

The Economic Impact of Terrorism in the Near East:
Understanding the Threats Posed
by Militant Groups

A Monograph

by

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Abstract

The Economic Impact of Terrorism in the Near East: Understanding the Threats Posed by Militant Groups, by MAJ Joshua G. Glonek, 59 pages.

How successful are terrorist attacks in inflicting economic harm on states? The small body of work that has explored this question finds that while domestic terrorism is generally ineffective, transnational terrorism does reduce economic growth in some regions. Despite being a major center of terrorism, the Near East region has not been empirically tested in this way. This paper investigates the effect of domestic and transnational terrorism on macroeconomic growth for the eighteen countries in the Near East from 1970-2012. The findings indicate that neither form of terrorism has significantly affected economic growth, however, internal conflicts and external wars have both greatly limited growth. These findings have implications for how states allocate their scarce resources to formulate efficient defense strategies. Terrorist groups are not monolithic in nature; while some groups conduct terrorist attacks almost exclusively, others use terrorism as a part of a larger strategy that also incorporates guerilla warfare and sometimes even conventional military operations. More traditional terrorist groups, which often have universal or global objectives, can be effectively targeted using counterterrorism strategies. Groups that are more local in nature, and who use terrorism in conjunction with other tactics, present a much greater threat to a state's economy and political stability. These groups are better targeted using a counterinsurgency framework, which focuses more resources towards resolving the underlying causes of the conflict.

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Acronyms

GDP	Gross Domestic Product
ITERATE	International Terrorism: Attributes of Terrorist Events

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Introduction

One of the ways in which terrorist organizations attempt to achieve their political objectives is to conduct attacks that impose high economic costs on a nation. The targeting of transportation networks, energy infrastructure, and business centers have been common methods employed by terrorist groups attempting to slow the movement of goods throughout an economy. One example of this is the 2002 Al Qaeda bombing of the oil tanker *Limburg* off of the coast of Yemen. As the ship traveled through the Gulf of Aden, it approached a Yemeni export terminal and was struck by an explosive-laden dinghy, catching fire and spilling much of its oil into the sea. Following the attack, insurance premiums rose and surcharges were implemented to cover the increased security costs, resulting in a fifty percent reduction in port activity and costing Yemen's economy approximately \$3.8 million per month.¹ Osama Bin Laden described the logic of the attack in a statement stating, "By exploding the oil tanker in Yemen, the holy warriors hit the umbilical cord and lifeline of the crusader community, reminding the enemy of the heavy cost of blood and the gravity of losses they will pay as a price for their continued aggression on our community and looting of our wealth."² This statement by Bin Laden shows that the objective of the attack was not so much to inflict casualties, but to disrupt the trade of goods, which is integral to the economic systems of his enemies.

There are a number of mechanisms through which terrorism can impose economic harm on a targeted nation. First, the threat of terrorism can lead to a reduction in foreign direct

¹ "Yemen: The Economic Cost of Terrorism," United States Department of State Fact Sheet, November 2002, accessed October 01, 2014, <http://2001-2009.state.gov/s/ct/rls/fs/2002/15028.htm>.

² Margaret Stock, "Immigration and National Security: Post-9/11 Challenges for the United States," in *Homeland Security: Protecting America's Targets*, ed. James F. Forest (Westport, CT: Greenwood Publishing, 2006), 135.

investment as investors divert their capital to other areas.³ This loss of investment has the potential to reduce economic growth, particularly in developing nations. Second, terrorist attacks can destroy key infrastructure needed to facilitate the exchange of goods and services throughout an economy. Although the associated losses are normally temporary, additional resources must be expended in order to repair or rebuild the infrastructure. Third, a terrorist campaign can reduce trade as spillover costs among neighboring countries discourage economic exchange with the terror-ridden country.⁴ Fourth, in response to terrorism events, nations often increase their expenditures on defense and security measures, which can crowd out investment in other areas. Also, resources spent on security cannot be devoted to other activities that facilitate long-run economic growth, such as conducting research and development or acquiring new technologies.⁵ Fifth, the uncertainty brought about by terrorism can adversely impact businesses by requiring them to pay higher wages to their employees, increasing insurance premiums, and necessitating additional expenditures on security.⁶ These excess costs decrease business profits and lower economic growth.

Following the terrorist attacks of September 11th, 2001 researchers have sought to better understand the macroeconomic consequences of terrorism. Despite a terrorist organization's

³ Todd Sandler and Walter Enders, "Economic Consequences of Terrorism in Developed and Developing Countries: An Overview," in *Terrorism, Economic Development, and Political Openness*, ed. Philip Keefer and Norman Loayza (New York, NY: Cambridge University Press, 2008), 18.

⁴ Sandler and Enders, "Economic Consequences of Terrorism in Developed and Developing Countries," 18.

⁵ Brian Jackson, Lloyd Dixon, and Victoria Greenfield, *Economically Targeted Terrorism: A Review of the Literature and a Framework for Considering Defensive Approaches* (Santa Monica, CA: RAND Corporation, 2007), 50, accessed September 28, 2014, http://www.rand.org/content/dam/rand/pubs/technical_reports/2007/RAND_TR476.pdf.

⁶ Sandler and Enders, "Economic Consequences of Terrorism in Developed and Developing Countries," 18.

intentions to inflict economic harm on a nation, the extent to which terrorist attacks are successful in doing so is not clear. Furthermore, various economies will respond differently based upon their characteristics. A nation with a large gross domestic product (GDP) would likely see a smaller impact from a terrorist event because the fraction of the economy affected by the attack would be relatively small. Additionally, well-diversified economies should be better able to withstand terrorist attacks because of their ability to quickly reallocate capital to different parts of the economy. For example, a country whose economy is heavily reliant on oil exports would have few areas to shift its capital and labor resources to if a terrorist attack successfully impacted the nation's hydrocarbon infrastructure. Because economies across the world are so different, the macroeconomic impact of terrorism is likely to be heterogeneous. This requires a regional analysis, where economies tend to be in a more similar stage of development and are impacted by many of the same factors, in order to better understand terrorism's impact.

One part of the world where this problem has yet to be thoroughly explored is in the Middle East and North Africa, also known as the Near East. This regional classification has been created because the North African countries of Egypt, Tunisia, Algeria, Libya, and Morocco have radically different precolonial and colonial histories compared to the remainder of Africa, are significantly wealthier, and operate predominantly in the state system of the Middle East.⁷ The lack of analysis of the Near East is somewhat surprising considering the relatively high prevalence of terrorism in the region. Several of the world's major terrorist organizations currently operate in this region. In a September 2014 presidential address, Barack Obama highlighted this, stating "At this moment, the greatest threats come from the Middle East and

⁷ Jeffrey Herbst, *States and Power in Africa: Comparative Lessons in Authority and Control* (Princeton, NJ: Princeton University Press, 2000), 5.

North Africa, where radical groups exploit grievances for their own gain.”⁸ Historically, terrorism has been a persistent threat for many of the nations in this region. Figure 1 shows the total number of terrorism events by region that occurred between 1970 and 2012, using the US Department of State’s regional classification. Terrorism has longed posed a challenge and a threat to the people of the Near East. The extent to which these events have affected economic growth is the purpose of this study.

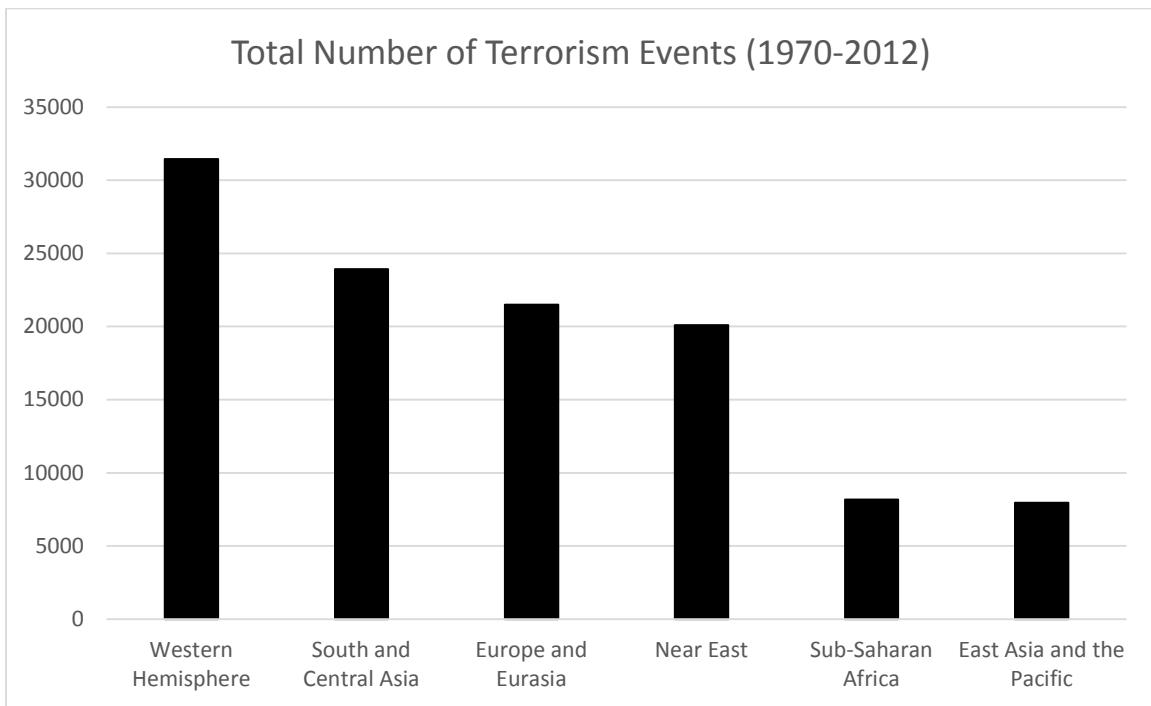


Figure 1. Terrorism Events by Region

Source: National Consortium for the Study of Terrorism and Responses to Terrorism, *Global Terrorism Database*, 2013, accessed September 15, 2014, <http://www.start.umd.edu/gtd>.

⁸ “Transcript: President Obama on how US will Address Islamic State,” NPR, September 10, 2014, accessed September 28, 2014, <http://www.npr.org/2014/09/10/347515100/transcript-president-obama-on-how-u-s-will-address-islamic-state>.

