SELECTIVE PRIVATIZATION OF SECURITY

WHY AMERICAN STRATEGIC LEADERS CHOOSE TO SUBSTITUTE PRIVATE SECURITY CONTRACTORS FOR NATIONAL MILITARY FORCE

by

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B.S., Eastern Michigan University, 1986
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M.M.A.S., School of Advanced Military Studies, 2000

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Security Studies Program
College of Arts and Sciences

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2012

Approved by:

Major Professor
Jeffrey Pickering

Abstract

Ideas about why US foreign policy actors have turned ever more frequently to private military contractors (PMCs) and private security contractors (PSCs) over the past decade and a half abound. Descriptive accounts of the rise of these corporations have become something of a cottage industry over the past decade or so. The various ideas advanced have yet to be placed under rigorous empirical scrutiny, however. This dissertation builds from the existing descriptive literature to advance a new theoretical framework to explain the rise of private contractors. It analyzes this framework as well as alternative ideas using both quantitative and qualitative analysis, marking the first time this important subject has been systematically examined with both social science methods.

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Dedication

For Bruce II.

Be Smart…

Chapter 1 - Introduction

1.1 Problem, Purpose, and Conceptual Issues

To date, the scholarly work on the increased use of private security, both domestically and internationally, has failed to produce a working theory to explain how the phenomenon operates. At best, the existing bodies of knowledge describe the private security industry in its contemporary form and provide some understanding of the contextual conditions that allowed for the industry's growth. However, descriptive accounts by scholars have not been tested with empirical evidence to determine which causal explanations are not only necessary, but sufficient to explain the phenomenon. In addition, the time horizon must be expanded to include samples prior to the end of the Cold War to be considered comprehensive. Most of the scholarly work implies that the privatization of security emerged from the global conditions created at the end of the Cold War. While international changes surely played a large role in the increase in the use of private military contractors (PMCs), it would be unwise to assume that domestic influences had no role in such a large policy shift. This study demonstrates: first, that the use of private security contractors by the United States is not a new phenomenon; and second, that the recent increased use of private security as an instrument of military policy or foreign policy may in fact be a consequence of deliberate policy decisions of successive presidential administrations; and third, that the security environment in the target state of an intervention is a factor that produces an increase of private security contractors.

In this study, private firms that offer security and military-related services will be considered private military contractors (PMCs) or private security contractors. A private military contractor (PMC) provides the military logistics support such as technical support, transportation, maintenance, engineering, and basic life support needs. A private military contractor can also provide the military consulting services and training. A private security contractor (PSC) provides the military security services such as fixed base security, convoy security, and individual personnel security.

Part of the problem with extant research of private security is that scholars attempt to analyze the industry within the paradigm of full militarization of the US military or industrial age war where nations maintain large standing armies. Smith and others assert that the nature of war

has transitioned from a massive industrial conflict fought by men and machines to smaller conflicts or "war amongst the people."[1] Smith (2008, 198) suggests that nation states, particularly in the west, retain their industrial armies only because people are willing to pay for them and assume they provide national defense.[2] He argues that this assumption does not match present reality. It is no longer practical for politicians and diplomats to expect that military force will be able to thwart threats to national security or future international problems. For Smith, "the worlds of security and defense have become closely intertwined – to the point where it is no longer possible to simply divide activities between military and other services" (Smith 2008, 378).

If Smith is correct, then something similar to a Kuhnian paradigm shift is needed in the study of private security forces. The old paradigm based upon assumptions rooted in the notion of industrial age warfare (full military mobilization) is no longer sufficient. A new perspective is needed to bring understanding to the growth of the private security industry. Carafano (2008, 38) suggests that "much of the current anxiety over contractors in combat comes from the fact that the future arrived so quickly and unexpectedly – almost in the blink of an eye," furthermore, he states that "anxiety is high also because many misunderstand both the role contractors have played in combat and the key mechanisms states have used to keep them under control."

This study looks beyond the conventional industrial age framework to discern why there has been a rapid growth in the use of private security in US foreign policy over the past two decades. Part of the answer lies in the "pull" of the seemingly increasing number of post-industrial, asymmetric conflicts across the globe over the past two decades. It may be, as Smith (2008) suggests, that international security threats can no longer be addressed by the military alone, and thus US soldiers dispatched overseas will tend to be accompanied by a growing array of contractors in the years to come. Changes in the external environment probably do not provide

[1] Smith (2008, 415) suggests the industrial war paradigm is defined by the sequence peace-crisis-war-resolution, which will result in peace again, with war, the military action, being the deciding factor. In the new paradigm there is no predefined sequence, but rather a continuous criss-crossing between confrontation and conflict where peace is not necessarily either the starting or ending point pg183.

[2] Smith points out that since the end of 1945 the development of the industrial age military held constant the primacy of defense over attack. He asserts that a triangular relationship existed between the people, the army, and the state. The state will mostly favor defense. In addition to the willingness of the people to pay for their defense, in defense there is the simplicity of matching the political objective with the military. Furthermore, defense enables the forming and sustaining of political will in a way attack or offense never does. Finally, defense enables a moral advantage, which is appreciated and necessary for the people – is considered a bonus of the political leadership – and is preferred by the military (p.198).

a full explanation of the rise of PMCs, however. Beyond the "pull" of post-industrial conflict, a "push" has also been provided by domestic changes in the US and similar advanced industrial democracies. By choice, the overall numbers of soldiers in uniform have declined and, at least for a short period, there seems to have been a broadening of the types of missions that democratic populations support.

The purpose of this dissertation is to analyze the causes of the growth of PMCs during the late 20th century and early 21st century US experience by relying on the demand for and supply of PMCs. It should also provide insight into the use of PMCs by other globally active industrial democracies. In fact, if the central tenants of the supply-demand framework advanced here are supported by the empirical evidence, then they should provide useful information for scholarly studies and policymakers within any modern state that actively uses its military in international affairs.

1.2 Conceptual Issues

Private military contractors are on occasion referred to as "Military Firms", "Military Service Providers" (MSPs), "Privatized Military Firms" (PMFs), "Transnational Security Corporations" (TSCs), and "security contractors". All of these terms, however, point to the same phenomenon: firms offering security and military-related services that up to the 1980s used to be considered the preserve of the state (*Private Military.org*, accessed March 2010). Providing specific definitions that describe the private security industry is a task many authors attempt, although few agree on a common taxonomy. Shearer (1998, 13) points out that "private military forces cannot be defined in absolute terms: they occupy a grey area that challenges the liberal conscience." O'Brien exclaims that "one of the greatest challenges for both policy and law enforcement lies in defining the activities and actors in this area" (cited in Chesterman and Lehnardt 2007, 34). Scahill (2007) consistently uses the term mercenary to describe actors in the industry. Shearer (1998, 22) brings a different perspective arguing that "the assumption that military companies merely comprise modern-day mercenaries is simplistic."

The term mercenary conjures up many images, mostly pejorative. Tickler (1987, 15) asserts that "in the public imagination he is a freelance soldier of no fixed abode or loyalty, ruthless, undertaking short contracts for large amounts of money, the sort of men depicted, for instance in the film The Wild Geese." Avant (2005, 22) suggests that "the term 'mercenary' has

been used to describe everything from individuals killing for hire, to troops raised by one country working for another, to private security companies working for their own country." Kinsey (2006, 19) described them as freelance operators or "a soldier willing to sell his military skills to the highest bidder."[3]

While some authors continue to use the term mercenary when describing the private security industry, Shearer (1998, 13) argues that "using the term mercenary can make it more difficult to understand the strategic implications of private military force" (Shearer 1998, 11). Furthermore, he suggests that "labeling a military company mercenary feeds a set of pre-conceived ideas and obscures the issues at stake." He concludes that "when companies work only for recognized governments, as most argue that they do, then they are exempt from the terms of these conventions" (Shearer 1998, 20). Mercenary is but one term used by scholars, pundits, and the media to describe the private security industry. What follows is an attempt to increase understanding of the industry and reduce some of the conceptual confusion.

Singer (2003, 37) asserts that the private security industry is different from mercenaries, or historically similar entities. He provides six criteria that describe the difference: *Organization: Prior* Corporate Structure*; Motives:* Business Profit-Driven, Rather than Individual Profit-Driven; *Open Market:* Legal, Public Entities; *Services:* Wider Range, Varied Clientele; *Recruitment:* Public, Specialized*; Linkages:* Ties to Corporate Holdings and Financial Markets.

Singer (2003, 88) suggests that "the single unifying factor for the privatized military industry is that all the firms within it offer services that fall within the military domain." Throughout his work, Singer uses the term private military firm and private security industry synonymously. Kinsey (2006, 9) asserts that "the categorization of types of companies in any

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[3]The definition in international law as set out in Additional Protocol I to Article 47 of the of the Geneva Convention (1977) defines a mercenary as one who:

Is specifically recruited locally or abroad in order to fight in an armed conflict;

Does, in fact, take direct part in the hostilities;

Is motivated to take part in the hostilities essentially by the desire for private gain and, in fact, is promised by or on behalf of a party to the conflict, material compensation substantially in excess of that promised or paid to combatants of similar rank and functions in the armed forces of that party;

Is neither a national of a party to the conflict nor a resident of territory controlled by a party to the conflict; and

Has not been sent by a state which is not a party to the conflict on official duty as a member of the armed forces. (Shearer 1998, 17).

Kinsey (2006, 19) points out that "all criteria must be met consecutively for a prosecution to go ahead under Article 47." To the disappointment of some and relief of others, most authors agree that the private security industry does not fit the legal definition of a mercenary.

industry, or of the correspondence between them and the realities they typify, is a difficult task, more so in an industry that sees companies able to undertake ranges of activities that cut across different categories of services, as well as moving between vastly different customers."

Schaub and Franke (2010, 90) describe the nature of the industry by pointing out that "by adopting a corporate business model, these firms are able to recruit and retain former military personnel, develop organizational frameworks within which procedures, doctrine, and innovation can be produced, and, as a result, offer an array of capabilities that cover the gamut of military services beyond mere tactical support." Furthermore, they state that "many firms are characterized by a cadre structure with a relatively low number of full-time employees and a reservoir of expertise that can be called upon on a contract basis" (Schaub and Franke 2010, 93). They conclude that "the fragmented nature of the industry, its multitude of firms, heterogeneous labor pool, and difficulties in forging a common corporate identity through coherent and consistent indoctrination, training, and education experiences suggests, however, that armed contractors should at best be considered to be members of a semi-profession" (Schaub and Franke 2010, 102).

As should be apparent, there is still little if any consensus on the specific definitions of the private security industry after three decades of scholarly work. Though the titles are different, many of the activities and services provided by the industry are generally categorized in a similar manner in the literature as either private security corporations or private military companies.

The private security industry trade website, *Private Military.org* states that "'Private Security Companies' (contractors, firms) or PSCs are on many occasions contracted to render tasks in conflict and post-conflict environments" (*Private Military.org* 2010). Distinguishing between PSCs and Private Military Companies (PMCs) is complex when they operate in climates of instability. In this light, the argument can be advanced that "in such cases PSCs become localized permutations of the PMC and/or a fast expanding international security industry" (*PrivateMilitary.org*, accessed March 2010). The website states that "The offering of security solutions and risk management services is on many occasions intertwined, particularly when firms operate in conflict and post-conflict environments. Hence, it seems prudent to highlight practically this service amalgamation modality inherent in international security provision" (PrivateMilitary.org, accessed March 2010).

Kinsey (2006) points out that "a Private Security Company is generally concerned with crime prevention and public order. The tasks they undertake range from evaluating investment prospects, armed guards to protect government and commercial installations and persons, and finally security advisors for multinational companies" (Kinsey 2006, 16). Kinsey distinguishes PSCs from their commercial security counterparts by the PSCs involvement in the international arena. Commercial security companies focus on their respective domestic market and include services such as prison administration, immigration control, and protection of critical infrastructure. A few examples of commercial security companies are Brinks Security, which provides armed guards to banks and financial institutions, and Wackenhut Security which provides critical infrastructure protection of the nation's private nuclear facilities.

Percy suggests that "PSCs are similar to PMCs but are under a higher level of state control. They offer military advice and training, and guard facilities and individuals, but do not engage in combat." She asserts that "PSCs undertake tasks authorized by the government and so are almost a branch of the national armed services" (Percy 2007, 61). Percy's definition is similar to Singer's (2003) definition of a Private Consulting Firm and more closely aligns with Kinsey's (2006) definition of a Proxy Military Company.

Ortiz (2010) states that "Private Military Companies or PMCs can be defined as legally established international firms offering services that involve the potential to exercise force in a systematic way and by military or paramilitary means, as well as the enhancement, the transfer, the facilitation, the deterrence, or the defusing of this potential, or the knowledge required to implement it, to clients." Shearer (1998, 22) asserts that "Their essential purpose is to enhance the capability of a client's military force to function better in war, or deter conflict more effectively." While he does not provide specific definitions of PMCs, Shearer categorizes their activities which will be discussed later. Kinsey (2006) describes PMCs as "providing military expertise, including training and equipment, almost exclusively to weak or failing states." He relies on both Shearers categorization of PMCs and Singers criteria of the Private Military Industry, but adds nothing new to the definition.

Percy (2007, 60) asserts that "PMCs can be defined as 'corporate bodies' specializing in provisions of military skills to governments: training, planning, intelligence, risk assessment, operation support and technical skills." She points out that operations support refers to the fact that PMCs will actually engage in combat. Thus, the difference in a PMC and a PSC is the level

of state control (PSC being under higher control). Percy provides the clearest definition of PMCs in the literature, although it is similar to Singer's definition of a Private Military Firm and Kinsey's definition of a Private Combat Company.

For the purposes of this dissertation, Percy's definition of PMCs and PSCs is used when describing its general use domestically or as a tool for foreign policy. The term private military contractor is used when referring to private firms that offer security and military related services. The term private security industry is used when referring to all types of private security firms, regardless of the service they provide. The term private security contractor or private contractor is used when referring to an individual or a group of individuals that work in the private security industry. Having addressed the conceptual issues in the literature, this study turns to a review of the theoretical and empirical literature.

