<tr>
<td>Theft/burglary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illegal narcotics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front businesses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pirating/counterfeiting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arbitrage plays</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax evasion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training other terrorist groups</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Couriers</td>
<td>Bank accounts</td>
</tr>
<tr>
<td>External</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2: Summary of PIRA financial networks and systems.

Just as the PLO diversified its financial base, PIRA increased and expanded its financial infrastructure over time as well. Since PIRA's area of operations was quite small, developing systems and mechanisms to store and move its money was predictably not a priority. However, diversifying its revenue-generating activities did appear to be a top priority, as the number of such activities expanded considerably in the 1970s and 1980s. This diversification was apparently a result of two influences—PIRA leadership intentionally expanding its financial base and individual PIRA cells and sub-groups acting independently to acquire their own funds.

The benefits of such diversification are similar to the ones experienced by the PLO. First, diversification allowed PIRA to survive exogenous shocks. While loss of

NORAID and Libyan funding obviously hurt, PIRA had developed enough other sources of income to overcome those losses. Furthermore, that diversification helped made the organization robust to law enforcement efforts. The loss of one revenue-generating activity—such as shutting down illegal drinking clubs or counterfeiting operations—would not lead to a wholesale collapse of PIRA finances. Finally, PIRA appeared to pursue diversification in internal rather than external activities.
Chapter 3: Al Qaeda’s Financial Empire

"Intelligence and security services worldwide, including the CIA and MI6, have never before encountered a global terrorist financial network as sophisticated as Al Qaeda’s. Comparisons with other such networks reveal that Al Qaeda has built the most complex, robust and resilient money generating and money moving network yet seen. No network resembles Al Qaeda’s…"75

Rohan Gunaratna

Inside Al Qaeda

"Al Qaeda is comprised of such modern educated youths who are aware of the cracks inside the Western financial system as they are aware of the lines in their hands. These are the very flaws of the Western fiscal system, which are becoming a noose for it..."176

Osama bin Laden

Interview, 28 September 2001

These sentiments by an Al Qaeda scholar and the organization’s top leader reflect the common perception that an impenetrable financial web supports one of the most deadly groups in international terrorism. The organization’s money infrastructure literally spans the globe, with fund-raising operations, various types of accounts and financiers on every continent and in approximately one hundred countries.177 It supported terrorist operations in nearly every corner of the world, to include the near sinking of a US destroyer and the deadliest single terrorist attack in modern history. Furthermore, Al Qaeda’s money network is proving resilient at both US and international efforts to dismantle it, which are discussed in detail in Chapter 4.

---

However, while Al Qaeda’s financial empire is certainly impressive, it is more evolutionary than it is revolutionary. With the exception of creative use of the Internet, Al Qaeda’s methods of raising, storing and moving money are typically not new, but rather more disciplined or imaginative methods previously used by other terrorist organizations. Al Qaeda’s structure itself is a hybrid,\(^{178}\) by borrowing useful elements from a variety of other organizations, including multi-national corporations, non-governmental organizations, international criminal syndicates and other terrorists with worldwide reach, Al Qaeda has indeed built a robust, networked and adaptive financial infrastructure.

**History and Development of Al Qaeda’s Financial Networks**

Unlike most resistance figures, Osama bin Laden rose to prominence largely due to his wealth and lineage and his leveraging of that wealth in support of the Mujahideen in Afghanistan in the 1980s.\(^{179}\) While some legitimate doubts regarding his role as a soldier in that conflict exists, his role as a financier is unquestioned. Al Qaeda’s original business plan, pecuniary philosophy, structure and some of the key personnel and organizations can be traced to bin Laden’s involvement in the anti-Soviet campaign a generation ago.

Osama co-founded and helped run the Maktab al Khidmat lil Mujahideen al-Arab (MAK), or the Afghan Services Bureau in 1984 in Peshawar, Pakistan.\(^{180}\) Working with his mentor, Abdullah Yosef Azzam, bin Laden acted as the group’s financial officer and

---


\(^{180}\) Gunaratna, p. 3.
recruiter. Together, Azzam and bin Laden used MAK to help organize and finance the anti-Soviet jihad from its founding until the Soviet withdrawal in February 1989. The office disseminated propaganda, raised money, and recruited jihadis through an extensive network of offices around the world. Bringing the business acumen and organizational learned from working in the family firm, bin Laden essentially helped build the infrastructure upon which the mujahideen could effectively operate. Building such a “base” foreshadowed Al Qaeda’s future operational doctrine.

Funds flowed to the MAK from a wide variety of sources. He reportedly used his own family wealth (received from the family’s construction conglomerate, The Bin Laden Group) to help fund the resistance, as well as shipped family business construction equipment to Pakistan to help build roads, camps, hospitals and other facilities needed by the mujahideen. He also received funds from a variety of wealthy Islamic donors and charity organizations, with names, organizations and contact information of each benefactor meticulously recorded. In Saudi Arabia alone, Prince Turki bin Faisal bin Abdul-Aziz coordinated the efforts of as many as twenty charities set up for the express purpose of funding the mujahideen, channeling as much as $2 billion to the effort. Furthermore, the Central Intelligence Agency (CIA) provided funds to the Pakistani Inter-Services Intelligence organization, which then distributed the funds, some of which may have reached the MAK. Osama reportedly went on several “fund-raising tours” in

---

184 Ibid. p. 18.
the Middle East, especially in the wake of notable mujahideen operations, courting major donors.¹⁸⁶

After the Soviet withdrawal in February 1989 (and Azzam’s assassination the following November¹⁸⁷), bin Laden was the unquestioned leader of the MAK, an organization that no longer had a real mission. He returned to Saudi Arabia only months before the July 1990 Iraqi invasion of Kuwait, an event that posed a threat to the Saudi Kingdom. The Saudi ruling family rebuffed Osama’s offer to use his war-hardened irregulars, opting instead for troops from a US-led coalition—two thirds of which were non-Muslim¹⁸⁸—to deter or defend against any Iraqi aggression against Saudi Arabia. When many of the US troops remained on the peninsula even after Kuwait was liberated, Osama began speaking publicly against the Saudi regime. The subsequent crackdown on his freedoms and threat of arrest led Osama to flee to Pakistan in April 1991 and then to Sudan, where he continued working and training with former Afghani mujahideen. While in Khartoum, he also worked closely with Dr. Hassan al-Turabi, the head of the National Islamic Front, an organization that had come to power in Sudan in 1989. Turabi, who became an influential figure in bin Laden’s life, pressed him with the need to overthrow the secular regimes in the Arab world and install purely Islamic governments. Bin Laden agreed, and the MAK—by now being referred to as “The Base”, or Al Qaeda—was operating throughout the Middle East. Troubled by bin Laden’s growing extremism, including referring to the House of Saud as false Muslims and reports of financial support to radical Islamist groups in the Middle East, Saudi officials in 1994

¹⁸⁷ Mystery surrounds Azzam’s assassination. Killed by a car bomb in Peshawar, his followers believe the US was responsible. Other analysts believe Osama had Azzam killed in order to consolidate his power over the MAK.
¹⁸⁸ Compiled from various sources.
revoked his citizenship. It was during these turbulent years than bin Laden crafted the modern Al Qaeda, turning to the same individuals and organizations (with the obvious exception of the United States and other western donor governments) who helped fund the anti-Soviet efforts to help him fund his new project.

Money: Command and Control

Prior to Operation Enduring Freedom, Al Qaeda was firmly in Osama bin Laden’s control. Command, control, administrative tasks and coordination with groups affiliated with Al Qaeda were achieved by a series of committees. A deliberative body, the *Shura Majlis* or consultative council, existed to allow members of affiliated and like-minded groups to confer with Al Qaeda leadership and with one another. This set of committees and councils (see figure 1) gradually developed and had coalesced by the early 1990s while the group was headquartered in Sudan. The status of the *Majlis* after Operation Enduring Freedom is not clear; while the central Al Qaeda leadership body probably does still exercise some influence on the group’s activities, the loss of their sanctuary coupled with increased pursuit of individuals on the *Majlis* likely decreased its capacity to function.

---

189 Multiple accounts provide greater detail of the period between the end of the anti-Soviet Afghan campaign and the genesis of Al Qaeda. Gunaratna, Robinson and Corbin all provide credible accounts, and the summary provided here was largely gleaned from their works.


191 Gunaratna, p. 6
Two committees in this structure dealt with money: the finance committee and the foreign purchases committee. The purpose of the finance committee was to deal with large organizational issues, such as developing financial resources to meet Al Qaeda's payroll and fund its operations and those of its various affiliates. Mustafa Ahmed al-Hawsawi, the chief financial officer of the 9/11 attacks, may have been chief of the finance committee as well. The remainder of the finance committee originally consisted of professional bankers, accountants and financiers, some of who have subsequently been killed or captured. The second financially related group, the foreign purchases committee, was responsible for acquiring weapons and other technical equipment that presumably was not available in either Sudan or Afghanistan.
Regional money managers also appear to have exercised a considerable level of influence and control on the network's financial decisions. For example, Wadi el-Hage, bin-Laden's personal secretary, apparently was in charge of Al Qaeda's financial operations in Africa prior to his capture in 1998. Muhammad Jamal Khalifa (bin Laden's brother-in-law) managed a substantial amount of money in Mauritius, Singapore, Malaysia and the Philippines. Riduan Isamuddin, a.k.a. Hambali, was a money manager in Southeast Asia as well prior to his capture in 2003. Khalid Sheik Mohammed may have been in charge of finances in the Middle East and Central Asia.

Additionally, each operation may have its own chief financial officer or set of financial operatives. For example, Mohamed Jamal Khalifah coordinated monetary support for Operation Bojinka, the 1995 plan to blow up a dozen US airliners over the Pacific. A United Nations investigation reported that a Somali conducted the monetary affairs of the 28 November 2002 attack that simultaneously targeted a resort hotel in Kenya and an Israeli airliner. More high-profile attacks may have a series of financiers, including more important figures in the Al Qaeda structure. For example, Soliman Biheiri, an important donor for both Al Qaeda and Hamas, appeared to play a key role in financing the 1998 Africa embassy bombings. In the Bali bombings, Hambali appeared to be the primary money manager. The 9/11 attacks were important

---

200 Gunaratna, p. 64.
enough to have Al Hawsawi himself, among several others, handle the financial support operations.

Despite some members of the original financing committee being captured or killed, Al Qaeda's financial infrastructure remained resilient through at least the end of 2001 for two primary reasons. First, the group practices financial compartmentalization; it keeps its sources of funding separate from the cells to which it distributes money. Al Qaeda's revenues went directly to its central headquarters, except for some operational expenses, cells were typically expected to be self-sufficient. Thus, operational cells could deploy without ever knowing much information regarding the larger organization's underlying financial network.

Second, Al Qaeda developed talent in depth, as illustrated by its ability to move mid-level managers up to places of authority when needed. For example, when authorities began pursuing (and eventually captured) al-Hawsawi shortly after the 9/11 attacks, a second-tier financier, Abdullah Ahmed Abdullah, rose to fill the void created by the fleeing al-Hawsawi. Abdullah, an Egyptian, played a supporting role in the 1998 Africa embassy bombings, and is still at large. He is also believed to be partially

---

206 Ibid.
208 Basile, p. 171.
209 Al Hawsawi was captured with Khalid Sheik Mohammed in March 2003 in Pakistan.
Resilience is also reflected in the less sophisticated financial labor of the organization. As arrests were made and moving money became more dangerous, the network adapted and filled in the ranks. US authorities found evidence that Al Qaeda began recruiting women in the Middle East and Afghanistan to move money and other material in support of operations, despite the group's strict Islamist beliefs and specific guidance found in Al Qaeda training manuals forbidding the use of women in operations. Whether the use of females reflects an operational security move or an attempt to populate a depleted labor pool or both, it certainly illustrates the organization's ability to adapt in the face of adversity, even if it means discarding religious taboos that were perceived as sacrosanct.

Al Qaeda's new leadership—both in operations and in financing—initially appears to be pursuing a different operational doctrine. For example, Abdul Aziz Al-Muqrin, the apparent leader of the network's Saudi cell, apparently broke ranks with the rest of Al Qaeda in his decision to attack Saudi Arabia. The attacks were more frequent than the typical Al Qaeda operational tempo, with eleven attacks between June 2002 and June 2004, for a total of 19 fatalities and 121 injuries. This group therefore differed from typical Al Qaeda operations in target selection, operational tempo, and the lack of spectacular attacks. While still linked to Al Qaeda, these newer operatives such as

---

212 This statement is true for Al Qaeda in general. After the capture or killing of approximately two thirds of its key leadership, a new and younger set of leaders appear to be assuming control. Saudi-born Abu Walid appears to have recently assumed command of Chechen operations, while Abdul Aziz Al-Muqrin was alleged to be in charge of Saudi operations until his death 19 June 2004.


Mohamed and Al-Muqrin appear to be looking to bin Laden more for inspiration than for direction. The new Al Qaeda operatives stepping up to replace earlier leaders who were arrested or killed are not veterans of the 1980s Afghan campaign, but they are more educated, technically adroit, and possibly better organizational managers. These differences may not be trivial; attacks by Al Qaeda and affiliated groups are no longer spectacular but infrequent; rather, they are increasingly frequent, individually less stunning than the World Trade Center and Pentagon attacks, but collectively designed to wear down their enemies. Financial support for this type of operational tempo—frequent small attacks in a wide-spread area of operations by increasingly autonomous cells—requires local financiers to exercise greater autonomy and be less dependent on Al Qaeda headquarters for support. In other words, an increasing number of Al Qaeda cells are increasingly self-sufficient, possibly depending on local financiers with an ideological bond to the group. Operational control is waning, but philosophical motivation remains strong.

Applying the Infrastructure Model

Total Wealth and Revenue Sources
Western authorities admittedly do not know the size of Al Qaeda’s portfolio, and never truly have. Various estimates literally range in orders of magnitude. Even putting a precise figure on bin Laden’s inheritance is problematic, as no authorities knew with certainty the size of the bin Laden family fortune or Osama’s share of it. Swiss intelligence officials, who would presumably have access to high quality financial information, make estimates ranging from US$250-500 million. The Australian government places the total above US$250 million. The British approximate the figure to

---

215 Kelly.
216 Ibid.
be between US$280-300 million.\textsuperscript{217} More recent analyses suggest the figure is far lower, closer to US$30-35 million.\textsuperscript{218} However, bin Laden’s endowment is only one element of Al Qaeda’s complex financial picture, and is inadequate to fully describe the extent of Al Qaeda’s wealth or revenues.

Even in the aftermath of intensive investigation into Al Qaeda’s financial networks, capture and interrogation of key Al Qaeda financiers, seizure of assets, estimates of the group’s total wealth are difficult. Officials from the US Departments of the Treasury, Justice and State admitted during Senate hearings that they had no ability to estimate the size of Al Qaeda’s fortune, let alone the ability to estimate how much of that fortune were in various sectors of the world’s financial systems or how reliant the organization was on various modes of remittance or storage.\textsuperscript{219} Other officials acknowledge the pervasiveness of Al Qaeda’s funding efforts, but simultaneously claim to “not have a clue” as to the true magnitude of the organization’s efforts or success.\textsuperscript{220} With knowledge of total wealth thus caveated, considerable information is known about the way Al Qaeda acquires its money.

A clear distinction must be made when discussing the sources of Al Qaeda’s revenue. Al Qaeda doctrine typically called for cells to be financially self-sufficient for all but operational expenses. Thus a natural division in revenue-acquiring activities

\textsuperscript{217} All these figures are quoted in Gunaratna, p. 19. Gunaratna obtained these figures by interviewing various officials in each of these governments.


\textsuperscript{219} “Financial War On Terrorism: New Money Trails Present Fresh Challenges.” Hearing before the Committee on Finance, United States Senate. 9 October 2002. Officials questioned included the Honorable James Gurule, Under Secretary for Enforcement, Treasury; the Honorable Michael Chertoff, Assistant Attorney General, Criminal Division, Justice; and the Honorable Alan Larson, Under Secretary for Economic, Business and Agricultural Affairs, State.

\textsuperscript{220} Meyer, Los Angeles Times.
exists. The central headquarters of Al Qaeda conducts its own fund-raising operations to pay for training, propaganda and operational expenses. Cells, on the other hand, are expected to raise their own funds to cover living and, in a number of instances, some operational expenses. These two sets of fund-raising activity are considerably different from one another.

Osama bin Laden's Wealth

Al Qaeda enjoyed a broad base of financial support even from its earliest days. Unlike other terrorist organizations profiled, Al Qaeda did not go through its first years on a meager budget. Bin Laden's individual wealth may have helped start the organization (he did receive approximately $1 million a year from 1970-1994 from the family business), but his fund-raising prowess with wealthy Gulf State donors, charities and NGOs to help fuel its growth.221

Charities and Humanitarian Organizations

Al Qaeda appears to favor charities as a primary source of income. Using charitable and benevolent organizations to fund terror is not a recent development in terrorist financing, as earlier discussions of the PLO and IRA suggest. Islamist groups have at least a decade-long history of using charities to raise and move money to support terrorist operations; for example, investigators looking into the 1993 World Trade Center attack traced funding for the operation back to a company that imported holy water from Mecca to Pakistan.222 The prominence of charity exploitation by Islamist groups can be partially explained by the generosity of the religion; one of the five pillars of Islam—

221 "Overview of the Enemy," pg. 3.
zakat, or tithing—requires Muslims to provide a small percentage of their incomes to help the poor. Al Qaeda and other terrorist organizations such as Hamas and Hizb’allah appear to have effectively exploited zakat for their own non-charitable goals. Additionally, terrorist financiers have managed to merge zakat with a different element of Islam—jihad—to successfully craft a message that resonates with some of the more militant elements in the Islamic world. In bin Laden’s own words, “We expect attacks that would target Afghanistan as a Muslim nation...and all Muslims should support it. Muslims and Muslim merchants in particular should give their zakat and their money in support of this state...where followers of Islam can embrace the Prophet of God.”

Al Qaeda appeared to use two different approaches in directing funds from charities to its own organization. The first design involves the network creating, taking over, or collaborating with a cooperative charitable organization. Donors to these types of charities may or may not have known the true nature of the organization to which they were contributing. Once donations are made to the charity, money is then sent to the network’s headquarters. The charities would print false documentation for the benefit of donors, typically showing the money had been spent on orphans, starving refugees, or some other similar laudable cause. As Ambassador Francis Taylor, the former Coordinator for Counterterrorism in the State Department stated, “[T]errorist

---

organizations, just like criminal enterprises, can bore into any legitimate enterprise to try to divert money for illegitimate purposes.”

The second approach involves Al Qaeda operatives infiltrating unwitting charities with the intent of having those charities send funds to support the Islamists’ efforts in various parts of the globe. Most donors to these types of benevolent organizations probably do not know it has been infiltrated by a terrorist group; however, some knowing donors may intentionally have provided funds to such unwitting charities, as such a move would provide an additional layer of plausible deniability to hide the true intentions of their funding activities. This type of operation is more risky than the previous model. Infiltrating an existing organization with the intent to steer its resources elsewhere runs the risk of not only being discovered by authorities, but being discovered by internal oversight mechanisms of the charity itself. This funding approach is understandably less common.

Willing charities allegedly associated with Al Qaeda include various branches of the Saudi-based Al Haramain, the Global Relief Foundation, the Al Wafa

---

228 On December 14, 2001, federal officials raided the offices of the Global Relief Foundation in Chicago and froze its assets. The group’s offices in Kosovo were raided by NATO forces a few days later after NATO was provided "credible intelligence information" that the group was "allegedly involved in planning attacks against targets in the U.S.A. and Europe." (Philip Shenon, "U.S.-Based Muslim Charity Raided by NATO in Kosovo," New York Times (December 18, 2001)) Global Relief raised more than $5 million in the United States in 2001. While much—perhaps most—of these funds likely went to legitimate causes, investigators maintain that the organization served as an important front organization for al Qaeda. See Leavitt, “Charitable and Humanitarian Organizations in the Network of International Terror Financing.”
Humanitarian Organization, the Afghan Support Committee (ASC) and al Barakaat. Various other benevolent organizations act as clearinghouses, raising money from multiple sources and funding multiple terrorist groups. The Muwafaq (“Blessed Relief”) Foundation, headed by wealth Saudi businessman Yasin al-Qadi, allegedly helped fund multiple Islamist terrorist organizations, including Al Qaeda, by acting as a front organization to which wealthy Saudis forwarded millions of dollars.

An example of an unwitting charity is the Kuwait-based Revival of Islamic Heritage Society (RIHS), where field offices were conning the home office. In similar fashion, the Islamic International Relief Organization (IIRO) had some of its offices infiltrated by Al Qaeda operations without the knowledge of other offices. For example, IIRO Philippines was penetrated by Muhammad Jamal Khalifa, bin Laden’s brother-in-law, and was used to support Al Qaeda-affiliated terrorist groups there. Additionally, IIRO Pankishi Valley in Georgia funneled nearly US$10 million to Chechnya from 1999-

---

229 The Al Wafa Humanitarian Organization has been described as a key Saudi-based financier of terror and as an important component of Al Qaeda’s network. Various individual financiers obtain and move money by and through Al Wafa; while officials believe that it probably does do some humanitarian work, the majority of its fund-raising efforts are to support Al Qaeda. See Leavitt, prev cit.

230 On 9 January 2002 the US Treasury designated the ASC as a financier of terrorism. The ASC operated by soliciting donations from local charities in Arab countries, in addition to fundraising efforts conducted at its headquarters in Jalalabad, Afghanistan, and subsequently in Pakistan. The ASC falsely asserted that the funds collected were destined for widows and orphans. In fact, the financial chief of the ASC served as a key leader of organized fundraising for Osama bin Laden; rather than providing support for widows and orphans, funds collected by the ASC were turned over to al-Qaeda. See “Contributions by the Department of the Treasury to the Financial War on Terrorism: Fact Sheet,” Washington, D.C., Department of the Treasury. September 2002. pg. 12.


232 On 9 January 2002 the US Treasury designated the Pakistani and Afghan offices of this charity as financiers of terrorism. Headquartered in Kuwait, the Pakistani and Afghan offices of RIHS padded the number of orphans they claimed to care for, by adding names of orphans they either did not exist or had died. The excess funds received for caring for the non-existent orphans were then transferred to Al Qaeda operatives. See “Contributions by the Department of the Treasury to the Financial War on Terrorism: Fact Sheet,” Washington, D.C., Department of the Treasury. September 2002. pg. 13.

233 Gunaratna, p. 68.
2000, apparently without any legitimate IIRO knowledge that the funds were going to Islamic militants.\textsuperscript{234}

**Cell Funding Mechanisms**

Cells, on the other hand, typically do not receive funds directly from charities or other large organizations, although neighborhood mosques or charities may help *jihadis* at the local level. According to Jonathan Winer, former Deputy Assistant Secretary of State for International Law Enforcement, typically a promising cell will be given a certain amount of “seed” money upon completion of their training to help them get established in their new environs, but after that, they are expected to “live off the land.”\textsuperscript{235} Additionally, cells conducting very important missions—such as those responsible for 9/11—receive higher support from Al Qaeda’s headquarters. However, most cells are expected to be self-sufficient for daily expenses.\textsuperscript{236}

Al-Qaeda trained cells have chosen from a large number of methods to obtain money. Credit card fraud, car theft and document forgery is popular amongst Algerian cells in Europe.\textsuperscript{237} In North America, terrorist financiers practice cigarette smuggling and coupon scams, both of which provide large profits but result in low penalties if caught.\textsuperscript{238}

\textsuperscript{234} Ibid.
\textsuperscript{236} For example, Khalid Sheik Mohammed, a key Al Qaeda financier is known to have given sums in the thousands of dollars to various cells and agents to fund operational expenses. Hambali, an Al Qaeda affiliate associated with the 12 October 2002 Bali bombing in Indonesia, also distributed such funds to various individuals planning attacks. Ahmed Rassam confessed that upon completing his training in Afghanistan he received $12,000 to move to Seattle to settle down. See Robin Wright and Joseph Meyer, “America Attacked: Mapping a Response.” *Los Angeles Times*, 12 September 2001. See also Richard C. Paddock, “Before 9/11, One Warning Went Unheard.” *Los Angeles Times*, 7 June 2004. pg. A1.
The terrorist cell responsible for the 11 March 2004 train bombings in Madrid sold opium to support themselves and to fund their operation. However, not all cells resort to crime; indeed, some analysts point to an Islamist network that exists to provide mujahideen legitimate employment. In Europe, for example, investigators have found plumbing, used car, textile and porcelain businesses that operated legitimately, but hired Islamist operatives to provide them legitimate cover and livelihood. Additionally, some of the charities previously mentioned also employed Islamist operatives for similar reasons.