Because this study's focus is on the impact of terrorism on economic growth, it is important to define what constitutes terrorism. Violence of many sorts exists in societies and what qualifies as a terrorism event is not always clear. In fact, many dictionaries, academics, and government agencies define terrorism differently. One of the more generally accepted definitions was created by Bruce Hoffman, who defines terrorism as "the deliberate creation and exploitation of fear through violence or the threat of violence in the pursuit of political change."⁹ Key to Hoffman's definition is the desire for the terrorist organization to achieve some sort of political goal. Unlike common criminals who enact violence primarily as a method to obtain their own personal reward, terrorists seek to achieve the goals of the organization. Terrorism is also intended to relay a message to a wider audience that they too should fear the repercussions of not conceding to the terrorists' demands. Criminals, on the other hand, generally only intend to target their message to the victim of their criminal act. Another important distinction that Hoffman makes is between terrorists and guerillas. While terrorists and guerillas may employ the same types of tactics such as assassinations, kidnappings, and bombings, guerillas attempt to exercise some form of sovereignty or control over a defined geographical area and its population, whereas terrorists generally try to avoid direct engagements with military forces and exercise no direct control over a populace at either the local or national level.¹⁰

But even Hoffman's generally accepted definition does not completely eliminate the confusion over whether or not a group fully meets the criteria to be classified as a terrorist organization. Should the group the 'Islamic State' be classified as terrorists? Their frequent kidnappings for ransom and beheadings of innocent civilians may lead one to think so; however, their operations have also been focused on engaging rival military forces and seizing significant

⁹ Bruce Hoffman, *Inside Terrorism* (New York, NY: Columbia University Press, 2006), 40.

¹⁰ *Ibid.*, 35.

amounts of geographic territory from which they attempt to exert their authority over the local population. These types of non-state actors that engage in a combination of irregular warfare and terrorism pose a hybrid threat to governments. To avoid this confusion, this study classifies terrorism attacks by the nature of the event as opposed to grouping all actions of a particular organization as terrorist events. This classification is derived from the *Global Terrorism Database*, which defines a terrorist attack as “the threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation.”¹¹ In order for an event to be included in this study, all three of the following *Global Terrorism Database* criteria must be met: first, the act must be aimed at attaining a political, economic, religious, or social goal; second, there must be evidence of an intention to coerce, intimidate, or convey some other message to a larger audience than the immediate victims; and third, the action must be outside the context of legitimate warfare activities.¹²

Terrorism is just one of many threats that nations face. Because governments only have limited resources to allocate towards security and defense measures, policymakers should understand the costs imposed by these various threats in order to devise optimal policies that maximize the welfare of the state. Analyzing the impact of terrorism on economic growth offers a measure by which states can compare the costs of terrorism with other threats such as civil war, insurgencies, and external conflicts.

To quantify the impact of terrorism on economic growth in the Near East, this analysis uses time-series data from 1970 to 2012 which includes all countries in the Near East region. Ordinary least squares regression estimates provide evidence that terrorism has had no significant

¹¹ National Consortium for the Study of Terrorism and Responses to Terrorism, *Global Terrorism Database Codebook* (College Park, MD: University of Maryland, 2013), 7.

¹² *Ibid.*, 8.

effect on economic growth in the region. Internal conflicts and external wars, however, have been significant detriments to economic growth. While the threat from terrorism alone is negligible, groups that practice terrorism often do so in conjunction with other forms of warfare that are far more harmful to a state. Understanding the role that terrorism plays in a militant group's strategy can help states devise efficient policies to contend with these threats.

The next section will provide a review of the extant literature on the relationship between terrorism and economic growth. Subsequent sections offer an empirical quantitative analysis of the Near East region and discuss the implication of these findings with respect to the allocation of defense and security resources. Focus is placed on understanding the role that terrorism plays in achieving a group's political ends. Organizations that practice terrorism exclusively present a relatively small economic and political threat and can be targeted through traditional counterterrorism strategies. Groups that employ terrorism as part of a more robust strategy present a much greater threat to the economic and political security of a state. These groups are more effectively targeted using a counterinsurgency framework that is better able to address the underlying causes of the violence. Although counterinsurgency strategies require a much larger investment of resources, the political and economic costs brought on by internal conflict and external wars are so large that such an investment is necessary.

Literature Review

Existing literature generally supports the conclusion that the presence of terrorism has a negative effect on economic growth. This body of literature, however, is quite small and reveals important regional heterogeneity in terrorism impacts. The regional variation in the effects of terrorism can arise from numerous factors including the types of governments, the openness of an economy, and the presence of external conflicts or civil wars. Extant literature that controls for each of these factors finds that all but government type has a significant effect on economic

growth.¹³ Understanding these regional differences is essential if policymakers wish to devise optimal policies that account for terrorism relative to the other factors that can potentially impose economic harm on a nation. While the mechanisms by which terrorism can harm a nation's economy are numerous, one common way to measure these impacts is through terrorism's effect on macroeconomic growth as measured through changes in a country's real per capita GDP.

Blomberg, Hess, and Orphanides provide one of the first empirical investigations of the macroeconomic consequences of terrorism using a global sample of 177 countries from 1968 to 2000.¹⁴ In their analysis, they find that the presence of terrorism has a small negative effect on real per capita GDP growth. This overall estimate derived from their global sample may not be very informative if terrorism impacts do in fact vary by region. In order to test for this, the authors of this study repeated their analysis by examining various country sub-samples including nondemocratic countries, countries belonging to the Organization for Economic Co-operation and Development, as well as African, Middle Eastern, and Asian nations. Surprisingly, when these sub-samples were analyzed, the impact of terrorism was only statistically significant for the African countries. Their estimates using the Middle Eastern sub-sample showed a positive but statistically insignificant effect of terrorism on economic growth.

The terrorism data that Blomberg, Hess, and Orphanides used for their analysis was drawn from the *International Terrorism: Attributes of Terrorist Events* (ITERATE) database, which includes only transnational terrorism events. The omission of domestic terrorist events is

¹³ See S. Brock Blomberg, Gregory Hess, and Athanasios Orphanides, "The Macroeconomic Consequences of Terrorism," *Journal of Monetary Economics* 51 (2004): 1021; Khusrav Gaibulloev and Todd Sandler, "The Adverse Effect of Transnational and Domestic Terrorism on Growth in Africa," *Journal of Peace Research* 48, no. 3 (2011): 364; Khusrav Gaibulloev and Todd Sandler, "Growth Consequences of Terrorism in Western Europe," *Kyklos* 61, no. 3 (2008): 418; and Khusrav Gaibulloev and Todd Sandler, "The Impact of Terrorism and Conflicts on Growth in Asia," *Economics and Politics* 21, no. 3 (2009): 371.

¹⁴ Blomberg, Hess, and Orphanides, "The Macroeconomic Consequences of Terrorism," 1008.

problematic to the extent that domestic terrorism is correlated with both transnational terrorism and economic growth. Research by Enders, Sandler, and Gaibullov shows that there is in fact a large cross-correlation between domestic and transnational terrorist incidents that persists over a number of periods.¹⁵ Many countries face a greater threat from domestic terrorism than from transnational terrorism and failure to include these domestic terrorism incidents can wrongly attribute a drop in economic growth to non-terrorism causes.¹⁶ To mitigate the concerns of omitting domestic terrorism from their analysis, the authors included controls for the presence of internal and external conflicts. Both of these measures are shown to have significant negative effects on economic growth. The internal conflict control should account for some of the effects of domestic terrorism because the measures are positively correlated.

Tavares also conducted a cross-sectional study using an unspecified global sample of countries from 1987 to 2001.¹⁷ Controlling for natural disasters and currency crises, Tavares's initial estimates show that terrorism had a small negative effect on real per capita GDP growth. As a robustness check, Tavares took into account additional determinants of growth including population size, the degree of trade openness, the rate of inflation, the share of primary goods exports in merchandise exports, the size of government, and government spending in education. Once all of these controls were taken into account, the effect of terrorism became insignificant. This result puts into question Tavares's initial findings since many of the additional controls are standard indicators of economic growth. Similar to Tavares's study, this analysis includes

¹⁵ Walter Enders, Todd Sandler, and Khusrav Gaibullov, "Domestic versus Transnational Terrorism: Data, Decomposition, and Dynamics," *Journal of Peace Research* 48, no. 3 (2011): 319.

¹⁶ Sandler and Enders "Economic Consequences of Terrorism in Developed and Developing Countries," 22.

¹⁷ Jose Tavares, "The Open Society Assesses its Enemies: Shocks, Disasters and Terrorist Attacks," *Journal of Monetary Economics* 51 (2004): 1047.

population size and the degree of trade openness as control variables, which is consistent with much of the other literature in this field.¹⁸

Three additional studies have taken a regional approach to understanding terrorism's influence on the economy. Gaibullov and Sandler assessed a panel of eighteen Western European countries from 1971 to 2004.¹⁹ New to their approach was the ability to separate transnational from domestic terrorist events. To do this, they combined *Terrorism in Western Europe: Events Data*, which contains information on domestic terrorism events, with the ITERATE database, which documents all transnational terrorism incidents. With the terrorism measures separated, they find that transnational terrorism has a greater negative marginal influence on income per capita growth than domestic terrorism. Each additional transnational terrorist incident per million persons reduced economic growth by about 0.4 percentage points. Domestic terrorism, however, did not have a significant effect on economic growth.

Gaibullov and Sandler then turned to Asia to understand how terrorism affected that region's economic growth from 1970 to 2004.²⁰ Unlike their Western European study, they only measure the effect of transnational terrorist attacks, potentially confounding their estimates with the effect of domestic terrorism. The authors estimate that an additional terrorist incident per million persons reduces per capita GDP growth by about 1.5 percentage points annually. They also measure the effects of internal and external conflicts on growth and find that internal

¹⁸ See Gaibullov and Sandler, "Growth Consequences of Terrorism in Western Europe," 418; Blomberg, Hess, and Orphanides, "The Macroeconomic Consequences of Terrorism," 1021; Gaibullov and Sandler, "The Impact of Terrorism and Conflicts on Growth in Asia," 371; and Gaibullov and Sandler, "The Adverse Effect of Transnational and Domestic Terrorism on Growth in Africa," 364.

¹⁹ Gaibullov and Sandler, "Growth Consequences of Terrorism in Western Europe," 411.

²⁰ Gaibullov and Sandler, "The Impact of Terrorism and Conflicts on Growth in Asia," 359.

conflicts reduce growth by approximately 2.2 percentage points, but that external conflicts have no significant effect on economic growth. These results differ widely from the Blomberg, Hess, and Orphanides study which shows that in their Asian sub-sample, the effect of external conflict on growth is much larger than that of internal conflict.²¹

The third regional study conducted by Gaibullov and Sandler investigated the adverse effects of terrorism on income per capita growth for fifty-one African countries from 1970 to 2007.²² By using data from the *Global Terrorism Database*, the authors are able to classify terrorist attacks as either transnational or domestic, allowing them to estimate the effect of each type of attack, alleviating some of the concerns of previous studies. Gaibullov and Sandler find that transnational terrorism in Africa reduces income per capita growth by approximately 0.1 percentage points per year, while domestic terrorism has no significant effect. Furthermore, they estimate that internal and external conflicts each reduce income per capita growth by approximately 2 percent in a year. These results are similar to Blomberg, Hess, and Orphanides's sub-sample of African countries. Gaibullov and Sandler also divide their African sample into regions to investigate the variation within Africa. Using their North African subsample, which includes all of the African countries in the Near East region except Libya, they find no evidence of an effect of terrorism on economic growth. The variation in the results across these different studies further emphasizes the need to investigate this question at a regional level.