1.3 Significance of the Study

In their final report to the US Congress, the Commission on Wartime Contracting (CWC 2011, 20) pointed out that as of March 2011 more than 262,000 private contractors were working in Iraq and Afghanistan. Furthermore, between 2001 and 2011, the United States spent more than $206 billion on contracts and grants that supported contingency operations in Iraq and Afghanistan (CWC 2011, 22). Two-thirds of the money was spent on support services; including logistics, construction, and technical services (see Table 1.1). Moreover, the number of US private contractor fatalities in Iraq and Afghanistan were 2,429; this number does not include foreign contractor employees (CWC 2011, 31). US military fatalities in Iraq and Afghanistan were 6,131 service men and women during the same period of time. Contractor fatalities accounted for more than 28 percent of all US fatalities. However, the conflict Afghanistan is not over. The commission predicts that a potential contractor surge will occur in Iraq and Afghanistan after the US military withdraws (CWC 2011, 21).

Figure 1.1 Top Ten Services Performed in Support of Operations in Iraq and Afghanistan, 2002 to2011 (CWC 2011, 23)

Service description	Total (in billions)
Logistics support services	$46.5
Construction of miscellaneous buildings	10.5
Technical assistance	5.5
Other professional services	5.2
Guard services	3.8
Maintenance and repair, alterations of office buildings	3.5
Construction of office buildings	2.9
Lease-rent or restoration of real property	2.8
Facilities operations support services	2.5
Program management/support services	2.4
Total obligations for top 10 services	**$85.6**
Top 10 as percentage of total services obligations	44 %

On 15 December 2011, the United States pulled its military forces out of Iraq as part of the agreement under the-Iraq Status of Forces Agreement (SOFA).[4] The Department of State (State) has become the lead agency in Iraq to oversee United States foreign policy objectives. In addition to the US embassy in Baghdad, State plans on establishing five Enduring Presence Posts (EPPs) throughout Iraq.[5] Typically, State relies on a host nation to augment the Diplomatic Security Services (DSS) to meet emergency needs for security. However, Iraq is not peaceful or stable. In the summer of 2010, the Under Secretary of State for Management Ambassador Patrick Kennedy, pointed out that the resources of the DSS "are inadequate to the extreme challenges in Iraq" (CWC 2010, 2). Since 2004, the Department of Defense has provided security and emergency services, such as medical evacuation and armed quick-reaction teams to respond to attacks on US facilities. Therefore, anticipating the withdrawal of combat troops from Iraq the

[4] Status of Forces Agreement Between the United States of American and The Republic of Iraq, 17 November 2008. *Agreement Between the United States of America and the Republic of Iraq on the Withdrawal of United States Forces from Iraq and the Organization of Their Activities during Their Temporary Presence in Iraq.*

[5] Commission on Wartime Contracting (CWC) Special Report 3, 12 July 2010. *Special Report on Iraq Transition Panning: Better Planning for Defense-to-State Transition in Iraq needed to avoid mistakes and waste*. The Commission on Wartime Contracting is an independent, bipartisan legislative commission established in Section 841 of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 110-181) to study federal agency contracting for reconstruction, logistical support, and security functions in Iraq and Afghanistan.

State Department identified 14 security-related tasks previously performed by the Department of Defense that must be met (CWC 2010, 4).

The Department of State (State) acknowledged that it employed about 2,700 private security contractors in Iraq to augment the DSS as of December 2010. After the departure of combat troops from Iraq, it also estimates that between 6,000 and 7,000 security contractors will be required to provide adequate security for its mission after December 2011 (CWC 2010, 6). The US Department of Defense and the Department of State are the two distinct authorities that are responsible for security of US federal civilian employees and contractors abroad (CWC 2009, 60). Beginning in January 2012, State is responsible for security in Iraq. The Commission on Wartime Contracting (CWC) is urging Congress to approve resources for State to support the increase in contract costs to "avoid unnecessary and tragic loss of life and avert damage to the U.S. mission in Iraq and to broader policy objectives" (CWC 2010, 7-8). This means that the Department of State fully intends to fill the shortfall in current DSS capacity with private security personnel.

This is just one example of the growing relevance of private security for US foreign policy. Because of the rise in the private security industry over the past decade, the perceived shroud of secrecy in their use by the United States, and the enormous sums of money spent on their services the discussion will and should continue into the future about the use of private military contractors. National military budgets, foreign policy decisions on intervention, military force structure, and international legal norms are but a few of the areas that are impacted by the phenomenon of privatized security.

Kinsey (2006, 3) cautions that accurately forecasting the growth of the PMC market is extremely difficult, if not impossible, since the market is frequently changing (Kinsey 2006, 3). Though he does assert that the market is set to grow, predicting when the next conflict will occur and to what intensity is difficult. He points out that there was a natural transition of the US-based PMC in providing technical support towards operational and training support, enabling US troops to perform more tasks with fewer people. One advantage that US-based PMCs enjoy is a close relationship with the US Department of Defense and the US Department of State. Kinsey (2006, 101-102) argues that this advantage points towards a continual use of PMCs by the US. Though continued use of PMCs will be based on government requirements, Kinsey (2006, 103-104) asserts that the reduced political risk associated with using PMCs versus national militaries

are an advantage resulting in the conclusion that politicians will certainly consider their future use in implementing foreign policy. Finally, he suggests that as non-governmental organizations (NGOs) increase their involvement in volatile regions around the world their needs for security will grow which will be provided for by PMCs (Kinsey 2006, 107).

Kinsey is not alone in his assessment. Rosen (2005, 197) suggests that as long as there continues to be a decrease in qualified and experienced forces to intervene in conflict, PMCs will continue to be used. He concludes that the war on terror has redefined the role and necessity for PMCs and their use will accelerate. Spearin (2005, 49) concludes that humanitarianism presents a potentially lucrative marketplace for PSCs. Citing the increase in NGO casualties over the past decade that has curtailed the delivery of assistance due to security concerns'; he notes that collaboration with PSCs becomes necessary. Spearin (2005, 61) also acknowledges that this is a dilemma for NGOs since using PSCs for security may jeopardize the perception of their neutrality for political action. He asserts that when NGOs and their donors become more educated about PSCs through dialogue, negative image issues will decrease. Likewise, when PSCs understand NGO concerns they will make adjustments to better handle the needs of humanitarian clients.

There are thus many ideas about the rise of private security industry in the literature, but they have not been subject to systematic empirical scrutiny to date. To be fair, the goal of the extant literature has been to describe the phenomenon, not to develop theory that explains it. For example, Avant (2001, 30) states that the aim of her well-known book "is to describe the current market and explore its implications rather than explain its rise." Although descriptive accounts are valuable, the subject is significant enough to warrant the development of more systematic knowledge about the phenomenon.

Although the literature is diverse, much of it centers on three key influences emphasized first by Singer (2003) and then by others: the decreasing supply of national troops, decreasing national defense budgets, and the rising demand from global conflicts and humanitarian emergencies. Not only does this study offer the first rigorous quantitative and qualitative testing of this "supply-demand" theory of the rise of PMCs, but it also develops a number of additional influences that have the potential to supplement the supply-demand explanation, such as, intensity of the conflict in the target state, key decisions by policy makers to legalize the use of PMCs, and support from the host nation. By rigorously examining such supplemental

explanations, this study determines whether the pressures associated with the "supply-demand" theory truly have driven the rise of PMCs in the late 20th century and early 21st centuries. In essence, this study argues that when political leaders choose to reduce their nation's military force structure, they may face conflicts beyond their anticipated scope and duration. Such decision-makers are left with no choice but to legalize and legitimize the use of PMCs resulting in the increased use of PMCs as a deliberate tool of foreign policy.

In sum, this study will add precision to our understanding of the causes of the increased use of PMCs. It moves beyond descriptive accounts of the rise of PMCs and lays out a clearly specified theory to explain the phenomenon. It tests the theory using more rigorous qualitative and quantitative methods than have been used in the literature to date.

The qualitative component uses a structured, focus comparison method to examine three historical cases to grasp more detailed knowledge about the rise of the private security industry in the United States and to trace interactions among various causal factors. The three cases are the US intervention in Iraq in 1991 (Operation Desert Shield/Desert Storm), the US intervention in Bosnia in 1995 (Operation Joint Endeavor), and the US intervention in Iraq in 2003 (Operations Iraqi Freedom). The justification for the cases selected is threefold. First, these cases represent American conflicts in the post-Vietnam era. Second, they occur at a time when the US had an all-volunteer army (post conscription). Third, all involve the use of private contractors. Examination of post-1990 US cases provides the unit homogeneity that King, Keohane, and Verba (1994) suggest for cross-case qualitative analysis. The use of PMCs also varies across these cases, which should facilitate the development of valid inferences.

The goal of structured, focused comparison is to deal with only certain aspects of the case by employing general questions to guide the data collection and analysis of the historical case (George 1979). George (1979) points out that "a controlled comparison of each case helps identify an outcome of the dependent variable and provides a historical explanation for it is couched in terms of the independent and intervening variables of theoretical interest." In this instance, structured, focused comparison should help to tease out exactly how supply, demand and other pressures help to stimulate the rise of PMCs.

The second component of the research methodology is a quantitative analysis. The quantitative component analyzes a larger time period and should increase the generalizability of the findings. It also provides insight on the relative explanatory weight of different causal

influences. The variables under study are operationalized using historical data from US government sources available from the Department of Defense, the US Census Bureau, and the US Office of Budget and Analysis.

Using a mixed method approach promises to provide richer complementary results. George suggest that "controlled comparison of a small N is neither competitive with or a substitute for quantitative analysis of a large N" (George 1979). King, Keohane, and Verba (1994, 3-4) argue that quantitative methods are a systematic generalizing branch while qualitative methods are the humanistic discursive branch. They suggest that, used together, both branches can reinforce one another and can help to provide a systematic analysis. Mahoney and Goertz (2006, 239) similarly assert that "both approaches are of value; in fact, they complement one another."

This dissertation's mixed methods approach should do more than shed light on the rise of PMCs. It also fills a gap in the literature. Carafano (2008) points out that through 2005, most scholars, other than Singer (2003) and Avant (2005), had been relatively silent regarding trends concerning the private sector in public wars. Furthermore, he asserts that "few pick up the challenges raised by scholars – testing their conclusions, refining theories, adding new evidence; in short, all the effort needed to build and broaden academic studies that provide a robust body of research on a subject. All these things have been missing in the debate over contractors in combat" (Carafano 2008, 143). Using a mixed method approach to examine the rise of the private security industry in the United States is an attempt to meet the scholarly challenge proposed by Carafano.

Of course, PMCs are more than just an academic interest. As their use by the United States has increased over recent decades, increasing questions about their control and status are being raised in the domestic political arena. Their legitimacy is being challenged by sovereign governments where US-based PMCs are deployed. PMCs are also becoming a "large market force" in the US and internationally, offering competencies and services not readily available to some nation states. This study should thus not only fill a gap in the existing academic literature on PMCs, it should provide valuable information to those shaping policy as well.

1.4 Limitations and Assumptions

As in any research, this study is limited by the availability of data on the private security industry. Thus, public US government records provide the source of the data on procurement and contracting, military forces, the US defense budget, and US interventions. Empirical evidence on specific private security firms is limited to public records and secondary sources. Where feasible, attempts will be made to obtain primary historical records from private security companies.

This study is also limited to the use of private security by the United States. As the most powerful (India is of course much larger by population) mature democracy, it is prudent to begin the debate using the US as a model for further study. However, limiting the study to the US exposes a weakness in generalizing the findings across other mature democracies.

The period examined in the quantitative analysis is limited to 1950 - 2008 since data are readily available from public records. The focus of the data collection is from US Department of Defense records. Meanwhile, this study acknowledges that other branches of the US government also employ private security companies in an international role. The US Department of Defense spends the largest sum of money on private security, therefore providing a general indicator of the trends. The time period examined in the qualitative analysis is 1991 to 2003.

This study assumes that the United States will continue to use private security in the future both domestically and internationally. However, the United States government is not viewed as an isolated actor and is influenced by multiple private and public actors that have influence on the use of private security domestically and internationally. Likewise, the private security industry is not viewed as an isolated actor; instead, the industry is seen as a complex adaptive system composed of many individuals, companies, and their sponsors each competing in a highly complex business environment. Furthermore, this study acknowledges that the US defense budget fluctuates over time, that US DOD personnel is a finite resource, and that the US is likely to be involved in future conflicts.

1.5 Organization of the Dissertation

The dissertation is organized into eight additional chapters. Chapter 2 reviews the current state of the literature on private military contracting and develops the theory under review. Chapter 3 introduces the case studies and explains the methodological approach used to examine the cases. Chapters 4 through 6 test the theory by using three historical case studies: Chapter 4

examines Operation Desert Shield and Desert Storm, the 1990 U.S. military intervention to restore the sovereignty of Kuwait. Chapter 5 examines Operation Joint Endeavor, the 1995 U.S. military intervention to implement the Dayton Accords in Bosnia. Chapter 6 examines Operation Iraqi Freedom, the 2003 U.S. military intervention to overthrow the regime in Iraq. Chapter 7 is a cross-case analysis of the three case studies. Chapter 8 presents the statistical analysis. Chapter 9 concludes the dissertation, provides a more detailed summary of the main arguments and findings, and briefly highlights future research.

Chapter 2 - Literature Review and Theoretical Framework

2.1 Introduction

This chapter presents the rationale for conducting research on the causes of the rise of the private security industry in the United States. Scholars have studied the rise of private security for over a decade. Most of the research has been descriptive and has not attempted to systematically discern the causes of this rise. Such descriptive work nonetheless provides implicit arguments about the variables that have created this important new phenomenon. This chapter summarizes the existing literature. As will be seen, most of the literature assumes that a basic supply-demand process lies behind the increased use of PMCs. As defense budgets and the number of soldiers in uniform have declined and the external demands for soldiers have risen, PMCs have filled the gap.

Thus, this study seeks to examine the relationship between the increase of the private security industry and the five potential explanatory variables tied to supply-demand theory: decreased national military capabilities; decreased military outlays; increased conflict, duration, and bureaucratic controls. It also looks at three additional potential explanatory variables: force caps; host nation support; and the permissiveness of the security environment in the target state.