Business and Investments

Similar to the PLO, Al Qaeda’s businesses and investments appear to be well balanced and have, in fact, been described as an “ideal capitalist portfolio.” Funds were placed in several banks around the world, to include the Islamic banking system (discussed in detail below) and world financial institutions. The organization owned a variety of businesses in Africa, most of which appeared to be more politically motivated than they were profitable. Osama started or invested in approximately 30 interests, including Taba Investments (a currency trading firm), Themar al-Mubaraka (an agricultural firm), a bovine genetics research laboratory, a tannery, a furniture company, a bakery, a cattle-breeding farm, a bicycle factory, and an international import-export business.

company.\textsuperscript{244} The organization also opened a mine in Tanzania, which apparently never actually broke ground.\textsuperscript{245} Some experts suggest many of these businesses may have been nothing more than a place for operatives to hold jobs while planning attacks and shell businesses to move funds and material around, similar to the European businesses discussed earlier.\textsuperscript{246} The one exception is the Gum Arabic Company Limited, a quite profitable firm that supplies 80 percent of the gum arabic\textsuperscript{247} in the world. In an effort to avoid international sanctions placed on Sudan for supporting terrorism, the group channeled money from these businesses through banks in the Turkish section of Cyprus.\textsuperscript{248}

Investments elsewhere appear to have produced a more reliable profit; Al Qaeda owned shares in the Swedish hospital equipment industry, the dairy products industry in Denmark, and paper mills in Norway.\textsuperscript{249} Bin Laden also apparently owned (and may still own through front companies and intermediaries) real estate in Africa, Central Asia and Europe, as well as stock in a variety of bourses around the world, including the French and German stock markets. Some financial analysts contend Al Qaeda looked favorably upon short-term speculation in Western stock markets, as it is an efficient way to accumulate funds in the West without using bank transfers. Sleeper cells could then draw on such money as needed.\textsuperscript{250} Based on irregular options trading patterns, other analysts

\textsuperscript{244} Gunaratna, p. 31.
\textsuperscript{245} "For a Few Dollars More: How Al Qaeda Moved Into the Diamond Trade."
\textsuperscript{246} Ibid.
\textsuperscript{247} Gum arabic is produced from the sap of acacia trees that grow in Sudan, and is used in a wide variety of products, to include the making of pills, production of soft drinks, and printing of newspapers.
\textsuperscript{248} Shahar.
\textsuperscript{250} Jacquard, p. 128.
suspect the group also speculated in the US stock market and gold futures prior to the 9/11 attacks in the United States.\footnote{Napoleoni, pp. 163-4.}

\textit{Commodities}

Al Qaeda operatives—namely Wadi el-Hage and Abu Ubadiyah al-Banshiri (an alleged co-founder of Al Qaeda and its one-time head of the Military Committee prior to his death in 1995)—attempted to generate cash from commodity trading between 1993-1997. Later, as the network expanded its presence into west Africa, it entered into various bartering agreements whereby diamonds and other gemstones were traded for weapons. By using the mining firm mentioned above as cover, they attempted to develop a diamond-trading business. The shift to commodity trading on the African continent may have been a result of financial difficulties Al Qaeda began experiencing in Sudan after the Sudanese government failed to pay bin Laden for work his organization had done.\footnote{"For a Few Dollars More: How Al Qaeda Moved Into the Diamond Trade." pp.14-15.} The goal was to make the organization's cells in Africa self-sufficient; not only would such self-sufficiency add to Al Qaeda's operational flexibility, but would also deny one avenue of potential law enforcement infiltration of the cells as well as seal off a possible route for post-attack investigations.

\textit{Merging with Transnational Organized Crime}

A recent but growing nexus exists between transnational organized crime and terrorists. While the two groups differ fundamentally in their means and goals—criminals generally seek economic gain through illicit means and terrorists seek political change and use criminal means to achieve those ends—terrorists and organized crime use many of the same strategies to promote their operations. Indeed, a history of cooperation...
between non-Islamic terrorist groups and transnational organized crime exists; for example, the Revolutionary Armed Forces of Columbia (FARC) has an extensive relationship with narcotics traffickers in South America, and the PKK primarily funds itself through narcotics trafficking and extortion of its diaspora. More recent, however, is the merging of certain operations between Islamist organizations—notably Al Qaeda and affiliates—with such criminal organizations.

Al Qaeda appears to have a cooperative but limited relationship with some organized criminal networks, using these organizations to acquire materials they require for terrorist attacks, as well as aiding in the laundering of money. The biggest links are with rebel groups that also served as diamond smuggling networks in western Africa, to including the Revolutionary United Front (RUF) and Unino Nacional para a Independencia Total de Angola (UNITA). Al Qaeda’s affiliates also are beginning to cooperation with organized crime. For example, Abu Sayyaf now raises funds through kidnapping ransoms, extortion, piracy and gunrunning. Additionally, the terrorist cell believed responsible for the 11 March 2004 bombings in Madrid are believed to have funded their operation at least partially, if not all, through the sale of narcotics.

The Internet

255 Karasik, pp. 39-44.
259 Roman, “Madrid Police Arrest Bombing Suspects.”
According to the 2003 National Money Laundering Strategy, terrorists use the Internet in a variety of ways to raise funds, to include:

-- direct solicitation for the organization itself;
-- exploit charitable organizations by soliciting in that guise;
-- perpetrate on-line crime, such as identity and credit card theft;
-- to organize and implement other fund-raising activities.\(^{260}\)

Terrorist organizations reflect growing creativity in their Internet fund-raising efforts. One of the earliest such sites, www.azzam.com (named after bin Laden’s late mentor, Abdullah Azzam) simply sold extremist literature and memorabilia to raise funds. Additionally, the Global Jihad Fund published a web site urging donations “to facilitate the growth of various Jihad Movements around the World by supplying them with sufficient funds to purchase weapons and train their individuals.” The site listed bank accounts in Pakistan and featured links to web sites to other terrorist organizations it supported, including the Taliban, Lasker Taiba, Hamas, and Hizballah. In addition, terrorist organizations use bulletin boards, chat rooms, and targeted mass e-mailings to solicit donations. For example, one user of an Arabic language Internet forum posted a message asking its readers to send “assistance to the families of the Guantanamo captives, for the families of the martyrs of the American invasion of Afghanistan, and for the families of those innocent arrestees detained on account of terrorism."\(^{261}\)

Technical savvy by terrorist organizations is also growing, complicating efforts to stop Internet fund-raising efforts. Azzam.com, anticipating its website would be regularly shut down, simply urged followers to download material on the site and


\(^{261}\) Ibid, pp. 58-60.
distribute it manually. Terrorists also began using public computers, such as those in libraries and Internet cafes, to prevent authorities from being able to trace the individuals who posted soliciting websites and sent soliciting emails. Now, terrorist organizations take advantage of Internet service providers that can provide anonymous IP addresses, constantly moving among several web-hosting services using false information, or hosting website from out of country areas that are difficult to investigate.

These represent a variety of fund-raising activities by Al Qaeda and its affiliates. Other potential activities exist—exploitation of pawnshops, counterfeiting of goods, and drug trafficking all represent very lucrative possibilities for Al Qaeda to exploit. The reader should be impressed at the array of revenue streams Al Qaeda has created and tapped, and the financial potential such streams represent.

Revenue Transfer and Storage Mechanisms

Al-Qaeda uses a variety of mechanisms to move its wealth to areas where it is needed. Depending on operational needs and risks facing it, the organization can choose the global financial system, the Islamic banking system, or the informal underground money remittance system (such as hawalas). It may make use of its global network of businesses and charities as a cover for moving funds. It can also utilize more traditional methods of moving wealth, including bulk cash smuggling and illegal commodity dealing, including precious stones and gold.

---

International and Islamic Banking Systems

The international banking system provides a broad array of financial services and convenience that cannot be matched by any other monetary system in the world. In the absence of risk in doing so, this system therefore logically represents the first choice for most international organizations—legitimate or otherwise—to move and store funds. After taking appropriate precautions, to include creating front or shell entities, masking identities or otherwise mitigating risk of detection, many shady organizations have made extensive use of this highly-regulated system. Al Qaeda is no exception.

The Bank of Credit and Commerce International (BCCI) represented one such element of Al Qaeda’s infrastructure. Founded by Pakistani banker Agha Hassan Abedi in 1972 as a Third World bank for Third World customers and backed by the ruling family of Abu Dhabi, the bank’s growth mushroomed to more than four hundred branches in seventy-three countries, employing over 14,000.265 The Bank was incorporated in the Cayman Islands and Luxembourg, two countries with some of the most lax banking oversight in the world at the time.266 The lack of stringent oversight, coupled with the Bank’s penchant for questionable business practices and providing banking services with drug cartels, weapons smugglers and terrorist organizations led to investigations by both the US Senate and the Bank of England.267 When the Bank was shut down in July 1991, investigators found accounts belonging to bin Laden, as well as to other individual

267 Tran.
alleged terrorists, terror groups, arms smugglers and drug cartels.\textsuperscript{268} The BCCI, as well as two additional Saudi banks, apparently were used to funnel money from various donors—mostly wealthy Arabs and allegedly the CIA—to the mujahideen in Afghanistan.\textsuperscript{269}

The loss of BCCI, while dealing a blow to bin Laden's early Al Qaeda infrastructure, was not crippling. Osama, still a Saudi citizen and in good standing with his family, could still use the banking system in Saudi Arabia, although that became problematic as he began agitating the ruling family. Furthermore, bin Laden was using the Saudi banking network to conduct operations elsewhere in the Middle East, even after his departure. He apparently used Saudi banks to send funds to secular Arab countries, to include Egypt, Algeria and Yemen, to help strengthen the Islamist-based resistance to those governments.\textsuperscript{270} Furthermore, in 1995—nearly a year after the Kingdom revoked his citizenship—bin Laden used the National Commercial Bank of Saudi Arabia, the largest bank in the Kingdom, to transfer funds to Egypt via New York and London to fund an assassination attempt on President Mubarak, as well as fund Islamic movements in the secular countries of Algeria and Yemen.\textsuperscript{271}

While in Sudan, bin Laden quickly moved to expand his access to the international banking system. He used $50 million of his own funds to help capitalize the el-Shamal Islamic Bank in Khartoum,\textsuperscript{272} and held accounts at three other Sudanese

\textsuperscript{269} Corbin, p. 18.  
\textsuperscript{270} Robinson, pp. 121-134.  
\textsuperscript{271} “Saudi Executives Give Funds to Osama bin Ladin,” \textit{USA Today}. 29 October 1999.  
Additionally, his inner circle held accounts in British banks (to include Barclay's Bank in London), as well as at banks in Dubai, Malaysia and Hong Kong.

Since the mid-1990s, Al Qaeda further spread its infrastructure into the global banking system by focusing on those areas with weak or lax banking oversight. As the Council for Foreign Relations Independent Task Force on Terrorist Financing stated,

"To find such jurisdictions, al-Qaeda did not have to look far. The regional banking centers of the Middle East—Dubai and other emirates of the United Arab Emirates (UAE), Kuwait, Bahrain, and (in its day) Lebanon—have each over the years generally ignored repeated calls by the international community to build anti-money laundering regimes consistent with international standards. Similarly, banking systems that have been major recipients of al-Qaeda's funds—most notably in Pakistan while the Taliban ruled neighboring Afghanistan—have also had weak or nonexistent anti-money laundering regimes. But al-Qaeda did not limit itself to regional money centers; it also took advantage of the globalizing financial system to move its money through banks in virtually every corner of the world, including offshore jurisdictions long known for providing bank secrecy. For instance, in the case of al-Taqwa (a purported international financial services company now the subject of U.S. and international sanctions), al-Qaeda moved its funds through accounts in such familiar havens as Liechtenstein and the Bahamas."

Al Qaeda also benefited from the introduction and rapid growth of the Islamic banking system in the Middle East, Central Asia and Indonesia. Islamic banks, created to provide banking services to Muslims, reflect the Koran’s prohibition against charging interest. This 1,400 year-old provision is an obstacle to many Muslims who wish to conduct their financial affairs strictly according to the tenets outlined in the Koran, and was often seen as an obstacle to economic growth and pursuit of business opportunities in

---

276 Greenberg, p. 9.
the Muslim world.\textsuperscript{277} Introduced in the mid-1960s, the international Islamic finance industry has been growing at a projected rate of 15\% a year and is conservatively estimated to be worth something in excess of US\$250 billion\textsuperscript{278}—up from approximately US\$5 billion in 1985 and US\$60 billion in 1994. As of 2002, over 250 Islamic banking institutions in approximately 75 countries around the world provide financial services in accordance with \textit{Shari'\'a} law to their customers.\textsuperscript{279} The Islamic banking system has further expanded its services by opening correspondent accounts in non-Islamic banks. This development makes international transactions between these two banking systems much quicker and efficient; however, due to less oversight of such bank-to-bank accounts, it represents a chink in the regulatory armor of the international banking system.

Appropriate regulation and oversight did not accompany this rapid growth. All Islamic banks started in the Middle East; while several non-Muslim countries have recently opened Islamic banking branches, the majority of Islamic banks are still headquartered in the Middle East and North Africa, where banking regulation is notoriously not up to international standards.\textsuperscript{280} Furthermore, money laundering expert Mark Pfeith suggests staff at Islamic banks may be tempted to ask fewer questions when an organization presents itself as an Islamic charity wants to open an account, thus

\begin{footnotesize}
\begin{itemize}
\end{itemize}
\end{footnotesize}
bolstering a stereotype of lax customer screening.\textsuperscript{281} Given Al Qaeda's penchant to use such charities as front organizations for its finances, coupled with geographic proximity, lax oversight, global reach and correspondent accounts with the formal international banking system, the Islamic banking system represents a weak flank in denying terrorist organization access to international financial tools. To wit, according to a declassified European Intelligence Agency briefing, a front associated with Al Qaeda used the London, Berlin and Bonn branches of an unnamed Islamic bank to transfer nearly DM3.5 million to an Al Qaeda associate terrorist group between 1995 and 1997. The same bank was later used repeatedly by Algerian Islamists to procure weapons, including a single transaction of DM 247,000.\textsuperscript{282}

Bin Laden's use of both the formal and Islamic banking systems apparently reflected many of the financial models and networks originally devised by BCCI.\textsuperscript{283} Multiple layers of accounts between a variety of financial systems, broadly bifurcated into feeder and operational accounts, help mask the true use of money flowing through the world banking system. For example, "feeder" accounts are registered in the names of Al-Qaeda controlled charities, NGOs and companies. These accounts receive funds from various donors or profits from business, funds that are controlled by Al Qaeda headquarters. These funds are then distributed to operational accounts held by Al Qaeda cell members whose identities are not known, are registered under false identities, or are accounts of reliable sympathizers. Funds are withdrawn from the operational accounts to be used by cells for terrorist operations.\textsuperscript{284} This compartmentalization of accounts helps

\textsuperscript{281} Ibid.
\textsuperscript{282} Gunaratna, p. 69.
\textsuperscript{283} Gunaratna, p.13.
\textsuperscript{284} Ibid.
keep the very important feeder accounts less exposed to potential investigative leads; should an operative be captured, he only knows of his operational account, not the feeder account.

As banking oversight and due diligence in the non-Islamic banking system has increased, Al Qaeda has moved some of its infrastructure out of that system, preferring the somewhat less efficient but less intrusive Islamic banking system or alternative remittance systems.\textsuperscript{285} The act of transferring funds among accounts—especially between Islamic and non-Islamic banks—is evolving into an increasingly sophisticated set of transactions.\textsuperscript{286} Al Qaeda has sent cash letters and bulk checks by courier to foreign correspondent accounts to avoid providing the usual identifying information required to perform electronic transfers.\textsuperscript{287} The organization also transfers funds in amounts small enough not to generate extensive identification requirements and other


\textsuperscript{287} Cash letters are an interbank transmittal letter that accompanies checks or cash instruments being sent from one bank to another internationally. Large banks receive cash letters on a daily basis from correspondent banks. They are used to ensure that foreign banks get paid for checks written in a different currency that banks abroad receive as deposits. For example, should a bank in Saudi Arabia receive a cash instrument deposit in US dollars, a cash letter and that cash instrument would be sent to a US bank via courier for deposit. Once deposited in the US bank, the foreign bank would be credited with the deposit. This method of transferring money has increased significantly as a method for laundering money or avoiding scrutiny. See Moynihan.
Alternative Remittance Systems / Informal Value Transfer Systems

The informal value transfer system (IVTS, often referred to simply as hawala—the Hindi word for “in trust”) is a method of wealth transfer that pre-dates the emergence of modern banking and other financial institutions. Used in many parts of the world, similar systems are known as hundi (India and Bangladesh), fei chi’ien (China—“flying money”), hui k’uan and ch’iao hui (Mandarin Chinese), nging sing kek (Cantonese Chinese) and phoe kuah (Thailand).

An IVTS money transfer does not result in actual funds moving—it is wealth transfer without money movement. A typical transfer involves four people: the sender, the receiver, and two IVTS merchants. A sender approaches an IVTS merchant to send money somewhere in the world, and provides that merchant with funds. That IVTS merchant contacts a corresponding IVTS merchant in the designated area of the world, and instructs them to provide a similar amount to the receiver. The use of a variety of codes provides security for the transaction. The two IVTS merchants then settle their own accounts through a variety of mechanisms, to include IVTS transfers in reverse,
smuggling cash or commodities to one another or under- or over-invoiced business transactions that result in settled accounts (see figure 3).

Figure 2: Basic IVTS operation. From US Department of the Treasury.

In some countries, IVTS-type networks operate in parallel with formal financial institutions or as a substitute or alternative for them. They have many advantages:

-- they provide a reliable financial service if political instability, inadequate payment systems, and/or an unstable financial sector exist within a country;
-- they exist often where no other easily accessible formal financial institutions in remote areas of some countries;
-- IVTS transfers are often more efficient cheaper than formal institutions;
-- they avoid currency reporting controls. (The United States, along with many foreign governments, has established currency reporting requirements for financial institutions.); and
-- to ensure anonymity since there may be minimal or no records maintained; in other words, no paper trail exists. 292

292 These advantages are detailed in "Informal Value Transfer System," prev. cit. Also see “National money Laundering Strategy: July 2003" US Departments of the Treasury and Justice. Appendix D:
The volume of IVTS transfers in the world is enormous. The United Nations estimates the hawala industry moves approximately US$200 billion a year. Jonathan Winer estimates that 25-50 percent of all transactions in the Middle East flow through the hawala system. Official figures show that US$5 billion a year moves through informal channels in Pakistan alone, where at least 1,100 known hawaladars conduct business. Considering the relatively small size of transfers needed to support terrorist operations, the sheer volume of money flow provides additional protection to Al Qaeda’s money while in the hawala system.

Because IVTS provides security, versatility and most importantly, anonymity to the user, the system is attractive to a variety of nefarious actors, including terrorists. Additionally, while used around the world, IVTS systems flourish where state institutions—both financial and law enforcement—is weak, providing additional incentives for criminal actors to use it. Furthermore, it is robust to regulation efforts, even in regions where enforcement capacity is high. Observing and regulating financial flows largely depends on those flows moving through the formal financial system; money moving through informal systems never passes through the regulatory screening process, and may elude screening processes once it enters into the formal financial network.

294 Napoleoni, pg. 123.
Indeed, prior to 9/11, US federal officials rarely even prosecuted IVTS operators because the charge was simply too difficult to prove.\textsuperscript{297}

Al Qaeda used the hawala system extensively, and probably continues to do so. Experts believe that Al Qaeda used hawalas extensively for the 9/11 planning and operations, with the center of the hawala network in Dubai.\textsuperscript{298} A Pakistani hawaladar was among the financiers of the 1998 attacks against the US embassies in Africa.\textsuperscript{299} The organization especially made use of hawaladars during Operation Enduring Freedom—after spiriting away tens of millions of dollars in cash and gold to Pakistan during the US invasion, hawaladars in Karachi and elsewhere helped diffuse Al Qaeda and Taliban monies throughout the world.\textsuperscript{300} In addition, law enforcement officials in multiple countries, including Pakistan, India, Indonesia and Malaysia have found Al Qaeda operatives and individuals from affiliated terrorist organizations frequently use IVTS to move terrorist funds, particularly to aid Kashmiri armed groups that appear to be affiliated with Al Qaeda.\textsuperscript{301}

\textbf{Charities and Humanitarian Organizations}

Charities not only procured revenue for Al Qaeda, but some charities apparently provided an illicit mechanism for transferring funds on behalf of the organization. For example, in December 2001, U.S. authorities raided the Chicago offices of another Saudi-


\textsuperscript{299} Napoleoni, pg. 124.

\textsuperscript{300} National Money Laundering Strategy, 2003. pg. 73.

based charity, the Benevolence International Foundation (BIF). In March 2002, Bosnian police raided BIF offices in Sarajevo, seizing a variety of evidence linking the organization to Al Qaeda, as well as finding evidence suggesting BIF funds were transferred to Al Qaeda operatives. In April 2002, BIF’s executive director, Enaam Arnaout, was arrested in the US; his subsequent trial indicated Arnaout had a personal relationship with bin Laden and that BIF aided Al Qaeda operations in multiple ways, to include facilitating money transfers.

Several other examples exist. Multiple charities assisted the 1998 Africa embassy bombings, including Mercy International Relief Organization and Help Africa People. These organizations provided cover for transferring weapons, false documents and funds from various locations in Africa to the cells conducting the bombing operations. The International Islamic Relief Organization (IIRO) helped channel funds to various Al-Qaeda related organizations operating in the Philippines, including Abu Sayyaf and the Moro Islamic National Front terrorist groups. Part of the Muslim World League (MWL), the shared offices of IIRO and MWL were raided by US authorities in March 2002 searching for evidence both groups were laundering funds for Al Qaeda and other Islamist terrorist groups, including Hamas and the Palestinian Islamic Jihad. The al Rashid Trust, a group associated with the abduction and murder of Wall Street Journal

---

302 Leavitt.
303 "United States of American V. Benevolence International Foundation, INC, and Enaam M. Arnaout, a/k/a "Abu Mahmoud," a/k/a "Abdel Samia" Case number 02CR0414, Northern District of Illinois, Eastern Division
305 Leavitt.
reporter Daniel Pearl, apparently helped funnel funds to Al-Qaeda organizations operating in Pakistan. The Global Jihad Fund, an Islamist website based in Great Britain that openly supports bin Laden, posted bank account information for Al Rashid, the Harkat al-Mujahideen and Lashkar-e-Taiba—other groups openly associated with Al Qaeda and all banned from raising funds in the UK—to “facilitate the growth of various Jihad movements around the world by supplying them with funds to purchase their weapons.”\textsuperscript{307} As such, even if such organizations do not specifically raise funds for Al Qaeda’s network, many of them act as conduits for funds raised elsewhere.

\textit{Legitimate Businesses}

Al Qaeda began establishing an impressive array of businesses shortly after bin Laden moved to Sudan in 1991.\textsuperscript{308} As previously mentioned, in addition to funding infrastructure projects (an airport and a major road among them), he opened approximately 30 other businesses, to include Taba Investments, a currency-trading firm—an ideal node in a financial network to facilitate the movement of funds. Debate surrounds whether these companies were profitable or were able to contribute to Al Qaeda’s coffers; however, their use in moving funds in and around Africa is certain. Indeed, the Sudanese businesses are suspected of having provided logistical support to the 1996 Khobar towers bombing in Dhahran, Saudi Arabia.\textsuperscript{309} Ironically, the Sudanese business network also cost bin Laden a great deal. In an interview, bin Laden himself estimated he lost $150 million in Sudan for unpaid work for the Sudanese government,


\textsuperscript{308} Napoleoni, pg. 162.