Two additional macroeconomic case studies assess the impact of persistent terrorism on a specific nation. The first explores the 20 year conflict in the Basque region in Spain and estimates that the prolonged terrorist conflict led to a 10 percentage point reduction in per capita GDP

²¹ Blomberg, Hess, and Orphanides, "The Macroeconomic Consequences of Terrorism," 1023.

²² Gaibullov and Sandler, "The Adverse Effect of Transnational and Domestic Terrorism on Growth in Africa," 355.

relative to a synthetic control region without terrorism.²³ The second case study analyzes the effect of terrorist attacks that occurred during the Second Intifada on the Israeli economy and concludes that from 2000 to 2003, the terrorist attacks resulted in a 10 percent reduction in per capita GDP.²⁴ These country-specific case studies provide insight into how economic growth responds to terrorism in two relatively high-income countries with advanced economies. How lesser developed nations would react to the same level of terrorism is unclear.

Sandler and Enders propose some reasons as to why developed countries should be better able to withstand terrorist attacks than lesser developed nations. Developed nations possess more advanced governmental institutions that can take action to mitigate the impact of terrorism such as enacting expansionary monetary or fiscal policy.²⁵ Additionally, the security apparatus in developed nations is better able to respond to a terrorist incident, generating confidence in consumers and investors that future attacks are less likely.²⁶ Developing nations with less competent security forces may be unable to reduce the risks associated with terrorism, leading to a reduction in economic activity. Finally, developing countries often have less diversified economies and are more likely to experience a larger effect from a sector-specific attack.²⁷ Many Near Eastern economies rely heavily on oil exportation so the region's oil infrastructure presents a lucrative target for terrorist groups who aim to inflict high economic costs on a country.

²³ Alberto Abadie and Javier Gardeazabal, "The Economic Costs of Conflict: A Case Study of the Basque Country," *American Economic Review* 93, no. 1 (March 2003): 113.

²⁴ Zvi Eckstein and Daniel Tsiddon, "Macroeconomic Consequences of Terror: Theory and the Case of Israel," *Journal of Monetary Economics* 51 (2004): 971.

²⁵ Sandler and Enders, "Economic Consequences of Terrorism in Developed and Developing Countries," 35.

²⁶ *Ibid.*

²⁷ *Ibid.*, 36.

The purpose of this paper is to examine how economic growth in the Near East region has been impacted by terrorism. The results of previous analyses indicate that a regional approach must be taken in this area of study because a global sample that provides an average effect is of little use to regional policymakers. Furthermore, it is necessary to decompose terrorist events into domestic and transnational incidents to avoid confounding terrorist attacks with other forms of violence. This study expands on the existing literature by examining the Near East region, which has yet to be examined in this way, despite having a historically high incidence of terrorism. The potential for terrorists to conduct attacks that inflict economic harm in this region is high; the vast energy resources and infrastructure that exist in this area present vulnerable targets that if successfully attacked can disrupt the flow of oil to the industrial world. The Near East region has seen a sharp rise in domestic terrorism and vast fluctuations in transnational terrorism incidents over the time period covered in this study, as shown in Figures 2 and 3. The full sample of Near

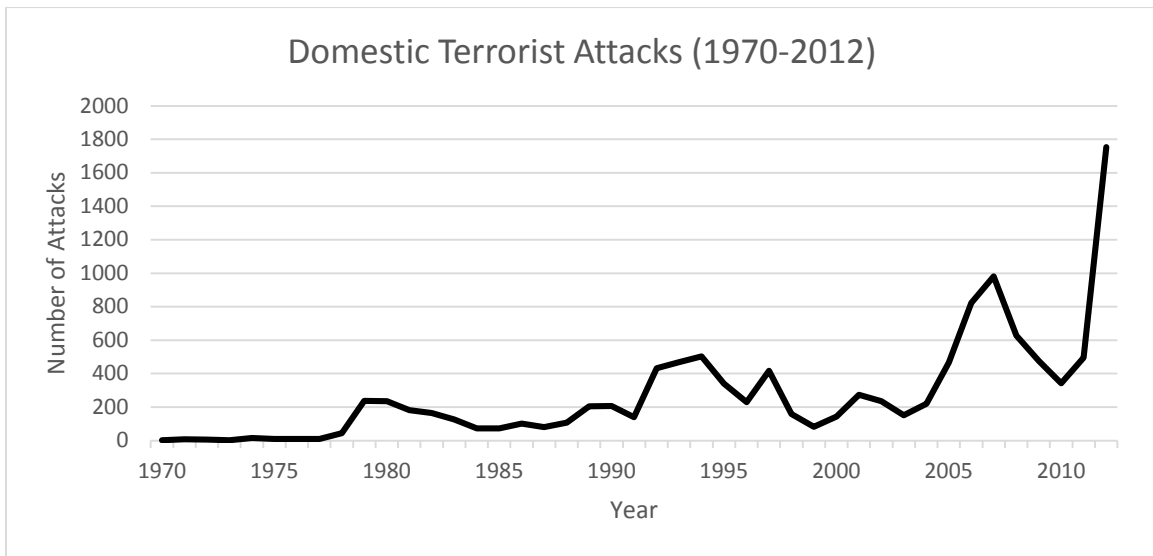


Figure 2. Domestic Terrorism in the Near East

Source: National Consortium for the Study of Terrorism and Responses to Terrorism, *Global Terrorism Database*, 2013, accessed September 15, 2014, <http://www.start.umd.edu/gtd>.

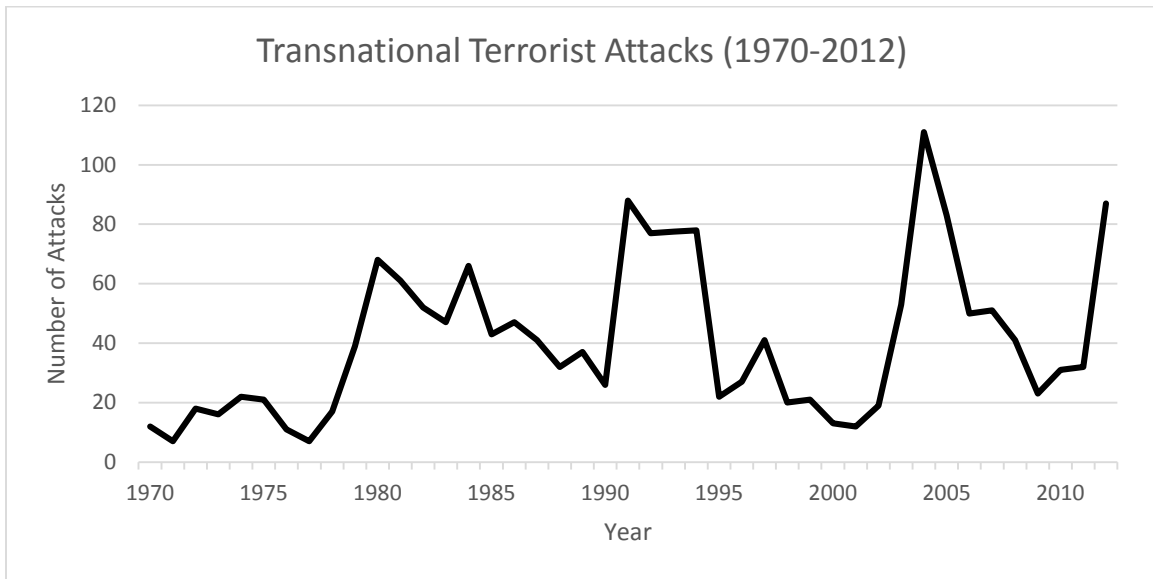


Figure 3. Transnational Terrorism in the Near East

Source: National Consortium for the Study of Terrorism and Responses to Terrorism, *Global Terrorism Database*, 2013, accessed September 15, 2014, <http://www.start.umd.edu/gtd>.

Eastern countries used in this analysis covers a longer duration of time than has been used in previous studies and allows for the decomposition of terrorist acts into transnational and domestic events. The Near East in recent decades has been both conflict-ridden and terrorism-prone and is worthy of further study to better understand how terrorism impacts the economic growth of the region, relative to other threats.

Theoretical Framework

This section will discuss the development of the economic theory used to model a country's macroeconomic growth. Five major determinants of economic growth found in the literature are discussed, along with their expected effect on growth. These include initial income per capita, investment share, government consumption, economic openness, and government

type. This theoretical discussion provides the foundation for the empirical model used to estimate the effect of terrorism on growth.

The Solow growth model has become the baseline from which the majority of empirical growth literature has developed. Solow's original model theorized that output per worker was a function of initial output per worker, the rate of capital accumulation, the growth rate of the workforce, and the rate of technological progress.²⁸ Using the foundation of Solow's model, many researchers empirically tested the impact of other socio-economic variables on long-run economic growth through the use of single cross-section regressions that averaged variables over a period of many years.²⁹ A revised model was later developed by economist Nazrul Islam to apply the model to panel data in order to eliminate the potential bias caused by omitted variables.³⁰ Islam's now widely used macroeconomic growth model incorporates the use of panel data to account for the variation in production functions across countries. Much of the literature that investigates the effect of terrorism on economic growth uses variations of this model.³¹

As opposed to a simple cross-sectional regression, which ignores the country-specific aspect of the aggregate production function, Islam's panel data framework accounts for the dynamic changes in technology and other growth related factors that change over time. One important determinant of income per capita growth, which accounts for the concept of

²⁸ Robert Solow, "A Contribution to the Theory of Economic Growth," *Quarterly Journal of Economics* 70, no. 1 (February 1956): 76.

²⁹ See Robert Barro, "Economic Growth in a Cross Section of Countries," *Quarterly Journal of Economics* 106, no. 2 (May 1991): 407-443; and N. Gregory Mankiew, David Romer, and David Weil, "A Contribution to the Empirics of Economic Growth," *Quarterly Journal of Economics* 107, no. 2 (May 1992): 407-437.

³⁰ Nazrul Islam, "Growth Empirics: A Panel Data Approach," *Quarterly Journal of Economics* 110, no. 4 (November 1995): 1127-1170.

³¹ See Blomberg, Hess, and Orphanides, "The Macroeconomic Consequences of Terrorism," 1018; and Gaibulloev and Sandler, "The Adverse Effect of Transnational and Domestic Terrorism on Growth in Africa," 358.

convergence, is a country's initial level of income per capita. Convergence, which occurs due to diminishing marginal returns to capital, allows developing countries to grow at a faster rate than developed countries. Over time, holding other factors constant, the income level of poor countries will approach that of rich countries, causing the growth rates to converge. The concept of convergence applies in a conditional sense because nations vary with respect to their populations' propensity to save and have children, their willingness to work, their access to technology, and the nations' government policies.³² While cross-sectional estimations may potentially omit important unobservable country-specific differences that affect economic growth, the panel estimation proposed by Islam controls for these individual country effects.³³

A second determinant of income per capita growth commonly used in the literature is the share of GDP composed of investment.³⁴ Because investment provides the needed capital to facilitate economic growth, higher shares of investment are expected to contribute to greater levels of economic growth. One concern regarding the use of this measure has to do with the potential endogeneity between investment and per capita GDP. As Barro notes, a positive correlation between these two measures may reflect the positive relationship between growth opportunities and investment, rather than the positive effect of an exogenously higher investment ratio on the growth rate.³⁵ In other words, investors may bring capital into a country because they perceive the potential for economic growth to be high.