What follows is a review of the literature, namely, a discussion of the existing literature, the general theory of supply and demand, and this study's theoretical framework to help bring understanding to the growth of private security.

2.2 Literature Review

A decade ago Singer (2003) thrust the topic of the use of private military contractors by mature democracies into the public conscience. He pointed out that "there is no single cause for the rise of private military contractors" and suggested that "the private market filled the security gap as a result of the end of the Cold War" (Singer 2003, 49). Since his work, scholars, journalists, and lawmakers have attempted to classify privatized security, debated the causes of the rising use of private security, pointed out criminal activity and fraud, and argued for increased regulations of and controls on the private security industry. Avant (2005, 3) builds upon Singer's work and aptly describes the private security industry as a provider of a service within the market economy. She brings to light the tension that exists in who controls force: the

state or private actors. While much of the debate has centered on the control of the private security companies, most scholars acknowledge and accept that the private security industry should exist and must have legitimate rules. If one looks around, the private security industry is not only employed extensively by mature democracies, it is embedded within them.

Mandel (2002) points out that a fundamental tension exists between a public's desire for security and many lawmakers' attempts to provide a public service with limited resources. He highlights the limitations of existing literature by observing that "many studies focus exclusively on private military activities of a few companies in only limited parts of the world" (Mandel, 2002, 2). Much of the debate on the use of private security highlights the tensions between privatization and statism, civil-private security control, and choices between public homeland security and private critical infrastructure security.

Percy (2007) argues that the literature on the private security industry tends to focus on empirical details and that most writers do not situate their accounts in a theoretical framework. She points out that "a striking feature of the present literature on mercenaries is its lack of theoretical analysis, particularly with respect to international relations" (Percy 2007, 4). Furthermore, she observes that scholars "tend to look at how mercenaries behave in a particular state or the nature of their organization and operations, rather than what the behavior or type of organization means for international relations" (Percy 2007, 4).

Percy (2007) credits Singer (2003) for his analysis on the development and growth of private military and security companies and the consideration of the political implications and morality of mercenary use. However, she asserts that his analysis of the private security industry is done outside of a theoretical framework (Percy 2007, 4). Although Singer (2003) acknowledged that his aim was to organize and integrate what was known about private security firms in a systematic manner with the goal of allowing for the future development of underlying theories, his work is framed by an implicit theory (Singer 2003, ix). He suggests that "the resultant effect on the supply and demand of military services created a 'security gap' that the private market rushed to fill" (Singer 2003, 49). Singer (2003, 49) points out that "the end of the Cold War produced a vacuum in the market of security, which manifested itself in numerous ways, feeding both the supply side and the demand side."

Singer's (2003) "supply-demand theory" asserts that "massive military demobilizations provided a large pool of labor for the private military firm (PMF) industry and cheapening of

start-up capital." The massive increase in the level of conflict since the Cold War's end also resulted in a demand for security that most nations were unable to provide (Singer 2003, 50). He concludes that "many states are less willing and less able to guarantee their own sovereign autonomy. Instead, they have increasingly delegated the task of securing life and property of their citizens to other organizations, including PMFs" (Singer 2003, 56). Thus, while it may be true that Singer does not empirically test a well-defined theoretical framework of the rise of the private security industry, his work advances an underlying theory that is worthy of future, rigorous analysis.

Similar to Singer, Avant (2005, 30) suggests that the increase in private security can be tied to supply and demand. She points out that concomitant with the increase in supply was an increase in the demand for military skills on the private market – from western states that had downsized their militaries, from countries seeking to upgrade and westernize their militaries as a way of demonstrating credentials for entry into western institutions, from rulers of weak or failed states no longer propped up by superpower patrons, and from non-state actors such as private firms, international non-governmental organizations (INGOs), and groups of citizens in the territories of weak or failed states (Avant 2005, 31).

However, Avant (2005, 3) does not examine the private security industry using the theory of supply and demand. Instead, she examines how the privatization of security affects state control. Avant (2005, 6) asserts that three dimensions of control (functional, political, and social and how they fit together) hold the key to controlling violence. Percy (2008, 5) observes that to assess if privatization has changed a state's control over force, Avant (2005) seeks to discover if change has occurred in a functional sense (is the use of force more or less effective?) in a political sense (has there been a shift in the relative power of actors who control force?) and in a social sense (has there been a change in the way security reflects societal values?).

Avant (2005, 6) states that she draws upon "new institutionalism," which is a diverse set of theories pulling from distinct "logics" in economics and sociology, but united by an interest in institutional mechanisms and how they affect collective outcomes. As a result, she attempts to juxtapose economic and sociological "institutionalist" arguments, while arguing that privatization's effects on force capabilities and societal values of armed forces vary (Avant 2005, 6). Nonetheless, her discussion of private security as a market alternative for military services

relates to a theory of supply and demand since it changes the options available to states for the conduct of foreign policy (Avant 2005, 258).

Avant (2005, 258) further asserts that using market allocation generally advantages executives relative to legislatures, reduces transparency, and reduces the mobilization required to send public forces abroad. Because of these changes, the market option makes it easier to undertake adventurous foreign policies – or actions that do not have widespread support of a polity. An additional cost of the use of market alternatives is that the private sector becomes involved in decision making – giving those with commercial interests an influence over policy formation and implementation.

Kinsey (2006) asserts that PMCs are new actors in the international security arena, thus, academic research into them is essential to help policymakers decide how, or if, they should be used in support of humanitarian and national interests. He suggests that while the market for private military security is set to grow, accurately forecasting market growth when the market is frequently changing is extremely difficult if not impossible (Kinsey 2006, 3). Kinsey points out that during the Cold War, geographical conflict was the rationale for the existence of state militaries. Politics is still an essential component, but it no longer dominates our thinking as it used to do. Other issues more akin to present socio-political and economic pressures have raised questions within modern society as to whether state militaries are the only option available to governments conducting security operations. To a large extent, the increasing reliance on PMCs and PSCs reflects concerns about monetary efficiency and the application of lethal force to save strangers (Kinsey 2006, 96).

Although he does not provide a theoretical framework to examine the rise of the private security industry, he gives clues on how choices are made by military leaders. Kinsey points out that a division of labor is now occurring in the military itself and observes that "contractors allow the military to concentrate on its core functions, fighting wars, by removing responsibility for the more mundane operations, which are no less important to maintaining operational efficiency, and handing that responsibility to outside agents" (Kinsey 2007, 97). Kinsey concludes that within the current international system, the provision of security is closely related to the structure of the security sector as a whole. He suggests that the key factors that define this context in today's international system are military downsizing, technology, monetary efficiency and political expediency (Kinsey 2006, 151).

In addition, Krahmann (2010, 5) examines the inherently political and ideological nature of the decision to contract out military services to private firms. She uses Republicanism and Liberalism to provide a "fuller understanding of how the growing role of private military forces has become possible" (Krahmann 2010, 4). Although she uses ideological factors to help understand the decision to outsource military services to private firms, she does suggest that supply and demand can explain the rise of the private security industry. Like Singer and Avant, she asserts that "the changing security environment, budgetary pressures and the market forces of supply and demand result in the rise of the private military industry" (Krahmann 2010, 9). In particular, Krahmann (2010, 11) argues that the reduction in the number of uniformed soldiers has contributed to the expansion of the private military industry in two ways: large surpluses of ex-military personnel available for recruitment and new demands for military expertise and personnel because of the changing security environment.

Thomson (1994) takes a different approach by examining the decline of mercenaries in the modern state system. She asserts that the contemporary organization of global violence is neither timeless nor natural. She observes that prior to the Peace of Westphalia "people bought and sold military manpower like a commodity on the global market, therefore, the identity of suppliers or purchasers meant almost nothing." Thomson (1994, 4) argues further that "the 'disarming' of non-state transnational activities marked the transition from heteronomy to sovereignty and the transformation of states into the national state system." An essential feature of this transformation was a new way of organizing global coercive resources which eventually facilitated the transformation of the institution of sovereignty in nineteenth-century. This transformation resulted in the rise of republican government, the elimination of non-state violence, as well as European expansion. Although Thomson focuses on the declining use of mercenaries, her theory that de-legalization followed by de-legitimatization, when reversed (legalization followed by legitimation), may help explain how modern state policy-makers enable the increased use of the modern private security industry.

Like Thomson, Percy (2007, 2) examines the norms against mercenary use. She argues that the norm against using mercenaries has influenced states in their decisions about which type of force to employ and has thus shaped the opportunities available for mercenaries. Percy suggests that such norms have two components. First, mercenaries are considered to be immoral because they use force outside legitimate, authoritative control. Second, mercenaries are

considered to be morally problematic because they fight wars for selfish, financial reasons rather than for any cause (Percy 2007, 1). Although her work is not directly related to this study, she does argue that the impact of such longstanding and powerful norms against mercenaries has undoubtedly influenced the prospects for private military and private security companies (Percy 2007, 11). She concludes that "a belief that the use of private force is wrong, whether or not it is grounded in the facts of how these companies have really behaved, provides a significant obstacle to the further development of the private military industry" (Percy 2007, 13). Percy's work highlights a potential barrier to future PMC use. Although this study does not analyze this norm directly, the dramatic rise of PMC use it documents raises questions about the strength of Percy's argument.

All of these studies use qualitative methods to analyze the private security industry. This is the norm in the literature on the subject. Existing research tends to focus on two or three case studies from the past decade and a half to examine the use of private security in conflicts.

For example, Shearer (1998) examines two military companies, Executive Outcomes (EO) and Military Professional Resource Incorporated (MPRI). He is interested in the abilities and shortcomings that each had in providing private-sector military assistance. Shearer concludes that EO played an instrumental role in altering the course of war in Sierra Leone in 1995. Most significant was that EOs military operations forced the Revolutionary United Front (RUF) to negotiate with the National Provisional Ruling Council (NPRC). Likewise, the losses suffered by the UNITA rebels in Angola in the late 1990s forced a peace settlement by 2002. Shearer attributes EOs training of the Angolan Army that ultimately led to their success. In the Balkans, Shearer asserts that the training provided by MPRI to the Croat and Bosnian Armies served as part of a program of armed deterrence that has been an effective and convenient instrument of policy for the US administration (Shearer 1998, 67).

Singer (2003) also examines EOs role in Angola and Sierra Leone and MPRIs role in the Balkans. In addition, he examines Kellogg Brown and Root's (KBR) support to the US military. Singer (2003, 17) states that the purpose of the selected cases is to provide highlights of the extent and breadth of the industry, not its entirety. These cases thus conform to Singers typology of the private security industry. Singer's typology describes the organizational characteristics, the history of major military operations, and the future of each company. He concludes that providing a heightened appreciation of the private security industry's potential, its underlying

dynamics, and its challenges can improve decisions by policy makers when dealing with the industry (Singer 2003, 234). Singer's work provided a foundation for subsequent scholars.

Similar to Shearer (1998) and Singer (2003), Avant (2005) examines Sierra Leone, Croatia, and the United States. She looks at how each country contracted private security over several years. Avant (2005, 77) wants to illustrate how exports of private security services affect states' ability to control the force that emanates from their territory and demonstrate how the private financing of security affects the control of force. Avant concludes that individual states can sometimes enhance the capacity of their forces with PMCs and thereby increase functional control. However, she finds that the market undermines the collective monopoly of the state over violence in world politics, and thus a central feature of the sovereign system.

Krahmann (2010) seeks to understand the reason for and implications of the proliferation of private military force in Europe and North America. She examines and compares the use of private military contractors in the United Kingdom, the United States, Germany, and in international military interventions. In each case, Krahmann reviews the ideological rationale for privatization, analyzes the implementation of privatization, debates how the changes affected the model of professional soldiers, and discusses the consequences of governance. Krahmann (2010, 241) concludes that the roles of and relations between the state, the citizen, and the soldier in Western democracies have repeatedly been transformed due to changing internal and external circumstances during the past three centuries.

The remaining empirical literature provides descriptive information on various actors in the private security industry. Carafano (2008, 151) states that most commercial books on PMCs may make for fine reading, but they do not add much to understanding the issues surrounding the role of the private sector in public wars. For example, Davis (2000) tells the story of the privatization of security from an insiders' perspective. He describes his experiences in Central America, on the African Continent, and in the Balkans working for a variety of security firms. Likewise, Pelton (2006) invites the reader to travel with him on a journey to experience the characters and scenarios of the private contractor in conflict. Additionally, Scahill (2007) focuses on describing the rise of one private security company, Blackwater, often referring to them as modern mercenaries for their work for the United States government since 9/11. Furthermore, Isenberg (2009) describes the role of multiple private security firms in Iraq since 2003, in an attempt to fill a "void" in the debate about the use of private contractors. Much of the

commercial literature provides either an individual perspective of private contractors, focuses on one private contracting company, or the industries involvement in Iraq, Africa, or Afghanistan.

Thus, the empirical literature focuses on description of the private security industry, analysis of government control, and normative explanations of civil-military relations. Carafano (2008, 143) argues that most scholars have been relatively silent regarding trends concerning the private sector in public wars. He points out that "interdisciplinary studies are often the most difficult to tackle, and as an academic topic, this subject sits at that fault-line of a number of disciplines – military and business history, economics, international relations, law, philosophy, national security, and public policy, to name a few" (Carafano 2008, 143). Carafano observers that "few pick up the challenges raised by scholars – testing their conclusions, refining theories, adding new evidence; in short, all the effort needed to build and broaden academic studies that they provide a robust body of research on a subject" (Carafano 2008, 143). This study takes on the challenge posed by Carafano to add to the empirical research the private security industry.

Following the theoretical arguments in the extant literature, the next section begins with an overview of the general theory of supply and demand to demonstrate why the general theory is too broad to explain the phenomenon under investigation. It does so by providing a new rigorous empirical testing of the supply-demand theory that is implicit in the descriptive and normative literature. Before such tests can be completed, however, the central elements of the supply-demand theory must be outlined. Next, is an introduction to the micro-economic theory, monopsony. Monopsony provides a more nuanced theory that provides a better start point to understand the relationship of the US military to the private security industry. Following the general discussion of monopsony, this section introduces Agapos and Dunlap's (1971) monopsony needs theory that provides the best theoretical foundation for this study. Finally, specific influences (or variables) that supply-demand theory would expect to be important for the rise of PMCs must also be delineated.