\textsuperscript{309} Corbin, pg. 59.
loss of tangible assets upon his flight to Afghanistan, and loss of money in unprofitable business ventures.\textsuperscript{310}

Al Qaeda also opened agricultural, boating and fishing businesses in Nairobi and Mombasa in Kenya; mining interests in Tanzania; and apparently bought influence, if not shares, of Turkish banks in Cyprus.\textsuperscript{311} These businesses helped move funds and equipment around Africa for operations in the region, to include the bombing of the US embassies in Kenya and Tanzania, and possibly to aid anti-US efforts in Somalia.

\textit{Cash Smuggling and Illegal Commodity Trading}

Al Qaeda resorted to the most basic method of money transfer on many occasions—simply smuggling bulk cash from one location to another. The National Commission on Terrorist Attacks Upon the United States (The “9/11 Commission”) characterized cash smuggling as rampant throughout the Middle East, abetted by weak border controls and a cash-based culture.\textsuperscript{312} For example, Jamal al Fadl, an Al Qaeda defector, key financier and court witness in the 1998 Embassy bombings trials, explained how he was often given cash to transport to either areas where operations would take place or to areas where the cash could be put in the international financial system with little risk. In one operation, he was given $100,000 in cash in $100 bills to carry to Amman, Jordan to support operations there.\textsuperscript{313} Travel documents for the couriers are arranged by al-Qaida, and the courier is provided with an address or a description of a contact who will meet him at a designated location. Once the money is handed over,

\begin{itemize}
\item \textsuperscript{310} Ibid, pg. 60.
\item \textsuperscript{311} Napoleoni, p. 162.
\item \textsuperscript{313} Shahar.
\end{itemize}
often in a sealed envelope, the operative returns home. Most such couriers have no idea what is going on beyond their immediate task.\footnote{314} 

Commodities—A Storage and Transfer Medium

More interesting and perhaps more important than cash, however, is involvement in gemstones and precious metals. Two in-depth investigations—one by a Washington Post reporter, the other by Global Witness—into African metal and stone mines revealed convincing evidence of Al Qaeda involvement in both industries.\footnote{315} While the CIA and 9/11 Commissions have doubted these claims, the evidence produced in open sources is worthy of review.

As early as 1993, Al Qaeda operatives allegedly began diversifying the organization’s financial infrastructure, especially in Africa. According to trial transcripts, Osama sent the head of Al Qaeda’s military committee, Ali al Rashidi (also known as Abu Ubaida al-Banshiri) to Tanzania where he established Taher Limited, a gold and diamond mining business.\footnote{316} Wadi al-Hage, bin Laden’s personal secretary, followed suit in 1994 when he opened a mining and trading company in Tanzania called Tanzanite King. Furthermore, al Hage began incorporating a company in Kenya called Black Giant Mining. Although that particular interest never actually opened any mines, evidence suggests it was used as a front company to launder diamonds and other commodities from

\footnote{314} Ibid.  
the Tanzanian operations. Financiers further infiltrated the African commodity business by expanding from their established bases in the Horn of Africa, namely Kenya and Somalia, into Western Africa. Targeted countries included Liberia, Sierra Leone, Congo and Guinea-Bissau. In addition to allowing Al Qaeda to make inroads among Muslims of Central and West Africa, these countries provided additional established entry points to the commodities trading business.

The move into the commodities business became urgent following the US crackdown on Al Qaeda finances after the 1998 Africa embassy attacks. The early forays into commodities were not the thrust of the network’s financial efforts; in 1998, commodities assumed a much more pressing role. The organization infiltrated the diamond, ruby, gold, tanzanite and other precious metals in what Global Witness called “a strategic...decision to begin trading in these commodities.” According to Global Witness analysts, Al Qaeda did so for three basic reasons: 1) to hide money targeted by new financial sanctions; 2) to launder profits of other financial activity; and 3) to convert cash into a commodity that holds its value and is easily transportable.

Diamonds represented an especially attractive alternative to the organization. Al Qaeda operatives first ventured into the diamond trading business between 1993 and 1997 by trading rough stones through their mining businesses established in Kenya and Tanzania, although those early effort do not appear to have produced any significant profit for the network. However, that knowledge was used by other financiers and

318 "For a Few Dollars More: How Al Qaeda Moved Into the Diamond Trade." pg. 38.
322 Global Witness, p. 28.
operatives to establish a diamond-buying and laundering operation in Liberia and Sierra Leone in 2000 and 2001. By purchasing diamonds, Al Qaeda could get its cash out of accounts that were vulnerable to seizure, as well as put it into a form that could be very easily moved around the world with less danger of detection during transport. While accurate figures are not available, indirect evidence suggests Al Qaeda bought approximately US$10 million of diamonds between 2000 and September 2001.

Al Qaeda invested in more than gemstones in the 1990s. Gold is a highly desirable medium of barter for nearly any organization in the Middle East, but especially so for terrorists. Due to such a high value to weight ratio, significant wealth can be stored using gold, with little risk it will lose much value over time. It is highly convertible, can be easily smelted into other forms, and is therefore exceptionally difficult for authorities to track. Indeed, instructions on how to smuggle gold on small boats and how to conceal it on the body were found in an Al Qaeda instruction manual in Afghanistan. According to Patrick Jost, a former senior financial officer in the Treasury Department’s Financial Crimes Enforcement Network that investigated Al Qaeda’s gold transactions,

"There can be no doubt that Al Qaeda has placed a large share of its assets in gold. This metal is indeed the best means of transferring secret funds. Jewelers in the Middle East and Indian subcontinent act as virtual bankers and due to its secret and archaic nature, this trade is particularly difficult to track down and infiltrate. Transfers are anonymous. Jewelers who help terrorists are often hidden behind a

---

323 Ibid.
324 Global Witness, p. 58.
326 Global Witness, p. 15.
diverse business front offering financial services, a travel agency, video
sales, and telephone cards."\(^{327}\)

Additionally, the Taliban—Al Qaeda's host in Afghanistan—kept most of their state
revenues in gold. Various sources state the Taliban used gold in transactions involving
the sale of Afghan-grown narcotics, primarily those derived from poppies.\(^{328}\)

Dubai plays prominently in Al Qaeda's use of gold; it is a nexus of hundreds of
hawaladars that will transfer and accept gold as payment, gold refineries capable of
smelting the metal into bars, jewelry or any other gold-based product, and extensive gold
souks (merchants) who can quickly move gold products into the marketplace. This
capacity, coupled with exceptionally lax banking and financial oversight, presents Al
Qaeda the perfect nexus for cash and gold exchange, with mechanisms to move that
wealth anywhere in the world.\(^{329}\) Al Qaeda apparently has used Dubai extensively in this
role, moving funds after the 1998 Africa embassy attacks, for the 9/11 attacks, and in the
post-9/11 period.\(^{330}\)

**Funding Terror: Al Qaeda's Various "Business Models"**

Al Qaeda's financing model appears to be goal-oriented rather than rule
oriented.\(^{331}\) As Bruce Hoffman of the Rand Corporation notes: "Al Qaeda works on
multiple levels, which is what makes it such a formidable opponent. Sometimes it
operates top-down, with orders coming from the CEO, and sometimes it is a venture-
capitalist operation, from the bottom up, when the terrorists come to ask for finance from

\(^{329}\) Global Witness, p. 16.
\(^{330}\) Farah, "Al Qaeda Gold Moved to Sudan." See also Farah, "Al Qaeda Gold: Follow the Trail to Dubai."
\(^{331}\) Gunaratna, pg. 58.
The basic business model of financing terror varies, depending on circumstances.

In the most basic model, Al Qaeda recruits and trains its own cells, and retains complete operation control over them. Under this model, Al Qaeda pays for:

-- expenses related to their host nation (Sudan or Afghanistan)
-- recruiting efforts
-- expenses for recruits traveling to and from Afghanistan training camps
-- training, food and lodging expenses while at the camps
-- seed money to get cells settled into an area where operations were planned
-- money to fund actual terrorist operations

However, once cells were settled into an area, they were typically expected to be self-sufficient. This strategy typically required cell members to open new businesses or purchase existing ones, obtain employment, or resort to criminal activity to pay for their living expenses.

A second model was analogous to a granting organization; established groups would present operational proposals to the consultative committee, and for those operations that were deemed suitable, Al Qaeda would send funds to conduct the operation. This particular model is similar to the role of the MAK described earlier. This model may have been Al Qaeda’s original concept: establishing “the base” on which other militant Islamic organizations could find support and coordinate their efforts. The purpose of the Majlis included bringing such groups together to discuss strategies, targets

333 The construct of this model comes from piecing together information from a variety of sources regarding Al Qaeda activities, to include Gunaratna, Corbin, Bergen, Burke, Levitt and Epstein.
and attacks, with bin Laden funding those ideas he found worthy. This model has led to some analysts to refer to al Qaeda as the “Ford Foundation” of terrorism.\textsuperscript{334}

Al Qaeda used this model on several occasions. The network allegedly funded operations planned and conducted by operatives for Jemaah Islamiyah, an Indonesian-based terrorist group founded as early as the 1970s\textsuperscript{335} (although it did not coalesce into its formal structure until the 1990s\textsuperscript{336}). While JI had several front-businesses that generated some revenue on its own,\textsuperscript{337} it did receive funds from Al Qaeda for specific operations, most notably the Bali bombing. \textit{Laskar Jundullah} (“Militia of God”), active against US interests in various part of Indonesia, got partial funding directly from Al Qaeda through a Saudi charity.\textsuperscript{338} Additionally, Al Qaeda sent funds to Nurjaman Riduan Ismuddin, a.k.a., Hambali, who was JI’s operational chief until his arrest in August 2003. He is also suspect of overseeing all of JI’s financial dealings as well as being Al Qaeda’s operations director in Southeast Asia.\textsuperscript{339} Al Qaeda also sent money to the Philippines-based Abu Sayyaf Group and Moro Islamic Liberation Front (MILF) for operations.\textsuperscript{340} Although Abu Sayyaf generated considerable revenue from kidnapping ransoms and extortion,

\begin{thebibliography}{9}
\item Gunaratna, pg. 68.
\item Ibid, p. 77.
\item Ressa, p. 95.
\end{thebibliography}
received funds from Al Qaeda as late as 2003. Yet another Southeast Asian group that benefited from Al Qaeda’s financial largess include the Kumpulan Mujahidin Malaysia (KMM) of Malaysia.

As efforts to disrupt Al Qaeda’s financial infrastructure began in earnest following the WTC and Pentagon attacks, a splintering of the infrastructure occurred. As mentioned earlier, the financial leadership splintered; lower-level money managers moved up to fill the voids created by arrests and deaths. Personnel shifts lower in the organization are more dynamic and important; as a number of new Al Qaeda-affiliated groups began organizing and conducting operations, financiers emerged to support them. An expansion in the number of low-level financiers, many who do not have connections to the wealthy individuals Osama and the inner Al Qaeda circle enjoyed, has occurred.

Similar to the splintering of Al Qaeda’s financial command and control, revenue sources appear to have splintered as a result of the attempt to disrupt the network’s financial infrastructure. Attacking the dozen or so major Al Qaeda benefactors—nearly all charities—has not stopped money from flowing to terrorist coffers; it may have only eliminated some of the middlemen. The effect on total revenues, given the state of intelligence and diffuse nature of the information needed, is impossible to gauge. However, many of the underlying donors prior to the crackdown still exist and continue to finance Al Qaeda operations, but have found different avenues to get their cash to the organization. Furthermore, an effective ideological campaign by Al Qaeda and other

---

341 Mendez and Laude.
342 Ressa, p. 69.
Islamist organizations, made more effective with heightened US and western military activity in the Middle East and Central Asia, have helped increase the number of individual and small donors to Islamist causes. According to Reuven Paz, senior researcher at the International Policy Institute for Counterterrorism, "...public support for terrorist groups has become the most essential element in fund-raising and the main source of finances." Such public support means that one must trace not a handful but literally hundreds of thousands of transactions.\(^{344}\)

This movement from a small number of large private donations to relatively more but smaller donations can be viewed as a continuation of a previous trend (see figure 2). The decline of state-sponsored terror in the 1990s led to what many analysts called the "privatization of terror,"\(^{345}\) meaning that terror was no longer a tool used exclusively by states. States were gradually replaced as the primary sponsors of terror during the 1980s, with private sponsorship of terror clearly the dominant model by 1991 when state support for the PLO essentially collapsed. While state sponsors of terror were few in number, their donations to terrorist groups were quite large. The privatization of terror model features a greater number of sponsors, but none of these entities (charities, NGOs and wealthy individuals) can individually match the financial resources of a state, although their higher number collectively make them a lucrative source of funding. Whereas a handful of states—seven to ten as so designated by the US State Department\(^{346}\)—sponsored terror, several dozen such private sponsors exist. Now, with local mosques,

---

\(^{a}\) a jointly designated global terrorist, who are both living freely in Saudi Arabia and continuing their fundraising activities.

\(^{344}\) Shahar, "Bin Laden: Marketing Terrorism."

\(^{345}\) Lesser, Ian. Countering the New Terrorism. (Santa Monica, RAND Corporation, 1999), pg. 86.

\(^{346}\) See the "State Sponsors of Terror" section in the annual "Patterns of Global Terrorism." US State Department.
magazine writers, professors and other radical Islamists taking up collections from anyone who can spare change and funneling that revenue towards violent groups,\textsuperscript{347} several thousands of sponsors exist. Succinctly, local financiers are collecting money from local patrons to support local organizations. The privatization of terror is now moving towards the localization of terror.

![Figure 3: Macro Trends in Terrorist Financing](image)

Examples of the "localization of terror" model are plentiful. The most deadly illustration is the Spanish cell responsible for bombing the Madrid train system on 11 March 2004. The group, recruited from local mosques, largely funded the operation through the sale of drugs.\textsuperscript{348} The 440 pounds of explosives were obtained from a Spanish mine, obtained by bribing the mine's guard with drugs and cash.\textsuperscript{349} The target selection, operational details and execution were done locally. The nature of the attack's funding


\textsuperscript{349} Roman, "Madrid Police Arrest Bombing Suspects."
mechanism also illustrates the merging of terrorist activity and organized crime, mentioned earlier.

Evidence suggests the localization model is already becoming widespread. For example, Fazlur Rehman Khalil is a militant cleric with ties to the *Harkat-ul-Moujahedeen*, the Pakistani group with the longest and most direct ties to Bin Laden. Khalil, who co-signed Osama bin Laden's 1998 edict that declared it a Muslim's duty to kill Americans and Jews, started a *Harkat*-related group called *Jamiat ul Ansar* (Group of Helpers), which openly publishes a harshly anti-American and pro-*jihadi* bi-monthly magazine, *Al-Hilal*. The magazine is openly available from street vendors. The back cover of November 2003's issue featured an advertisement for the "All-Pakistan Training Convention of *Jamiat ul Ansar* Activists" at Khalil's headquarters, the Jamia Khalid bin Waleed Mosque, across from an army base on the edge of Islamabad. The December 2003's cover showed a giant fist holding a sword, rising from flames in the desert to slash the U.S. flag. The advertisements also provided Khalil’s address and phone number for where to make donations for "*jihadi* activities." He also urged all Muslims who were unable to physically become *jihadis* to give money to those who were.

A second example involves Maulana Massoud Azhar, a Pakistani cleric with ties to bin Laden dating to the 1993 attacks on US forces in Somalia. Azhar literally went on a fund-raising tour in 2002 for his militant group *Khudammul Islam* (Servants of Islam). Going from mosque to mosque in Pakistan preaching the virtues of violence in a series of "*jihadi* conferences," the militant cleric reportedly collected sacks full of cash at each stop from the various patrons of his sermons. Azhar’s organization, having undergone

---

351 Watson, and Zaidi, "Militant Flourishes in Plain Sight."
several name changes as each successive group is outlawed by Pakistani authorities, was banned only months before he started his very public campaign. Two months after Azhar returned flush with cash, assailants attempted to assassinate Gen Perez Musharraf; Pakistani officials are convinced Azhar’s organization was responsible.\textsuperscript{352}

These series of events exemplify what type of operations and attacks to expect in the future as the localization of terror model gradually complements and may eventually supplant the privatization model. An important question arises with the localization of terror—without direct Al Qaeda involvement or operational control, is mere inspiration enough to link such organizations to Al Qaeda’s network? Is the localization of terror similar to the “leaderless resistance” model, where the leader merely identifies the enemy and autonomous cells conduct operations against that enemy without further coordination? If so, how effective will such a model be?

Conclusion

Al Qaeda’s financial infrastructure has shown an impressive ability to adapt to adverse conditions, quickly take advantage of available opportunities, pursue creative, non-traditional and unorthodox methods of money management, and geographically move operations to areas where laws are lax or non-existent. This amoeba-like ability—to form itself in whatever shape is necessary and still function effectively—has proven exceptionally useful. However, the expanded and persistent US and international efforts to disrupt those financial networks represent the great challenge Al Qaeda’s moneymen have yet to face.

\textsuperscript{352} Watson and Zaidi.
Chapter 4: Policies Aimed at Terrorist Financial Networks and Initial Results

"Every United Nations member has a responsibility to crack down on terrorist financing. We must pass all necessary laws in our own countries to allow the confiscation of terrorist assets. We must apply those laws to every financial institution in every nation."

President George Bush
Speech to the General Assembly of the United Nations, 10 November 2001

Long before Al Qaeda became a threat to international security, criminals, drug traffickers, guerrillas, and other illegitimate organizations easily exploited the international financial system to facilitate their activities. Terrorist organizations in general (and Al Qaeda specifically) are simply the latest entities to do so. In this respect, terrorist financing can be seen as a subset of a larger problem, that of non-transparent movements of money in a system to which much of the world has easy access.353

As more links between significant global problems and illicit financing became evident, money laundering and criminal exploitation of the international financial system was recognized in the 1990s as a global problem requiring a global response. The number of instruments available to governments and law enforcement agencies to combat such criminal activity subsequently expanded. However, governments, regulators and law enforcement agencies initially found such laws ill designed for the specific task of tracing illicit terrorist transactions. The 9/11 attacks spurred a second expansion of mechanisms, with the resulting plethora of programs, policies and organizations specifically tailored to disrupt terrorist financial networks. Despite these new tools, methods and organizations, tracing terrorist funds continues to be a complex and frustrating proposition.

This chapter outlines the efforts, both before and after the World Trade Center attacks, of US and international efforts to deny terrorist organizations money. It further provides an assessment of efforts to date, suggesting that such policies have shaped more than disrupted terrorist financial networks.

US Efforts

Pre-9/11

Targeting terrorist financing prior to 9/11 was not central to US efforts at combating terrorism in general. This general assessment is appropriate for both US and international efforts. Many of the tools used in disrupting terrorist financing were originally passed with other crimes in mind, such as money laundering, racketeering, narcotics trafficking or organized criminal networks. Indeed, until 1994, the illegality of terrorist financing was not well specified in the U.S. criminal code. As a result, US decision-makers and prosecutors had to generally rely on creative applications of tools designed for other crises and crimes to prosecute acts of terrorist financing.

In the 1970s and 1980s, the US focused its financial counterterrorism policies primarily on states that were suspected of sponsorship of terrorism. State sponsors of terrorism are countries designated by the Secretary of State under Section 6 (j) of the Export Administration Act of 1979 as countries that have “repeatedly provided state support for acts of international terrorism.” Currently the state sponsors of terrorism (SST) list includes seven countries: Cuba, Iran, Iraq, Libya, North Korea, Sudan, and Syria.

354 See section 6(j) of the Export Administration Act of 1979 (50 U.S.C. App. 2405(j)).
355 Due to recent military and diplomatic events, Iraq and Libya are likely to be removed from this list soon.
Naming a country on the terrorism list triggers a series of economic sanctions under different US laws. These sanctions include:

- restrictions (to include a general ban) on export licenses, dual-use items or critical technology (under the Export Administration Act of 1979)
- ban on sales or licenses for items on the US Munitions Control List (under the Arms Export Control Act)
- ban on US foreign assistance, including Export-Import Bank credits and guarantees (under the Foreign Assistance Act of 1961)
- authorization for the president to restrict or ban imports of goods and services from designated terrorist countries (under the International Security and Development Cooperation Act of 1985); this ban does not automatically kick in, it merely gives the president authorization to impose such sanctions
- prohibition of financial transactions by US persons with the governments of designated terrorist countries (under the Antiterrorism and Effective Death Penalty Act of 1996, discussed later)
- requirement that US representatives at international financial institutions vote against loans or other financial assistance to that country (under the International Financial Institutions Act of 1977)
- ineligibility for the Generalized System of Preferences (GSP, under the Trade Act of 1974)

In addition to these tools, the International Economic Emergency Powers Act (IEEPA) provides the US President additional sanctions. Part of Title 50 of the US Code (War and National Defense), IEEPA authorizes the President, in the case of "unusual and extraordinary" foreign threats "to the national security, foreign policy, or economy of the United States," to "regulate...or prohibit...transactions involving, any property in which any foreign country or a national thereof has any interest; by any person, or with respect to any property, subject to the jurisdiction of the United States..."). The broad powers

---

outlined in IEEPA became the basis for nearly all subsequent financially-based counter-terrorism policies and executive orders.

IEEPA has been invoked often in response to terrorism. For example, President Reagan invoked IEEPA in 1986 in retaliation for Libyan involvement in terrorism. He again invoked IEEPA powers in 1987 in response to Iranian attacks on neutral shipping in the Persian Gulf—arguably an act of state terror. President Clinton also made considerable use IEEPA provisions with respect to terrorism. He expanded President Reagan's sanctions against Iran through Executive Order 12957, issued 15 March 1995. This executive order prohibited U.S. persons from entering into contracts for the financing, management or supervision of the development of Iranian petroleum resources.

An important change in the philosophy of attacking terrorist financing occurred 1995—for the first time IEEPA protocols were invoked against non-state actors. On January 23, 1995, President Clinton declared a national emergency pursuant to IEEPA when he issued Executive Order 12947, "Prohibiting Transactions With Terrorists Who Threaten To Disrupt the Middle East Peace Process." EO 12947 prohibits transfers, including donations of funds, goods, or services to any organizations or individuals designated under its authority, and it blocks all property in the United States or within the possession or control of a U.S. person in which there is an interest of any designated terrorist. Twelve Middle East terrorist organizations were named the Order. EO 12947

also applies to persons determined by the Secretary of the Treasury, to be owned, controlled by, or acting on behalf of any person designated as a terrorist under EO 12947. Collectively, these persons are known as "Specially Designated Terrorists" (SDT). On 20 August 1998, President Clinton issued EO 13099, which amended EO 12947 by adding three individuals and one organization to the Annex of EO 12947: Osama bin Laden, Abu Hafs al-Masri Rifa’i, Ahmad Taha Musa, and Al Qaeda. EO 13099 thus represented the US’s first direct financial strike at the Al Qaeda network.

This expansion of IEEPA protocols to non-state actors came on the heels of a change in the US criminal code. Criminalizing the actual act of financial support to terrorist organizations within the United States occurred in late 1994, with the enactment of the Providing Material Support for Terrorists (Title 18 U.S. Code § 2339A). 2339A is primarily a statute aimed at reaching those persons who provide material support to terrorists knowing that such support will be used to commit one of the offenses specified in the statute. This evidentiary requirements of this particular law—requiring knowledge of the intent of the recipient—proved difficult for prosecutors, and the law was not generally considered a powerful tool for disrupting terrorist groups or their operations.