³² Robert Barro, *Determinants of Economic Growth: A Cross-Country Empirical Study* (Cambridge, MA: MIT Press, 1997), 1.

³³ Islam, "Growth Empirics," 1137.

³⁴ Gaibulloev and Sandler, "Growth Consequences of Terrorism in Western Europe," 412.

³⁵ Barro, *Determinants of Economic Growth*, 33.

The share of government consumption can also affect economic growth. As government spending increases, interest rates can rise, crowding out private investment and consumption. The extent to which this crowd-out reduces economic growth has to do with the productivity of the government spending and the deadweight loss associated with the taxes required to raise the government revenue. The level of a country's economic openness, often measured by the ratio of the sum of exports and imports to GDP can also affect growth. More open economies are expected to have higher growth rates because exports increase an economy's aggregate demand and imports may provide necessary raw materials and technology transfers.³⁶

Economic freedom, promoted through the government protection of property rights, is also believed to promote economic growth. Democracies are also thought to offer greater economic protections to its citizens than other forms of government. If this is true, then democracy should lead to greater growth. But growth reducing aspects of democracy exist as well, such as the tendency to enact programs that redistribute wealth.³⁷ Authoritarian governments do not necessarily restrict economic freedom either. Qatar, for example, is an absolute monarchy and its citizens possess a high degree of economic freedom. Lebanon, on the other hand, is a parliamentary democracy, but possesses low levels of economic freedom. Therefore, the relationship between government type and economic growth is theoretically ambiguous.

³⁶ Gaibulloev and Sandler, "Growth Consequences of Terrorism in Western Europe," 413.

³⁷ Barro, *Determinants of Economic Growth*, 49.

Methodology

Data

In order to conduct this analysis, a new unbalanced panel dataset was created drawing on four sources. The dataset contains annual observations on the eighteen Near Eastern countries from 1970 to 2012, with the country-year as the unit of analysis.³⁸ The dependent variable for this study is a proxy of a country's income per capita as measured by GDP in constant 2005 US dollars minus government consumption expenditures divided by the country's population.³⁹ These data are derived from the *National Accounts Main Aggregates Database* produced by the United Nations Statistics Division.⁴⁰ In order to measure the percentage change in economic growth, the difference in the log of the income per capita measure of subsequent years is calculated. Also obtained from the *National Accounts Main Aggregates Database* are data on gross capital formation, which measures the amount of new capital investment in a nation's economy in the designated year, as well as the amount of exports and imports.

The independent variable for this study is terrorism. Data on terrorism incidents is derived from the *Global Terrorism Database* produced by the National Consortium for the Study of Terrorism and Response to Terrorism.⁴¹ One advantage of this study is that it is able to

³⁸ Near Eastern states used in this analysis, as classified by the US Department of State, include: Algeria, Bahrain, Egypt, Iran, Iraq, Israel/Palestine, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates, and Yemen.

³⁹ Terrorist attacks are likely to induce additional government security and defense expenditures. If so, a rise in government consumption in response to a terrorist attack will contribute positively to a country's GDP. This is one reason why GDP is not a perfect measure of welfare – the country would have been better off had they not been attacked, even though its GDP may be smaller. To compensate for this potential bias, I remove government consumption expenditures from the income per capita measure.

⁴⁰ United Nations Statistics Division, *National Accounts Main Aggregates Database*, accessed October 2, 2014, <http://unstats.un.org/unsd/snaama/selbasicFast.asp>.

⁴¹ National Consortium for the Study of Terrorism and Responses to Terrorism, *Global Terrorism Database*, 2013, accessed September 15, 2014, <http://www.start.umd.edu/gtd>.

distinguish between domestic and transnational terrorist events. Although the *Global Terrorism Database* does not differentiate between domestic and transnational incidents, Enders, Sandler, and Gaibullov developed a procedure to decompose the data into these two types of events.⁴² Distinguishing between these two types of terrorism is an important component in an analysis of terrorism on economic growth. Transnational terrorism can have a larger influence by deterring foreign direct investment, requiring additional border security expenditures, or necessitating military operations to target terrorists in their foreign bases.⁴³ Of the two regional studies that have thus far been conducted using disaggregated terrorism data for Western Europe and Africa, both have concluded that only transnational terrorism has had a negative effect on macroeconomic growth.⁴⁴

The primary differentiation between transnational and domestic terrorism has to do with the nationalities of both the victims and the perpetrators. Domestic terrorism primarily affects the host country as it involves an act of terrorism by one citizen against another. The March 13th, 2012 vehicular suicide bombing by Ansar al-Sharia against a Yemeni military checkpoint in Bayda, Yemen that killed three people and wounded seven others was a domestic terrorist attack. Domestic terrorism can sometimes result from long-lasting socio-economic inequalities or occur as the result of the oppression of certain minority groups. The assassination of local government officials or the targeting of local security forces are common forms of domestic terrorism. In certain cases there may be some uncertainty as to whether events should be classified as acts of domestic terrorism or as non-terrorism events, such as guerilla warfare or criminal action. These

⁴² Enders, Sandler, and Gaibullov, "Domestic versus Transnational Terrorism," 322-323.

⁴³ *Ibid.*, 323.

⁴⁴ Gaibullov and Sandler, "Growth Consequences of Terrorism in Western Europe," 418; and Gaibullov and Sandler, "The Adverse Effect of Transnational and Domestic Terrorism on Growth in Africa," 363.

ambiguous events are coded in the GTD database as ‘Double Terrorism Proper’ and are dropped from the dataset to ensure that the analysis does not conflate terrorism with other forms of violence. The ability to eliminate these questionable observations from the database is only available for incidents that occurred after 1997.

Incidents of transnational terrorism extend beyond the border of the host country. This can pertain to the victims, perpetrators, or the targets of the terrorist attack. Transnational terrorism is often intended to influence a nation to change its foreign policy. The September 11th, 2012 attack by Ansar al-Sharia on the US consulate in Benghazi, Libya that killed two Americans, including the ambassador, was a transnational terrorist incident. Aircraft hijacking of international flights and the bombing of foreign tourist destinations are other forms of transnational terrorism. Transnational terrorist attacks also commonly impose externalities on other nations. This occurs when negative costs are inflicted upon nations that are not involved in the terrorism incident. For example, the September 11th, 2001 terrorist attacks had a negative influence on stock markets around the world.⁴⁵ These spillover costs are one reason why transnational terrorism may be more costly, on the whole, than domestic terrorism.

In order to differentiate transnational from domestic terrorist events, this paper follows the decomposition method designed by Enders, Sandler, and Gaibullov.⁴⁶ Table 1 shows the number of transnational and domestic terrorism events by country over the entire period of the study. The ratio between domestic and transnational terrorism in the Near East region exceeds 6:1 over this time period. Other research using global data has found this ratio to commonly be

⁴⁵ Sandler and Enders, “Economic Consequences of Terrorism in Developed and Developing Countries,” 21.

⁴⁶ Enders, Sandler, and Gaibullov, “Domestic versus Transnational Terrorism,” 322-323. The data for 1993 are missing from the GTD, so an average of the 1992 and 1994 values are used to interpolate the missing year’s values.

between 3:1 and 4:1.⁴⁷ Some of the most active terrorist groups in the Near East that have contributed to this high prevalence of domestic terrorism include the Armed Islamic Group in Algeria, Hamas in Israel, and Hizballah in Lebanon. Many of these groups are deep-rooted in Islamic fundamentalism and have waged prolonged domestic terrorism campaigns in their respective states.

The incidence of terrorism in the Near East as shown in Table 1 reveals that the majority of attacks are concentrated in a few states. The countries of Lebanon, Israel, Iraq, and Algeria are each ranked in the top four in terms of both the number of transnational and domestic terrorism events. Cumulatively these four countries account for over 70 percent of transnational attacks and 85 percent of domestic terrorist attacks over the time period studied. The United Arab Emirates, Tunisia, Qatar, and Oman experienced very few terrorist attacks of either type and are ranked in the bottom four in both measures.

Just as terrorism has the potential to affect economic growth, so does the presence of other forms of conflict. Information on the presence of internal and external conflicts is taken from the *Major Episodes of Political Violence* database.⁴⁸ Conflicts are included in the database if they occur as a result of the “systematic and sustained use of lethal violence by organized groups that result in at least 500 directly-related deaths over the course of the episode.”⁴⁹ Classification of conflicts that reach this threshold in the dataset are assigned to one of seven categories of armed conflict: international violence, international war, international independence war, civil

⁴⁷ Daniel Meierrieks and Thomas Gries, “Causality between Terrorism and Economic Growth,” *Journal of Peace Research* 50, no. 1 (January 2013): 94.

⁴⁸ Monty Marshall, *Major Episodes of Political Violence (MEPV) and Conflict Regions, 1946-2013*, Center for Systemic Peace, George Mason University, accessed September 15, 2014, <http://www.systemicpeace.org/inscrdata.html>.

⁴⁹ Monty Marshall, *Codebook: Major Episodes of Political Violence (MEPV2013)* (Fairfax, VA: Center for Systemic Peace, George Mason University, 2013), 2.

Table 1. Number of Terrorist Incidents by Country, 1970-2012

Country	Transnational		Domestic	
	Incidents	Rank	Incidents	Rank
Lebanon	591.5	1	693	4
Iraq	408.5	2	4860.5	1
Israel	129.5	3	2457	2
Algeria	118	4	1899	3
Iran	108.5	5	437.5	6
Yemen	93	6	338.5	7
Egypt	53.5	7	555	5
Syria	53	8	208	8
Jordan	47.5	9	31.5	12
Kuwait	38.5	10	32	11
Saudi Arabia	32	11	25	13
Libya	20.5	12	46	10
Morocco	18	13	12.5	14
Bahrain	14	14	50.5	9
UAE	10	15	7	16
Tunisia	9.5	16	9	15
Qatar	2	17	2	17
Oman	0	18	0	18

Source: Data from National Consortium for the Study of Terrorism and Responses to Terrorism, *Global Terrorism Database*, 2013, accessed September 15, 2014, <http://www.start.umd.edu/gtd>.

violence, civil war, ethnic violence, and ethnic war. Using the same procedure as Gaibullov and Sandler, these seven categories are combined into two variables that represent the presence of internal or external conflict.⁵⁰ An internal conflict dummy variable is coded as a 1 if a country experiences civil violence, civil war, ethnic violence, or ethnic war, and is 0 otherwise.

Additionally, an external conflict dummy variable is coded as a 1 if a country is engaged in international violence, international war, or international independence, and is 0 otherwise. Figure 4 shows the number of countries that have been involved in internal and external conflicts per

⁵⁰ Gaibullov and Sandler, “The Adverse Effect of Transnational and Domestic Terrorism on Growth in Africa,” 361.