2.3 The General Theory of Supply and Demand

Mansfield (1985, 17) points out that economics deals with the way in which resources are allocated among alternative uses to satisfy human wants. Furthermore, he suggests that microeconomics helps to answer many practical problems of businesses and governments and throws important light on many fundamental issues that confront responsible citizens and elected

representatives (Mansfield 1985, 17). Mansfield (1985, 20) concludes that the market for every good has a demand side and a supply side. Smith (2009, 47) argues that microeconomics, and more specifically, the interaction of supply and demand in markets for particular goods, can also illuminate security issues.

Beinhocker (2007, 26) describes how the philosopher Adam Smith viewed resource allocation. If the quantity demanded exceeds the quantity supplied, then prices rise, producers increase production, and consumers decrease consumption. If the quantity supplied exceeds the quantity demanded, then prices fall, producers decrease production, and consumers increase consumption. In essence, this is the theory of supply and demand.

Likewise, Beinhocker (2007, 28) explains Jacques Turgot's views on the law of diminishing return. In most production processes (or service businesses), as one inputs more and more of a particular factor (such as labor), at some point one gets progressively less output bang for the input buck (2007, 28). In essence, given a price in the market, a producer will keep adding more inputs and expanding output until the payoff is no longer worth it. Thus, Turgot's law links producer costs into the supply side of the market.

Additionally, Beinhocker (2007, 28) points out Jeremy Bentham's contribution to the demand side. Bentham identified a quantity that he termed utility to measure individual pleasure and pain. Economic choices are the result of an individual calculation as to what action maximizes his or her utility. For example, if you like apples and dislike bananas, when faced with a choice between apples and bananas, you will calculate that consuming the apple will provide you with greater utility and therefore choose it. Bentham's ideas became known as Utilitarianism.

Finally, Beinhocker (2007, 29) describes Hermann Gossen's ideas of the law of diminishing marginal utility. Gossen demonstrated that there was a diminishing benefit to increased consumption. For example, if one is hungry and buys a hamburger, its consumption might provide quite a lot of satisfaction, or utility. However, according to the law of diminishing marginal utility, for each additional hamburger consumed, the level of satisfaction decreases incrementally. At some point, purchasing another hamburger is not worth the money, the point at which this occurs depends on the price. Thus, demand falls as price rises, and vice versa. Just as diminishing marginal returns keep a producer from producing and infinite quantity of apples,

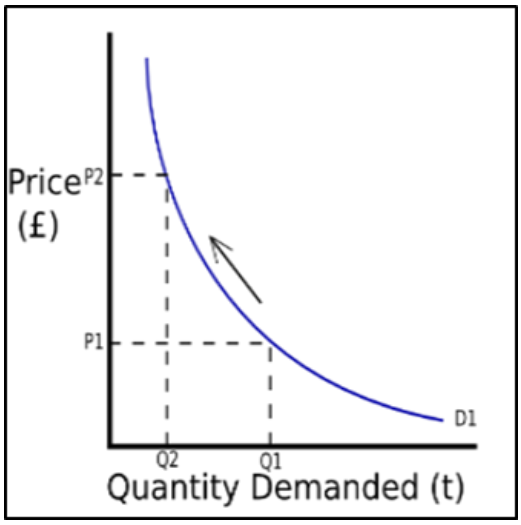
diminishing marginal utility keeps consumers from consuming and infinite quantity of hamburgers.

The general theory of supply and demand provides a means by which the rise of private security can be explained. Adam (2009) asserts that "in economics theory, the law of supply and demand is considered one of the fundamental principles governing an economy." The law of demand states that, if all other factors remain equal, the higher the price of the good, the less people will demand the good. The law of supply states that, the higher the price, the higher the quantity supplied. Adam (2009) points out that supply and demand represent "a symbiotic relationship where each is absolutely dependent on the other. Disruption of one automatically disrupts the other." Accordingly, the combination of diminishing marginal returns on production and diminishing marginal utility on consumption means that markets have a natural balancing mechanism – price (Beinhocker 2007). Thus, price is the key piece of information that producers and consumers share.

The Law of Demand

Any microeconomic textbook indicates that the demand side of the market can be represented by a curve that shows the quantity of the good that would be purchased at each price (see figure 2.1). Thus, the market demand curve for a good almost always slopes downward to the right; that is, as the quantity demanded increases the price falls. The, position and shape of the market demand curve for a good depends on the tastes of consumers, the level of consumer incomes, the price of other goods, and the length of the period to which the demand curve pertain (Mansfield 1985, 45).

Figure 2.1 Demand Curve[6]



The taste of consumers is important. If consumers show an increasing preference for a product, the demand curve will shift to the right: that is, at each price, consumers will desire to buy more than previously. In contrast, if consumers show a decreasing preference for a product, the demand curve will shift to the left, since, at each price, consumers will desire to buy less than previously. Thus, another factor that influences the position and shape of a good's market demand curve is the level of other prices. Mansfield (1985, 23) points out that increases in the price of a product will shift the market demand curve for a like product to the right (and decreases the price of the original product will shift the demand curve to the left).

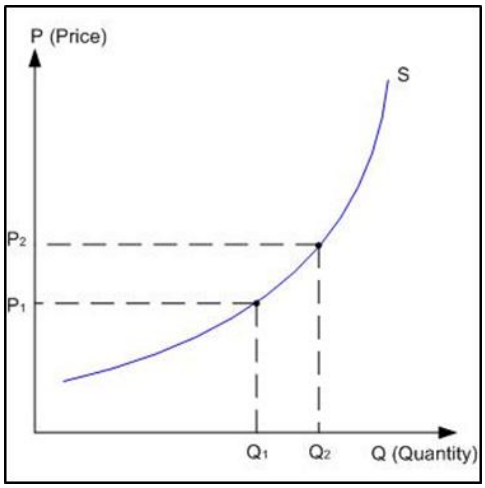
The market demand curve pertains to a particular period, and its shape and position depend on the length and other characteristics of this period (Mansfield 1985, 22). For example, in times of relative peace, a nation may reduce its demand for a large standing military. However, during periods of increased conflict, the demand for a larger standing military increases. Therefore, when examining demand, the context of the period is important. Demand is thus a relationship between the things that determine purchases on the one hand, and the amount people buy (or order) on the other hand (Turvey 1971, 13).

[6] Figure 2.1 Demand Curve imagine found at www.expertsmind.com.

The Law of Supply

Economists are so convinced of the importance of prices as one of the factors determining purchases that they often divide these factors into just two groups: price and everything else (Turvey 1971, 20). Mansfield (1985, 45) explains that the supply side of a competitive market can be represented by a market supply curve which shows the quantity of the good that would be supplied at each price (see figure 2.2). The market supply curve for a good generally slopes upward to the right; that is, the quantity supplied increases as the price rises. The position and shape of the market supply curve for a good depends on the state of technology, input prices, and the length of the time to which the supply curve pertains (Mansfield 1985, 45).

Figure 2.2 Supply Curve[7]



A significant factor that influences the position and shape of a product's market supply curve is the level of input price. Mansfield (1985, 28) points out that the supply curve for a commodity is affected by the prices of resources (labor, capital, and land) used to produce it. Furthermore, he states that decreases in the prices of these inputs make it possible to produce commodities more cheaply, so that firms may be willing to supply a given amount at a lower price than formerly. Thus, decreases in price of inputs may cause the supply curve to shift to the right. On the other hand, increases in the price of inputs may cause it to shift to the left (Mansfield 1985, 28). Similar to the market demand curve, the market supply curve also pertains

[7] Figure 2.2 Supply Curve imagine found at www.expertsmind.com.

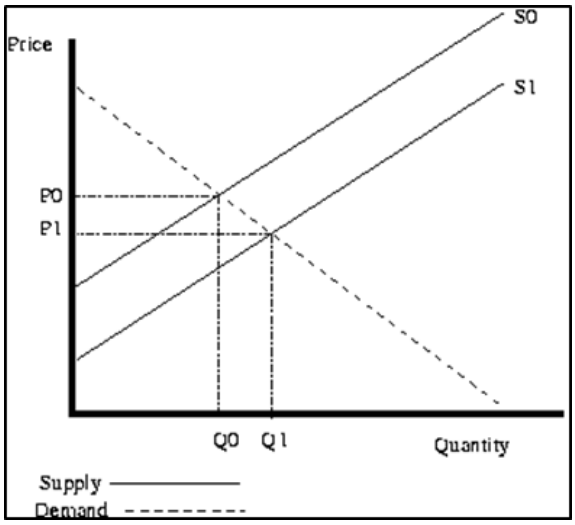
to a particular period of time (Mansfield 1985, 28). Therefore, any examination of the market supply curve requires an understanding of the environment during a particular period.

Substitution Effect

The closeness of substitutes is a major factor determining how responsive the quantity demanded is to a change in the price. Turvey (1971, 23) points out that if, other things being equal, when the price of a good falls this will have two effects: One is the substitution effect; having become relatively cheaper there will be a shift in expenditure towards the good from substitutes. Furthermore, he states that the other effect is the income effect; one price having fallen, and all other prices and income being unchanged, the total real purchasing power of those who buy the good has necessarily increased (Turvey 1971, 23).

Mansfield (1985, 95) suggests that the substitution and income effects occur when the price of a good changes. The consumer attains a different level of satisfaction, and he or she is likely to substitute now cheaper goods for more expensive goods. When the price of a good X increases, it is clear that a decrease occurs in the consumer's level of satisfaction (Mansfield 1985, 96). Mansfield (1985, 96) explains that the substitution effect is defined to be the movement from the original equilibrium point to an imaginary equilibrium point which corresponds to the hypothetical budget line (see figure 2.3).

Figure 2.3 Substitution[8]



2.4 Supply and Demand of Private Security

Carafano (2008, 54) argues that paying for troops has become the most expensive part of running the military. Moreover, he estimates that the cost for every 100,000 active duty soldiers is $1.2 billion per year. Ground troops quite simply cost a lot (Carafano 2008, 54). Carafano thus concludes that the upward-spiraling manpower costs and downward-spiraling size of the military have fueled the Pentagon's reliance on contractors (Carafano 2008, 56).

In military economics, there are two dimensions to force acquisition. The first is demand, what troops and equipment are needed or wanted. The second is supply, the arms industry and the arms trade that provide the weapons (Smith 2009, 118). Smith (2009, 159) points out that military expenditures have opportunity costs, the other activities that are given up to provide the military resources. Moreover, he argues that "in having opportunity costs, military expenditures are no different from other sorts of government expenditures and one can apply standard public finance theory" to military spending (Smith 2009, 159).

Smith (2009, 160) observes that government budget constraints control the flow of money that a government has to balance. The government surplus or deficit, the difference between revenue and expenditure (military and non-military), must match either by changes in the money supply or by changes in government assets and liabilities. Therefore, an increase in

[8] Figure 2.3 Substitution imagine found at www.expertsmind.com.

military expenditure must be financed by some combination of reductions in other government expenditures, increased taxes, printing more money, borrowing by issuing more debt or selling assets. Smith (2009, 91) argues that "nearly all military expenditure is a demand for goods, like weapons, or services, like those provided by the armed forces."

In principle, governments should determine how much security is enough by adjusting military expenditure to the point where the marginal security benefit of a little more military expenditure is equal to the opportunity cost (Smith 2009, 88). However, he points out that the opportunity cost is what could be gained if the money was used for other government expenditures, like health and education, or used to reduce taxation, which would allow higher private consumption.

The primary factor determining a country's military expenditure is its GDP, what it can afford. Smith (2009, 94) argues that "what share is thought appropriate depends on the perceived threat and foreign policy goals. The perceived threat will reflect the danger of armed conflict, enduring hostilities, and domestic political factors which shape perceptions, such as militaristic traditions." Furthermore, Smith (2009, 119) states that when the military is given a fixed budget, there is a choice between the quality and quantity. The balance between quality and quantity will be chosen to maximize force effectiveness, which depends both on the number of units and the capability of each. To maintain this balance, Smith (2009, 133) points out that it may be possible to maintain a hi-low mix, as the US did with its modern air force, by combining small numbers of the expensive F15 aircraft with large numbers of cheaper F16.

If Smith (2009) is correct, that the military controls the demand and the arms industry and the arms trade control the supply, then is price the controlling factor as demand and supply theory suggests? The next section introduces the micro-economic theory of monopsony that helps explain how, in this study, that demand is the controlling factor. Following the discussion of monopsony, this chapter reviews the variables that political influences on government decisions to purchase either troops or PMCs, and introduces variables beyond the supply-demand model that further influence the use of PMCs.

Monopsony

As demonstrated earlier, the general theory of supply and demand provides the foundation from which the growth of the private security industry can be explained.

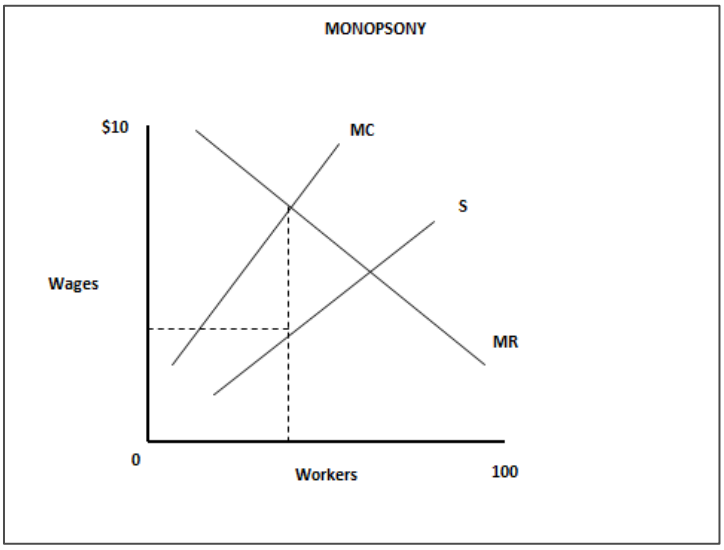
Furthermore, the theory points out that in a competitive market, price is a factor that shapes purchases. But what happens when the demand side of the market controls purchases? Monopsony is a market in which a single buyer on the demand side has considerable power in the market. This section first, introduces the microeconomic theory monopsony; second, examines the components of the theory; third, analyzes how the theory applies to US government procurement; and fourth, applies the theory of monopsony to the US military-private security industry relationship.