Prior to enactment of 2339A, individuals and non-state actors accused of financing terrorism prosecuted through money laundering statutes. This approach was

---

clearly sub-optimal, as money-laundering statutes were crafted with criminal enterprises in mind. Unlike criminal enterprises, often money flowing to support terrorist organizations is “clean” to begin with, and did not need to be laundered. Furthermore, the relatively small sums of cash flowing to terrorist organizations were dwarfed by the magnitudes of money flowing from drug cartels, smuggling organizations and other organized criminal networks.363

The more powerful Antiterrorism and Effective Death Penalty Act (AEDPA), motivated in part by the 1992 World Trade Center and the 1995 Oklahoma City bombings, was enacted in 1996. While the AEDPA was a broad and far-reaching in its efforts to combat terrorism, Title III of that act was specifically crafted to help sever international terrorists from their sources of financial and material support. Title III provides for the following:

- enlarges the proscriptions against assisting in the commission of various terrorist crimes
- authorizes the regulation of fundraising by foreign organizations associated with terrorist activities, largely by proscribing providing such an organization with “material support”364
- adjusts the Foreign Assistance Act to help isolate countries that support terrorists and to bolster counterterrorism efforts in those who oppose them by establishing the procedure under which a foreign organization may be designated as a terrorist organization (FTO designation)
- establishes a system of civil penalties for banks and other financial institutions that fail to freeze and report the assets of such organizations.365

---

363 Yeager, Lauren. Senior economist, General Accounting Office. Interview. 4 February 2004. See also Breinholt, pp. 7-9.
364 “Providing material support” is defined as “currency or monetary instruments or financial securities, financial services, lodging, training, expert advice or assistance, safehouses, false documentation or identification, communications equipment, facilities, weapons, lethal substances, explosives, personnel transportation, and other physical assets, except medicine or religious materials.” (18 U.S.C. §§2339A(b).) The phrase “providing material support” was later redefined in the USA PATRIOT Act of 2001.
Of these provisions, designating an entity a foreign terrorist organization is the most powerful. It is the responsibility of the Secretary of State to decide if an organization meets the conditions for such a designation. Designations last for two years, at which time the designation is reviewed. Designations normally occur after an involved interagency process, which typically includes consultations with the intelligence community, Departments of Justice, Treasury and Homeland Security; however, the Secretary of State makes the ultimate decision.

After an FTO designation is made, the Treasury Department may block financial transactions involving an organization's assets and determine whether U.S. banks are complying with the law. If Treasury imposes sanctions, U.S. financial institutions are required to block the funds of designated FTOs and their agents and to report that blockage to the Treasury Department. The Justice Department is responsible for prosecuting offenders who violate any aspect of the Treasury Department's sanctions. This can have important consequences for a designated terrorist organization's ability to access its resources.366

The Office of Foreign Asset Control (OFAC) of the U.S. Treasury Department is charged with administering the Treasury's sanctions. However, despite OFAC's considerable experience in doing so, pre-9/11 efforts produced meager results. In 2000, the Treasury Department's annual report on FTOs and SDTs revealed that OFAC

---


managed to freeze just over $300,000 in terrorist assets. The major hurdle OFAC faced was identifying the funds that specifically belonged to the targeted individuals, organizations or governments. While the US's capacity to track funds improved significantly, the ability of terrorists to move funds to areas safe from US seizures improved as well.

The U.S. subsequently amended Title 18 criminal code laws by passing into law Section 2339B in April 1996, making it a crime of providing or conspiring to provide "material support to designated terrorists," with "designated terrorists" being groups named as FTOs by the Secretary of State under the authority of AEDPA. Passage of 2339B synchronized US criminal code and AEDPA, giving law enforcement authorities a more powerful tool in prosecuting those who would fund terrorist activities.

**Post 9/11**

Two policies are pre-eminent in the post 9/11 terrorist financing landscape: Executive Order 13224 and the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT) Act. Both these acts expand the entities targeted for sponsoring terrorists, the activities that are considered as providing material aid to terrorists, and the proscriptions available to the government in pursuing those entities.

President Bush issued EO 13224, entitled "Blocking Property and Prohibiting Transactions With Persons Who Commit, Threaten to Commit, or Support Terrorism" on

---


368 Ibid.
23 September 2001. This EO introduced several important changes. First, it expanded the coverage of previous executive orders from terrorism in the Middle East to global terrorism—including groups in the United States. Second, it expanded the class of targeted groups to include all those who are “associated with” designated terrorist groups, not just the terrorist groups themselves. Third, it established the ability to block the US assets and deny access to US markets of foreign banks that refuse to freeze terrorist assets.

These expansions were significant. To provide perspective, prior to EO 13224 issue, prosecutors had more authority to seize the assets of drug lords than of terrorists. Furthermore, this helped narrow the loophole with terrorists moving money to accounts beyond US jurisdiction. By seizing assets of organizations “associated with” terrorist organizations, the US could cast its seizure net wider, snaring groups that were allegedly front groups for terrorist organizations. This provision was especially useful in seizing funds associated with charities and other seemingly benevolent organizations that in reality were largely organizational smokescreens for terrorist organizations. The list of these entities, known as the Specially Designated Global Terrorists (SDGTs), is updated regularly. When the EO was originally issued, fourteen groups and thirteen individuals were listed; now the SDGT list contains over 500 entities.

The USA PATRIOT Act also contains several important provisions expanding the financial fight against terrorist. Specifically,

---

370 Hufbauer, et al.
Section 326 requires the Treasury Secretary to set minimum standards for verifying the identity of customers (including foreign nationals) opening accounts at all US financial institutions.

Section 328 requires the Treasury to encourage foreign governments to require all wire transfer instructions sent to the US to include the name of the originators.

Section 330 empowers the relevant US agencies to conclude agreements with foreign financial supervisors on maintaining records of accounts and transactions and to establish mechanisms to share information on those accounts of suspected terrorists.

Section 411 establishes the Terrorist Exclusion List, which empowers the US to deny entry to the US of any entity that has provided material support to terrorists.

The first three provisions enhance the “know your customer” initiative. While such an initiative existed for banks since the Basel Statement of Principles issued 12 December 1988, the variety of money transfer mechanisms subsequently created provided multiple alternative money remittance systems for those who wish to keep their identity hidden. Expanding the “know your customer” and “customer due diligence” to all forms of transnational financial activity—not just bank-to-bank transfers—is crucial to making these initiative workable. The last provision provides an additional punitive measure against those who do provide financial support to terror organizations.

US criminal law was again updated to stay synchronized with the EO 13224 and the PATRIOT Act. Congress signed into law 2339C, “Suppression of the Financing of Terrorism Convention Implementation Act of 2002.” This statute allowed for prosecution of individuals or entities who provided or intended to provide money to any organization that support or is affiliated with terrorist organizations, even if they intended for the proceeds to go to non-violent activities.

---

372 The Basel Committee for Banking Supervision is one of many self-regulatory organizations that focus on extending standards for international regulation to cover banking transparency issues.

These provisions now give the US five different lists of terrorist entities, each with different proscriptions. The Secretary of State maintains the SST and FTO list; as of March 2004, the SST list contains seven countries and the FTO list contains approximately 34 organizations.\(^{374}\) EO 13224 gives the Treasury authority to maintain its two terrorist lists. OFAC maintains the Specially Designated Nationals list of suspected terrorists, which includes the Specially Designated Global Terrorists (SDGT) and the Specially Designated Terrorist (SDT) lists; as of June 2004, the SDGT list contains over 1500 individuals, while the SDT list includes over 200 organizations.\(^{375}\) EOs 12947 and 13099 authorizes the Specially Designated Terrorists (SDTs) specifically for the Middle East Peace Process, although its usefulness is limited to transactions that occurred between January 1995 and September 1997.\(^{376}\) Furthermore, while not completely cross-checked with one another, are more regularly compared with other agency data to ensure consistency across lists and to ensure the broadest distribution of relevant knowledge regarding individuals and entities across government agencies.

**International Efforts**

The international community’s efforts at regulating finances over the past three decades largely originated with the major financial services jurisdictions, including countries of the UN Security Council, the G-8, the Organization for Economic Cooperation and Development (OECD), European Union, and the United States. These

\(^{374}\) US State Department List of Foreign Terrorist Organizations. Available on-line at http://travel.state.gov/reciprocity/list_of_foreign_terrorist_organisations.htm as of 3 June 2004. This list was last updated in August 2002 and is subject to change.


\(^{376}\) Brien Holt, p. 11.
organizations provided the general groundwork for international financial monitoring on which subsequent terrorist-specific instruments were crafted. Similar to US-specific efforts, most of these original policies were crafted with criminal acts other than terrorism in mind.

**Pre-9/11**

Many efforts at international finance control prior to 9/11 focused on a variety of issues, few of which directly addressed the financing of terrorism. Some, such as the 1988 United Nations Vienna Convention Against Illicit and Psychotropic Drugs, created momentum for the attention to money laundering as a global phenomenon, but focused exclusively on narcotics proceeds. Others focused on internal government reform, such as the 1998 OECD Convention Against Illicit Payments, which largely focusing on the negative externalities of bribery and other forms of government malfeasance. Theoretically, reforming governments should have led to greater oversight of the private sector within those governments, therefore enhancing collective international oversight.\(^{377}\) Other instruments include the 2000 United Nations Convention Against Transnational Organized Crime, as well as various regional instruments created and enacted by the Organization of American States, the Council of Europe and other regional pacts. Over time, these international instruments created a de facto body of international standards that gained legitimacy and enforcement by becoming embedded in the increasing number of mutual assessment mechanisms throughout the world.\(^{378}\)

---

\(^{377}\) Winer, pg. 28.

\(^{378}\) Ibid, p. 29.
The Financial Action Task Force (FATF)—originally created to combat money laundering. Established in 1989 in response to the G-7’s recognition of the threat posed by drug money laundering, FATF’s initial mandate was to examine the methods used to launder criminal proceeds and develop recommendations for combating them. The result was FATF’s 40 Recommendations, which core standards include:

- Criminalizing the laundering of criminal proceeds and enacting laws to seize them
- Obliging financial institutions to identify all clients and keep appropriate records
- Requiring financial institutions to report suspicious transactions to the appropriate national authorities
- Create and put into place adequate systems for controlling and supervising financial institutions
- Create agreements to permit each financial jurisdiction to provide effective international cooperation, especially with respect to exchanging financial information and other evidence in cases involving a financial crime.

FATF’s particular contribution is through its creative assessment program. Being a voluntary body and lacking any real enforcement mechanisms, member states provide and publish self-assessments of compliance with the 40 Recommendations, and then invite other FATF members to provide an independent assessment of compliance. As the organization assessments of its member states initially started slowly and its reports

were generally considered neutral and fair, member states accepted and abided by FATF’s guidelines.\textsuperscript{381}

In 1996, two important developments expanded FATF’s influence. First, the organization expanded its mission beyond reviewing capacities against narcotics money laundering to cover all money laundering involving serious crimes, as well as agreeing to take on any new developments in money laundering in the future. Second, member states recognized that the globalized nature of the world’s financial system would prevent them from protecting themselves from money laundering unless non-member states began complying with the 40 Recommendations as well. As such, it moved beyond its original mandate of members-only assessment to developing a blacklist of countries whose practices were deemed to facilitate money laundering and therefore be deemed as “non-cooperative” with FATF objectives.\textsuperscript{382} Both of these changes were crucial to FATF’s subsequent engagement in the financial war on terror, discussed later.

The United Nations

The United Nations also played an important role in disrupting terrorist financing. Indeed, the UN began passing resolutions regarding terrorist activity since 1963, when the General Assembly passed the Convention on Offences and Certain Other Acts Committed on Board Aircraft.\textsuperscript{383} The UN has passed a total of 18 different types of

\textsuperscript{381} Winer, p. 30.
\textsuperscript{382} Winer, pp. 30-31. The latest FATF update had seven countries blacklisted, including the Cook Islands, Guatemala, Indonesia, Myanmar, Nauru, Nigeria and the Philippines. See “FATF Non-cooperative Countries and Territories (NCCT) List” available on-line at http://wwwl.oecd.org/fatf/NCCT_en.htm#List as of 1 June 2004. The list was last updated 31 May 2004, when the Philippines was considered but rejected for removal.
resolutions regarding terrorism since then.\textsuperscript{384} The earliest resolution dealing specifically with terrorist financing was asked The General Assembly’s “Declaration on Measures To Eliminate International Terrorism (February 1995) simply called for member states to “To refrain from organizing, instigating, facilitating, financing, encouraging or tolerating terrorist activities…”\textsuperscript{385} Rather than it being a truly international agreement, this Declaration simply ask member states to pass domestic legislation to help combat the financing of terrorism.

The follow-on Supplemental Declaration to the Feb 1995 Declaration, passed in January 1997, still pursuing reform by encouraging member states to pursue domestic policies, but went further and was far more specific:

“To take steps to prevent and counteract, through appropriate domestic measures, the financing of terrorists and terrorist organizations, whether such financing is direct or indirect through organizations which also have or claim to have charitable, social or cultural goals or which are also engaged in unlawful activities such as illicit arms trafficking, drug dealing and racketeering, including the exploitation of persons for purposes of funding terrorist activities, and…adopt regulatory measures to prevent and counteract movements of funds suspected to be intended for terrorist purposes…\textsuperscript{386}

These specific exhortations—collection or movement of terrorist funds, be it by individuals, charities or other organizations—raised international awareness to the complexities of terrorist financing to a degree not present in any previous UN conventions or resolutions.

The most relevant, specific and demanding of these UN resolutions in the pre-9/11 period is the International Convention for the Suppression of the Financing of Terrorism, adopted by the General Assembly in December 1999. This convention, among other things, requires that all member states criminalize the collection or use of funds for terrorist activities, either prosecute or extradite persons accused of funding terrorist activities and requires banks to enact measures to identify and issue reports of suspicious transactions.  

This convention expanded previous conventions in two ways. First and most importantly, as the General Assembly recognized that the limited approach of states passing domestic anti-financing legislation was simply insufficient, it expressly enlisted banks and other financial institutions. Specifically, the Convention required financial institutions to enhance identification of their customers (later referred to as customer due diligence (CDD)), pay specific attention to suspicious or unusual transactions or patterns of transaction, and develop reporting mechanisms for such activities. Secondly, by requiring states to prosecute or extradite, the Convention created a level of expected international cooperation in the pursuit of terror money.

Finally, the United Nations established the UN Monitoring Group for Al Qaeda in July 2001 to ensure compliance with the various UN Security Council resolutions aimed at Osama bin Laden, Al Qaeda and the Taliban. Established pursuant to Security Council Resolution 1363 passed on 30 July 2001, the Group monitored the implementation of measures imposed by resolutions 1267 (passed on 19 October 1999) and 1333 (passed on 19 Dec 2000) against Osama bin Laden, Al Qaeda, the Taliban and their associates.

Those measures, which included a freeze of financial and economic assets, a travel ban and an arms embargo, are applied against both the individuals and entities of and related to Al Qaeda and the Taliban.\textsuperscript{388} Those targeted individuals and entities were enumerated in a consolidated list maintained by the “UN 1267 Committee,” as it was established pursuant to Security Council resolution 1267.\textsuperscript{389}

**Post 9/11**

A flurry of activity occurred immediately after the 9/11 attacks. Many organizations that were involved either directly or tangentially to the international financial system issued statements of sympathy, refocused their activities to specifically apply to terrorist financing, or created new mechanisms to specifically empower relevant and competent agencies to disrupt terrorist finances.

**United Nations**

The United Nations Security Council passed Resolution 1373 exactly one week following the 9/11 attacks. The resolution urged states to criminalize all aspects of terrorist financing, freeze all terrorist assets, refrain from giving terrorists any type of support, and for member states to ratify all UN counter-terrorism instruments. However, UNSCR resolution 1373 is not a sanctions committee and did not create a list of terrorist organizations or individuals. Therefore, the UNSC passed Resolution 1390 on 28 January 2002, updating and broadening the powers and targets of UNSCR 1373.

The most important aspect of these two resolutions is the creation of the Counter-Terrorism Committee (CTC) of the Security Council, designed to promote collective action against international terrorism, of which all fifteen members of the Security


Council are members. Its mandate is to bring member states to an acceptable level of compliance with Resolution 1373.\textsuperscript{390} The CTC acts as an information clearinghouse, collecting and distributing pertinent information regarding Al Qaeda activities (especially financial activities and developments), compiling “best practices” of member states and acting as a liaison between states, international governmental organizations and regional bodies to coordinate action.\textsuperscript{391} Furthermore, it established a Technical Assistance Team designed specifically to aid states in developing counter-terrorism capacity with respect to financial institutions.\textsuperscript{392}

The UNSC passed Resolution 1455 on 17 January 2003, stressing once again the need for all member nations to participate in the general war on terrorism and terrorist financing in particular and reissued its plea for international cooperation on the fighting terrorism. This resolution also levied the new requirements that member states submit to the CTC any information they have regarding entities on the 1267 list and on-going efforts to combat those entities. Additionally, UNSCR 1455 tasks the UNSC to provide quarterly reports to member states summarizing Al Qaeda operations (especially regarding financial activities).\textsuperscript{393} Finally, it requires member states to annually provide the CTC updates of their respective law enforcement efforts, investigations and asset seizures of Al Qaeda assets.\textsuperscript{394}

\textsuperscript{394} Ibid, paragraph 6.
The UN also specifically created an independent Al Qaeda Monitoring Group, which was an expansion of the 1267 Committee detailed earlier. It’s mandate, expanded after the fall of the Taliban in January 2002, was to monitor compliance of additional UNSC resolutions and provide periodic updates to the Security Council on member state compliance. However, with the passage of UNSCR 1526, the Monitoring Group was dissolved on 30 January 2004 and replaced with the Analytical Support and Sanctions Monitoring Team. This new team has the same responsibilities as the Monitoring Group, but is less independent and has closer oversight by the Security Council. In addition, UNSCR 1526 tightened financial sanctions against Al Qaeda and affiliated groups, urging member nations to specifically examine charities and traditional remittance systems for links to the terrorist organization.

Speculation exists that the Monitoring Group was dissolved due to the several reports it issued claiming the financial war against Al Qaeda was not successful. In particular, the group issued a scathing report on 12 January 2004 stating the financial war against Al Qaeda was failing at least in part due to state non-compliance with UN resolutions. In particular, less than half the member states provided reports to the 1267 Committee despite resolution requirements to do so; the Committee Chairman, Michael Chandler of Great Brian, further suggested those nations failing to comply should be publicly named. Other areas cited as needing improvement included stopping the

---

396 Ibid. Paragraph 7.
merging between drug profits and Al Qaeda activity and state seizure of terrorist assets other than those easily available in bank accounts.398

The effectiveness of the new Monitoring Team is as of yet unknown. Secretary General Kofi Anan named eight experts to the Team in mid-March 2004,399 but as of June 2004, the Team had not delivered any reports to the Security Council. However, the dismantling of the Monitoring Group under such auspices at least suggests that the political will to enforce existing UNSC resolutions is not ironclad.

**FATF Expansion**

On 31 October 2001, FATF issued eight additional special recommendations specifically targeting terrorist financing.400 These eight special recommendations require nations to:

- Ratify and implement all United Nations instruments
- Criminalize the financing of terrorism and any associated money laundering activities
- Freeze and confiscate terrorist assets or groups associated with terrorist organizations upon discovery;
- Report suspicious financial activity associated with terrorist activity;
- Enhance cooperation and information sharing between countries;
- Increase oversight of alternative remittance systems, such as *hawalas*

---


- Increase information available regarding the originator and receiver of all wire transfers

- Increase oversight of non-profit and non-governmental organizations

While these special recommendations are certainly be helpful, they are recommendations, and FATF has no enforcement capabilities. It relies on self- and mutual-assessments for member states, and black-listing or "naming and shaming" those that do not sufficiently adhere to the recommendations. However, these recommendations quickly became the international standard and were recognized by major international financial institutions, various regional organizations, and individual countries as the standard by which FATF member countries would evaluating their respective regulations and laws.\(^{401}\)

Furthermore, FATF has pledged technical assistance to other countries to increase their capacity to pursue these recommendations.\(^{402}\)

**Egmont Group**

Another important voluntary international organization that joined the financial fight against terrorism following the 9/11 attacks is the Egmont Group. Originally envisioned as an organization to help fight money laundering, the Group is made up of various financial intelligence units (FIUs) around the world. FIUs are specialized governmental agencies created as it became apparent that banks and other financial institutions were an important source for information about money laundering and other financial crimes being investigated by law enforcement. FIUs, at a minimum, receive, analyze, and disclose information by financial institutions to competent authorities of


\(^{402}\) Ibid.
suspicious or unusual financial transactions. Currently, 84 different countries and jurisdictions have FIUs that participate in Egmont Group activities.403

Following the September 11th attacks, the Egmont Group expanded its requirements of member FIUs to focus on terrorist financing and funding.404 It specifically stated that its network of FIUs were capable of providing a unique service in the global fight against terrorism. Furthermore, the Group increased its focus on helping to create and train FIUs in nations that have inadequate resources to monitor money laundering and other suspicious financial transactions.405 The Egmont Group makes the reasonable claim that their efforts of expanding financial intelligence collection and analytical capability to such areas is crucial for continued success in disrupting terrorist financial networks.

Wolfsberg Group

Yet another voluntary organization that inserted its financial self into the efforts against terrorism is the Wolfsberg Group. This Group formed in the late 1990s in response to the discovery of many high-level political and financial institution officials involved in money laundering. Such abuses of the private banking sector by those with substantial sums of money, in cooperation or collusion with those with access to political power, were seen by the major banking institutions as potentially undermining of the worldwide financial system. In response, twelve of the largest international banks406 and

406 These banks include ABN Amro N.V.; Banco Santander Central Hispana, S.A.; Bank of Tokyo-Mitsubishi, Ltd.; Barclays Bank, Citigroup; Crédit Suisse Group; Deutsche Bank AG; Goldman Sach, HSBC; J.P. Morgan Chase; Société Générale; and UBS, A.G.
the anti-corruption organization Transparency International (TI) undertook an initiative in 2000 that led to the development and adoption of “The Global Anti-Money Laundering Guidelines for Private Banking,” otherwise known as the Wolfsberg Principles. The eleven principles issued exclusively addressed money laundering for high net worth individuals and the private banking departments of financial institutions; their primary foci include customer identification and due diligence, establishing beneficial ownership for all accounts, and handling unusual or suspicious transactions.

In January 2002, the Wolfsberg Group issued “The Wolfsberg Statement on the Suppression of the Financing of Terrorism.” The statement declared that financial institutions can, by denying access to and investigating participation in the services they provide, help governments in the war on terror. Much like the eleven standards for money laundering, the Statement on Terrorism declared the need for greater customer due diligence and “know your customer” procedures, and enhanced oversight of financial sectors used by terrorist organizations. The statement also called for greater cooperation and information sharing between the government and private sector and between different private sector actors.

Separately, in November 2002 the Wolfsberg Group adopted a set of principles regarding relations between financial institutions and “shell” banks. Such “correspondent banking” relationships are an important entry point for unregulated

407 Winer, p. 34.
money into the legitimate worldwide financial system. For example, Al Qaeda uses front businesses to earn and move money, often using the lightly regulated Islamic banking system to do so. The correspondent nature of Islamic banks to the more regulated international banking system allows transfers from one system to the other with less scrutiny than a deposit from an organization directly into the international banking system. This represents an important loophole for terrorists trying to gain access to the international banking system.\footnote{Basile, Mark. "Going to the Source: Why Al Qaeda's Financial Network is Likely to Withstand the Current War on Terrorist Financing." \textit{Studies in Conflict and Terrorism}. Volume 27, Jan/Feb, 2004. p. 175.}

Assessment

The framework in which both the United States and international community approaches terrorist financing has evolved. Generally speaking, the United States, the United Nations, regional coalitions and large financial institutions have progressed in tandem over the past two decades, with each supplying unique contributions to the overall effort.