Figure 4. Presence of Internal and External Conflicts in the Near East

Source: Monty Marshall, *Major Episodes of Political Violence (MEPV) and Conflict Regions, 1946-2013*, Center for Systemic Peace, George Mason University, accessed September 15, 2014, <http://www.systemicpeace.org/inscrdata.html>.

year throughout the sample period. The number of countries involved in internal conflicts has exceeded the number involved in external conflicts in all but four years. Although external conflicts are less common in the region, previous research indicates that external wars are three times as costly as internal conflicts.⁵¹

Figure 5 shows the number of years that each Near Eastern country has been involved in both internal and external conflicts from 1970 to 2012. The countries of Iraq, Israel, Lebanon, and Iran have been involved in the greatest number of years of conflict of both types. Much of the

⁵¹ Blomberg, Hess, and Orphanides, “The Macroeconomic Consequences of Terrorism,” 1023.

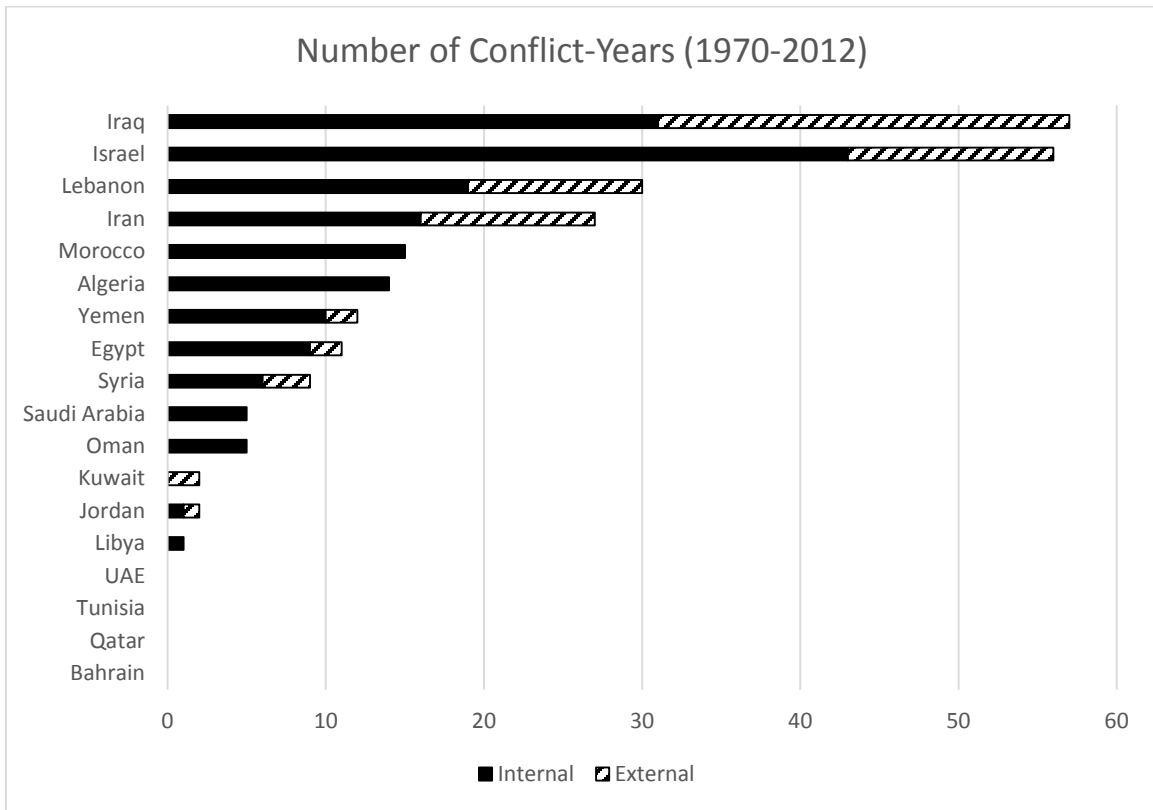


Figure 5. Number of Conflict Years by Country

Source: Monty Marshall, *Major Episodes of Political Violence (MEPV) and Conflict Regions, 1946-2013*, Center for Systemic Peace, George Mason University, accessed September 15, 2014, <http://www.systemicpeace.org/inscrdata.html>.

external conflict is due to the Israeli-Lebanese and Iran-Iraq wars fought in the 1980s, along with the more recent American war in Iraq. The presence of internal conflict is much more ubiquitous, with thirteen of the eighteen countries in the region having experienced major violence as a result of a civil war during this period.

A country's level of democratization is also included in the analysis in order to control for the influence of the government type on economic growth. To measure democratization,

polity scores are used from the *Polity IV dataset*.⁵² The polity measure reflects the amount of political participation in a country, the level of restraint on the use of executive power, and the extent to which the government supports civil liberties. The polity scores classify states on a scale of -10 to 10, with a higher score representing a more democratic type of government. The mean polity score for Near Eastern countries during the time period studied is -6.0 with a standard deviation of 5.0.

Empirical Specification

The original work of Blomberg, Hess, and Orphanides used a pooled cross-section in their estimation of the impact of terrorism on economic growth.⁵³ The disadvantage to this approach is that it averages values across all of the years in the sample and is unable to account for dynamic changes. The use of panel data, however, accounts for these changes. This paper follows a similar approach to Gaibullov and Sandler in the use of the following regression model⁵⁴:

$$(1) \quad \text{growth}_{it} = \beta_0 + \beta_1 y_{it-1} + \beta_2 \text{capital}_{it-1} + \beta_3 \text{terror}_{it} + \beta_4 \text{external}_{it} + \beta_5 \text{internal}_{it} + \beta_6 \text{polity}_{it} + \beta_7 \text{population}_{it} + \beta_8 \text{openness}_{it-1} + \alpha_i + \lambda_t + \mu_{it}$$

where growth_{it} is the growth rate of the income per capita measure for country i during year t , y_{it-1} is the natural logarithm of the income per capita measure lagged by one year, and capital_{it-1} is the fraction of GDP composed of gross capital formation in a country lagged by one year. The

⁵² Monty Marshall, Ted Gurr, and Keith Jagers, *Polity IV Dataset Version 2013 and Dataset Users' Manual* (Fairfax, VA: Center for Systemic Peace, George Mason University, 2013), accessed September 15, 2014, <http://www.systemicpeace.org/inscrdata.html>.

⁵³ Blomberg, Hess, and Orphanides, "The Macroeconomic Consequences of Terrorism," 1018.

⁵⁴ Gaibullov and Sandler, "The Adverse Effect of Transnational and Domestic Terrorism on Growth in Africa," 358.

variable $terror_{it}$ is the number of terrorist attacks per million persons in a given country per year. Domestic and transnational terror events are first tested separately and then are both included in subsequent regressions. The $external_{it}$ and $internal_{it}$ terms are dummy variables representing the presence of external and internal conflicts, respectively. The variable $polity_{it}$ is a country's polity score in a given year, $population_{it}$ is the annual growth rate of a country's population, and $openness_{it-1}$ is a measure of trade openness as measured by the sum of exports and imports divided by GDP, lagged by one year. Additionally, α_i are country fixed-effects, λ_t are year fixed-effects, and μ_{it} represents the error term. Standard errors are robust and are clustered at the country level.

The use of this identification strategy has two main advantages. First, the use of panel data allows for inclusion of more observations than in time-series analyses, thus obtaining more precise estimates. The results are also more efficient, given that there is more variation in the variables of interest. Second, using this combined country and time period fixed-effects regression model eliminates omitted variables bias arising both from unobserved variables that remain constant within countries over time and from unobserved regional changes that affect all countries equally. State differences such as resource endowments, ethnic and religious diversity, and national culture, which are accounted for by the fixed effects, are expected to influence economic growth as a result of terrorism. Similarly, regional shocks such as changes in the price of oil will also impact the growth of the area's economies.

Results and Discussion

Estimation Results

The results of the estimates of equation (1) are presented in Table 2. Model 1 includes the standard growth determinants of lagged income per capita and lagged capital investment, along

with the measure of domestic terrorism events. Model 2 repeats this analysis, replacing domestic terrorism with transnational terrorism, and Model 3 includes both terrorism measures. Model 4 then adds variables for both internal and external conflicts as well polity scores as a measure of democratization and Model 5 controls for a country's population growth and trade openness.

Across all five models, the lagged income per capita measure has a negative impact on growth, consistent with the theory of convergence, which predicts that poorer nations will have higher growth rates than wealthy nations. The measure of lagged capital investment is also consistent with growth theory, showing a positive relationship between investment spending in the previous year and economic growth, although the results are statistically insignificant. The variables for both domestic terrorism and transnational terrorism are insignificant across all five specifications. The finding of an insignificant impact of domestic terrorism is consistent with the two previous studies that have decomposed terrorism into domestic and transnational incidents by Gaibullov and Sandler.⁵⁵ The finding of an insignificant effect of transnational terrorism differs from some of the previous literature that uses global or other regional samples, but is consistent with the only other regional analysis of the Middle East conducted by Blomberg, Hess, and Orphanides.⁵⁶ Additionally, in Gaibullov and Sandler's African study, they construct a subsample of North Africa and find that transnational terrorism has a statistically insignificant effect on growth in that area.

While the estimates of terrorism do not show an effect on economic growth, the other measures of conflict do show significant detrimental effects. The presence of an external war is

⁵⁵ Gaibullov and Sandler, "The Adverse Effect of Transnational and Domestic Terrorism on Growth in Africa," 363; Gaibullov and Sandler, "Growth Consequences of Terrorism in Western Europe," 418.

⁵⁶ Blomberg, Hess, and Orphanides, "The Macroeconomic Consequences of Terrorism," 1021. In their Middle Eastern subsample, the authors estimate a positive, but statistically insignificant impact of transnational terrorism on GDP growth.

Table 2. Ordinary Least Squares Regression Estimates of Growth Model

	Model 1	Model 2	Model 3	Model 4	Model 5
y_{it-1}	-0.122*** (0.028)	-0.117*** (0.027)	-0.117*** (0.027)	-0.126*** (0.027)	-0.122*** (0.025)
$capital_{it-1}$	0.063 (0.076)	0.074 (0.080)	0.071 (0.079)	0.076 (0.074)	0.100 (.077)
$domestic_terror_{it}$	-0.001 (0.002)		-0.002 (0.001)	-0.001 (0.001)	-0.001 (.001)
$transnational_terror_{it}$		0.007 (0.008)	0.009 (0.008)	0.011 (.009)	0.010 (0.009)
$external_{it}$				-0.106** (0.042)	-0.118*** (0.042)
$internal_{it}$				-0.047** (0.021)	-0.044** (0.021)
$polity_{it}$				0.003 (0.003)	0.004 (0.003)
$population_{it}$					-0.634* (0.351)
$openness_{it-1}$					0.034 (0.030)
Observations	736	736	736	711	711
R-squared	0.17	0.17	0.18	.22	.23

Source: Author's calculations.