While the market for any type of good, service, resource, or commodity could, in principle, function as monopsony, this form of market structure tends to be most pronounced in the exchange of factor services (Parkin 1993, 415; Watkins 2012; Boal and Ransom 2010). Boal and Ransom (2010) observe that a monopsonist has power over price through control of quantity demanded. Three characteristics of monopsony are, a single firm buying all output in a market, there are no alternative buyers, and restrictions on entry into the industry. Thus, a monopsonized market is characterized by a smaller quantity traded and a lower price than a competitive market with the same demand and other costs of production (Boal and Ransom 2010). A protected monopsony is a firm with a state protection of its monopsonist status (Watkins 2012). A monopsony often acquires, and generally maintains, single buyer status due to restrictions on the entry of other buyers into the market. A monopsonist controls the demand side of the market with government license or franchise, resource ownership, patents and copyrights, high start-up cost, and decreasing average total cost (Watkins 2012).

Microeconomic theory states that the protected monopsonist takes into account the effect of additional purchases on the price of the commodity. The marginal cost of a purchase is, therefore, more than the price of the additional purchases (Watkins 2012). Figure 2.4 demonstrates the profit-maximizing employment of a monopsony. A firm faces a positively-sloped supply curve (S); yet, higher wages are needed to attract more labor. The positively-sloped curve is the marginal factor cost curve (MC), and therefore, the value of the extra production generated by each worker is the marginal revenue cost curve (MR) (Watkins 2012). In other words, the marginal cost of employing one more worker will be higher than the average cost because to employ one extra worker the firm has to increase the wages of all workers. As a profit-maximizing firm, monopsony hires the quantity that equates marginal factor cost and marginal revenue product found at the intersection of the MC and MR curves. Presuming no

externality, the supply curve (S) is the marginal social cost curve (MC), so its intersection with the marginal revenue curve (MR) corresponds to the level of production and consumption such that marginal benefit is equal to marginal cost and both correspond to the market price. If demand for a product falls, the theory suggest wages are likely to fall (Parkin 1993). While most of the literature on monopsony focuses on the price of labor, Agapos and Dunlap (1970) argue that this explanation is inadequate and severely hinders the understanding of the government-industry relationship.

Figure 2.4 Monopsony[9]



In general, firms that operate within the government-industry market operate differently than those depicted as profit maximizers in conventional microeconomic theory textbooks (Agapos and Dunlap 1970). Agapos and Dunlap (1970) argue that the foundation and operation of government-industry competition does not coincide with private spending and the operation cannot coincide with conventional economic theory. Thus, the traditional tools of microeconomics are inapplicable because they do not effectively explain the price, output, profits, and cost relationship of a private firm when it deals with the government (Agapos and Dunlap 1970). The theory, once in practice, is not just about price.

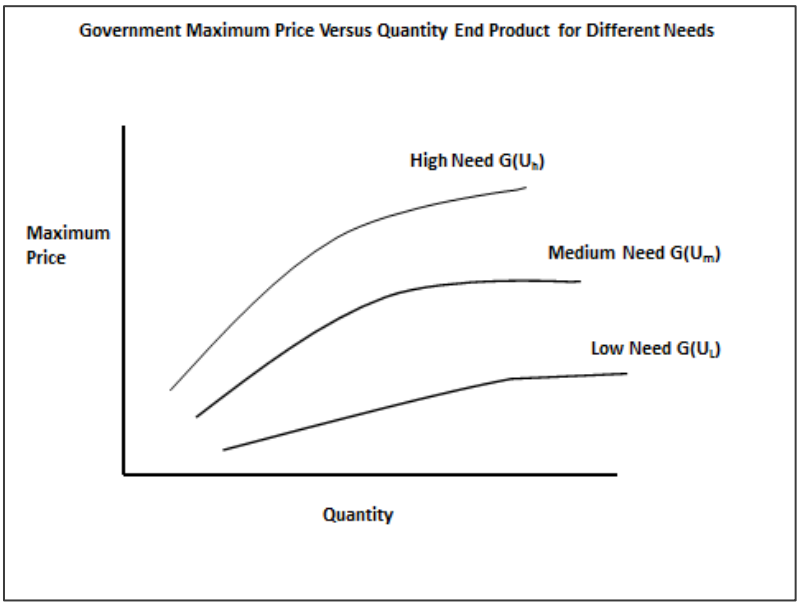
[9] Watkins (2012)

As such, the government is not a pure monopsonist in the conventional sense of the word (Agapos and Dunlap 1970). Agapos and Dunlap (1970) point out that the government does not resell any end product and, thus, makes no attempt to maximize profits. Its only function is to supply services to the general population at a reasonable cost (not necessarily minimum). This difference is reflected in the demand curve. Agapos and Dunlap (1970) assert that "instead of demand function, a variation, call it a "need" function, is used." Need here is defined as how critical the items are to the government.

A major difference between this "need" curve and a demand curve is that the assumption of linearity would probably be in error (Agapos and Dunlap 1970). Agapos and Dunlap (1970) illustrate that the government's need curve assumes a constant price, that is, because of budgeting constraints there is a fixed amount of funds that the government can use for procurements, and it tries to maximize its utility by striving for the greatest quantity of end product. The government will accept a lower quantity in end product (x-1) for the predetermined costs as its needs increase. In this example x is the total units of an end product. Thus if we assume that the government has budgeted to procure a fixed dollar amount, the less the need, the more quantity of end product it demands to receive; and the greater the need, the less quantity it will be willing to accept from its supplier.

To illustrate, Agapos and Dunlap (1970) develop a series of need curves relating price to the quantity of end product for different needs. By combining three variables; quantity of end product, need, and price, the results are a "family of curves". Agapos and Dunlap's (1970) model (Figure 2.5) show a series of curves where price is represented by the Y axis and the quantity of the end product by the X axis. The three curves are functions of need. If there is a high priority for some end product (or service), the cumulative maximum price curve is quadratic. The lower the government's need, the more the curve approaches a straight line; see $G(U_h)$ and $G(U_L)$. A medium or intermediate need is depicted by $G(U_m)$ somewhere between the high and how need curves (Agapos and Dunlap 1970).

Figure 2.5 Family of Curves[10]



By viewing the US military-private security industry through the model developed by Agapos and Dunlap (1970), it becomes clear that the market relationship is more about need than price. Although the US military can be categorized as a protected monopsonist, their goal is not to make a profit. Thus price is less of a factor when examining the supply-demand behavior of the US military and the private security industry. To illustrate this behavior this study presents a basic model that builds on the microeconomic theory of monopsony and Agapos and Dunlap's theory of need.

The US military requires a certain number of units to meet the National Security Objectives set out by the President. A unit (x) is the number of soldiers, equipment, services, or organizations required to achieve the objectives. At equilibrium, the US military procures one less unit to achieve its expected utility (x-1). When the need increases because of conflict, the US military seeks to procure additional units (x_1, x_2, x_3...) based on the level of need. For example, the US military may choose to activate its Reserves (x_1), call National Guard forces (x_2) to active duty, increase the size of the military (x_3), use allied or coalition forces (x_4), hire host nation contractors (y_1), or hire private military contractors (y_2). Depending on the level of need, the US military may procure the required units using some combination of the following model.

[10] Agapos and Dunlap (1970)

US Military Monopsonist Model:

$$(x\text{-}1) + x_1 + x_2 + x_3 + x_4 + y_1 + y_2$$

Although the general theory of supply and demand provides the foundation from which the growth of the private security industry can be explained, price is not the determining factor when examining the US military-private security industry relationship. The microeconomic theory monopsony helps explain why demand is the determining factor. Agapos and Dunlap (1970) place the theory of monopsony in context when examining US government procurement behavior. This allows a parsimonious model to be developed to help explain the phenomena in this study. In short, the US military exhibits monopsonist behavior as their need increases.

The Demand for PMCs

This dissertation asserts that the general theory of supply and demand combination goes far in explaining the increasing use of PMCs. Singer (2003,53), Avant (2005, 30) and others (Kidwell 2005, 27; Krahmann 2010, 11) point out that the rise of the private security industry is linked to demand and supply. As the previous section underscores however, its rise is not driven purely by the market, but rather by the needs and constraints of a monopsonist actor, the military.

Budget Constraints

Kinsey points out that "the key factors that define the context of PMCs in the international system are military downsizing, technology, monetary efficiency and political expediency" (Kinsey 2006, 151). In particular, he asserts that "to a large extent, the increasing reliance on PMCs and PSCs reflects concerns about monitory efficiency and the application of lethal force to save strangers" (Kinsey 2006, 96). Carafano (2010) argues that for most of America's history, the federal government's chief budgetary function was funding defense. However, "the two-thirds decline in defense spending since 1962 has substantially altered the makeup and structure of the US national defense" (Carafano 2010, 55). He warns that mandatory outlays for programs such as Social Security, Medicare, and Medicaid are consuming, and will continue to consume, ever larger percentages of federal spending and the gross domestic product (GDP). As a result, they will apply increasing pressure, crowding out the resources available to

field more ground troops – and that will likely change how future wars are fought (Carafano 2010, 56).

The US budget for fiscal year 2001 demonstrates that military expenditures decreased after the end of the Cold War. Starting in 1987, US defense outlays were 28.1 percent of the national budget. By 2001, the US defense outlays were 16.4 percent of the national budget. In 1987, the defense budget represented 6.1 percent of the Gross National Product (GDP). By 2001, the defense budget represented only 3.0 percent of GDP. Carafano (2010, 56) concludes that "the upward-spiraling manpower costs and downward-spiraling size of the military have fueled the Pentagon's reliance on contractors." He suggests that there are few practical alternatives to PMCs. Thus, the extant literature suggests that the decrease in military outlays helps explain the increasing reliance on the private security industry. This is one causal influence examined in this dissertation.

Decreased National Militaries

Shearer (1998, 27) was the first to suggest that Western military-force reductions resulted in an expansion of the private military sector. Furthermore, he asserts that "demobilization has released former soldiers on the job market" and "the net result is a sharp increase in expertise in the private sector" (Shearer 1998, 27). Singer (2003, 53) points out that the majority of military cutbacks were in "back-end support areas, such as base support and logistics." Kidwell asserts that with the end of the Cold War, "Americans interpreted a reduced threat to national security that would result in a peace dividend or an accelerated reduction of military size and expenditure" (Kidwell 2005, 27).

Similarly, Carafano explains that "the post-Cold War peace dividend affected all the services. Not only did the numbers drop, but organizations shrank, bases closed, equipment was retired, and civilian employees were let go" (Carafano 2008, 52). Likewise, Kinsey points out that "since the end of the Cold War, the US military numbers declined from 780,000 troops in 1991 to 380,000 in 2006, fueling the growth in private contractors" (Kinsey 2006, 95). Ortiz concludes that "at least in the United States and the United Kingdom, there appears to be some correlation between the downsizing and the size of their private military industry" (Ortiz 2010, 52). In short, the extant literature strongly suggests that the decrease in the size of a nation's military helps explain the increase in the reliance on the private security industry. This is

particularly evident when increased involvement in conflicts creates a demand for soldiers in uniform.

Concurrent with the reduction in military outlays, the size of the US military decreased as well. In 1987, the total size of the US military was 2,174,217 active duty personnel. By 2001, the total size of the US military was 1,376,905 active duty personnel (US SAID, 1987 and 2001). Additionally, US military reduced the size of its civilian workforce at nearly the same rate. In short, the size of the active US military force decreased by 50 percent. Thus, if US military decreases, it is possible that there is a correlation with the increase use of the private security industry.

Increased Conflict

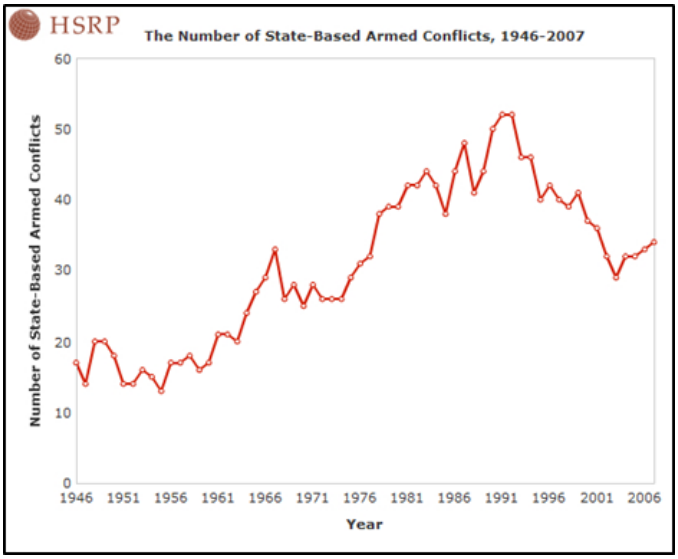
Singer asserts that "the first force driving the privatization of military services has been the massive increase in global levels of conflict since the Cold War's end" (Singer 2003, 50). However, he points out that "Western military structures are still largely designed for major total warfare and are often inappropriate for limited interventions" (Singer 2003, 58). Furthermore, as conflicts increase globally, Singer argues that many Western nations "developed a marked intolerance for casualties in conflicts that do not directly threaten the core of the nation" (Singer 2003, 58). Agreeing with Singer, Kidwell argues that "the political instability triggered by the collapse of the Soviet Union spurred the demand for private security and increased military support services" (Kidwell 2005, 27).

Ortiz cautions that "in much of the analysis, PMCs are examined in isolation from the insecure environment encouraging their use" (Ortiz 2010, 7). Specifically, he argues that "the increase in low-intensity conflicts and the perceived lack of effectiveness of United Nations (UN) peacekeepers increases the willingness of some weak states to hire PMCs rather than wait for the UN" (Ortiz 2010, 82). In short, the extant literature suggests that the increase in conflict helps explain the increase in the reliance on the private security industry. Increased conflict certainly points towards an increase in demand for the private security industry.