However, efforts to disrupt terrorist financing were belatedly introduced into overall anti-terrorism strategies, and terrorist organizations continue to frustrate authorities through their ability to quickly react to new initiatives. For example, by the time the US moved beyond it's state-centric approach to terrorist financing in 1995, all terrorist groups had diversified their revenue streams beyond exclusive state financing. Additionally, when President Bush issued EO 13224 empowering the US to seizing the assets of charities, non-profit organizations and other seemingly benevolent groups that were actually front organizations, many of those organizations simply moved their assets
to areas beyond US jurisdiction.\textsuperscript{412} Developments in the terrorists' ability to acquire and store their wealth thus far appear to be consistently ahead of developments in relevant authorities' abilities to disrupt those networks.

Furthermore, terrorists appear capable of eluding efforts to deprive them of ways to move their funds. Initiatives by major financial institutions focus largely on established, formal establishments. The FATF Recommendations and the Wolfsberg Principles, for example, are certainly improvements to the existing formal financial system, but terrorists can easily resort to other methods of money transfers, to include informal methods that are exceptionally difficult to regulate. Additionally, the movement from cash to commodities represents a major challenge for authorities hoping to disrupt transfers of wealth.

Finally, efforts around the globe, both in adoption of laws and enforcement of those laws, vary. This heterogenous landscape provides terrorists ample opportunity to shift their financial efforts to areas where laws and/or enforcement are weak. Given the ease in which funds can be transferred from areas with low enforcement areas to areas terrorists intend to use the funds, "weak-link" areas represent prospective loopholes in the global effort against terrorist financing. Specifically, off-shore banks, shell banks, and gray area financing all provide avenues for wealth to find its way to terrorist organizations and for those organizations to put it to use nearly anywhere in the world.

Given these limitations, it may be more accurate to characterize the impact of the current international effort to disrupt terrorist financing as "shaping" rather than "disrupting." Total revenue by Al Qaeda and affiliated groups is unknown, but terrorist fund-raising is continuing. Generation and storage of revenue has moved to areas beyond

\textsuperscript{412} Interview. Monahan, Kathleen. GAO analyst. 18 March 2004.
authorities' reach or is well camouflaged. Movement of wealth is similarly well camouflaged, or has migrated to alternative remittance systems that do not lend themselves easily to regulation.

The frequency of terrorist activities, on the other hand, is known; recruiting, creation of new groups, and most importantly, attacks have all increased since 9/11. Given that the ultimate goal of disrupting terrorist finances is to starve terrorist organizations of the funds they need to operate, thus far efforts to do so appear to be inadequate. Terrorist financial networks appear to merely have adapted to counter-finance initiatives, shaping themselves in such a manner as to elude authorities but still maintain a sufficient level of capability to support their operations.

**Results**

Most policymakers state that $136 million in terrorist funds have been seized since 9/11. The impact to terrorism as a result of these seizures is difficult to quantify; not having a clear picture of how terrorist organizations use money also means not having a clear picture of how they adapt to an environment with less funds. Observable indicators suggest little to cheer.

**Little Success in Actually Seizing Terrorist Money**

The vast majority of the funds seized after 9/11 were seized before January 2002 (see Figure 1). Since then, seizures have fallen off dramatically. The most likely explanation is that the terrorist organizations themselves quickly adapted to the new threats. By publicly announcing intentions to freeze funds in charities, front and shell businesses, and other known elements of terrorist financial infrastructure, the US sent a clear signal to the terrorists.
As mentioned earlier, most public pronouncements state that $136 million in terrorist funds have been seized since 9/11. This is a rather small sum, a mere .04% of the $300 billion annual global narcotics industry\textsuperscript{414}--another illegal financial network. Even this comparison is insufficient; while the claim of seizing $136 million is technically true, it is also misleading. Dissecting this figure shows that the total amount of new funds permanently denied to organizations associated with terrorist groups is actually closer to $26 million—a nearly negligible sum.

The U.S. has seized a total of $36 million since 9/11. Of that total, approximately $20 million was Taliban funds frozen by the US pursuant to EO XXXXX in 1998, after the bombing of the US embassies in Africa. On 13 September 2001, those monies were officially “seized,” and have since been used to help fund reconstruction of Afghanistan.

\textsuperscript{413} Compiled from various sources.

Therefore, the U.S. has frozen only $16 million in new terrorist funds since September 2001.

The international efforts are even less successful. While countries around the world did seize approximately $100 million in suspected terrorist funds in the three months following 9/11, that seizure was conditional upon the US providing adequate intelligence to support the allegation that the targeted money was indeed helping terrorist groups. Unfortunately, either due to insufficiency of the information shared or sensitivities leading to not enough information shared, approximately $90 million of those funds were subsequently released. Thus, on the international scene, only $10 million of new terrorist funds were seized.

Part of the lack of US success may be in a lack of true effort in seizing terrorist funds. OFAC maintains only four agents tracking all terrorist money throughout the world; this compares with 23 agents tracking U.S. citizens illegally sending money or traveling to Cuba. While the data necessary to make a full assessment of the optimal number of personnel to enforce counter-financing rules is elusive, given the complexity of terrorist financing, the previous numbers are disturbing.

_Terrorist Operations_

Additionally, terrorist operations appear to have increased. As Table 1 suggests, the number of terrorist attacks and the lethality of those attacks increased in the year following implementation of counter-financing laws, although attacks have abated since. Furthermore, the US State Department in its annual Patterns of Global Terrorism reported

---

that incidents deemed “significant” were higher in 2003 than at any other time since 1982, when the report was first issued.  

Table 1

<table>
<thead>
<tr>
<th></th>
<th>Attacks</th>
<th>Dead</th>
<th>Wounded</th>
<th>Total Casualties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 1 – Dec 31, 2001</td>
<td>1705</td>
<td>4548</td>
<td>3918</td>
<td>8466</td>
</tr>
<tr>
<td>Jan 1 – Dec 31, 2002</td>
<td>2642</td>
<td>2707</td>
<td>6699</td>
<td>9406</td>
</tr>
<tr>
<td>Jan 1 – Dec 31, 2003</td>
<td>1806</td>
<td>1962</td>
<td>5407</td>
<td>7369</td>
</tr>
<tr>
<td>Jan 1 – Aug 18, 2004</td>
<td>920</td>
<td>1975</td>
<td>4300</td>
<td>6275</td>
</tr>
</tbody>
</table>

This metric is far from conclusive, however. A significant lag effect may exist in terrorist operations; money seized today may affect operations planned for many months hence, whereas attacks conducted today may have been financed years earlier. Furthermore, the RAND/MIPT database used to tabulate these results does not take into account all political violence in Iraq. That conflict may be providing incentives to would-be jihadis to conduct more insurgency-type attacks within Iraq than terrorist attacks elsewhere. One can say conclusively, however, that the new counter-financing laws have failed to stop or even substantially decrease terrorist attacks. Whether or not the laws have otherwise impeded terrorist activities is unknown.

What is observable, however, is the transformation of the networks that handle terrorist monies. As mentioned in Chapter 3, Al Qaeda and its affiliates have adapted quickly to each attempt to disrupt its money supplies. Cells that are affiliated with Al Qaeda through sheer ideology, and are acting on its behalf without its guidance or support, are fund-raising autonomously. Reports suggesting Al Qaeda continues to solicit donations via the Internet, acquire funds through smuggling and through front businesses persist.


Chapter 5: Simulating Terrorist Financing

This dissertation advances inquiry to terrorist financing and infrastructures through the use of exploratory simulation. This chapter provides a brief background on the advantages of this type of quantitative technique and why it is particularly appropriate to the issue of terrorist financing, an explanation of the model itself, and a description of the various policies represented by the different variables in the simulation.

Exploratory Simulation Modeling and its Application to Terrorist Financing

Applying typical empirical analysis methods to the terrorist problem, especially quantitative policy analysis tools such as economics, statistical decision theory and game theory, is problematic for a variety of reasons. First, a great deal of uncertainty exists. As explained earlier, reliable data on terrorism is scarce, and collecting such data is difficult. Furthermore, economic approaches to terrorist behavior require developing well-formed utility or cost functions; present insights to terrorist rationale and decision-making currently place this intellectual accomplishment out of reach. Obviously, well-designed experiments regarding the subject are impossible. Thus, moving analysis of terror financing beyond descriptive narrative is difficult.

An alternative to these approaches is exploratory modeling, simulation and analysis. Simulation can be described as "a numerical technique for conducting experiments with certain mathematical models describing the behavior of a complex system."\textsuperscript{418} Exploratory methods expand on this basic definition by developing and analyzing computational experiments over a range of models, each with a different

functional form and range of variable values. Indeed, when inadequate data, information or irresolvable uncertainties[^419] preclude building a verifiable proxy system, exploratory approaches to complex systems are a preferred type of inquiry.[^420] Individually, no single model can be taken as a reliable image of the target system itself; however, analyses of the entire ensemble of simulations provide a collective computational experiment to show how the target system would behave if the estimated models were correct. Exploratory modeling and analysis, then, is the use of a series of such computational experiments to explore the implications of varying assumptions and hypotheses.

This different approach necessarily entails a different end objective. Traditional policy analysis, relying heavily on verifiable models, observed data and validated functional forms, seeks to optimize some output against to a pre-selected set of criteria. This optimized model can then be used as specific guidance for policymakers; it is predictive in nature. Information in this sense acts as a constraint—the greater the verifiable information of the target system, the more likely a single, accurate “ideal” model can be built that presents some level of predictive value.[^421]

Conversely, deep uncertainty means insufficient information regarding the target system to create a single “ideal” model; no single functional form can be verified. Consequently, prediction using or optimization of any particular functional form is not useful for policymakers. However, if enough information and knowledge about the

[^419]: This situation is sometimes referred to as “deep uncertainty.” This is a situation where not only are the values for certain key parameters unknown, but the probability distributions which may statistically model them are unknown as well. See Bankes, Steve. “Tools and Techniques for Developing Policies for Complex and Uncertain Systems.” (Santa Monica, RAND Corporation). 7 May 2002. Available on-line at http://www.pnas.org/cgi/content/full/99/suppl_3/7263#SEC2 as of 2 August 2004.


particular target system exists, an ensemble of plausible functional forms can be constructed and analyzed. These series of "guesses" attempting to accurately capture the target system creates a series of outputs of what would happen, given a change in policy, if those "guesses" were correct. Such computational experiments, whose outputs cannot be regarded as predictions, can be used for a variety of methods to support policymaking: to examine ranges of possible outcomes; to suggest hypotheses to explain puzzling data; to discover significant phases, classes, or thresholds among the ensemble of plausible models; or to support reasoning based upon an analysis of risks, opportunities, or scenarios.

An additional objective of exploratory modeling is robustness of variable effects across the ensemble of functional forms. By definition, robust strategies are those that are insensitive to uncertainty. Rather than finding the optimum strategy based on predictions, exploratory modeling enables analysts to systematically and analytically evaluate alternative policies against a wide range of plausible scenarios and thereby directly address the real task that faces issues regarding terrorist financing -- crafting strategies that are robust in the face of an opaque and unpredictable system.

This simulation represents a first step in exploratory simulation of terrorist financing. This basic model is designed to investigate how the conditions within a country, the attitude of the citizenry and various attributes of a set of terrorist cells come together to raise funds for conducting terrorist attacks. It is only a first step—much more work, such as building and testing entirely different models, applying a variety of

---

modeling techniques, (especially agent-based modeling) must be done to explore more fully the basic ideas and relationships presented here.

**Description of the Simulation**

This simulation involves three categories of actors. The first category is the inhabitants of a given country that would at least nominally be under that country's jurisdiction. The inhabitants are the base source for funds that may flow to terrorist groups; all the inhabitants have certain attributes, including a level of acceptance or rejection of the radical Jihadi ideology, a risk aversion, and an endowment of wealth. The second category is the entity that provides security and enforces law—the state. The state has observable attributes—a regime of laws regarding the financing of terrorist organizations, the degree to which that regime is enforced, the number of law enforcement agents within the country, the size of its population, and the punishment meted out for breaking those laws. While “the state” suggests a monolithic entity, the simulation realizes a significant degree of heterogeneity can exist within a state, and generates output with that in mind. The attributes of these two actors—the inhabitants and the state—interact to form the terrorist fund supply. The third category is a set of terrorist groups, the actors that solicit money from the inhabitants. The terrorist groups have their own constraints, such as levels of acceptable risks as well as budgets allocated for raising more funds. These constraints and characteristics help define the money demand for terror operations. Collectively, these categories of actors and their attributes

---

interact with one another to produce an actual level of terrorist funding and the resulting potential violence that level of funding could support within a given society.

This simulation does not attempt to capture all the phenomena in terrorist financing. For example, terrorists often resort to deception to trick donors who do not support the jihadi cause to donate; these unwitting donors made up an unknown portion of the terrorist revenue stream. Nor does the simulation explicitly take into account subversion or corruption by government officials, or whatever remnants of state sponsorship for terrorist groups that remain. Exploratory analysis does not require a perfect simulation of the target system—merely a plausible one.

Attributes of the Inhabitants

The simulation assigns three characteristics to each of the inhabitants in the simulation: level of acceptance or rejection of the radical Jihadi message, a degree of risk aversion, and an endowment of wealth.

Acceptance of Jihadi Message (J): level of acceptance or rejection of the radical jihadi message. The simulation draws a random number from $N(0,1)$, the normal distribution truncated on the interval $(0,1)$. The closer to 0, the less acceptance of the jihadi message by a citizen, and a ranking closer to 1 reflects a citizen with a strong commitment to the jihadi cause. “Acceptance” can be the result of intrinsic conviction or from external motivation, such as extortion.\footnote{The difference between donations stemming from true support and those coming due to coercion is important, although this nuance is not captured in the simulation. If a set of inhabitants truly support a jihadi cause, they will be pushing donations, whereas if they are coerced, terrorist groups are pulling donations. The latter is far easier to staunch than the former.} Whatever the underlying motivator, this variable reflects an inhabitant’s resulting support of violence. This simulation assumes that belief influences the decision to act. Ideological support, when it becomes sufficiently fervent, may translate into financial or operational support. At the extreme
end—such as a ranking close to 1—a citizen may choose to join the terrorist organization, becoming a terrorist operative.

**Wealth (M):** Each individual citizen also has randomly assigned wealth endowment, which is the absolute value of a randomly drawn number from the normal distribution with a mean of zero. This represents a notional wealth distribution, but one that is typically observed in a developing country—a few people are rich, a small middle class exists, but a large percentage of the population has little money. This particular distribution can be empirically observed for a specific country and modified as necessary.

**Risk Tolerance (R):** Each individual also is assigned a risk tolerance level, drawn from $N(0,1)$, initially with a mean of .5. The lower the number assigned to the citizen, the less tolerant the citizen is of risk and vice versa. Assigned risk is then conditioned on wealth (M) through a natural log function. This represents the notion that those with little to lose may be more willing to accept risk than those with some wealth, but only up to a point. Upon reaching a certain financial threshold, the additional wealth may decrease the individual's aversion to risk. Again, this is a reasonable but notional simulation of risk; analysts can conduct well-designed surveys to provide actual data to feed into the simulation if such specificity is desired.

**Attributes of the State**

The security environment the state creates provides additional parameters for the individual's decision on whether to fund terrorist organizations. The state has several simple and observable characteristics that are key to this simulation: the total population (T), the number and quality of law enforcement authorities (A), and the maximum jail sentence imposed for the crime of financing terrorism ($J_{max}$).
Quality of Anti-Funding Laws (Q): States all have a regime of laws regarding financial transactions, some of which will address providing funds to violent groups. The quality of this regime of laws will vary from country to country, but will be consistent within a country. The country will thus receive a ranking between 0 and 1, with 0 representing little to no laws regarding financial transactions, with a ranking of 1 representing the best set of practices observed. For any given country, the ranking assigned is a mixture of objective and subjective assessments.

Enforcement of Anti-Funding Regime (E): In addition to the number of law enforcement agents mentioned above, the state must also enforce the anti-financing regime it adopts. Enforcement will vary within a state; some areas will enforce the laws more stringently than other areas. Again, this variable is the absolute value of a random number drawn from a normal distribution with a mean and standard deviation that can be manipulated by the user, reflecting adoptions of policies which increase or decrease enforcement of laws as well as the range of that enforcement. The state also has the capacity to provide various levels of punishment that ostensibly create different levels of deterrent (d) to would-be criminals. Deterrence in this model is directly related to the harshness of the punishment; ten years in a minimum security prison is significantly different than ten years in a dungeon-like cell where torture routinely occurs.

Capacity to solicit and collect donations (C): Finally, terrorist agents collecting funds must infiltrate the state to do so. These agents provide certain access points for would-be donors to put their money into the terrorist financial infrastructure. These "bundlers" or "collectors" are the important liaison between the citizenry and the terrorist group. Simply because someone has money and wants to donate to the Jihadi cause does
not mean they have the capacity to do so. This capacity of the terrorist to solicit and accept donations represents the number and capability of such access points within a state.

The Decision to Donate

The decision of any individual citizen depends on a simple assessment: if their incentives and capability to give funds to a terrorist group is higher than their assessed net risk of doing so, they will donate. Otherwise, they will not donate. The simulation therefore calculates both values—the "give factor" (G) and the net risk (N). The decision is expressed as:

If G > N, donate. If G ≤ N, do not donate.

The give factor (G) is a function of an individual's desire and ability to donate. Desire is simply commitment to the jihadi message J, multiplied by the individual's risk tolerance R, or J*R. Ability to give is determined by the individual's wealth M, multiplied by the access an individual has to entry points to the terrorist's financial infrastructure. All these elements must be present—an individual must be committed enough to the Jihadi cause to donate money, must not be too risk averse at doing so, must actually have money to give, and must have a point of access where he can donate the money. If any one of these elements is missing, the donation will not take place. In sum, the "give factor" is a product of belief, risk tolerance, wealth and capacity:

Give Factor = J x R x M x C

The net risk factor represents the individual's assessment of the jeopardy of donating funds, given the security environment the state in which they operate presents. The first major calculation the individual makes is "probability of arrest," P. This calculation is a function of the quality Q and level of enforcement E of anti-financing
laws, as well as of the ratio of law enforcement officials $A$ to potential donors. ("Potential donors" are simply the product of population $P$ and capacity to give $C$.)

**Probability of arrest** $P = 1 - \exp((-Q \times E) \times A / (P \times C))$

Net risk is also a function of the punishment $J$ an individual will receive if caught, conditioned on the deterrent factor $d$ of that punishment. As the result of arrest becomes increasingly worse (i.e. a longer jail sentence conditioned on the harshness of jail), an individual’s net risk increases. Therefore, net risk is calculated as follows:

$Net\ Risk = P \times J^{d}$

**Size of donations**

Each individual in the simulation who chooses to donate can donate in one of three magnitudes: a small amount (1 unit of wealth), a medium amount (25 units of wealth) or a large amount (50 units of wealth). Assuming an inhabitant has made the decision to donate, the main determinant on how large the contribution will be is the individual’s wealth. A poor citizen may have high commitment to the jihadi cause and have a high tolerance for risk, but his donation will be limited by his low wealth. The second determinant of the size of the donation is risk tolerance and the net risk. A wealthy person with a high commitment but a low risk tolerance may choose to donate only a small amount of money, as that represents a less risky course of action. The following rules assume that the citizen has assessed the risk environment and has already made the decision to donate—the subsequent decision of how much to donate is now

---

425 This can also be seen simply as a derivative of the Expected Utility Theorem, which states an individual’s utility is the product of the probability of an event happening and the utility of that event happening.

426 The derivations of probability of arrest and net risk are adaptations from Epstein and Parker’s agent-based model regarding civil violence. See Epstein & Parker, *Modeling Civil Violence: An Agent-Based Modeling Approach*.

427 Some highly motivated but poor individuals may choose to illegally acquire funds through criminal efforts. The dynamics of such decisions are currently poorly understood; therefore, this simulation does not attempt to include such behavior.
under consideration. A summary of the rules governing the size of the donation is as follows:

\[
\text{If } W > 1 \text{ and } P < 0.03, \text{ then donate large}
\]
\[
W > 1 \quad P < 0.05 \quad \text{medium}
\]
\[
W > 1 \quad P > 0.05 \quad \text{small}
\]
\[
1 > W > 0.8 \quad P < 0.03 \quad \text{medium}
\]
\[
1 > W > 0.8 \quad P > 0.03 \quad \text{small}
\]
\[
W < 0.8 \quad \text{small}
\]

 Depending on the structure of the observed wealth distribution in the country, these wealth cut points between those capable of donating differing amounts can be adjusted.

\textit{Terrorist Group Attributes}

The first two actors in this simulation—the collection of individual citizens and the state—provide the informing variables to shape the terrorist money supply curve within the society modeled. The next actor—terrorist groups themselves—provide the attributes necessary to simulate the demand for money for terror operations.

Terrorist organizations have their own set of attributes—they have their own risk threshold ($R_t$) and budget threshold for soliciting funds ($B_t$). The simulation assumes a set of heterogeneous terrorist organizations within the society,\(^{428}\) each soliciting donors and collecting money. As each group successfully solicits a donor, it costs that group one wealth unit. Additionally, as the group collects funds, it has to either decide to attack with the money it has, or to pool its financial resources and continue to collect money. As the group continues to collect funds and its accrued wealth is increased, generally the risk of keeping that wealth increases as well. The cumulative risk is calculated as follows:

\textbf{Large donations: }1.3(\text{Average } P^{429})

\(^{428}\) The analyst can set each of the three attributes for all of the terrorist groups in the model.

\(^{429}\) The average probability of arrest is calculated as the average of the 2000 citizens in each iteration of the model. This is making the assumption that the terrorist group perceives risk at the same level as the collective society perceives risk, an assumption that is not strong.
Medium donations: 1.1(Average P)
Small donations: Average P

The decision rule on whether to attack or continue collecting donations is when either one of the constraints—the risk or budget thresholds—is exceeded. Again, these thresholds are heterogeneous for different terrorist groups in the simulation, and can be easily adjusted. The rule for attack is:

\[
\text{If cumulative risk} > R_t \text{ OR } B_t = 0, \text{ then attack; otherwise, continue to collect funds}
\]

The simulation thus generates a thirteen-dimensional supply curve\(^{430}\) of terrorist financial support within a hypothetical country. The attributes of the terrorist organizations themselves then generate a three-dimensional demand curve\(^{431}\) depending on the attributes of each organization, these terrorist organizations then conduct some number of attacks under the given security environment. The simulation then records how many total attacks\(^{432}\) could be funded in that particular run of the simulation, how much money an active terrorist organization collected before becoming financially able to conduct an attack, and what the portfolio of those funds looks like (i.e. how many small, medium and large donations were collected).

\(^{430}\) These dimensions refer to all the different variables: commitment mean, commitment standard deviation, risk mean, risk standard deviation, wealth mean, wealth standard deviation, capacity, quality of law regime, enforcement level, number of law enforcement agents, state population, length of punishment and type of punishment.

\(^{431}\) These dimensions are each terrorist group’s fundraising budget, fundraising requirements, and risk aversion.

\(^{432}\) The simulation does not provide attributes of an “attack”. By arbitrarily assigning a fund-raising goal to a terrorist organization—that goal being whatever that particular organization defines as necessary to conduct some operation—“attack” can be a single operation or a complex set of operations. The dissertation assumes that complexity and lethality of attack linearly increases with funds raised. Therefore, should a terrorist group have a high fund-raising goal and obtains it, the group is capable of conducting a complex, lethal attack.
Optimal Terrorist Responses

The dynamics between supply of terrorist funds and the various attributes of terrorist groups create varying levels of opportunity. These levels are defined by the total supply of contributions and the three different sizes of donations, constrained by various risk factors and operational requirements of the terrorist groups. The terrorists enjoy the position of reacting to the environment in which they choose to operate, and can adjust their activities and requirements to best respond to the money supply and risks.

The terrorists' ability to respond to funding opportunities and risk constraints are divided into two periods—optimizing during the current period and choosing a course on how best to try to modify their environment during subsequent periods. In other words, terrorist organizations collectively optimize their operations given the parameters of the simulation; they may then analyze those parameters and attempt to modify them in subsequent periods to expand their opportunities.