Notes: Terrorism variables are specified as the number of terrorist attacks per million persons in a given country per year. Standard errors and in parenthesis. Significance levels: *** .01, ** .05, and * .10.

estimated to reduce the measure of income per capita growth by approximately 11 percentage points annually. Similarly, internal conflicts are estimated to reduce growth by over 4 percentage points. Given that there are 71 country-years of external conflict and 175 country-years of internal conflict in this sample, the presence of these conflicts has been a major detriment to economic growth in the Near East region. Previous literature has also identified the large effect of external wars and internal conflict on economic growth, and even the literature that estimates a negative effect of terrorism, finds that the magnitude is considerably smaller and less persistent

than that associated with either external or internal conflict.⁵⁷ The level of democratization as measured by Polity scores shows an insignificant effect, indicating that government type is not a significant determinant of economic growth. Similarly, a country's level of trade openness shows an insignificant effect. Finally, higher rates of population growth have a negative effect on economic growth, consistent with the Solow growth model.

Next, a series of robustness checks are performed using an alternative specification of terrorism. The terrorism measure used thus far has weighted all terror events equally. Unsuccessful terrorist attacks or those that cause minimal damage are likely to have a smaller impact than more catastrophic events. An attack on a business center that kills workers and damages infrastructure has the direct effect of immediately reducing economic activity, whereas an unsuccessful assassination attempt against a government official might not have the same effect on economic growth. In order to determine the severity of an attack, the *Global Terrorism Database* provides data on the number of fatalities that result from each terrorist attack. Not only are domestic terrorist attacks more common, they are also more deadly. On average, there were 3.1 fatalities associated with each domestic attack and 2.2 fatalities per transnational attack.

Table 3 shows the results of the estimation of Models 1 through 5 using the number of fatalities per million persons in a given country per year as the measure of terrorism. The results remain generally consistent with the previous analysis. The estimates of the lagged income per capita measure and lagged capital investment maintain the theoretically predicted sign, although the lagged capital investment estimates remain statistically insignificant. The new measures of transnational and domestic terrorism remain very close to zero, supporting the finding that neither of these measures has a significant effect on economic growth. Internal and external conflicts are both found to have negative statistically significant effects on growth, with the magnitude of

⁵⁷ Blomberg, Hess, and Orphanides, "The Macroeconomic Consequences of Terrorism," 1009.

Table 3. Robustness of Estimates to Alternative Specification of Terrorism Variables

	Model 1	Model 2	Model 3	Model 4	Model 5
y_{it-1}	-0.118*** (0.028)	-0.123*** (0.028)	-0.120*** (0.028)	-0.127*** (0.028)	-0.123*** (0.026)
$capital_{it-1}$	0.062 (0.077)	0.050 (0.075)	0.045 (0.075)	0.050 (0.070)	0.076 (.073)
$domestic_killed_{it}$	0.001 (0.001)		0.001 (0.001)	0.002 (0.001)	0.002 (.001)
$transnational_killed_{it}$		-0.003 (0.002)	-0.003 (0.002)	-0.002 (.002)	-0.003 (0.002)
$external_{it}$				-0.105** (0.041)	-0.118*** (0.042)
$internal_{it}$				-0.052** (0.021)	-0.049** (0.021)
$polity_{it}$				0.002 (0.003)	0.003 (0.003)
$population_{it}$					-0.695* (0.364)
$openness_{it-1}$					0.038 (0.031)
Observations	736	736	736	711	711
R-squared	0.17	0.18	0.18	.24	.25

Source: Author's calculations.

Notes: Terrorism variables are specified as the number of fatalities per million persons in a given country per year. Standard errors and in parenthesis. Significance levels: *** .01, ** .05, and * .10.

external wars being double that of internal conflict. Higher rates of population growth also continue to have a statistically significant negative effect. Finally, neither the democratization level, nor the degree of trade openness, are shown to have a significant effect.

Discussion of Findings

These results suggest that Near Eastern economies are less affected by terrorism than previous research has found in other parts of the world such as Africa and Asia. Terrorist attacks aimed towards destroying economic infrastructure or deterring foreign investment have been

relatively unsuccessful in meeting this goal. While some attacks have certainly brought about some amount of economic harm, in aggregate, Near Eastern economic growth has not been slowed by terrorism. So what accounts for this economic resiliency? Three possible reasons are discussed here that help explain why the Near East has been better able to withstand terrorism than other regions.

One possible explanation has to do with the ability of the region's governments to leverage the revenue gained from oil exports to mitigate any adverse economic effects. Because the majority of Near Eastern economies are oil exporters, many have been able to amass significant financial reserves that can be used to counter any potential economic slowdown brought on by terrorist attacks.⁵⁸ While these reserves are primarily built-up in order to provide governments with the ability to implement expansionary fiscal policy to offset the effects of the business cycle, the same tools can be applied to respond to terrorism events. The historically increasing global demand for oil has allowed the oil exporting nations to maintain a high level of public spending, which has created spillover effects for some of the other countries in the region.⁵⁹ Although terrorism has plagued this part of the world, the ability to capitalize on the vast supply of oil resources has provided the governments with the necessary means to mitigate any negative economic effects brought on by the attacks.

Previous research on government responses to terrorism has shown that states often do attempt to mitigate the economic effects of terrorism through fiscal stimulus. In the case of Western Europe, the reduction in investment spending that occurred as a result of terrorism was

⁵⁸ Masood Ahmed, "Middle East and North Africa: Resilient Amid the Global Financial Storm," International Monetary Fund, November 2009, accessed October 1, 2014, <https://www.imf.org/external/np/vc/2009/113009.htm>.

⁵⁹ Ibid.

in part offset by a corresponding increase in government spending.⁶⁰ While it is unclear whether this increase in government spending came in the form of additional defense spending or more general fiscal stimulus measures, the short-term effect contributed positively to economic growth. Near Eastern governments with large financial reserves have likely taken some of the same fiscal measures.

A second possible explanation as to why terrorism has not affected economic growth in this region is that Near Eastern society has become accustomed to a high level of terrorism, seeing it as part of everyday life. This concept, known as social resilience, describes a society's ability to withstand adversity in order to prevent events such as terrorist attacks from seriously disrupting the normal functioning of a society.⁶¹ States that are more cohesive in nature generally display higher levels of social resilience. One way that social resiliency can be tested is by examining behavioral responses to adverse events. Previous research has sought to understand how Israeli society has been affected by prolonged terrorism. One analysis of Israel during the Second Intifada, which was waged from 2000 to 2005, found that regular consumers of goods and services did not alter their demand as a result of increases in terrorism.⁶² This finding indicates that other than the direct costs of the attacks, such as lost lives or damaged property, the economic harm imposed by the terrorism was relatively limited. A second analysis of this same period found that Israeli society became acclimated to chronic terrorism.⁶³ The high level of

⁶⁰ Gaibulloev and Sandler, "Growth Consequences of Terrorism in Western Europe," 421.

⁶¹ Dov Waxman, "Living with Terror, not Living in Terror: The Impact of Chronic Terrorism on Israeli Society," *Perspectives on Terrorism* 5, no. 5-6 (December 2011): 19.

⁶² Gary Becker and Yona Rubinstein, "Fear and the Response to Terrorism: An Economic Analysis" (Mimeo, University of Chicago, 2011), 37, accessed November 15, 2014, http://www.econ.brown.edu/fac/yona_rubinstein/Research/Working%20Papers/BR_FEB_2011.pdf.

⁶³ Waxman, "Living with Terror, not Living in Terror," 18.

social resilience in Israeli society helped them to cope with the violence and prevented the terrorists from significantly disrupting economic activity. Although the concept of social resilience has only been examined in one terror-prone Near Eastern country, high levels of social resilience may be a common feature of the region.

The final explanation offered here focuses on the motivations and the methods of the terrorists themselves. The strategies employed by terrorist groups range from spreading chaos among a population, discrediting and destroying an existing government, inflicting economic damage, weakening a state's military force, or attempting to bring international attention to the terrorists' cause.⁶⁴ Which of these strategies are employed varies depending on the goals of the terrorist organization. The growth of terrorism in the Near East has primarily been a result of the politicization and radicalization of Islam. The focus of this religiously-motivated terrorism has been on weakening the monarchies and authoritarian regimes in the region, which the terrorists view as corrupt and un-Islamic, rather than attacking targets of economic significance. This rise in terrorism, shaped primarily by Islamic radicalization, has differentiated how terrorism has evolved in the Near East from other parts of the world. Although religiously motivated terrorism has occurred in all faiths and cultures, the rise in Islamic terrorism has outpaced that of any other religiously associated political violence.⁶⁵

A brief description of the evolution of terrorism in the region is helpful in understanding why political as opposed to economic targets are primarily chosen by Near Eastern terrorists. The dynamics that have influenced contemporary terrorism consist of a blend of historical, economic, political, cultural, and social factors. Following the colonial era, Egypt's President Gamal Abdel Nasser began promoting the idea of pan-Arabism, a form of secular nationalism that expressed

⁶⁴ Christopher Harmon, *Terrorism Today* (New York: Routledge, 2008), 39.

⁶⁵ Peter Neumann, *Old and New Terrorism: Late Modernity, Globalization and the Transformation of Political Violence* (Cambridge: Polity Press, 2009), 105.

the Arabs' desires to be independent of Western political involvement. In most of the Muslim countries that were allied with the Soviet Union at the time, Islam had been pushed to the margins and no longer played a significant role in the formation of state policies.⁶⁶ After Israel's defeat of the combined Arab forces of Egypt, Syria, and Jordan during the Six-Day War of 1967, Nasser's rhetoric began to lose momentum. The following decade saw a combination of both secular terrorism, waged primarily by Palestinian terror groups, and religious terrorism, waged by radical Islamic groups such as the Muslim Brotherhood. Then in 1979, the Iranian Revolution occurred and Ayatollah Khomeini rose to power. The revolution demonstrated that it was possible for a strong Islamic ideology to defeat a more secular political agenda. That same year, the Soviet Union's invasion of Afghanistan mobilized a wave of foreign fighters from Arab countries who went to Afghanistan to wage jihad. When the battle-hardened Islamist fighters returned home, many believed that the time had come to overthrow the ignorant rulers of their own countries.⁶⁷ The victory in Afghanistan, combined with the end of the Cold War, convinced many Islamists that there was an opportunity to alter the political landscape of the Muslim world. Throughout the 1990s, nearly every Arab country saw the formation of Islamic terrorist groups, often led by veterans of the Afghan war.⁶⁸ These groups targeted not only the existing political regimes, but also their perceived Western supporters.

The growth of Islamic extremism in the region occurred as many of these groups began to pursue objectives aimed at restructuring the local political orders. The perceived failure of secular ideologies presented an opportunity for these groups to offer a return to a more traditional

⁶⁶ Neumann, *Old and New Terrorism*, 108.

⁶⁷ Lawrence Wright, *The Looming Tower: Al-Qaeda and the Road to 9/11* (New York: Random House LLC, 2006), 121-125.