However, according the Human Security Report Project the number of conflicts decreased between 1992 and 2006 (see figure 2.6). In 1992, there were 52 conflicts. By the time Singer published his book that number had decreased to 29. However, by 2006, the number had increased to 34. In contrast, between 1989 and 2003, the US was involved in eight of the global

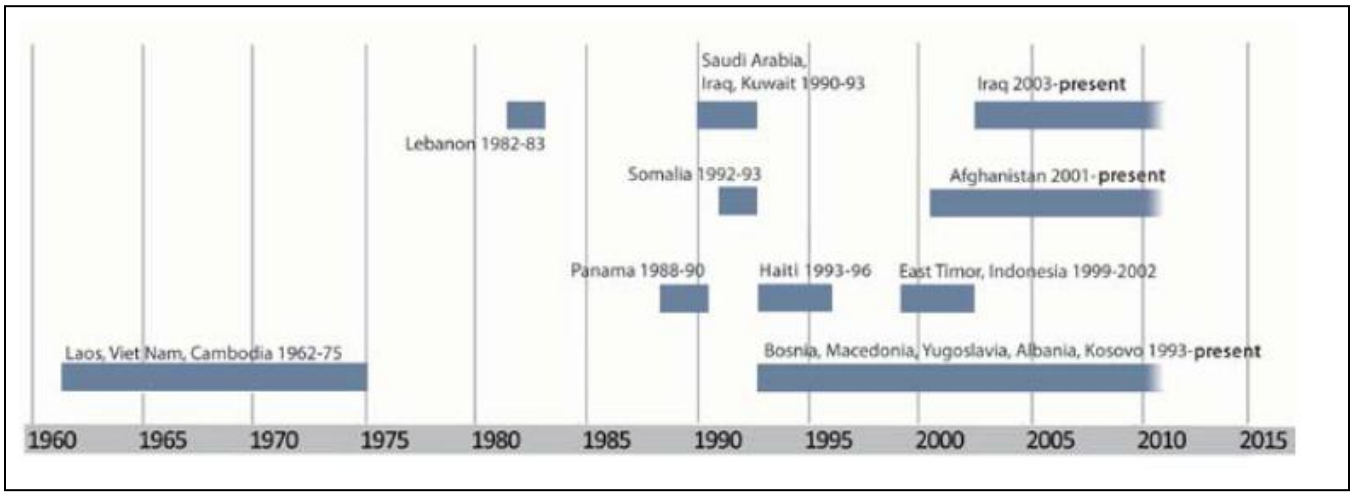
conflicts (see figure 2.7). Moreover, the US had much of its military force deployed outside the US. In 1991, that number was close to 450,000. In September of 2001, there were about 250,000 military personnel deployed overseas. In 2003, the number of military personnel deployed outside the US was over 280,000. In short, it may be that increases in US conflicts and engagements result in the increased use of the private security industry. Thus, if a nation's involvement in conflict increases, it is possible that there is a correlation with the increasing use of the private security industry.

Figure 2.4 State Based Conflicts[11]



[11] Figure 2.4 State based conflicts imagine from the Human Security Project, www.hsrgroup.org.

Figure 2.5 US Conflicts Abroad[12]



As noted above, potentially important explanatory variables exist that are not included in supply-demand theory. These variables are also emphasized in the study. They may add additional nuance to supply-demand theory, or they may cause us to reconsider the theory. These three variables are: bureaucratic controls; force cap; duration, and permissiveness of the target state security environment.

2.5 Beyond the Supply-Demand Model

Bureaucratic Controls

If Thomson (1994) is correct, that de-legitimation and de-legalization led to the end of mercenarism then it is possible that legalization and legitimation may lead to an increase in private security. Most authors point out that in the United States policy changes enabled a broader use of the private security industry, particularly in the US military. Krahmann (2010, 121) points out that in 1966, the US Office of Budget and Management introduced Circular A-76 which laid the foundations for the outsourcing of military services in the USA. However, for much of the nation's history, laws were in place preventing the use of mercenaries.

Thomson (1994) points out that from the very beginning, the US sought to control the privatization of military force within its borders. She asserts that the Neutrality Act of 1794 was

[12] Figure 2.5 US Conflicts Abroad imagine found at the Commission for Wartime Contracting Website www.wartimecontracting.gov. Transforming Wartime Contracting Report, August 2011.

the first domestic law in the world to deal specifically with the problem of hostile expedition against foreign countries, and it served as a model for England and other nations (Thomson 1994, 79). The neutrality laws forbid anyone other than the U.S. central state from raising an army within the territory of the United States to attack a state with which the United States is at peace. In addition, the law prohibited individuals from selling their services as soldiers to another state while within the jurisdiction of the United States. Individuals are also forbidden from hiring others into the service of a state when the transaction is completed within the United States. Finally, individuals are prohibited from organizing military expeditions against foreign political entities in their own private interests (Thomson, 79). Shearer (1998, 20) points out that the Neutrality Act of 1795 made it a misdemeanor for an individual to prepare or depart for a conflict abroad.

Kidwell (2005, 11) observes that in 1798, the US Congress passed legislation to guide the process of military procurement. The US Congress continued its legislative oversight of government contracts through the 18th and 19th Century. At the end of the First World War, the National Defense Act of 1920, returned many contracted military logistics responsibility to military agencies (Kidwell 2005, 13). Shearer notes that a new Neutrality Act was introduced in 1937, but is interpreted as only prohibiting the recruitment of mercenaries within the US – being a mercenary is not in itself a criminal offense (Shearer 1998, 20).

In the United States one can trace the push for outsourcing of military activities back to the 1996 release of the revised Office of Management and Budget (OMB) Circular A-76. Krahmann asserts that the Clinton administration's express objective was to aggressively pursue the outsourcing and privatization of public services and to introduce new management procedures in those public sectors which could not be privatized (Krahmann 2010, 122). As a result, the first comprehensive multifunctional LOGCAP Umbrella Support contract was awarded in August 1992 to support all US services and United Nations (UN) forces in Somalia. By 1998, the Clinton administration introduced the Federal Activities Inventory Reform Act (FAIR). The FAIR Act succeeded in providing the government with a basis for increasing its pressure to expand the use of private suppliers by offering concrete data on the number and types of services which could potentially be outsourced to the private sector (Krahmann 2010, 128).

The US government controls and regulates the international supply of defense articles and services through the Arms Control Act (AECA), first implemented in 1968 (Ortiz 2010,

137). Ortiz (2010, 137) points out that the AECA confers on the president the authority to control the export and import of defense articles and services. Furthermore, the US Department of State manages the International Traffic in Arms Regulation (ITAR) that controls and regulates defense services outside the US. Defense services are defined as furnishing assistance to foreign persons in the development or maintenance of defense articles, and military training of foreign units and forces (Ortiz 2010, 138). The ITAR requires the registration and licensing of US persons willing to export defense articles and services. This means that any US private contractor working overseas must register with the US Department of State and receive a license before services can be provided.

In 1986, the US Congress passed the Diplomatic Security and Anti-Terrorism Act which authorized the US Department of State to use private security contractors to provide for security in support of US missions overseas (CWC 2009, 60). This legislation followed in the wake of the 1983 attack on the US Embassy in Beirut. After that time, the US Department of State employed private security contractors in Haiti, Yugoslavia, Palestine, Afghanistan, and Iraq. In 2010, the US Department of State requested that Congress approve a request to use between 6,000-7,000 private security contractors in Iraq to protect US government personnel and facilities (CWC 2010)

Although Singer (2003) asserts that massive military demobilizations provided a large pool of labor for the PMF industry and cheapening of start-up capital, this was not possible prior to 1995. The Ethics Reform Act of 1989 imposed criminal liability on government employees who engage in prohibited conflicts of interest. Among other things, the Act restricted the ability of former government employees to represent contractors before the government and the ability of current government employees to negotiate employment with contractors (Szeliga 2007). However, amendments to the Joint Federal Regulation lifted the five-year restriction on military personnel from obtaining employment by a private contractor. This change allowed a military member to leave military service one day and begin working for a private contractor the next.

Thus, the bureaucratic controls allow policy makers the ability to control the private security industry particularly its recruitment of a trained labor pool and its ability to provide services outside of the United States. In short, policy makers could eliminate the use of private security contractors with the amendments to the existing laws. Therefore, if bureaucratic controls

on the private security industry decrease, it is possible that there is a correlation with the increase use of the private security industry.

Of course, there are other potential variables that may impact the use of PSCs and PMCs. While this study focuses on the five highlighted in the existing literature, it also holds out the possibility that in-depth case studies will reveal additional influences on the increasing use of PMCs and PSCs. If additional explanatory variables are found in the case studies, they will be analyzed in the quantitative portion of the dissertation and possibly be added to the explanatory framework advanced in this study.

Increased use of PMCs

Most scholars assert that there has been an increase in the use of private security since the end of the Cold War. However, the extant literature is inconsistent on how to measure the private security industry. Various terms such as expansion (Shearer 1998), emerging (Singer 2003), tidal wave (Singer 2003), proliferation (Kidwell 2005), and burgeoning (Avant 2005) are used to describe the increase in the use of the industry. Some scholars (Isenberg 2009) use specific numbers of contractors in Iraq as evidence of an increase while others (Carafano 2008) use the number of companies to demonstrate and increase. Unfortunately, these statistics only provide evidence from a particular period and place.

Krahmann (2010) uses US military procurement data to demonstrate an increase in the use of PMCs. This may provide a more accurate measure of the increased use of the private security industry. For example, contractors are persons or businesses who provide products or services for monetary compensation. Additionally, a contractor furnishes supplies or services, or performs work, for a certain rate of pay based on the terms of the contract (Carafano 2008, 71). Thus, a contract for private security most likely does not specify how many contractors to hire, only what service to provide.

Likewise, most scholars begin their measurement with the end of the Cold War (1989). Isenberg (2009) suggests that we can say that the private military industry is neither as new nor as big as frequently claimed. Furthermore, he points out that it is evident that civilians have always been instrumental to military operations and have often been in harm's way in support of the military (Isenberg 2009, 4). He concludes that there has been an increased prominence given

to the reemergence of an old phenomenon. Figure 2.6 illustrates Isenberg's point. Therefore, this study measures the number of private contractors used during an intervention.

Figure 2.8 20th Century Contractor to Military Ratio[13]

Conflict	Contractors	Military	Ratio
World War I	85,000	2 Million	1:20
World War II	734,000	5.4 Million	1:7
Korean Conflict	156,000	393,000	1:2.5
Viet Nam Conflict	70,000	359,000	1:6
Gulf War I	9,200	541,000	1:58
Bosnia	1,400	20,000	1:15
Iraq	21,000	140,000	1:6

Most scholars point out the differences in the use of contractors during conflict based on the ratio of contractor to military. While it may be true that there has been an increase in the use of private security in the post-Cold War era, it is certainly not a new phenomenon nor are the numbers particularly large in comparison to earlier conflicts. Maybe Carafano is correct when he asserts that "understanding why the private sector has come to play such a prominent role in public wars requires tracing a story as torturous and, at times, as mysterious as the search for the Holy Grail, a tale filled with deceit, greed, courage, selflessness, stupidity, misdirection, and myth" (Carafano 2008,12).

2.6 Limitations of the literature

One of the limitations of the extant literature is the availability of empirical data. Singer (2003) and Avant (2005) provide very little empirical evidence to support their claim that military downsizing and increased conflict result in an increase in the private security industry. Given that the scholarly work does not often rely explicitly on the theory of supply and demand, it is not surprising that the empirical evidence does not exist. However, various US government

[13] Isenberg 2009, 4.

statistical databases and government reports provide some initial evidence to support the claims in the literature.

Another challenge with the extant literature is the identification of multiple causes for the increased use of private contractors. Lebow (2001, 123) warns that multiple causation can result in overdetermination, when several causes are present, and any one of them could have produced the observed outcome. He argues that failure to rank these causes and explore the relationship between or among them can make such explanations difficult to refute and easy to confirm tautologically (Lebow 2001, 112). It may be that some scholars are looking for a parsimonious explanation for a seemingly complex event, yet to assume that their explanations are applicable in a wide range of situations will require further testing.

In sum, this study will add precision to our understanding of the causes of the rise of PMCs. It moves beyond descriptive accounts of the causes of the rise of PMCs and advances a parsimonious theory to explain the phenomenon. This study thus fills a gap in the literature by determining the extent the theory is empirically accurate or the extent it must be modified.

Of course, PMCs are of more than just academic interest. As their use has grown over recent decades, increasing questions about their control and status are being raised in the domestic political arena. Their legitimacy is being challenged by sovereign governments where US based PMCs are deployed. PMCs are also becoming a "large market force" in the US and internationally, offering competencies and services not readily available to some nation states. This study should thus not only fill a gap in the existing academic literature on PMCs, it should provide valuable information to those shaping policy as well.

2.7 Summary

This study maintains that the private security industry fills vacuums created when the US government does not have the means or the will to provide domestic and international security. This study will also examine the impact that bureaucratic controls, force caps, and host nation permissiveness have on the US military's use of PMC/PSCs. Understanding the broader context of the private security industry's relationship to mature democracies enables the current debate to be expanded to reflect how domestic choices impact foreign policy choices. Based on a review of the literature, this paper focuses on five hypotheses:

> *H1: When military outlays decrease there is an increase in the use of private security.*

H2: When the size of a national military decreases there is an increase in the use of private military security.

H3: When the number of a military disputes, military engagements and militarized conflicts increases there is an increase in the use of private security.

H4: When the duration of a military conflict increases there is an increase in the use of private security.

H5: When there is a decrease in bureaucratic controls and regulations there is an increase in the use of private security.

The hypotheses suggested by Kidwell (2005, 65), Avant (2005, 253), and Singer (2003, 230) are that the use of PMC/PSC will continue to increase not only in the US but throughout the international community. Their increased use will impact foreign policy decisions, domestic decisions on force structure, and international regulatory regimes. The goal of this research is to test the hypotheses and to determine the validity of a supply-demand theory of PMCs. If the parsimonious theory is correct, it will provide scholars and policy makers with relatively easy, traceable indicators that may help predict whether the US or other advanced democracies might experience rising or decreasing levels of PMCs. Additionally, the results may inform policy makers involved in developing solutions to foreign policy problems requiring military intervention in areas not directly related to immediate or evident national security concerns. State policy makers may be able to use the results of the study to inform decisions about military budgeting, structure, or civil-military relations.