Simple linear programming is used to determine the optimal terrorist responses, identify the binding constraints, and suggest the most advantageous strategy for future periods of the simulation. The results of the simulation—money supply and number of each donation size represent inputs, while risk attributes, operational requirements and fundraising budgets of the terrorist organizations represent the constraints.

Assumptions

Several assumptions are made regarding the relationship between the supply of terrorist dollars and terrorist organizations. First, the simulation assumes terrorists have
perfect information. The jihadi groups can survey the environment in which they operate, accurately gauge the supply of funds available, the danger posed to them by the state, and precisely understand their own risk aversions and operational requirements. This allows the array of terrorist groups to collectively respond to and optimally use the funds available to them while simultaneously avoiding unacceptable risks.

The model further assumes terrorist groups successfully collect all terrorist dollars available; the array of terrorist organizations thus adjusts in the model so that no available donations are left unused. Thus, as terrorist group attributions adjust (even given a constant money supply curve), the number of groups, the total amount of money each group collects before making the decision to attack, and the number of attacks can change.

A further simplifying assumption is made regarding the relationship between the size and complexity of a terrorist attack and the amount of money collected to support that attack. This experiment assumes complexity and size of terrorist attacks are linearly increasing in cost. In other words, if a terrorist organization is capable of collecting a larger cache of funds prior to attacking, that organization is enabled to conduct a more significant attack than a group that collected a lesser amount. This assumption is admittedly problematic; terrorist organizations can acquire less expensive technology, increase their efficiencies and productivity, or adopt techniques and procedures in their attacks that are less capital-intensive but still produce the same level of violence. This simulation does not attempt to capture such reaction curves on the part of the terrorists.

Policy Levers Accommodated by the Simulation
Seven of the thirteen variables in the model are designed to represent a spectrum of potential policies designed to combat terrorist financing. Such a design enables the analyst to explore the possible effects of any one or any combination of policies. The simulation should not be used in a strictly predictive sense; rather, it’s value lies in providing a plausible framework of analysis that creates greater structure and insight on the complex issue of terror and money, as well as identifying informational shortcomings, both in availability and reliability. Thus, changes in the simulation output resulting from changes in these policy levers should not be taken literally—rather they should be considered one element of increasing the understanding the target system.

**Acceptance of Jihadi Message**

Al Qaeda and its affiliates desire and benefit from a greater acceptance of a militant interpretation of Islam. Jihadist leadership pursues a variety of policies aimed at mainstreaming their philosophies, to include funding madrassahs that teach jihadi beliefs, publishing websites, newspapers and other forms of media that spread that point of view, and terrorist leaders releasing videos and voice recordings advocating violent actions. The effect of these policies is captured in the simulation by increasing the mean of the acceptance of jihadi message (J) variable. As a greater acceptance of jihadi thought permeates a given society, more individuals will be willing to provide financial support to such organizations, assuming other variables stay constant.

Policies that marginalize violent Islamist ideas decrease the mean of the J distribution, resulting in fewer willing donors within a society (again assuming other variables stay constant). These policies can include programs designed to win “hearts and minds” of a society (programs which woo the populace towards a different and specific set of values or political beliefs other than that of the terrorists) or policies to
discredit the terrorists (programs which cast violent Jihadi ideas in an unfavorable light, thereby undermining the public support the terrorists enjoy). Specific policies pursued by the US in the past include creating an office in the Under Secretary of State for Diplomacy and Public Affairs specifically designed to “Sell America” (especially to the Muslim world433) as well as introducing an expanded Western media presence (such as Radio SAWA) to promote a positive image of Western values to the Arab world. Other policies may include expanded cultural, education, and athletic exchanges, increased economic interactivity, and expanded political contacts.

Operationalizing this variable for a specific country is challenging but feasible. Determining the general shape of this variable’s distribution is possible, especially given the increased efforts by various polling organizations to capture attitudes in the Islamic world.434 By analyzing such public opinion data, a plausible and reasonable estimate of the mean and standard deviation of this distribution is possible. Absent such polling data, one can make informed subjective estimates of this parameter by polling country experts, examining both the formal and informal power structures of Islamist institutions in the country, the number of fundamentalist madrassahs, the activity of jihadi organizations within the country, and the reaction of the citizenry of that country to jihadi activities.

Capacity to Give

This variable measures the capacity of the terrorist organizations to solicit and accept donations. Explained differently, it is the capacity of the inhabitants of a given


434 Shibley Telhami, the Anwar Sadat Professor for Peace and Development at the University of Maryland and a non-resident Senior Fellow at the Saban Center for Middle Eastern Studies at the Brookings Institute, explores the recent increase of polling in the Middle East by both Western and Middle Eastern analysts in Reflections of Hearts and Minds: Media, Opinion and Arab Identity. (Brookings Institute Press, forthcoming).
country to find access points to the terrorist financial infrastructure to give their donations. These access points are key nodes where transfers of wealth between inhabitants and terrorist groups take place. These nodes may be charities, wealthy individuals, financiers or "bundlers," tithing plates at places of worship, front or shell businesses, or any number of other creative mechanisms that terrorists can fashion. More opportunities and methods to transfer wealth into terrorist coffers translate into a higher capacity value, whereas fewer such access points results in a lower value in the simulation. States may pursue policies that specifically target such capacity, including the creation of financial intelligence units to fight money laundering, increased regulation of black and gray economic activity, conducting sting operations against possible financiers, and requiring greater financial transparency in all financial systems and charitable organizations, and controlling donations at places of worship.

**Number of Anti-Terrorist Agents**

This factor is nearly self-explanatory. The greater the number of agents, the greater the chances of being caught for providing money to terrorist organizations, all other things equal. A higher per-capita number of enforcement agents provide a greater deterrent, as such a ratio is a key component of the perceived probability of arrest. This simulation can map the effects of a given number of such agents on both donations and terrorist attacks, given various other parameter settings.

**Quality of Anti-Terrorist Funding Regime**

Significant differences exist among various countries’ laws regarding financial activity. Some (mostly western) countries have rigorous financial laws, made even more so as a result of the 9/11 attacks. Other countries (such as Liechtenstein, the Bahamas, Nauru and other areas where banking laws were or are intentionally negligent in an effort
to attract monies from wealthy individuals and businesses wishing to avoid regulation and scrutiny) have unusually lax laws. The quality of this anti-terror funding regime plays into inhabitants’ perception of their probability of arrest; the stronger the regime, the greater the probability of arrest, and vice versa.

One plausible method for operationalizing this variable is through the judgments rendered by the Egmont Group, described in detail in Chapter 4. Those countries that are on the Egmont Group blacklist would receive no higher than a .3 on this scale. Lower rankings are provided for those countries that are egregiously lax in their regime. Those countries that are full members of the Egmont Group, including having satisfactorily passed the Egmont evaluation as having fully implemented the Eight Special Recommendations, would receive at a minimum a .8. Higher rankings are given to those countries that go above and beyond the Eight Special Recommendations.

**Enforcement of Anti-Terror Funding Regime**

A country may adopt a strong anti-terror funding regime, but it must also have the political will and capacity to enforce those laws for the regime to have effect. The simulation is more useful by making this distinction. A country can have a strong regime with strong enforcement, a weak regime with weak enforcement, or a mixture of the two. The ultimate effect on reducing terrorist financing is thus a combination of both quality and enforcement of that regime.

Furthermore, understanding why a country may receive a low ranking on enforcement is important before prescribing a policy approach for that country. For example, the political leadership of a country that passes quality laws may not have the political will or internal capacity to properly impose those laws on its inhabitants. Pakistan provides a suitable example. Prime Minister Musharaf may want to pursue and
arrest all members of Al Qaeda within the country, but the internal security forces simply are not capable of doing so. In such a case, the US has a willing but not particularly proficient partner. Saudi Arabia provides the converse example. The Saudi regime has well-trained internal security forces and adequate internal intelligence, but until Al Qaeda operatives began conducting attacks within the Kingdom, the House of Saud had little appetite for conducting operations against the organization inside its own borders. An appropriate policy to modify low political will may be substantially different than a policy designed to address low capacity to enforce. Pakistan would benefit from a greater emphasis on capacity building, whereas Saudi rulers needed motivation.

Punishment if Caught

The simulation models punishment as jail time, calculated as a percentage of the expected remainder of an individual's life. The variable was modeled as a percentage to take into consideration the different ages of potential donors; a ten-year prison sentence may be more of a deterrent to an older individual than to a young one, as it represents a greater portion of the expected remainder of their lives. A maximum rating of one translates into an individual receiving a life sentence, whereas the minimum ranking of 1 suggests an individual will be assigned to 10% of the expected remainder of their life.

Deterrent

This represents the potential deterrent value of possible jail time spent if an inhabitant is caught. Deterrent is estimated to be increasing with expected harshness of incarceration. If jail within a country is at a minimum-security prison with various amenities, or a country does not have the death penalty, the deterrent is relatively low. Conversely, if jail time is served in far more austere conditions, or in a country where
torture is known to occur (such as in Egypt, the Philippines or Uzbekistan\textsuperscript{435}), the value assign to the deterrent variable is higher.

\textbf{Variations of the Model}

To be truly considered exploratory, an ensemble of models must be examined. The value of investigating different function forms, relationships, distributions and other modifications is finding the consistencies across the ensemble, and finding those policy levers where action is robust to uncertainty.

This dissertation explored the following modifications of the basic model described above:

-- replace normal distributions with skewed normal and uniform distributions, and dropped the upper truncation of the normal distributions;

-- created a feedback loop such that prison harshness (deterrent) at .7 or above undermined the legitimacy of the government, and thereby increased commitment to jihadi ideas \textsuperscript{I};

-- increased the threshold for the giving decision; the give factor $G$ had to be 1.1, 1.2 and 1.3 times as great as the net risk $N$ before the individual would give;

-- expanded terrorist groups attributes to unlikely levels (to include fund-raising budgets are larger than operational budgets and excessive risk tolerance);

These modifications are more accurately considered exploratory analysis, a subset of exploratory modeling. Wholesale model changes—such as choosing a different modeling paradigm—would completely flesh out a full-scale exploratory modeling effort, but are beyond the scope of this effort.

Conclusion

The exploratory simulation detailed in this chapter marks the first step in applying this analytical technique to terrorist financial infrastructures. It is a system that defies traditional forms of inquiry—no experimentation is possible, and the standard set of empirical investigative tools is inappropriate. This simulation is not designed to provide specific predictions or outcomes of policies affecting terrorist financing. Rather, it is aimed at facilitating the phenomenon of terrorist financing.

The simulation has nine different continuous variables, which can create an infinite number of permutations of the variables. A full factorial design with each variable taking on three values—the high, the low and mid-point of the variable’s range—was executed to draw the basic shape of the model space creating $3^9$, or 19,683 possible combinations. The simulation was run 100 times under each combinatorial possibility, for a total of 1,968,300 runs of the simulation. An assessment of the model space provided further guidance on areas where the model surfaces were interesting or appeared to hold key issues for policy analysis.

Expanded exploratory modeling in those specific areas followed, reducing the scope of the model space but increasing its granularity. Specifically, robustness among the various policy variables is tested among different wealth distributions, different risk aversions, and in an environment featuring terrorist groups with a range of attributes. Additionally, different functional forms around these specific areas were explored to gauge the sensitivity of those forms. The results of the model are discussed in Chapter 6.
Chapter 6: Simulation Results

The ensemble of models described in Chapter 5 produced a substantial amount of output. This chapter will explore four general areas that are most important and germane to policies terrorist financing. These areas are:

- What happens to total donations, money movement and storage, and number of terrorist attacks financed as various policy levers are used?
- What is the most effective policy lever and combination of levers at disrupting terrorist financial infrastructures? What are additional areas for inquiry to more fully answer this question?
- What happens to specific demographics as policy levers are used? Specifically, how do wealthy, middle-class and poor people react under the given policies?
- How would terrorist groups best adapt to the counter-financial policies pursued?

For each of these questions, key areas of the model space are explored, searching for effects not only on the total and type of donors, but also the total wealth made available to terrorists under each scenario. Both questions are important. Total wealth donated to terrorists is the central question regarding the effectiveness of counter-financing policies, but the total number of individuals actively providing financial support to terrorist groups is important for other terrorist support functions, such as recruiting. While the issue of recruiting and other terrorist support activities is beyond the scope of this dissertation, this information is worth noting.

General Results on Donations

Each of the seven policies produced measurable influences on total donations and total cash raised to terrorist organizations. No discontinuities exist within the model space, and all effects observed from changes in variables are in the expected direction. As any of the policies that increased net risk $R$ were strengthened in the simulation, total donations correspondingly decreased. As the simulation
strengthened any of the factors influencing the give factor G, total donations correspondingly increased.

Assessment: No set of policies resulted in an end to terrorist funding; even the most extreme set of policies resulted in a donor base capable of funding some form of attacks.

Regardless of the policy settings of the simulation, amount of money was available for the terrorists to collect. Even in the unlikely scenario that favors the authorities as much as possible—the lowest possible settings for commitment and give capacity variables and the highest possible for quality of law, enforcement of law, anti-terror agents, jail and deterrence—on average 120 small and one each medium and large donations (a total of 195, ample funds for a simulated attack) were available. Another extreme but more realistic scenario, where both the terrorists and authorities are both maximizing their efforts to raise funds or disrupt those funds respectively, results in a lucrative donor base of 227 small, four medium and 68 large donors, for a wealth level of 3,727, enough to fund dozens of simulated attacks.

This is not to say disrupting funding mechanisms has no effect on terrorist operations. Decreasing revenue affects any organizations, jihadi groups included. The effect of a loss in funds on operational capability, however, is a different area of analysis. The simulation clearly suggests that the goal of stopping funding completely for terrorist groups is impossible. Indeed, shrinking terrorist revenue to the point of stopping terrorist operations is highly unlikely as well. A more modest goal—shrinking terrorist revenue so that it eventually slows terrorist operations and affects the terrorist planning cycle, to possibly include causing the terrorists to spend more effort fundraising instead of
planning operations—is realistic. This particular assessment is the most important contribution by this simulation.

**Assessment: Give Factor variables dominate Net Risk variables**

Delving further into the two halves of the donation model—examining the variables that are used to calculate the give factor $G$ assessment and the net risk factor $R$—interesting patterns emerge. First and unambiguously, give factor variables exert greater influence on the decision to donate than do risk factor variables. In other words, the policies that affect the net risk factor (which are all policies the state almost exclusively, if imperfectly, controls)—quality and enforcement level of the law, number of anti-terrorist agents active, and jail length and severity—have less influence on the inhabitants decision to donate than do the variables determining give factor (figures 1-2). Across all models and regardless of wealth levels, both commitment and capacity to give are more important than any of the state-controlled variables. As figures 3-4 suggest, both commitment and give capacity individually are more influential than any single net risk variable (figures 5-8), and nearly as influential as the entire bundle of policies that factor into net risk assessments.
Figure 1: Effects on Total Donations by Increasing the Net Risk

Total Donations (by type) as Net Risk Factors Increase

Assessment: Law Variables Dominate Punishment Variables Within Net Risk
Examining the net risk policies individually, magnitudes of influence were substantially different (see Table 1). Across all model variations tested, passing better laws, better enforcing those laws, and increasing the number of anti-terrorism agents in the country yields a far greater effect than does increasing jail time or increasing the deterrent of punishment. Even when combined, increasing jail sentences and the deterrent level associated with those sentences was dominated by quality of law, enforcement of that law, and the number of agents actively enforcing the law. Of note, when the high deterrence helped influence commitment to jihadi causes, the resulting increase in commitment quickly overwhelmed any additional benefits of higher harshness of punishment. In other words, excessively harsh punishment may actually work towards increasing the supply of dollars available to the jihadis, as it can fuel anti-government backlash and pro-jihadi sentiment.

Interestingly, even within the set of variables determining an individual’s net risk, the inputs with the greatest efficacy are those that undermine the ability to give (better laws and enforcement) rather than those that more directly affect an individual’s risk perception (jail and deterrence). This dominance of law variables over punishment variables is further indication within the simulation that activities affecting an inhabitant’s ability to give are more salient than variables directly affecting an individual’s avoidance of risk.
Figure 3: Effect of Increasing Commitment

Change in Total Donors as Commitment Increases

Figure 4: Effect of Increasing Give Capacity

Total Donations by Type as Give Capacity Increases
Fig 5: Effect of Increasing Law Quality

Fig. 6: Effect of Increasing Enforcement
Fig 7: Effect of Increasing Agents

Total Donations with Increases in Anti-Terrorist Agents

Number of AT Agents in a 5M population
Fig 8: Effect of Increasing Jail Time

![Graph showing the effect of increasing jail time on the number of donors.]

**Figure 9: Effect of Increasing Deterrence**

![Graph showing the effect of increasing deterrence on the number of donors.]

Marginal increase in Deterrence
Figure 10: Effect of Increasing Deterrence; Deterrence Affects Commitment

Total Donors as Deterrence Increases (Deterrence Linked to Commitment)
Table 1: Numerical Results from General Sensitivity Analysis

<table>
<thead>
<tr>
<th>Policy Lever</th>
<th>Ranking Across Models</th>
<th>Average Percentage Change Across Variable Range (L/M/S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity to Solicit/Collect Funds</td>
<td>High</td>
<td>100% / 100% / 96%</td>
</tr>
<tr>
<td>Commitment to Jihadi Cause</td>
<td>High</td>
<td>91% / 95% / 75%</td>
</tr>
<tr>
<td>Effectiveness of Anti-Funding Laws</td>
<td>Medium</td>
<td>87% / 84% / 22%</td>
</tr>
<tr>
<td>Level of Enforcement</td>
<td>Medium</td>
<td>54% / 81% / 14%</td>
</tr>
<tr>
<td>Number of anti-Terrorism Agents</td>
<td>Medium</td>
<td>59% / 70% / 32%</td>
</tr>
<tr>
<td>Jail term (length)</td>
<td>Low</td>
<td>27% / 31% / 10%</td>
</tr>
<tr>
<td>Jail severity (deterrence)</td>
<td>Low</td>
<td>43% / 48% / 12%</td>
</tr>
</tbody>
</table>

Figure 11: Comparisons of Policy Effectiveness on Reducing Donor Base

The total number and type of donors involved in terrorist financing is an interesting, if secondary, metric. The more central issue regarding the effectiveness of policies designed to disrupt terrorist financing. As mentioned in the previous chapter, in
this simulation large donations are 50 units, medium donations are 25, and small donations are 1 unit each. Thus, the marginal benefit of stopping a large donation is 50 times as much as a small donation. Thus, the policy that more effectively stops larger contributions is more effective than the policies disrupting smaller ones.

Comparing the seven policies against the total money rather than the total donors stopped suggest that the quality of laws variable becomes nearly as important as the give capacity and commitment variables (fig 11). This makes intuitive sense. Large donations typically require infrastructure—a banking system, wire transfer mechanisms, business accounts or other such accoutrements enable ease of movement and storage. Such financial infrastructure lends itself to strict oversight, should a governing authority decide to do so. A wide range of laws exist to govern such financial institutions, ranging from the US, with very strict oversight, to off-shore banks, which extraordinarily lax oversight. Large donors obviously prefer less oversight in order to decrease their exposure and risk. Better laws governing financial systems would less affect smaller donors, who ostensibly do not need such infrastructure.

Figure 11: Comparisons of Policy Effectiveness on Stopping Donor Cash
Policymakers should be cautioned, however, that pursuing policies that exclusively target large and medium donations while ignoring small donations would probably only have a temporary effect. Well-organized terrorist organizations—particularly the PLO and more recently the LTTE—have managed to develop a substantial revenue stream through exploitation of their respective diaspora. As mentioned in Chapter 1, the PLO actually leveraged taxes on all Palestinian workers abroad, with some governments actually collecting that tax on behalf of the PLO. The LTTE is much more discrete; through methods ranging from propaganda to outright coercion, the LTTE receives tremendous numbers of small donations from its diasporic communities in Canada, Australia and the UK. These frequent, small contributions account for a larger amount of the LTTE’s revenue than do the less frequent but large donations collected elsewhere. As discussed in Chapter 6, law enforcement authorities need to anticipate terrorist financiers moving from a portfolio of large donations by a few wealthy individuals
to a grass-roots portfolio, possibly relying extensively on relevant diasporic communities.

Effects Across Wealth Demographics

Various policy levers had different effects across wealth demographic lines. Given different parameters of risk assessment and rules for giving, some heterogeneity in behavior was expected. These assessments were conducted by dividing the inhabitants into three groups—the poor (wealth < .5), the middle class (.5 ≤ wealth ≤ 1), and the wealthy (wealth > 1). Individual policy effects were obtained by keeping all other variables at the mid-point of their defined range, and testing the variable of interest across its entire range.

Assessment: As policies increase the net risk of donating to terrorist organizations, richer contributors are more likely to continue to provide cash than are those inhabitants that are less wealthy.

As net risk increases, ceterus parabis, a corresponding net decrease in all categories of donations occurs. Interestingly, the median net wealth of contributors who provide medium and large donations increases as net risk increases, whereas it decreases for those giving small donations (see Figure 11).

Figure 11: Donor Median Wealth as Net Risk Increases

![Composition of Donors as Net Risk Basket Changes](image)
This particular statistic suggests that policies increasing net risk eventually do have an effect on those who are inclined to donate, but they affect the wealthiest donors last. This is significant; given the difference between how much a wealthy and poor patron can provide a terrorist organization (a 50-1 ratio in this simulation), persistence by the wealthy will blunt the effectiveness of policies increasing net risk. The simulation suggests that incomplete or ineffective policies will decrease the total donor base but will not significantly affect the total amount of funds raised, as the donors that can make the greatest difference will remain active until net risk is very high.

The simulation produced no evidence that donors contributed less in high risk environments than in low risk environments; indeed, rich and middle-class donors did not switch from large and medium donations to small donations in an attempt to reduce their exposure while still acting as a terrorist benefactor. As defined by the simulation no instance of wealth demographic “cross-over” occurred in over 100 runs of the simulation. In the ensemble of models tested, net risk appears to influence the binary “donate / don’t donate” question rather than the “how much to donate” calculation. Assessment: Increases in capacity to give brings in mostly poor donors, but has the greatest percentage increase among rich inhabitants.

As give capacity increases, poor inhabitants make up the greatest absolute increase in donors (fig 12). This makes intuitive sense. Richer donors ostensibly have greater access to information and will have greater knowledge of where to place their money for a variety of efforts. Terrorist organizations, recognizing the marginal benefit of wooing rich donors, have incentives to develop give capacity for them first—as illustrated by al Qaeda’s extensive use of charities to launder large donations from wealthy benefactors. As give capacity increases, it necessary must expand to less affluent but far more numerous inhabitants. However, on the basis of percentage increases, rich inhabitants overwhelm middle class and poor inhabitants (fig 13). This too, is expected; given the small number of large donors in the first place, a small increase in their population will initially lead to large percentage increases. This is an important
characteristic of the give capacity variable. Since large donors donate significantly more than medium or small donors the ultimate effect on total funds available to terrorists is disproportionately increased from the relatively small absolute increase in rich benefactors (fig 14).

Fig 12: Increases in Give Capacity brings in mostly poor donors

Fig 13: Increases in Give Capacity has the greatest percentage affect on rich donors
Assessment: Increases in capacity to give specifically attracts the less affluent elements of the rich demographic.
As mentioned above, as give capacity increases the total number of donors correspondingly increases. In addition to this expected result, an increase in give capacity corresponds with a decrease in the mean wealth of individuals contributing large and medium sums. In other words, as the capacity of terrorist groups to solicit and collect donations increases, the new rich donors are markedly less affluent than the donors who contributed at lower give capacities (See fig. 15). This finding, coupled with the dominance of give capacity in influencing total donors and especially the large percentage increase in large donors, strongly suggests policymakers focus on it when attempting to slow terrorist finances.

Assessment: Increases in commitment brings in mostly poor donors, but has the greatest percentage increase among rich and middle-class inhabitants.