⁶⁸ Neumann, *Old and New Terrorism*, 113.

religious lifestyle that many believed had been lost.⁶⁹ To pursue these political ends, terrorist groups in the Near East have directed their violence towards military and police forces, members of the government, and private citizens in order to weaken the general confidence in the state. They have focused less on targets of economic significance, as is often the strategy of Marxist-inspired terror groups that are motivated by economic grievances.⁷⁰ Over the time period of this study, approximately 15 percent of attacks in the Near East were directed at targets of economic significance such as businesses, transportation assets, and utilities, whereas almost 30 percent of attacks were directed at this same category of targets in the rest of the world. While attacks on political and military targets still have the potential to negatively affect economic growth, the overall effect on the economy is minimal. A suicide bomber that blows himself up at a military checkpoint can inflict a terrible human toll, but will do little to slow down the growth of the economy. Because of the nature of the terrorists' goals, they have primarily decided to attack their enemies directly rather than weaken their power indirectly through an attack on the economic system.

The three explanations provided here reveal that the Near East region's economic resiliency to terrorism is potentially due to a wide range of causes stemming from the actions of the governments, the characteristics of society, and the motivations of the terrorists. The economic ineffectiveness of terrorism, however, has not deterred terrorist groups in the region from waging attacks. The next section explores how the findings of this paper can be applied to the larger context of defense policy. Understanding the costs imposed by different threats is necessary for states to appropriately allocate the right amount and type of resources to provide for a state's defense.

⁶⁹ Neumann, *Old and New Terrorism*, 115.

⁷⁰ Brynjar Lia, *Globalisation and the Future of Terrorism: Patterns and Predictions* (New York: Routledge, 2005), 96.

Implications for Defense Strategy

Policymakers and defense practitioners have to make tough choices about how to protect against terrorism. Because the potential threats that countries face are numerous, but their defense resources are scarce, states must apply the appropriate amount of power at the right place and time in order to maximize the effectiveness of their defense strategies. The Near East faces a substantial terrorist threat that many governments in the region have had difficulty mitigating. Different groups use terrorism to varying degrees in pursuit of their political objectives, which has implications for the best strategies used to achieve a state's desired ends.

As this paper has shown, terrorism in the Near East has failed to disrupt the economic growth of the region. But since the use of terrorism is ultimately directed towards a political goal, understanding the economic impact does not necessarily determine success or failure. In recent years, a growing body of research has found that terrorism is relatively ineffective in coercing governments to grant political concessions. Governments that have been targeted through the use of terror tactics become hardened to the terrorists' demands and are less likely to consider political reform than in situations where other forms of dissent are used.⁷¹ One study that analyzed the success of all foreign terrorist organizations as designated by the US Department of State since 2001, found that terrorist groups accomplished their policy objectives only 7 percent of the time.⁷² Furthermore, groups that primarily attacked civilian targets were the least successful in achieving their goals. Other research that examines a much broader sample, using all terrorist groups between 1968 and 2006, finds that only 10 percent obtained their strategic

⁷¹ Max Abrahms, "Deterring Terrorism: A New Strategy," *Perspectives on Terrorism* 8, no. 3 (June 2014): 12.

⁷² Max Abrahms, "Why Terrorism Does Not Work," *International Security* 31, no. 2 (2006): 43.

demands.⁷³ Groups that employ suicide attacks, which is a common tactic used by terrorist groups in the Near East, fail at an even higher rate.⁷⁴

Terrorism poses a danger to Near Eastern countries primarily due to the high frequency of its use, but terrorism tactics alone do not significantly threaten the growth of the region's economies or the legitimacy of its governments. What is much more costly, both economically and politically, is the presence of internal conflicts and external wars. As found in this study, internal and external conflicts reduce economic growth by over 4 and 11 percentage points respectively per year. These results are robust to both measures of terrorism used in the analysis. Internal conflicts are often seen as a struggle between various ethnic or religious groups vying for power within a state. At the macro level this is often the case, but at the local level much of the violence that occurs is a result of pre-existing rivalries that become violent as the conflict spreads.⁷⁵ These internal conflicts can create great uncertainty within a state, often limiting foreign direct investment and posing high risks for existing firms. External wars produce an even bigger strain on growth as they consume a significant amount of resources and disrupt trade with other regions. While terrorism can often provoke a strong response by states because of its perceived illegitimacy and frequent targeting of civilians, the harm it poses to a country is far less than that brought about by these other forms of conflict.

When states allocate resources to defense and security measures they should do so with an understanding of the costs and benefits associated with each type of action. Because states do not possess unlimited means to use towards national defense, there are tradeoffs involved with the

⁷³ Seth Jones and Martin Libicki, *How Terrorist Groups End: Lessons for Countering al Qaeda* (Santa Monica: RAND Corporation, 2008), 32.

⁷⁴ Max Abrahms, "Dying for Nothing? The Political Ineffectiveness of Suicide Terrorism," in *Debating Terrorism and Counterterrorism*, ed. Stuart Gottlieb (Thousand Oaks, CA: CQ Press, 2014), 153.

⁷⁵ Stathis Kalyvas, *The Logic of Violence in Civil Wars* (New York: Cambridge University Press, 2006), 364.

decision to provide resources to one area and not another. As has been shown here, not all threats are equal and therefore deserve varying levels of intervention. Terrorism is a relatively ineffective tactic in achieving economic or political goals and should receive less focus than state efforts to mitigate internal and external conflicts. This is not to say that terrorist groups should not be a major focus of a state's national security strategy. Rather, a distinction needs to be made between groups that employ terrorism as a tactic and the act of terrorism itself.

Terrorism often occurs in conjunction with internal and external conflicts. As research by the renowned sociologist Charles Tilly has shown, "the strategy of terror appears across a wide variety of political circumstances, in the company of very different sorts of political struggle."⁷⁶ Despite this phenomenon, most scholars continue to place artificial, analytic boundaries between the study of terrorism and other forms of conflict.⁷⁷ Removing these barriers has led one study to find that there is a high degree of overlap between terrorism and ongoing civil war.⁷⁸ The results of the analysis shown here identify the effect of terrorism controlling for internal and external conflicts (along with the other control variables). In other words, whether or not a state is undergoing an internal or external war, adding additional terrorism events does not have a significant effect on economic growth. However, the use of terrorism by groups is often just one component of a larger strategy. Even in the Near East where a particular form of Islamic terrorism is widely practiced, it is important to understand that terrorist groups are not monolithic in nature.

⁷⁶ Charles Tilly, "Terror, Terrorism, Terrorists," *Sociological Theory* 22, no. 1 (March 2004): 10.

⁷⁷ Michael Findley and Joseph Young, "Terrorism and Civil War: a Spatial and Temporal Approach to a Conceptual Problem," *Perspectives on Politics* 10, no. 2 (June 2012): 286.

⁷⁸ *Ibid.*, 285.

While some Islamic terrorist groups have direct strategic goals and function similar to regime-change movements, other groups have more abstract or universal goals, such as those affiliated with the global Al Qaeda network.⁷⁹ Countering the threats posed by these groups requires varying approaches. Groups with more universal aspirations are difficult to contend with because they often exist within a complex global network of recruitment, financing, and operations. Traditional counterterrorism operations, however, can be effective in degrading these types of groups through the application of military power against the terrorist organization. Strategies of this kind, broadly classified as preventative counterterrorism, focus on establishing obstacles between terrorists and their objectives. Preventative counterterrorism can include active measures, such as pre-emptive action against an organization that is believed to be preparing for an attack, or passive measures, such as target hardening or increased border security.⁸⁰ Islamist groups, on the other hand, that exhibit more local objectives, such as controlling terrain and asserting political authority over a population, require a more robust strategy that necessitates extensive action outside of the military realm. Defeating these types of threats not only requires destructive military force, but it also requires constructive efforts to rebuild political order.

Many modern terrorist groups in the Near East have expanded their operations beyond traditional terrorism methods, now acting more like insurgent groups by employing hybrid strategies that threaten the states' military and security forces. This type of warfare is what former British commander, General Rupert Smith, calls "wars among the people."⁸¹ Rather than military

⁷⁹ James Piazza, "Is Islamist Terrorism More Dangerous?: An Empirical Study of Group Ideology, Organization, and Goal Structure," *Terrorism and Political Violence* 21, no. 1 (2009): 63.

⁸⁰ Bradley McAllister and Alex Schmid, "Theories of Terrorism," in *The Routledge Handbook of Terrorism Research*, ed. Alex Schmid (New York: Routledge, 2011), 256.

⁸¹ Rupert Smith, *The Utility of Force: The Art of War in the Modern World* (New York: Random House, 2007), 19.

engagements occurring in isolation from civilians, garnering the support of the population has become a central target of modern military operations. Hybrid groups use a blend of tactics, based upon their capabilities and resources, to pursue their goals. Terrorism is employed against civilian populations and rival forces in order to coerce political leaders into making concessions, while guerilla and even conventional military actions are taken against state security forces in a more direct challenge to the existing government's authority. For example, Hamas still wages a traditional terrorism campaign in Israel, but they have also targeted Israeli Defense Forces using highly-trained, conventionally-equipped teams under the authority of well-informed commanders.⁸² Similarly, some observers have claimed that Hizballah has developed into some of the "most skilled light infantry on the planet."⁸³ The self-proclaimed Islamic State, fighting in Iraq and Syria, has seen success in taking on the states' security forces. In one instance in June of 2014, 800 Islamic State fighters forced the withdrawal of two divisions of Iraqi soldiers from the city of Mosul, seizing the city's main army base, releasing hundreds of prisoners from the city's jails, and taking up to \$480 million in banknotes from the city's banks.⁸⁴ While each of these groups employ terror tactics, it is their establishment of active insurgencies that poses the greatest danger to the states' respective governments.

Labeling these groups as "terrorist organizations" can be beneficial in as much as it helps to delegitimize the use of terrorist violence; reduce public support; and undercut financial and

⁸² Robert Scales and Douglas Ollivant, "Terrorist armies fight smarter and deadlier than ever," *Washington Post*, August 1, 2014, accessed September 4, 2014, http://www.washingtonpost.com/opinions/terrorist-armies-are-fighting-smarter-and-deadlier-than-ever/2014/08/01/3998ae00-18db-11e4-9e3b-7f2f110c6265_story.html.

⁸³ *Ibid.*

⁸⁴ Martin Chulov, Fazel Hawramy, and Spencer Ackerman, "Iraq army capitulates to Isis militants in four cities," *The Guardian*, June 11, 2014, accessed September 4, 2014, <http://www.theguardian.com/world/2014/jun/11/mosul-isis-gunmen-middle-east-states>.

material support for terrorist entities.⁸⁵ Framing the narrative in this way is an effective method for garnering support to take action against the so-called terrorists, but as a descriptive label it is misleading; terrorism is often only one of several tactics used by organizations attempting to gain political power. Groups that employ terrorism also directly confront conventional military forces, attempt to hold significant pieces of terrain, and try to usurp government authority through the provision of public goods to local residents. Wrongly characterizing a group as a terrorist organization can cause analytical mistakes and lead to the development of a suboptimal approach to defeating the group. Traditional counterterrorism strategies that are primarily enemy-focused are insufficient to contend with the more robust threats that employ terrorism tactics in conjunction with guerilla warfare along with other methods to foster an insurgency. As Donald Schoen notes, “Through complementary acts of naming and framing, the practitioner selects things for attention and organizes them, guided by an appreciation of the situation that gives it coherence and sets a direction for action.”⁸⁶ The way a problem is framed will ultimately shape the solutions that are created.