This chapter presented the rationale for conducting research on the causes of the rise of the private security industry in the United States. It reviewed of the literature pertinent to this research study, namely, the general theory of supply and demand, a summary of the existing literature, and the theoretical framework for the rise of private security. It concluded with a proposed thesis and five hypotheses that guide the remainder of the study. Next is an introduction of the case studies.

Chapter 3 - Introduction to the Case Studies

This chapter uses a qualitative approach to test the explanatory power of private security supply-demand theory. The theory predicts that if the size of the national military decreases there is an increase demand for the private security industry. Likewise, as US involvement in conflict increases there is an increased demand for the private security industry. Moreover, the theory predicts that decision makers will chose between not becoming involved in conflict or choosing to use private security, depending on which has the lower cost. By analyzing the historical record of specific US conflicts, this study can track distinct policies, events, and decisions that led to the increased use of the private security industry by the US. This research also creates approximate measures of supply-demand choices in a much wider array of cases to cross validate whether the case study findings are peculiar to just a few conflicts. Therefore, the following case studies and statistical analysis serve to reinforce one another. The case studies include the first Gulf War (1991), the US in Bosnia, and the US in Iraq (2003). Each case allows the reader to directly compare the supply-demand choices with historical events.

3.1 The Case Study Method

George and Bennett (2005, 5) point out that the case study approach is a detailed examination of an aspect of a historical episode to develop or test historical explanations that may be generalizable to other events. Flyvbjerg (2006, 221) asserts that the case studies produce context-dependent knowledge and that in the study of human affairs there appears to exists only context-dependent knowledge. George and Bennett (2005, 17) further argue that the strongest means of drawing inferences from case studies is the use of a combination of within-case analysis and cross-case comparisons with a single study or research program.

The case study approach has a number of strengths. First, it allows a researcher to achieve high levels of conceptual validity. Second, it can help identify new variables and hypotheses. Third, it can examine the operations of causal mechanisms in individual cases in detail. Fourth, it has the ability to accommodate complex causal relations such as equifinality, complex interactions effects, and path dependency (George and Bennett 2005, 19-22). However, George and Bennett (2005, 31) warn that case study methods involve a trade-off among the goals of attaining theoretical parsimony, establishing explanatory richness, and keeping the number of

cases to be studied manageable. Thus, case study researchers are more interested in finding the conditions under which specific outcomes occur, and the mechanisms through which they occur, rather than uncovering the frequency with which those conditions and their outcomes arise (George and Bennett 2005, 31; Flyvbjerg 2006, 223).

3.2 Structured Focused Comparison

This study relies on the method and logic of structured, focused comparison to examine the cases under review. George and Bennett (2005, 67) point out that the method is structured in that the researcher writes general questions that reflect the research objective and that these questions are asked of each case under study to guide and standardize data collection, thereby making systematic comparison and cumulation of the findings of the cases possible. Likewise, the method is focused since it deals only with specific aspects of the historical cases examined. George and Bennett (2005, 67) note that the method was devised to study historical experience in ways that would yield useful generic knowledge of important foreign policy problems. The method of structured, focused comparison borrows the device of asking a set of standardized, general questions of each case, even in single case studies (George and Bennett 2005, 69). The method also requires that the study be focused: that is, they should be undertaken with a specific research objective in mind and a theoretical focus appropriate for that objective (George and Bennett 2005, 70).

3.3 Case Selection

This study consists of three cases for in-depth historical examination: US intervention in Iraq (1991), US intervention in Bosnia (1995), and the US intervention in Iraq (2003). Following King, Keohane, and Verba (1994), this section includes significant variation on the independent (or causal) variables of interest. In the context of testing the private security choices of the US, this method suggests finding cases with differing expectations of the utility of using the private security industry to supplement the national military. The three cases include both longitudinal and cross-sectional variance on key concepts such as bureaucratic controls, intensity of violence in the target state, the duration of the intervention, the size of the US military, the US military budget outlays, and the number of conflicts the US participates during a given year. For example, the US intervention in Iraq (1991) happened shortly after the end of the Cold War, and just prior to the decrease in the size of the US military. However, decision makers were in the early stages

of using the private security industry to support military operations. On the other hand, the US intervention in Iraq (2003) occurred at a time where privatization was in full swing, the size of the US military was half the size of the 1991 military, and decision makers were fully committed to using the private security industry to support military operations.

In addition, these US interventions were conflicts of choice. Although political leaders asserted that each was vital to the national security of the United States, in each case the US was neither threatened directly or indirectly with violence by the target nations involved. Thus, decision makers had choices prior to the intervention to rely on the private security industry to supplement military operations or not become involved in the conflict because of insufficient availability of troops.

Similarly, there is considerable variation in the type of US intervention, particularly their scope and duration. Although the size of the US intervention in Iraq (1991) was significantly larger than in Bosnia or Iraq (2003), the duration was considerably shorter. In contrast, the size of the US intervention in Bosnia was much smaller compared to the other cases. However, the duration of the Bosnia intervention lasted significantly longer than political or military planners had anticipated. Likewise, the size of the intervention in Iraq (2003) was much smaller than actions in Iraq in 1991. Yet it was far longer in duration than military planners had predicted. Furthermore, the commitment of US forces around the world in places such as Europe and Korea limit their use to military planners when planning interventions. Therefore, exogenous factors play a role in the decisions made as well as add uncertainty to outcomes once there is an onset of conflict.

3.4 Questions

Several questions guide the case study analyses of the growth of the private security industry. The important device of formulating a set of standardized, general question to ask of each case will be of value only if those questions are grounded in – and adequately reflect – the theoretical perspective and research objectives of the study (George and Bennett 2005, 71). This research will use the following questions to focus the comparison both across and within cases:

1) How many PMCs were used during each intervention?
2) What role did the PMCs play? These questions attempt to determine how many private security contractors participated in the intervention. Two factors are

examined: actual numbers of private security contractors (where available) and the amount of DOD procurement funds spent on contracts during the intervention (following Krahmann). Additionally, this question explores what role the private security industry played in the intervention; support (PMC) or security (PSC).

3) What laws, regulation, and controls were in place regarding PMCs? This question specifies the limitations or constraints of US bureaucratic controls on the private security industry. The more limitations and constraints, the less private security industry is used. When limitations and constraints are removed, the more private security is used. Legalization of the private security industry is assumed to be necessary (see Thomson 1994).
4) What was the duration of the conflict? This question examines the length of the intervention, specifically from the beginning of the deployment of forces until a drawdown in the conflict area, where applicable. This is important since military forces require logistics support, technical advice, and security even when not directly involved in combat. The expected duration of the intervention is contrasted with the actual duration to analyze decision makers planning assumptions. The duration of the intervention should reveal if decision makers' choices in private security changed during the conflict based on expected price or a change in price.
5) What was the scope of the conflict? Specifically, how many troops were used during the intervention? This question attempts to determine if the scale of the intervention results in an increased use of the private security industry. As military logistics support became privatized, there should be an increase in private military support in relation to the number of troops used during a conflict. Additionally, how the military forces were staged for the intervention, employed during the conflict, and arrayed at the end of hostilities should reveal the scope of the conflict. For example, if the military force deployed from one main base, limited their intervention to a small portion of the rival's country, and redeployed through one main base, we should see a smaller use of the private security industry in support.
6) What other conflicts or deployments were ongoing?
7) How many troops participated in other conflicts or deployments? These questions examine the larger role of the military in international affairs. The commitment of

military forces to areas other than the intervention limits their availability to participate. The result should be an increased demand for the private security industry to fill the gap in available military assets.

8) What was the size of the military? This question examines the total military forces available during the time of the intervention. This includes all branches of the US military, reserve forces, and National Guard forces. Although the active military force is immediately available, policy makers must chose to activate reserve and National Guard forces. Following Singer (2001) and Avant (2005), as the overall size the military decreases one should expect to see an increase in reliance on the private security industry. Additionally, this question should highlight the opportunity costs or shifts in supply that policy makers face when choosing between the private security industry and national armies.
9) What was the percentage of the national budget do military outlays represent? This question looks at the US military defense budget at the time of the intervention from the standpoint of total dollars spent on defense as a percentage of GDP and a percentage of the US budget outlays dedicated to defense. As the size of the defense budget decreases over time, there should be an increased reliance on the private security industry due to decreased spending on national armies. This should illustrate a shift in the supply curve away from higher costs of personnel for national armies.
10) Did policy makers or military leaders have choices other than using the private security industry?
11) If so, did they use them? These questions look beyond the availability of national armies and military budgets to determine if policy makers had choices available other than the private security industry. For example, increased participation of allies, coalition partners, and host nations should provide an alternative to the private security industry.

3.5 Sources

The case studies rely on information from diplomatic, military, and personal histories, as well as original government documents. In all cases, there are sufficient primary and secondary sources to reconstruct the cases. As Gaddis (2002) notes, many times historians themselves

disagree over the interpretation of past events and the interpretation of choice may be incorrect. In each case, where contradictions are found, the historical interpretations are explained in relation to their bearing on the argument, where applicable.

Chapter 4 - Desert Shield/Desert Storm

4.1 Intro and purpose

How does private security supply-demand behavior fare against the evidence? This chapter presents the first of three case method tests. The results tend to corroborate the theory as an early post-Cold War example of private security supply-demand behavior.

This chapter provides a case method test of Operation Desert Shield and Desert Storm, the Coalition offensive in the Persian Gulf War from 17 January to 28 February 1991. The argument is that the details of Desert Shield and Desert Storm contradict assertions in the literature on private security. The Gulf War has proven powerfully influential in defense debates. Yet the war's main lesson for most observers – that few contractors were used – is inconsistent with the conflict's actual conduct. The Coalition's low contractor count cannot be explained without considering the nature of the intervention, the decisions by senior Coalition leaders on force deployment, and the support provided by the Saudi government.

This argument is developed in six steps. First, is the motivation for selecting Desert Shield and Desert Storm as a case study. Second, is an outline of the main events. Third, is to develop values for the key independent variables. Fourth, is to assess the role of private military contractors during the conflict. Fifth, is to assess the theory and considerations of other explanations of the Desert Shield and Desert Storm outcome. A brief summary assessment follows.

4.2 Why Operation Desert Shield and Desert Storm?

Operation Desert Shield and Desert Storm is a least-likely case in George and Bennett's (2005) terms. Biddle (2004, 78) points out that a least-likely case is one where extreme values make the theory unlikely to succeed – even if the theory were generally valid, under such unfavorable conditions it might well fail anyway. Theories that survive the difficult test – of a least-likely case – may prove to be generally applicable to many types of cases, as they have already proven their robustness in the presence of countervailing mechanisms (George and Bennett 2005, 122). King, Keohane, and Verba (1994, 209) suggest that if the investigator chooses a case study that seems on a priori grounds unlikely to accord with the theoretical predictions – a least-likely observation – but the theory turns out to be correct regardless, the

theory will have passed a difficult test, and we will have reason to support it with greater confidence. Eckstein (1975) argues that in a least-likely case, the independent variable is at a level that gives only a weak prediction; a finding that it nonetheless produces the outcome is strong supporting evidence. Therefore, the strongest possible affirming evidence for a theory is a case where the theory makes only a weak prediction: a least-likely case.[14]

There are many reasons why PMCs should not have been used in Desert Storm; however, they were used anyway. The war began with the size of the US military and its budget essentially at its peak Cold War levels. Although the scope of the intervention was significant, the duration of the conflict was less than a year. Aside from the military commitments to NATO and Korea, the US faced very few competing conflicts around the world during the time of the intervention. More importantly, the ratio of private military contractors to military forces appears smaller in comparison to the ratios during interventions in subsequent decades. However, US military leaders required close to 10,000 private contractors to support operations in Saudi Arabia (Isenberg 2009, 4).

Although the operations in Kuwait and Iraq occur in the post-Cold War era, scholars such as Singer (2001), Avant (2005), tend to overlook this case when studying the rise of the private security industry. At first glance, the case does not possess the characteristics of the causal factors forwarded in the theory. Yet the case is not indeterminate. The key lies not in the theory's gross predictions for the use of the private security industry, but in the underlying conditions in which the US found itself the post-Cold War era.

The lower ratio of private contractors used in Desert Shield and Desert Storm obscures the fact that the US was able to achieve its goals because of their use. The question is why they were needed and why the ratio was lower, relative to other cases. The outcome to be explained here is thus what initial conditions existed that resulted in the use of private contractors, and why the ratio of private contractors appears to be lower than in other cases. The outcome is important in its own right, and it also provides critical methodological leverage in distinguishing the relative validity of the theory. As such, the case offers a challenging test even without providing a George and Bennett (2005) most-likely case.

[14] The converse to a least likely case is a most likely case. I will introduce and discuss a most likely case in Chapter 5.

4.3 Overview of Events, August 2, 1990 – February 28, 1991

In the months preceding the Iraqi invasion of Kuwait, Iraq was nearly $90 billion in debt after its war with Iran (1980-1988).[15] President Saddam Hussein blamed Kuwait and the United Arab Emirates (UAE) for preventing Iraq from working its way out of this massive debt. Saddam charged that "they had thrust a poisoned dagger into Iraq's back" by busting the oil quotas set by the Organization of Petroleum Exporting Countries (OPEC), thus driving the price down and reducing Iraq's income (Powell 1995, 459; Herspring 2005, 310). Furthermore, Saddam claimed that Kuwait had siphoned off $2.5 billion in oil from the Rumaila field, which the two countries shared.[16] Additionally, he covetously eyed two Kuwaiti-held islands, Warba and Bubiyan, which blocked his access to the Gulf. Saddam asserted that the Kuwaitis were not Arab brothers, but greedy lapdogs of the West (Powell 1995, 460). In mid-July 1990, the Iraqis deployed three armored divisions along the Kuwaiti border to intimidate the Kuwaiti leadership (Woodward 1991, 185). By the end of July 1990, all indications were that the Iraqis would attack Kuwait (Powell 1995. 461; Woodward 1991, 190).