As commitment increases, the total number of inhabitants who decide to become donors expectedly increases. Two noteworthy details emerge from this general result. First, poor inhabitants dominate the number of individual who become donors than are middle-class or rich donors, but only in absolute numbers (Fig 16). As percentage gains,
rich inhabitants see the greatest cumulative percentage change, followed closely by middle-class inhabitants (Fig 17). This is an artifact that there are more poor people than middle class or rich inhabitants, but also from the fact that low commitment scenarios result in far more initial poor donors than rich or middle class donors. As is the case with an increase in give capacity, the smaller absolute gains in rich and middle-class donors disproportionately swells terrorist coffers (fig 18)

Fig 16: Changes in Donor Base as Commitment Increases

![Absolute Changes in Donor Numbers as Commitment Increases](image)

Fig 17: Cumulative Percentage Change in Donor Base as Commitment Increases

---

436 On average, the simulation generated 770 poor, 630 rich and 600 middle-class inhabitants. This ratio is a direct result of the wealth distribution used in the simulation. The actual numbers are not important; the way the numbers change as commitment increases is the phenomenon of interest. A variety of sensitivity analyses regarding this effect and its relationship with wealth returned consistent results.
Assessment: An increase in commitment resulted in larger donations among the middle class, but appeared to have little effect on the size of donations among the rich and poor.

As commitment increases, middle class donors correspondingly shift from small to medium-sized donations. However, poor donors remain giving small donations (the constraint being they simply do not have more to give), and rich donors continue to give large donations. As commitment decreases, rich donors do not give small donations, but simply no longer are benefactors.

**Terrorist Responses: General Results on Moving Funds and Attacking**

The calculations terrorist groups consider when deciding whether or not to attack, based on financial-related considerations, is different than the calculations used by an inhabitant on whether or not to donate money for the jihadi cause. In the model, terrorists must balance two different constraints: 1) collecting enough money to finance the type of
attack they desire; and 2) avoid accumulating too much risk while doing so. Once a terrorist group reaches either of those limits, they will attack. The terrorist can collect funds from only one source—the inhabitants—but they face risk in two primary ways: 1) by accepting new individual donations (with risk indexed to size—the larger the individual donation, the greater the risk of accepting), and 2) moving or holding accrued monies (the larger the amount of collective funds, the greater the risk of continuing to move or hold the funds). The model confirms intuition—the terrorists’ best response depends on which constraint they hit first—a ceiling in available funds or their risk tolerance.

Assessment: Terrorists adjust their donation portfolio to maximize revenue while staying below their perceived risk threshold.

The simulation assumes terrorists survey their environment and can make accurate judgments as to the risks they face when managing their finances. Armed with perfect information, the simulation suggests that terrorists survey the supply of donations available, and accepts those donations that maximize their revenue while respecting their risk constraint.

The various policies available to the state change the risk of the different sizes of possible donations. Increasing risk to large donations is easiest and most cost effective to the state, while increasing risk to small donations is the most difficult and least cost effective. Large donations are more visible targets, and the marginal benefit of stopping large donors is much greater than for other types of donors. The opposite is true for small donors. Thus, as the state adopts policies that increase the risk to accepting donations and storing the funds in general, larger donations disproportionately increase in risk.
Keeping with economic convention, the simulation shows terrorist organizations will continue to accept large donations until the marginal risk outweighs the marginal benefit of accepting them. Given the substantial advantage in accepting large donations, the associated risk must increase accordingly before terrorist groups substitute medium donations for large ones; the same logic is true for substituting small donations for medium ones. Policies that raise the risk of all donations strongly dominate those policies that increase risk only large donations in terms of reducing total wealth donated.

Fig 18: Adjustment of Terrorist Group Solicitation of Donors and Acceptance of Donations as Risk for All Donations Increase

Fig 19: Adjustment of Terrorist Group Solicitation of Donors and Acceptance of Donations as Risk for Only Large Donations Increase
Assessment: Increasing Risk—especially when moving funds internationally—increases the number of terrorist groups but decreases their size.

Policies that increase the risk posed to terrorist groups by their finances simultaneously encourage such groups to avoid taking larger donations and decided to attack sooner with a smaller amount of funds, as they reach their risk threshold sooner. As the risk of holding and moving money increases, terrorist groups make the decision earlier to attack in order to continue operating below the new lowered risk threshold. However, if the give capacity stays the same, the supply of terrorist dollars will not correspondingly decrease. Thus, assuming all the funds available for terrorist organizations will be absorbed and terrorist groups do not change their risk aversions, groups accruing smaller amounts of cash necessarily means more groups.

Again using the baseline model for donations, various risk levels produced different numbers of groups (fig 20). Exploratory analysis away from the baseline model produced similar results—increasing the risk for a group to accept or hold large amounts of cash resulted in more groups operating with smaller budgets.
Fig 20: As risk of soliciting and holding donations increases, financial fractionalization of terrorist groups may occur.

Increasing risk thus creates several dynamics within the simulation, to include a geographic component. First, it changes the donor base from being overwhelmingly controlled by large donors to one where small donors become more prominent—the early al Qaeda model as compared to the modern LTTE model. Rather than al Qaeda cells being operationally funded by a small number of large donors in a top-down fashion, the simulation suggests cells in high-risk areas are reliant on collecting funds from a large base of small donors in a bottom-up fashion. The second implication of higher risk is that cells make the decision to attack with smaller pools of funds than before; higher risk thus prevents these smaller donations from pooling up to areas beyond local or state control.

Adding a geographic component to the relationship between risk and attacking early presents an interesting insight to this simulation result. Assuming that continuing to pool contributions means soliciting from an increasingly large geographic base, attacking with a small amount of funds suggests attacking within the locale where the funds were...
collected. Conversely, attacking with a large set of contributions suggests money supporting such an operation would be collected from a large geographic area; the logical conclusion of this is that benefactors from multiple countries would fund the largest attacks.

Explained thus, a distinct parallel to this simulation result may be occurring in the real world. In the post-9/11 world, regulation on international capital flows has been much more strident and uniform than regulation on domestic capital movement throughout the world’s nearly 200 states. Collecting and moving cash within a country is thus substantially less risky than attempting to move domestically collected cash to a second country. The simulation operates assuming that continuing to collect funds within a country linearly increases risk; however, once funds must be moved internationally, the risk increase is no longer linear. Thus, as the penalties and risk for moving terrorist funds through conventional international financial institutions increase, the supply of terrorist funds are increasingly likely to remain within country rather than flowing out of the country to “pool up” with funds collected from other countries. Funds that may have gone to support larger, more expensive, international terrorist activity outside the donating country may begin funding terrorist activity within that country. Put differently, the risks of terrorists collecting and moving money within a country become substantially smaller than moving money outside a country, despite the lesser benefits of presumably smaller, domestic attacks. With more local fund-raising efforts and greater restraints on international money transfers, a “ceiling” may become established under which terrorist funds may begin to pool. That financial phenomenon, coupled with less command and control from al-Qa’ida, creates a situation where local al-Qa’eda affiliates may now find
themselves both financially enabled and possibly encouraged to make operational
decisions on their own. Collecting their own money but unable to forward it to the larger
organization, coupled with receiving no money and little guidance from above creates a
situation where local commanders will be increasingly likely to act on their own, while
internationally-coordinated 9/11-like attacks are less and less likely.

Terrorist Responses: Strategy for Round II

All the above analysis is conducted under the auspices of a single-period
interaction. In other words, none of the actors—the inhabitants, the state or the terrorist
groups—has the opportunity to change their preferences or characteristics in response to
the preferences and characteristics of the other actors. The simulation explores such
possible reactions for a follow-on iteration of the simulation, suggesting the optimal
reactions for the state and terrorist group.

Terrorist Group Reactions

Within the simulation, terrorist groups have three different options to change: risk
tolerance, amount of money devoted to fundraising, and amount of money needed to
conduct an attack. Each of these present the terrorists different approaches to combating
state policies designed to choke off their revenue. In sum, the terrorist organization needs
to identify the constraint most limiting to its operations and modify its preferences
accordingly. The linear programming model used to calculate maximum numbers of
groups quickly shows which constraints are binding under a variety of scenarios. The
results are described below.
*Increase Risk Tolerance*

Increasing risk tolerance is most effect when the supply of terrorist funds is ample but the risk in collecting them is high. In this scenario, relaxing the risk constraint will allow groups to continue to collect funds that are already available but were unwilling to do so earlier due to the danger it posed. This results in fewer terrorist groups conducting fewer attacks, but each attack progressively enjoys greater financial support. (fig 21) Of course, relaxing the risk constraint increases the chance the group will be caught. Continued increases in risky fund-raising efforts will result at some point in a decrease of terrorist group effectiveness; the losses of funds and personnel due to that risky behavior will eventually outweigh the benefits gained from whatever additional funds are raised. The point of such diminishing returns to risk tolerance is a function of the characteristics of the state in which the group is operating; a state with high law enforcement capacity will be able to more readily capitalize on such increasingly risky behavior than one with a lower capacity.

*Fig 21: As terrorist group risk increases, fewer but better funded attacks occur*
Some scenarios in this simulation did not feature risk aversion as a binding constraint. Specifically, if the give factor variables are such that the supply of funds are low, increasingly risky behavior in collecting contributions will yield substantially less money than if inhabitants’ give factor is high. In these scenarios, the noted changes in number of attacks and available funding were not significant.

Decrease Funds Required for Operations

Terrorist groups could also respond to a shrinking resource frontier through a corresponding decrease in either scale or scope of operations. A group could conduct fewer operations, less expensive operations, or both. A different alternative is for the group to attempt to maintain the current pace of operations, but cut costs elsewhere, such as in recruiting, propaganda, training, or weapons acquisitions. (fig 22) Assuming constant returns to scale, terrorist groups will receive correspondingly less utility from their operations.

Fig 22: Possible terrorist group budget frontier adjustments in the face of declining revenues
Again, under standard economic assumptions of well-behaved utility curves, any of the adjustments mentioned above necessarily lead to a loss of utility. A terrorist group could respond in multiple ways if they desired to minimize such a utility loss. For example, they could decide to attack softer targets, switch to cheaper or more efficient operating procedures, or to adopt and use technologies that increase the utility of attacks at a lower price than without the benefit of such technologies. Acquisition and use of nuclear, chemical, biological or radiological weapons are often considered as examples of such a technology. Al Qaeda’s use of airliners as missiles against buildings rather than as simple hijackings represents this well; the amount of economic and symbolic damage and number of casualties from this different operating procedure vastly increased the group’s utility with little extra cost. Looking into the future, potential use of chemical, biological, radiological or nuclear weapons may represent a low-cost, high utility option for terrorist groups. However, without an understanding or insight to terrorist utility functions, however, such discussion is speculative.

*Increase Fundraising Budget*

Terrorist organizations could use existing funds in several ways. The model assumes each successful solicitation for a contribution costs one wealth unit. Conventionally, the terrorists could relax this constraint by simply increasing the amount of money allocated to its fundraising budget. This would work only if the give factor variables produced a high supply of donations and if the risk of collecting them was relatively low. In other words, relaxing this constraint is most effective only if the
terrorists were setting their sights too low, planning for attacks that are below the cost threshold of the environment they are in.

A more creative way to use a fund-raising budget is to use those funds to influence give factor variables. For example, al-Qaeda could use its money to expand its network of financiers, charities, or front businesses in an attempt to increase give capacity. Conversely, it could fund efforts to increase commitment to the jihadi cause, such as opening fundamentalist mudrassahs, increase jihadi publications, or influence places of worship to promote al-Qaeda’s message. Additionally, al-Qaeda could use its resources in an attempt to affect political change, resulting in laws or policies by the state that is at least not as harsh as they otherwise could have been.

Many assumptions are needed to empirically test which strategy is best. Important cost-benefit information is simply unknown (How much change in commitment to the jihadi cause does $1 purchase? How much increase in give capacity does $1 purchase? How much difference in laws does $1 purchase?). Terrorist discount rates and long-term versus short-term considerations are also difficult to discern (Does the group use the funds available to attack now, or cultivate an environment which enables larger attacks five years from now?)

A potential alternative method of evaluating the suitability of each of these options is level of control the terrorist group wields over the outcome of each option. For example, influence costs are highly stochastic; pouring money into operations intended to affect political outcomes is a highly uncertain proposition.\textsuperscript{437} Shaping, “branding,” or attempting to make the jihadi ideology more mainstream may be relatively cheap on a

\textsuperscript{437} Terrorist involvement in conventional politics is surprisingly not uncommon. For example, in Aum Shinrikyo spent tens of millions of dollars unsuccessfully trying to get its members elected into the Japanese Diet, the IRA poured considerable financial resources into political campaigns,
small, local basis but is an expensive and long-term effort on a regional or especially
global basis. In comparison, using funds to open front businesses or infiltrate charities is
substantially more predictable and transparent, with efforts coming to fruition in a shorter
period of time.

Additionally, sensitivity analysis discussed earlier in this chapter illustrates that
proportional adjustments to these three variables—commitment, give capacity and quality
of laws—produce disproportional outcomes. Give capacity increases total donors and
total donations the most, whereas lower quality laws result in increased donations, but not
as substantially an increased donor base. Given the dominance of give capacity in the
model and the greater direct control a terrorist group would exercise over the outcome of
such an effort, affecting this variable will provide the greatest short-term return and
represents the best course of action for a terrorist group facing a revenue shortfall.

Dynamics at Work: Examining a Case Study Through the Simulation Lens

Saudi Arabia serves as an illustrative example of the dynamics captured by the
simulation. Indeed, Saudi Arabia and Dubai (one of the seven United Arab Emirates)
appear to be the two most important states in the al-Qaeda fundraising network. Nearly
all the elements of the simulation are expressed in a brief history of al-Qaeda’s
fundraising efforts in the Kingdom.
Al-Qaeda raised millions of dollars from Saudi entities, mostly from wealthy individuals and charities, since the early 1990s.\textsuperscript{438} The reasons for such success are varied, but undoubtedly include the desire to fund a Wahhabist voice in the world that was unafraid of confronting the West, an effort to undermine the House of Saud, readily available wealth and lax oversight on capital flows in the country. In the parlance of the 9/11 Commission, "...al-Qaeda found fertile fund-raising ground in Saudi Arabia, where extreme religious views are common and charitable giving was both essential to the culture and subject to very limited oversight."\textsuperscript{439} Additionally, Saudi Arabia apparently felt comfortable that it could effectively "buy off" al-Qaeda by not aggressively pursuing the group within the Kingdom. Riyadh allowed al-Qaeda to conduct radical activities within Saudi Arabia—to include raising enormous amounts of money—with the apparent expectation that this would effectively export the threat of terror from Saudi Arabia. Fitting these words to the simulation variables, in Saudi Arabia commitment to the jihadi cause is high, giving capacity is high, and wealth is high. As a result, the give factor in Saudi Arabia during most of the 1990s and early 2000s grew almost unchecked, and was comparably higher than nearly any other country in the world throughout that time period.

This lucrative donor base may explain why al-Qaeda, despite Osama vilifying the House of Sa’ud since it allowed a coalition of largely non-Muslim soldiers to be stationed within inside the Kingdom, refrained from conducting attacks inside the country. Statements attributed to al-Qaeda operatives suggest as much; al-Qaeda operatives feared

\textsuperscript{438} To echo the 9/11 Commission’s report, there is no convincing evidence that the Saudi government as an institution or as individual senior officials individually funded al-Qaeda. See “Monograph on Terrorist Financing,” p. 123, footnote #137.

conducting attacks inside Saudi Arabia could staunch the flow of funds to al-Qaeda's coffers.\textsuperscript{440} Despite US exhortations (even after 9/11), the Saudis were slow to craft policies aimed at stopping terrorist financing or even cooperate with US efforts at doing so. By January 2003, however, the Saudi government did take some visible actions. The Saudi government froze the assets of Al Haramain’s Bosnia office in March 2002, declared that the Ministry of Islamic Affairs clear any transfer of charitable funds overseas, announced a program that required host government approval of all incoming charitable funds, and that charities’ bank accounts would be monitored through audits, expenditure reports and site visits. Furthermore, in the spring of 2003, the Saudi Arabia Monetary Authority (SAMA) reportedly instituted a major technical training program for judges and investigators on terrorist financing and money laundering.\textsuperscript{441} Notably absent, however, were funds, personnel or statement of intent to aggressively enforce these new measures. These efforts translate to an effort to increase the quality of laws regarding terrorist financing and decrease the give capacity of the al-Qaeda network. The Saudis did little to change the Saudi population’s attitude towards al-Qaeda’s jihadi message, increase the level of enforcement of its laws, increase the number of agents pursuing financing issues, or change punishments for doing so.

Regardless of the unenthusiastic measures taken by the Saudi government in early 2003, these actions may have been the trigger that pushed al-Qaeda cells in Saudi Arabia quickly into action. Several possible explanations exist. First, al Qaeda may has viewed these actions as threatening to their activities; once Saudi officials began interfering, the

\textsuperscript{440} The Operation of 11 Rabi Al-Awwal: The East Riyadh Operation and Our War with the United States and It’s Agents. Authors unknown. Published by The Center for Islamic Studies and Research, August 2003. pp. 11-14. This book appears to be written—especially Chapter 2—as a justification to Muslims on why al-Qaeda conducted an attack In Riyadh on 12 May 2003.

\textsuperscript{441} "Monograph on Terrorist Financing.” p. 122.
exporting terror model was broken. Next, once access to lucrative donors—one of the few redeeming values of the Saudi regime in al-Qaeda's eyes—was threatened, attacking inside the Kingdom became more likely. Bin Laden’s strategic vision included eventually taking over Saudi Arabia and basing his self-defined Caliphate from there; the change in Saudi resolve may have quickened those plans. Additionally, the money collected inside the Saudi Kingdom faced greater scrutiny, making its movement to operational cells outside the country more difficult. Thus, the terrorist funds originally intended for export may have began pooling inside the Kingdom, financially enabling the renegade local al Qaeda leader Abdulaziz al-Muqrin, to attack. While speculative, that account is consistent with known facts and results offered by this simulation.

The first attack occurred on 12 May 2003, targeting an expatriate community in Riyadh, killing Westerners and Saudis alike. The Saudis quickly responded in a forceful and visible way—they removed collection boxes in mosques, shopping malls and prohibited cash contributions at places of worship. Additionally, the Saudi government introduced a set of new comprehensive restrictions on the financial activities of Saudi charities, to include enhancing customer identification requirements, consolidation of all banking activity into a single account, a prohibition on cash disbursements, prohibition on use of ATMs, and a prohibition on transfers from charitable accounts outside of the Kingdom. These actions not only increased the quality of the law regime, but also served to increase enforcement. The Saudi moves also made considerable strides in affecting the give capacity of the al-Qaeda network within Saudi society. Importantly, the removal of the collection boxes around the country was a very visible action that apparently deeply affected the Saudi public, forcing everyone in the Kingdom to think

about terrorist financing.443 This—coupled with the fact that Saudi citizens were killed in the attack—served to decrease commitment to al-Qaeda's message as well.

Al-Qaeda stepped up the war by conducting another bombing in Riyadh on 9 November 2003—during the holy month of Ramadan. The attack killed a large but unknown number of Muslims and Arabs. According to the State Department, these attacks “transformed Saudi public acceptance of the widespread nature of the threat in the Kingdom. This acceptance has facilitated increased security and counterterrorism efforts by the Saudi Government…”444 Saudi security forces subsequently killed or detained many al-Qaeda operatives, to include financial facilitators.445 Additionally, the Saudi government began offering rewards for information on the network and began publishing pleas from operatives’ family members to turn themselves in.446 These actions further reduce al-Qaeda’s give capacity as well as decrease the acceptance of al-Qaeda’s message, two of the most important variables in the simulation.

A time-series of simulation runs reflecting the above history produces a pattern of fundraising within Saudi Arabia that is plausible. When possible, accurate values (such as population) are put in the simulation. When accurate information is not available, informed subjective judgments are used. The simulation produces a total amount of money for al-Qaeda raised from 1992-2003 in fig 23.

*Fig 23: Al-Qaeda’s simulated fundraising drops off considerably after the May 2003 attacks*

---

443 Ibid.
446 *Patterns of Global Terrorism*, 2003. pg. 67.
This graph is not intended and should not be viewed as an accurate representation of actual funds collected, but rather as an illustration of the usefulness of the simulation. The graph above shows that as observable metrics in Saudi Arabia changed, the simulation can give the policymaker some idea of what direction fundraising is likely to move. It also puts a strategic framework around the problem, enabling the policymaker and analyst to identify what variables are important and how they may interact with one another.

The important points raised from the Saudi example is that given the considerable wealth many individuals enjoy in the Kingdom, the acceptance and commitment to jihadi ideas and the presence of al-Qaeda financiers should have sent clear signals that al-Qaeda was likely raising considerable funds early in the 1990s. The Saudis were very slow to prevent al-Qaeda from developing a rather sophisticated capacity to solicit and accept donations, even as al-Qaeda’s message became more mainstream and US unpopularity increased. Recognizing and acting on the signatures of a robust and growing fund-raising
operation earlier may have helped prevent al-Qaeda from growing as strong as it did. Conversely, the jihadis can learn from this graph as well. At least from a financial point of view, al-Qaeda made a strategic blunder by conducting attacks inside Saudi Arabia; this blunder was compounded by the deaths of Muslims during the month of Ramadan. The results of these attacks accomplished what Saudi officials were nearly powerless to do—to turn the attitude of Saudi citizens against al Qaeda and begin supporting Saudi government initiatives to begin cracking down on the militants. The loss of commitment, coupled with an increase in the government’s enforcement of better laws, significantly undermined al Qaeda’s fundraising operations inside the Kingdom.
Chapter 6: Policy Recommendations

Observation and the results of this simulation do not suggest that completely depriving terrorist organizations of money is possible. Furthermore, policies aimed at disrupting terror money do not, on the surface, appear to be particularly effective at subsequently disrupting terrorist operations. Questioning the efficacy of such policies is therefore understandable.

This chapter combines law enforcement information, case studies and simulation results to recommend a variety of policy recommendations, suggest areas for further information collection, and highlight areas for additional research. The collective counsel of this dissertation is for continued operations at tracking terrorist funds, but with an expanded horizon of effects in mind.

General Framework

First order effects of counter-finance categories can fall in four different categories: reducing supply of terror funds, reducing demand of terror funds, breaking the mechanisms which enable supply to meet demand (i.e. preventing the transfer from supplier to demander), or decreasing the utility of money by increasing the difficulty terrorist organizations have in making it accessible to those individuals who will use it for operations. Table 1 outlines primary counter-finance policies and which categories these policies affect. Additionally, it provides judgment as to how aggressively the US and international community has pursued such policies.

Table 1: Primary Counter-Financing Policies and Their Area of Impact:

<table>
<thead>
<tr>
<th>(effectiveness/pursuit)</th>
<th>Long-Term</th>
<th>Short-Term</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reduce Supply</td>
<td>Reduce Demand</td>
<td>Prevent Transfer</td>
</tr>
<tr>
<td>Expand counter-financing laws</td>
<td>Poor / High</td>
<td>Poor / High</td>
<td>Medium / High</td>
</tr>
<tr>
<td>Increase punishment</td>
<td>Poor / High</td>
<td>Poor / High</td>
<td>Poor / High</td>
</tr>
</tbody>
</table>
Second order effects of these policies include the reactions by terrorist groups to adjust to less revenue or exerting more effort to maintain revenue streams. These effects include reducing scope or scale of operations, adjusting support activity (such as increasing resources for fund-raising and propaganda, while decreasing explicit efforts at recruiting and training), or simply moving to a less threatening area and resuming operations. Intelligence analysts and law enforcement officials have not yet developed sufficient information to accurately gauge what second-order effects terrorists in general and al Qaeda specifically dominate terrorist reactions. However, sufficient information exists for informed speculation. Al Qaeda apparently moves its fund-raising operations to areas posing fewer risks to them, expands its propaganda and fundraising efforts, as well as decentralizes many of these efforts to make them more robust to law enforcement efforts. Acquiring enough information and adequately developing theory on terrorist economic behavior should enable the creation of a matrix similar to the one regarding first order effects. Understanding and exploiting these second order effects is a general area where significant progress regarding counter-terrorism policy can occur.