One idea that has been proposed in order to prevent the labeling of groups as “terrorists” from leading to an overly simplistic analysis is to continue to label actors involved in terrorism as terrorist groups in official policy statements, but adopt a greater nuance when examining and conceptualizing these militant groups by employing insurgent group frameworks when appropriate.⁸⁷ From an economic perspective this paper has argued that groups that employ strictly terrorism are less of a threat to the prosperity of a state than those that use it as part of a

⁸⁵ Assaf Moghadam, Ronit Berger, and Polina Beliakova, “Say Terrorist, Think Insurgent: Labeling and Analyzing Contemporary Terrorist Actors,” *Perspectives on Terrorism* 8, no. 5 (October 2014): 13.

⁸⁶ Donald Schoen, *Educating the Reflective Practitioner* (San Francisco: Jossey-Bass, 1987), 4.

⁸⁷ Moghadam, Berger, and Beliakova, “Say Terrorist, Think Insurgent,” 13.

larger strategy. Groups that employ terrorism as a tactic in waging internal conflicts or external wars have the potential to greatly reduce economic growth. These groups, which employ a hybrid style of warfare, are most effectively analyzed through an insurgency framework. US military counterinsurgency doctrine provides this framework, broadly defined as “comprehensive civilian and military efforts designed to simultaneously defeat and contain insurgency and address its root causes.”⁸⁸ When advising and assisting US allies and partners in the region, this doctrine can be applied to determine the methods best employed in order to accomplish the strategic objectives. The threat to the United States’ interests is not so much that terrorism is a regular occurrence in the Near East, but that, as part of a larger strategy that challenges state sovereignty, it aids in destabilizing the region. As a result, the flow of energy resources can become disrupted, transnational crime can increase, humanitarian disasters can develop, and transnational terrorism can directly threaten the homeland.⁸⁹

Many of the structural predictors of successful insurgencies currently exist in the Muslim world including: populations that are largely excluded from politics, authoritarian governments that are corrupt and unresponsive to the needs of their citizens, and significant popular support for insurgent groups.⁹⁰ Effectively countering the threats in this region requires a strategy that goes beyond eroding the terrorist groups’ physical ability to function; the underlying factors that helped give rise to the insurgents must be addressed as well. The advantage to employing an insurgency framework to this problem is that it emphasizes the political dimension of the conflict

⁸⁸ Field Manual 3-24, *Insurgencies and Countering Insurgencies* (Washington, DC: Government Printing Office, 2014), 1-2.

⁸⁹ Steven Metz, *Rethinking Insurgency* (Carlisle, PA: Strategic Studies Institute, US Army War College, 2007), 50.

⁹⁰ David Gompert and John Gordon, *War by Other Means: Building Complete and Balanced Capabilities for Counterinsurgency* (Santa Monica, CA: RAND Corporation, 2008), xxv.

and highlights the diverse methods that can lead to success for an insurgent group. This type of analysis helps to better understand and target an enemy's source of strength. For example, US military counterinsurgency doctrine recognizes that "achieving victory for an insurgent may depend less on defeating an armed opponent and more on a group's ability to garner support for its political interest (often ideologically based) and to generate enough violence to achieve political consequences."⁹¹ Determining the enemy's source of power, or what Prussian military theorist Carl von Clausewitz termed the *center of gravity*, can lead to a more effective strategy that targets the enemy where he is most vulnerable. Clausewitz's conception of the center of gravity is that it is "the hub of all power and movement, on which everything depends...[and] is the point against which all our energies should be directed".⁹² Understanding how militant groups employ terrorism in conjunction with other tactics can lead states to better understand their enemies' sources of strength, allowing states to intervene using various methods to obtain their own political ends.

The extent to which terrorism plays a primary role in a group's strategy can help determine the best method for countering the threat. The more exclusive terrorism becomes as a tactic, the more likely it is that military force will be effective in defeating a terrorist group. Political scientist Joseph Nye's theorizing on the uses of hard and soft power demonstrates that the usefulness of each type of power depends on the nature of the threat that the state faces. According to Nye, "In a struggle against terrorism, the United States needs to use hard power against the hard-core terrorist, but we cannot hope to win unless we win the hearts and minds of mainstream Muslims."⁹³ Counterterrorism strategies that focus mainly on the use of hard power

⁹¹ Field Manual 3-24, *Insurgencies and Countering Insurgencies*, 1-2.

⁹² Carl von Clausewitz, *On War*, ed. and trans. Peter Paret and Michael Howard (Princeton: Princeton University Press, 1976), 595-96.

⁹³ Joseph Nye, *The Future of Power* (New York: Perseus Books Group, 2011), 232.

can prove effective against groups that rely mainly on terrorism to achieve their political ends. In 2009 the US Military updated its doctrine to narrow the scope of counterterrorism by removing “countering root causes and desired regional end states” from the definition.⁹⁴ This distinction differentiates counterterrorism operations, which focus primarily on neutralizing terrorist organizations via hard power, from counterinsurgency operations, which place significant emphasis on soft power actions intended to garner the support of the population.

Due to the complex nature of the hybrid threats that exist in the Near East, there is not always a clear distinction between groups that focus strictly on terrorism and those that use terrorism as part of an insurgency. In Syria, for example, some of the warring groups have close ties with transnational Al Qaeda terrorists, whereas others are more local in orientation. But as the separation in desired political outcomes grows, opportunities exist for conflict to arise between the groups. Higher level leadership with more universal or global aspirations is often at odds with lower level affiliates who seek more local objectives. This tension was evident in 2013 as guidance issued by Al Qaeda leader, Ayman al-Zawahiri, to avoid collateral damage was routinely disobeyed, notably in attacks by Al Qaeda affiliates against civilian religious pilgrims in Iraq and hospital staff in Yemen.⁹⁵ Zawahiri had further trouble mitigating a dispute between the al-Nusrah Front and Al Qaeda in Iraq in 2014, resulting in the expulsion of the latter group, which has since renamed itself the Islamic State.⁹⁶ Security forces should attempt to exploit these fissures in the system by turning popular support against the movement and delegitimizing their cause.

⁹⁴ Joint Publication 3-26, *Counterterrorism* (Washington, DC: Government Printing Office, 2014), iii.

⁹⁵ United States Department of State, *Country Reports on Terrorism 2013* (Washington DC, Bureau of Counterterrorism, 2014), 6, accessed October 6, 2014, <http://www.state.gov/documents/organization/225886.pdf>.

⁹⁶ *Ibid.*

This discussion reveals the importance of understanding the role that terrorism plays in an organization's attempt to achieve its political objectives. When terrorism is the predominant tactic used by a group with universal ambitions, counterterrorism operations are the most efficient application of the state's scarce resources. Because terrorism of this type is both economically and politically unsuccessful, states should economize their efforts and not set out on an unachievable quest to destroy every last terrorist. Conversely, when terror is used as a tactic as part of a larger strategy to challenge state sovereignty, a more robust counterinsurgency strategy is necessary. Internal conflicts, as well as external wars, greatly hinder the economic growth of a state and have the potential to disrupt the existing political order. This type of strategy requires a greater investment in resources and far more interagency involvement, but is necessary because success hinges on winning the support of the population. Although states commonly label insurgent groups as "terrorists," they cannot defeat them unless the state employs a counterinsurgent approach.

Conclusion

Terrorism is ultimately conducted for a political purpose. One of the ways that terrorists attempt to achieve their goals is by inflicting economic harm on states, in the hope that governments will grant them political concessions, rather than continue to endure the consequences of additional attacks. A small body of work has examined how terrorism affects economic growth and has generally shown that the impact is negative, but relatively minor. What the literature has revealed is that there is significant heterogeneity in the effect of terrorism across regions, necessitating a regional approach to this study. This should not be surprising considering the vast differences in the makeup of terrorist groups, their objectives, and their methods of attack. In the Near East, terrorist groups take on a particularly religious nature, promoting a radical form of Islam. The effect of religion on terrorist organizations is not entirely clear and has

been debated among scholars.⁹⁷ Some believe that the introduction of religion into political violence has fundamentally changed the nature of terrorists, while others argue that religion simply acts as a collective action solution, helping groups to come together to pursue political change.⁹⁸ What is clear is that the rise of religiously inspired terrorism in the Near East has occurred in conjunction with other social and political trends that have shaped the development of the region.

The results of this study show that despite the significantly high prevalence of terrorism in the Near East, neither transnational nor domestic terrorism has had a significantly negative effect on economic growth. Rather, external wars and internal conflicts have been the major detriments to economic growth in the Near East. These results are robust to the inclusion of measures of economic openness, level of democratization, and population growth. Additionally, the results hold for alternative specifications of the terrorism variables. Possible explanations for why these results differ somewhat from other regional analyses include the ability of oil wealthy Near Eastern governments to use significant financial reserves to offset any adverse effects, a high level of social resilience among Near Eastern societies, and a preference of terrorist groups to pursue political and military targets over economic interests.

The findings here have implications for how states allocate scarce resources to contend with the numerous threats they encounter. Groups that primarily employ terrorism as a means to pursue universal political objectives have shown a limited ability to achieve their long-term strategic ends. To protect against the threat that these groups pose, governments should employ a

⁹⁷ See Robert Pape, *Dying to Win: The Strategic Logic of Suicide Terrorism* (New York: Random House, 2005); James Jones, *Blood that Cries out from the Earth: The Psychology of Religious Terrorism* (New York: Oxford University Press, 2008); and William Cavanaugh, *The Myth of Religious Violence: Secular Ideology and the Roots of Modern Conflict* (New York: Oxford University Press, 2009).

⁹⁸ McAllister and Schmid, "Theories of Terrorism," 231.

preventative counterterrorism strategy that uses active measures to preempt attacks and passive measures to provide protection when attacks are conducted. While this will not completely eliminate the threat imposed by these types of terrorist groups, it can reduce it to the point where the groups do not pose a serious threat to the state. Groups that employ terrorism as part of a larger strategy to challenge the sovereignty of a state require a different approach. These groups, which are more insurgent in nature, often employ guerilla tactics and sometimes conventional military operations against state security forces. While commonly labeled as terrorist groups, terrorism is just one tactic used in the struggle to overthrow existing power holders to establish a new political order. A counterinsurgency strategy is necessary to contend with these threats because they cannot be defeated with military power alone. This type of approach requires a significant investment of resources, but is necessary because of the significant harm these groups cause to economic growth and ultimately, to political stability. Governments that face these threats must combine military actions with diplomatic, informational, and economic efforts in order to gain and maintain the support of the populace and degrade the insurgent group's ability to challenge the authority of the state.

The Near East region faces a persistent threat of terrorism. When used in isolation, these attacks are deadly, but relatively ineffective. The larger threat comes from the multiple groups that use terrorism as part of more widespread internal and external conflicts. US Forces that advise and fight with their Near Eastern allies and partners should understand the nature of each threat that they face. Doing so will allow for the formulation of better strategies and a wiser use of the states' limited resources.

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