**Recommendations**

*Recommendation 1: Counter-finance strategies should be viewed as only one plank of a well-developed counter-terrorism strategy.*

In isolation, counter-finance policies have to date not demonstrated potency in stopping terrorist operations. The assessment presented in Chapter 3 notes that terrorist operations overall have not noticeably decreased and that the lethality of those operations...
have actually increased in the previous three years. Furthermore, the simulation results in Chapter 5 suggest that decreasing financing to the point of significantly decreasing operations is a goal that does not enjoy a high probability of success. No doubt decreasing terrorist revenue will result in an eventual decrease in terrorist activity overall; less money, ceterus parabis, cannot translate into more activity. However, the true effect on terrorist attacks is unknown. The dynamics of terrorism are such that many options are available to terrorist groups to minimize the effects of counter-finance policies if they are pursued in isolation.

This by no means suggests the US and international community ought to abandon counter-financial policies. Any support or operational activity undertaken by a terrorist group ought to be as difficult and risky as possible; their potential costs for "doing business" must increase. However, policymakers must not craft strategies with the belief that completely starving terrorists of funds is possible. Policies that undermine the financial strength of terrorist groups help undermine the strength of the group overall, but are simply insufficient to do the job themselves. Consequently, policymakers must craft counter-terrorism strategies that has financial focus playing an important, if often supporting, role.

In addition to viewing counter-financing policies as part of a broader strategy, timing and sequencing of different policies may be important. For example, when helping build capacity in a weak but willing allied nation, is developing protective capacity that can defend or preemptively strike at terrorist cells more important than building counter-financing capacity in the banking sector? When attempting to stop recruiting of potential jihadists, should disrupting the flow of supporting funds take priority over isolating and arresting known terrorist agents? Furthermore, specifically within counter-finance policies, sequencing may matter. Instead of immediately designating certain organizations as entities that provide financial support to terrorist groups upon discovery of evidence suggesting so, should authorities attempt to covertly turn keep financiers and bookkeepers to learn more about the organization? The answers to the above are dependent on the conditions in which the questions are asked. For example, regarding the last question, if a particular group is flush with cash, attempting to turn a financier through bribery is unlikely to be successful, whereas designating them and
seizing the funds they have maybe more effective. On the other hand, if the group is poor, opportunities may exist to successfully bribe key individuals to turn on the organization, learn more about it, then designate it so that it’s funds can be seized.

 Recommendation 2: View finances are more than a target subject to disruption or attack; specifically, terrorist finances can be a lucrative intelligence source.

Continuing to collect financial data on terrorist organizations must continue and even expand. One reason for this is that such financial data can be used as intelligence support for on-going counter-terror operations or to systematically enhance long-term intelligence analysis. As an operational support manner, US law enforcement officials are now using financial information collected pursuant to counter-financial policies to actually track and arrest terrorists themselves, rather than using that information to merely disrupt the terrorist organization’s finances. Specifically, the FBI’s Terrorist Financing Operations Section (TFOS) has taken rules developed within the context of traditional after-the-fact investigation of financial crimes and developed procedures to gain expedited access to financial data in emergencies. The FBI now uses this to track suspected terrorists inside the US through their financial transactions, enabling the Bureau to keep better tabs on such persons of interest.

From a long-term analysis point, the Treasury Department (via regulation in the USA PATRIOT Act) requires financial institutions to provide very basic financial information on suspects within two weeks upon request by government investigators; in an emergency this requirement is reduced to two days. This saves an investigator literally hundreds of hours to find out if a suspected terrorist has accounts or conducted any activity in any of the thousands of financial institutions across the country. That, coupled with increased KYC and CDD requirements enables investigators to map out the financial activities of suspected terrorist networks in a fraction of the time required previous to the new rules, if investigators would have been able to do so at all.

The amount of financial information thus available to investigators must be exploited to its fullest degree. FinCEN, TFOS and OFAC also have access to literally dozens of open-source databases tracking financial activity around the globe. The

---

447 "Monograph on Terrorist Financing," pg. 59.
448 Ibid, p. 60.
Technological challenge here is clear—using terrorist account information now available to them, government investigators must develop techniques and procedures to properly mine the vast amounts of data to them. Since 9/11, both the FBI and financial institutions have unsuccessfully tried to create financial profiles of terrorist operatives; however, no effort at creating a profile for terrorist financial systems has occurred. This must change. Terrorism is not random, and neither is the financial support it needs. An appropriate effort at developing quantitative techniques and proper modeling methods so that mid-level analysts within government agencies can efficiently mine this information and look for the patterns hidden within.

Next, as greater understanding of terrorist financial networks develops, preemptive policies can be crafted. For example, the trend of autonomous funding by local cells, often through criminal activity, will probably continue and possibly accelerate. Policymakers will be wise to anticipate this continuation and develop appropriate programs to counteract it. Additionally, terrorists may attempt to modify pre-existing fund-raising methods to avoid detection or enhance profitability. Despite the disruption of the Hamas cigarette-smuggling group in 1998, US authorities have over 300 similar groups under investigation now, and believe several more exist that have developed more discrete and clandestine procedures to avoid detection. Another evolutionary development may be occurring in the way terrorists produce cash from coupon scams. Rather than clipping literally hundreds of thousands of coupons, financiers may now be resorting to the counterfeiting, theft or smuggling of retail merchant gift cards—worth up to $100 each—to financing terrorist operations. Analysts, guided by known terror financing methods and augmenting intelligence, can imaginatively extrapolate to discover new areas of financial activity where investigations may be needed. Policymakers must then follow-up with appropriate laws and support.

Recommendation 3: Expand the focus of counter-finance policies from exclusively first-order effects to include second-order effects.

451 Interview with financial crimes analyst upon condition of anonymity. 18 August 2004.
Judging the success of counter-finance policies exclusively through their effects on stopping terrorist attacks is a mistake. As described in Chapter 3, the available metrics measuring terrorist group operations provide little evidence counter-finance policies have achieved much in terms of stopping terrorist attacks. However, expanding the assessment beyond these first order effects to these secondary effects will provide a more useful mosaic of what is truly being accomplished. It is an undisputable fact that terrorists reacted to counter-finance policies passed in the wake of 9/11; the challenge now is to fully understand and exploit those reactions.

Expanding the search for counter-financing effects is problematic due to the difficult nature of collecting the requisite information. However, economic theory can provide some insights as to what may be occurring inside al Qaeda's organization, and intelligence officials can be keyed on finding information that informs such theory. For example, as al Qaeda's resource frontier shrinks, they must respond accordingly. In al Qaeda's specific case, the loss of revenue was simultaneous with a loss of sanctuary, a significant overhead cost. However, sanctuary provided excellent places for operational planning, training and indoctrination. How are those support functions now conducted? How does al Qaeda fund them? Is the end product—al Qaeda operatives—coming from the new inferior to the trained jihadis coming out of the Afghan training camps prior to 9/11? If the operatives are lower in quality, how can authorities best exploit that reduction in quality? Armed with answers to those questions, what policies, tactics, techniques or procedures could be pursued to exploit al Qaeda's reactive measures?

While knowledge of the inner workings of any terrorist organization currently is insufficient to do so, analysts need to begin approaching terrorist organizations with an effects-based mindset. A simple example is increasing regulation of formal financial institutions. The effects of that are clearly for terrorist organizations to move their money out of them, and put their wealth into traditional and unconventional institutions that are harder to track. Was this a desirable outcome? Being able to fairly easily predict that reaction, what should policymakers have done to anticipate it? Furthermore, what effects are currently desirable with respect to al Qaeda as an organization? What do we know about al Qaeda's financial infrastructures that can be manipulated to achieve that effect? Here Recommendations 1 and 2 interact—collecting information on second-order effects
resulting from counter-financial policies, coupled with an effects-based mindset to fighting terrorism is superior to following any particular stove-piped set of policies.

**Recommendation 4**: *Counter-finance strategies and policies must be crafted with clear long- and short-term desired effects in mind.*

Different counter-finance policies have different time horizons. For example, arresting a financier or bundler of smaller donations will have an immediate but temporary impact on a terrorist organization. That portion of a financial network will be disrupted; additional second-order effects will occur as the financial network moves to inoculate itself from any intelligence authorities may have gathered from the arrested financier. Assuming commitment to the cause is unchanged, the network will adjust and find a new financier willing to fill the vacancy.

The above example is merely a surface movement on top of a larger seismic dynamic. Long-term efforts to disrupt the supply of terror funds are also needed. For example, successfully decreasing the sympathy for the jihadi cause is long-term goal that will engender persistent effects. The jihadis have taken decades to build the global network of support they now enjoy; these modern sympathies were arguably incubated from the early days of the Muslim Brotherhood in the 1920s. Those who wish to undermine those who actively support the jihadi ideology—and just as importantly create widespread and deep intolerance of anyone who does provide support to terrorist groups—must similarly engage in long-term strategies and programs.

Additionally, these efforts at cultivating the Muslim world are aided significantly by legitimate entities sympathetic to al Qaeda’s message. Countries such as Saudi Arabia, which fund building madrassahs specifically to teach radicalism, or information networks which air provocative images such as Al Jazeera, give credence to and help mainstream the jihadi message. This combination—propaganda reinforced by voices and images of legitimate entities make commitment to the jihadi cause a core al Qaeda strength. It is a strength that must be effectively undermined in the long-term.

Short- and long-term counter-finance policies will have interactions. Specifically, western countries’ long-term efforts will be harmed if their short-term efforts are perceived as a modern-day crusade against Islam. For example, the short term policy of
demanding the Islamic banking system adopts and enforces effective counter-finance regulations must be done with sensitivity towards Islamic monetary traditions. The Egmont Group could create a separate assessment group chaired and largely consisting of Islamic nations, whose purpose would be providing guidance to Islamic banks on meeting the FATF 40 Recommendations and Eight Special Recommendations. Additionally, international law enforcement agencies such as Interpol can create units led and largely manned by Muslim individuals designed to track criminal activity that funds jihadi groups. These groups are less likely to create a cultural backlash and are less susceptible to jihadi propaganda that their efforts are merely the latest example of "soft colonialism" from the West.

**Recommendation 5: Given terrorists' creativity at raising funds, all levels of law enforcement must have some counter-financing awareness.**

Many of the significant disruptions of terrorist financing have come from local law enforcement officials investigating what they believed to be merely criminal activity. The cigarette smuggling ring active in supporting Hamas was discovered by an off-duty police officer who also worked as a night guard at a tobacco warehouse. A traffic officer who stopped a van for speeding disrupted a significant baby-formula smuggling operation that also supported Hamas. A local investigator tipped off of financial irregularities at an ice cream parlor discovered a $13 million coupon scam that was sending money to terrorist groups in the Middle East.

The point of this anecdotal evidence is that local authorities have a significant role to play in tracking terror money, especially as local terrorist cells increasingly find ways to support themselves. Unfortunately, situational awareness regarding terrorist financing, especially at local levels, is not sufficient to meet the threat. Awareness and education programs on for local law enforcement on terror financing need to be developed, structures that encourage and regularly require communication and information-sharing between white-collar crime investigators and local law enforcement needs to be built, and cooperative outreach programs between law enforcement and local charities, businesses and smaller financial institutions must be developed. As terror cells increasingly turn to a
grass roots type of infrastructure to collect, store and move their funds, counter-finance activities must similarly become more local.

These efforts must be widespread. Terrorist organizations often geographically separate support and operational areas. For example, the IRA had a developed financial arm in the US, even though it never conducted any operations there. The PLO had financial activities developed around the globe. Currently, the majority of LTTE’s financial activity occurs in Europe and Canada, whereas its operational activity is largely in Sri Lanka. The lesson to be learned here is that authorities must not conflate areas of operations with areas of support activity. Al Qaeda had fund-raising activities throughout the world, and will likely to continue to pursue geographically expansive funding efforts. Just as Hamas used small towns in North Carolina as part of its fund-raising efforts, there is no reason to believe al Qaeda will not attempt to use small, otherwise innocuous locales around the world to raise cash for their activities.

Recommendation 6: Heterogeneity in quality of laws and enforcement levels of laws undermines counter-financing efforts. The US and UN need to continue to exert strong pressure on off-shore banking havens and help build capacity abroad to enforce such laws.

Al Qaeda and its affiliates are nimble foes; one of their greatest strengths is their ability to quickly adapt to authorities’ efforts to stop them. In the financial realm, this agility is represented by al Qaeda’s ability to move capital around the globe in a variety of forms and using a range of mechanisms. The organization has revealed itself to be an astute observer of its environment, with the capacity to adjust quickly to minimize its risk and take advantage of opportunity. Consequently, as parts of the world passed increasingly stringent laws aiming to disrupt terrorist finances, the results were at best temporary. In 1998, al Qaeda moved much of its money out of the established international financial system into more traditional systems. In 2001, much of the fund-raising was no longer conducted under the cover of charities. Al Qaeda’s financial activity did not cease—it merely moved to areas less exposed to the legal sanction of much of the world. These actions illustrate that terrorist financing is truly a weak-link phenomenon.
Another way of viewing the financial war on terror is that stopping terrorist activity is a global public good. A lack of terrorist attacks around the world generally improves the security of the entire world. As it is a public good with its attendant externalities (costs of new laws and enforcement, among others), the natural result will tend to be a less than optimal level of law creation and enforcement. Put differently, when all the world’s states act independently, international institutions and cooperation are needed to overcome the sub-optimal equilibrium that will likely emerge regarding counter-financing efforts.

High heterogeneity among countries’ laws and enforcement allow al Qaeda to capitalize on its financial agility and frustrate efforts to combat it. Decreasing the variance of those variables may serve to blunt al Qaeda’s advantages; as the landscape of the world’s counter-finance efforts become flatter and increasingly homogenous, opportunities to gain from financial dexterity decrease. All elements of influence and power, emanating from major international governmental organizations (such as the UN, G-7, G-20, the World Bank), germane international non-governmental organizations (such as the Egmont group and Wolfsberg Group), and individual states, must be used to minimize the footprint and effects of financial institutions that refuse to bring their regulatory standards up to minimum expectations. Creating the political will to accomplish this task will be difficult; the case of Nauru mentioned in Chapter 5 is a sobering example of the effort required and the cost of doing so.

Ensuring adequate enforcement exists is a simultaneous priority. Good laws are only effective if they are truly enforced. The same powers mentioned above must also make efforts to ensure a high standard of enforcement is observed around the world. Enforcement deficits can come from two sources—a lack of local political will or incapacity to enforce. Prescribed policy options differ depending on the reason for lack of enforcement. In the former—lack of political will—concerted pressure, incentives and potential sanctions may be effective. In the case of Saudi Arabia, not until the Kingdom realized it too was in danger and had self-interest in staunching the flow of money to al Qaeda did it begin to act. Convincing all the world’s states they truly have a survival interest in passing and enforcing high quality counter-financing laws may help in
achieving a stronger “weakest link” in the counter-finance effort, and help further
decrease the footprint of financial institutions available to terrorist organizations.

**Recommendation 7: Unwitting donors must be protected. A Transparency International
 for Charities is one way of doing this.**

As mentioned in Chapter 3, some charities that provided money to al Qaeda did
so unbeknownst to many of the charities’ donors. These unwitting donors constituted an
unknown but unignorable portion of al Qaeda’s revenue. Al Qaeda is not unique in this
regard; other jihadi organizations, including Hamas, often prey on unwitting donors.
Those who wish to give musts have access to information to better guide them in their
charitable choices.

Saudi officials have taken a step to protect donors who give to Saudi charities. In
addition to passing new transparency regulations and removing zakat boxes from
mosques, the Saudi government adopted a variety of policies to ensure charitable
contributions go to the causes for which the unwitting donor ostensibly intends. Saud
officials established the High Commission to oversee all charities, contributions and
donations, now requires all charities to under audits and institute mechanisms that better
show the flow of funds into and out of the charity, directed all charities to suspend
activities outside of Saudi Arabia, and froze more than 40 charitable accounts suspected
of having links to terrorist organizations. Additionally, in February 2004, the Saudi
government announced it was moving to create the Saudi National Commission for
Relief and Charity Work Abroad, an organization designed to assume all responsibilities
of overseas aid operations and take over all aspects of distribution of charitable donations
from Saudi Arabia. These moves presumably will decrease the likelihood of charitable
donations ending up in terrorist coffers.

However, this is not enough. Although Saudi Arabia is a significant player in
Islamic charities, it can not influence the entire spectrum of Muslim charities. A trusted
and legitimate non-governmental organization, organized and run by a largely Islamic
staff, must begin reviewing and assessing all charitable organizations around the world.
Such an organization would provide various rankings or grades for charities based on

---

criteria that would prove to its benefactors such charities did not transfer money for illegitimate causes, especially to terrorist groups. Oversight by an Islamic NGO should encourage all charities to adopt best-practices, to include complete transparency of distributions of charitable donations. By arming individuals with such information, presumably a greater share of donations would be steered away from poorly-ranked charities to those with the highest rankings. The fact such an organization is not beholden to any specific state and that it is Islamic in nature should inspire greater confidence and legitimacy among the Muslim world in its judgments regarding charities.

Precedent exists for such an organization. Transparency International (TI), an international governmental organization, attempts to fight corruption by raising awareness about the damaging effects of corruption, advocating policy reform, and working towards the implementation of multilateral conventions. TI subsequently monitors compliance by governments, corporations and banks, actually assigning grades to each of these entities. At the national level, TI chapters work to increase levels of accountability and transparency, monitoring the performance of key institutions and pressing for necessary reforms in a non-party political manner.454

Areas for Further Information Use or Collection:

- Area 1: Available economic, social and polling attitude data exist that can help analysts and law enforcement in tracking sources of terrorist finances; more such data must be developed.

An increasing amount of data that correspond to variables in the simulation is available from academic sources, polling firms and other unclassified sources. This data can be very useful in providing analysts and law enforcement authorities general guidance on where a potential lucrative supply of terror money may exist. As mentioned earlier, the combination of high sympathy for radical Islamic beliefs, a rich citizenry and knowledge of charities that diverted funds to al Qaeda should have alerted Saudi authorities early on that a significant terrorist fund-raising operation existed within their borders. Similar indicators can now be used to find other such fund-raising operations.

Furthermore, these variables may be scaled down to regions and locales within a state, allowing authorities to pinpoint potential pockets of fundraising within their states.

Fortunately, polling data on perceptions and attitudes on a variety of issues by citizens in Muslim countries in general and Middle Eastern countries specifically is becoming available. Efforts at polling attitudes of the Arab street towards the West, Islamic fundamentalism and violent conflict have expanded greatly in the last five years. For example, the Center for Strategic and International Studies recently completed a two-part study regarding attitudes and perceptions in Iraq, making use of 16 different polls of Iraqis.  

Policymakers should encourage and enable such polling whenever possible and study the results, especially in areas where such knowledge of such attitudes is weak. Furthermore, questions regarding attitudes towards the actual support of terrorist groups—raising funds, providing logistic or other operational support, or even joining such a group—should be developed and administered. No one knows how citizens of these countries view donating to violent, jihadi groups. Below is just the beginning of questions public polling firms may be able to shed light:

• Is giving small amounts of money to an organization that opposes the US and the West as a low-risk way to oppose modern-day crusaders or is it a sincere endorsement of jihadi groups with the full understanding that a contribution could support violent attacks?
• Most donations for jihadi groups are collected during the holiest periods of the year—Ramadan and Eid-ul-Azha. What message could counteract that?
• Do you consider contributing money to a jihadi group the same thing as zakat?
• Do you know how these groups use your contributions? How do you know? Do you believe that is in accordance with Islam?

Understanding these and other related questions will help form the basis for long-term policies aimed at shaping opinion away from providing monetary support to violent groups. This information can also inform information operations designed to do the same in a more tactical manner. Detailed information regarding the social and public attitudes


on citizens from throughout the Middle East, North Africa, Pakistan, Indonesia, Malaysia, and the Philippines is needed. Simply put, where sympathy exists, some level and type of support is likely to follow. The international community must understand how this sympathy develops and how to affect it. An additional effort at collecting similar information on relevant diasporas is also particularly needed. Diasporas often provide considerable capital for insurgencies, guerrilla warfare and other forms of political violence; the Tamil diaspora vividly demonstrates the financial strength such a community can give a terrorist group. As World Bank economist Paul Collier observes, diaspora populations often prolong ethnic and religious conflicts. Diasporas typically are much richer than the people in their home country of origin and therefore can afford to finance violence—and do so without having to face the consequences of authorities of that nation. Diasporas can also extend conflict by contributing extremist rhetoric, since the fervor of the locals is undoubtedly held in check by the prospect of losing their own lives and families. Thus, even if authorities in a given state can effectively control their own populations, diasporic support originating outside that country must also be understood and appropriately targeted.

Area 2: What lessons learned from former law enforcement efforts against organized crime need can be applied to the counter-finance mission?

Some parallels between organized crime and terrorism exist. Organized crime groups are often very tight-knit, relying on family, tribe or other kinship-type networks to define membership. Terrorist cells, while perhaps not relying on such kinship networks to the degree of organized crime, still maintain very tight-knit cells that are similarly hard to penetrate. What methods were used to penetrate crime families? How were individuals in such organizations “flipped?” Are such methods suitable in the terrorist financing realm?

More importantly, the merging of terrorism and organized crime must be researched and addressed. Both groups are resorting to similar methods to fund their causes. For example, intellectual property crimes (specifically counterfeited goods) is a

persistent method of fund-raising for terrorists and organized crime groups alike. Are the
two connected? How does such a connection work? How can a radically religious group
function with a group based on criminal activity? Is it possible to use those differences to
weaken, penetrate and take down either group?

Area 3: Expand exploratory modeling and simulation efforts.

Until sufficient information regarding terrorist financing emerges so that other
types of quantitative analysis can occur, simulation will remain a preferred technique.
Different simulation strategies and types must be used to explore various policy issues
regarding terrorist activity in general and terror financing in particular.

However, a great deal of data is now available to analysts enabling a greater
exploratory approach of terrorist financial activities. As mentioned earlier, the massive
quantities of data in various databases available to FinCEN, OFAC and other federal
agencies must be fully explored. Serious efforts at developing artificial intelligence
applications designed to pore through the terabytes of financial information need to be
developed—government should use the marketplace to adapt existing technology or have
it developed. Additionally modeling techniques—to include agent-based modeling,
complex network analysis, and more complex non-deterministic simulations—will shed
additional light on terrorist behavior. Social science, especially developing an
understanding of value transactions among supporters of the jihadi ideology, coupled
with the increasing body of polling data of that demographic, can lead to more
sophisticated social network analysis and behavioral models. In sum, a great number of
useful tools have yet to be applied to the terrorist problem in general and the terrorist
financing issue in particular.

Conclusion

Terrorism has and will continue to evolve, as has and will its financial support.
Despite various groups’ use of terror for centuries, the strategy of attacking such a group
by targeting its assets is a recent development. As with any new strategy, it must be adjusted as new information is developed regarding both the target and the strategy's ability to impact the target. This is the first real iteration at learning how current strategy affects terrorist financing specifically and terrorism generally.

Counter-terrorism strategy will benefit greatly from continued application of systems analysis. Additionally, a great deal can be learned from expanded quantitative analysis and simulations of the subcomponents within terrorist organizations. Such a systematic approach can better inform counter-terrorism strategy in general, but also specifically suggest policies that are mutually reinforcing, properly sequenced and synergistic. Such continued analysis will enable policy analysts and policymakers alike to be more fully aware of changes within the greater terrorism phenomenon, and continually adapt policies to effectively blunt any detected changes.

Opening a front on terrorist groups through their finances is an approach that must be more fully explored. As a policy initiative, a great deal is left to learn regarding exactly what counter-finance efforts accomplish, how to best exploit counter-finance effects, and how to better craft and implement future counter-finance initiatives. This dissertation is one part of that much larger effort.