At 0200 hours on 2 August 1990, the Hammurabi Armored Division and the Tawakalna Mechanized Division of the Iraqi Republican guard crossed the Kuwait border and quickly overran the single Kuwaiti brigade deployed along the frontier. The Kuwaiti brigade had little hope of checking the onslaught of nearly 1000 T-72 tanks. By evening, the Iraqi Army secured Kuwait city and began establishing defensive positions along the Kuwait-Saudi border (Scales 1994, 45; Sultan 1995, 11). It took less than a day for Iraq to overcome organized Kuwaiti resistance (Pagonis 1992, 5). Iraq's violation of the sovereignty of a weak Arab state was the sufficient cause of the 1990-91 Gulf War. Swain (1994, 1) observes that this action alone – which threatened Saudi Arabia, the minor Gulf States, and the regional and global economic balance of power – called the anti-Iraq coalition into existence.

Pagonis (1994, 6) asserts that "To this day it remains a mystery why Saddam Hussein didn't continue his advance through Kuwait and on into Saudi Arabia." However, on the same day of the Iraqi invasion of Kuwait, the United Nations Security Council passed Resolution 660, condemning the invasion and calling for the immediate and unconditional withdrawal of Iraqi forces from Kuwait (Swain 1994, 22). Swain (1994, 1) points out that "With the collapse of the

[15] Powell 1995, 4.
[16] Ibid., 460.

old world order, a clear precedent was called for in the form of united military action that would punish this wanton act by a mighty nation against a weak one and place it beyond the pale of legitimate international behavior." In addition to the UN resolution, the US imposed an embargo on Iraq, and President George Bush ordered the US Joint Chiefs of Staff issued to begin deployment of an Air Force tanker squadrons and the movement of the *USS Independence* Carrier Battle Group into the North Arabian Sea (Swain 1994, 22).

On 6 August 1990, King Faid of Saudi Arabia requested US assistance in the defense of Saudi Arabia (Woodward 1991, 256). That same day, the UN Security Council passed Resolution 661, calling for an international embargo on Iraq and occupied Kuwait (Swain 1994, 23). The following day, 7 August 1990, President George H. W. Bush ordered US military forces to the defend Saudi Arabia (Swain 1994, 23). From Jidda, Saudi Arabia, Dick Cheney, the US Secretary of Defense, called General Colin Powell, the Chairman of the US Joint Chiefs and issued the order to start moving troops to Saudi Arabia (Powell 1995, 467; Herspring 2005, 316). Pagonis (1992, 67) points out that "The mission was to deploy American troops and weaponry into Saudi Arabia to establish a defensive position and deter an invasion of the Kingdom (of Saudi Arabia) by the Iraqi forces occupying Kuwait." Thus began the military actions of August 1990 to January 1991 (Operation Desert Shield) and those of January 1991 and February 1991 (Operation Desert Storm).

Swain points out that "The war occurred in a 'new world' context." Furthermore, "The old post-World War II framework of Soviet-American confrontation had been supplanted by a new multipolar global community" (Swain 1995, 1). Thus, the military actions of August 1990 to January 1991 (Operation Desert Shield) and those of January 1991 and February 1991 (Operation Desert Storm) were a part of the strategic response by the United States, Saudi Arabia, and their coalition partners to the Iraqi aggression. The Gulf War was thus a coalition war, and it remained a war of limited objectives. At no time was the destruction of Iraq a serious consideration (Swain 1995, 1).

Beginning on 10 August 1990 the first US ground combat soldiers departed for Saudi Arabia. By the end of the month, more than 12,000 soldiers from the 82nd Airborne Division were on the ground (Scales 1994, 50). President Bush announced in the same month that his stated goal was "The immediate, complete, and unconditional withdrawal of all Iraqi forces from Kuwait; and the restoration of Kuwait's legitimate government"(Powell 1995, 470).

Powell (1995) points out that by 6 October 1990, the first offensive planning discussion occurred in Washington. Just after the mid-term elections on 8 November 1990, President Bush announced that another 200,000 US troops were on their way to the Gulf (Herspring 2005, 322). Bush stated that their mission was "to insure that the coalition has an adequate offensive military option" (Powell 1995, 489). This action signaled a transition from Operation Desert Shield, the defense phase, to planning for Operation Desert Storm, the offensive phase. On 29 November 1990, the UN passed Resolution 678 authorizing "all necessary means" to remove Iraq from Kuwait. The UN resolution made clear that the mission was only to free Kuwait (Powell 1995, 489).

Operation Desert Storm began on 17 January just after midnight in Saudi Arabia, when Coalition air forces launched an assault on strategic and military targets in Iraq and Kuwait (Pagonis 1992, 145). After thirty-eight days of continuous air attacks on targets in Iraq and Kuwait, President Bush directed the US Central Command to proceed with the ground offensive (Stewart 2010, 35). In just under 100 hours, the US and its Coalition partners destroyed or forced the withdrawal of the forty-three Iraqi army divisions defending Kuwait (Stewart 2010, 63). The objectives of Operation Desert Shield and Operation Desert Storm were achieved. At 2400 hours, midnight on 27 February 1991, the US suspended military operations in Iraq. The Iraqi Army had withdrawn from Kuwait (Powell 1995, 525).

4.4 Private Contractors in Operations Desert Shield and Desert Storm.

Stewart (2010, 67) asserts that American forces rapidly deployed to Saudi Arabia with very little warning to fight on a distant and unexpected battleground. Thus, establishing the basis for an indigenous assistance and contracting program became a critical component of the overall logistical effort (Stewart 2010, 11). With over 60 percent of the Army's logistics support personnel in the reserves, the US depended on supplies and fuel from Saudi Arabia (Woodward 1991, 231). In contrast, an agreement for peacetime and wartime help had long been in force between the United States and the Federal Republic of Germany, where the United States had thousands of soldiers; but none covered the American presence in Saudi Arabia until 1990 (Stewart 2010, 11; Herspring 2005, 314).

Swain (1994, 23) and Khaled (1995, 287) suggest that because of the heavy investment of oil revenues in modernization and the annual need to accommodate the influx of pilgrims to the

Islamic holy sites, the Saudi commercial structure was already heavily depended on contracting as a way of doing business. This facilitated the acquisition of large-scale support to sustain US and coalition forces. General Gus Pagonis (1992, 76) pointed out that the early goal of logistics in Saudi Arabia was to establish civilian infrastructure to support a now-definite US intervention.[17] Furthermore, he states that the US had to deploy combat forces as rapidly as possible, therefore logistics forces would have to wait – and to fill the logistical void, and the US would have to use host-nation assets (Pagonis 1992, 76). Saudi General Khaled Bin Sultan (1995, 284) the Gulf War was a quartermaster's heaven because supplies were abundant and support was lavish.

To achieve his purpose, Pagonis observed that "in effect, I would be doing a market survey, much as a corporation does when it contemplates opening a new facility. In many cases, subcontracting for facilities, personnel, and other resources is much more cost-effective than shipping all needed assets to the new site" (Pagonis 1992, 76). He argues that there was an urgent need to get fighters on the ground (Pagonis 1992, 76). Therefore, when a military unit needed supplies or equipment, a contracting officer would simply pay cash on the spot and send the bill to the Saudis. In the first months of the buildup, the US Support Command had to go to extraordinary lengths to purchase goods and services fast enough to keep up with the accelerating arrival of troops. Housing, transportation and food were contracted locally from the Saudis (Scales 1994, 63; Khaled 1995, 284).

In the early days of Desert Shield, Pagonis asserts that many of his questions had to do with contracting, which he took to be the key sustainment issue (Pagonis 1992, 73). By satisfying as many supply requirements as possible from local sources, Pagonis substituted logistical shortfalls and reduced the number of American support units ultimately deployed to the theater of operation (Stewart 2010, 11). Fortunately for the US and its Coalition partners, the Saudi government made it clear from the start that it would shoulder many of the expenses of the deployment (Stewart 2010, 12; Khaled 1995, 288). As Herspring (2005, 315) suggests, cooperation of the Saudis would be key.

In response to host-nation support requests, the Saudis reacted energetically and cooperatively, providing tents, food, transportation, real estate, and civilian labor support

[17] General Gus Pagonis served as the senior logistics officer to US Central Command. Pagonis was responsible for all logistics support in Saudi Arabia, to include all contracting.

(Stewart 2010, 12; Bourque 2002, 60). Saudi Arabia agreed to pay for all freshly prepared meals, water, fuel, transportation within Saudi Arabia, and facilities construction. By December, that assistance was valued at about $2.5 billion projected over one year (Stewart 2010, 12). In total, the Saudi government provided 4,800 tents, 1,073,500 gallons of packaged petroleum products, 333 heavy-equipment trailers (HETs), 20 million meals, and 20.5 million gallons of fuel per day, as well as bottled water for the entire theater and supplies for Iraqi prisoners of war (Scales 1994, 65). Khaled (1995, 288) points out that over 600 Saudi contractors and subcontractors supported the coalition logistic requirements.

Pagonis (1992, 9) asserted that during Desert Shield and Desert Storm, his support command drew up, executed, and monitored over 70,000 contracts. Khaled (1995, 294) suggests that over 592 Saudi companies secured contracts to do with the war, in addition to the thousands of individuals who rented their houses, vehicles and other items of equipment. However, not all items were contracted through the Saudis. Powell (1996, 496) points out that when there was a shortage of shelter, the West Germans provided the huge tents they used for festivals. In addition to the 333 Heavy Equipment Trailers (HETs) provided by Saudi Arabia, 270 HETs were leased from Czechoslovakia, East Germany, and Poland (Scales 1994, 80).

Stewart (2010, 12) observes that in time, the system of Saudi support and contracting matured and helped sustain American forces in theater. For example, Army logistics officers contracted for buses and materials-handling equipment to move soldiers and their baggage through the airport at Dhahran (Scales 1994, 61; Bourque 2002, 81). Furthermore, the heat in Saudi Arabia hovered somewhere in the range of 120 degrees in the afternoon. Pagonis (1992, 96) points out that his logistics officers moved into the local community immediately, in search of bottled water and refrigerated vans. Moreover, Pagonis (1992, 72) asserts that "we needed to secure permission from the king to procure fresh food and fruit, along with other critical goods and services, from the local economy." He points out that locally procured food was both better and cheaper than Meals Ready to Eat (MREs), which cost about four dollars apiece, and for which our soldiers developed a number of colorful nicknames (Pagonis 1992, 72).

In fact, a Saudi by the name of Zahir Masri had been instructed by the king to feed the American troops (Khaled 1995, 295). Pagonis (1992, 114) points out that he was a highly successful food producer and distributor in Saudi Arabia. Masri contracted for Saudi and Filipino cooks, and set up mess halls throughout the theater. He served produce from Astra Foods, the

largest covered farm operation in the world, which was already on contract by King Fahd to feed the Saudi military. Astra Foods served over 300,000 troops per day with these contract meals, using food stuffs provided by Astra Foods and paid for by King Fahd (Khaled 1995, 295). Pagonis (1992, 115) suggests that the generosity of the king, as well as the entrepreneurial spirit, greatly improved the quality of life for our soldiers. Pagonis (1992, 114) exclaimed that there was no doubt that the food supplied by Masri had a direct impact on the success of the war. In all, Astra Foods subcontracted with over 125 Saudi companies to supply food to the Coalition (Khaled 1995, 295).

When it came time to move the two US Army corps into attack position in western Saudi Arabia, Pagonis turned to contractors for support. Pagonis points out that for the logisticians in theater and their colleagues back in the United States, the flanking movement represented an enormous challenge. VII Corps (US) was trucked 330 miles across the desert, and XVIII Corps (US) was trucked 500 miles west and north (Bourque 2002, 81). This required Pagonis to assemble nearly 4,000 heavy vehicles of all types, many of which had to be contracted for, and for which drivers had to be hired (Pagonis 1992, 9). He determined that by using rented buses it was fairly simple task to relocate the forward divisions in the desert and to set them up with temporary Bedouin-tent quarters (Pagonis 1992, 122). Additionally, Pagonis needed heavy equipment transporters (HETs) – big, flatbed trucks with huge carrying capacities (Clancy and Franks 1997, 206). He determined that he needed HETs in large numbers and that the Army had a grand total of 112 HETs in theater. Coalition allies had additional HETs, and the Saudi private sector was willing to rent more. Pagonis (1992, 123) asserted that this was a lifesaver. Pagonis assembled a fleet of nearly 1,300 HETs and tractor trailers, most of which came equipped with experienced third-country national drivers to move the two US Army Corps west (Pagonis 1992, 123; Khaled 1995, 302).

Pagonis (1992, 108) suggests that contracted support was the key to survival in the desert. Likewise, Scales (1994, 65) concludes that Saudi contributions substantially shortened the length time needed to prepare for combat and undoubtedly shortened the length of the conflict once hostilities commenced. Although the number of recorded contractors supporting the US during Operation Desert Shield and Desert Storm are relatively low compared to future decades, this obscures the fact that the Saudi Arabian government provided substantial support to the US and its Coalition partners. Next is to answer the focused questions.

What was the number of PMCs used during the intervention and what was their role?

These questions attempt to determine how many private security contractors participated in the intervention. Two factors are examined: actual numbers of private security contractors (where available) and the amount of DOD procurement funds spent on contracts during the intervention (following Krahmann). Additionally, this question explores what role the private security industry played in the intervention; support (PMC) or security (PSC).

Approximately 10,000 contractors supported military operations in Saudi Arabia, almost a 1:58 ratio of military troops to private contractors (Isenberg 2009, 4). The U.S. relied on private contractors to provide logistic support and transportation to combat troops. The majority of the private contractors were third-country nationals working in Saudi Arabia. There is insufficient data on how many private contractors were U.S. citizens.

In 1990, the DoD spent over $157 billion a year on procurement contracts. Of this total, DoD spent an average of $47 billion a year on service contracts. Service contracts represent about 31 percent of the total procurement purchases for DoD. The estimated cost for Operation Desert Shield and Desert Storm is $61 billion. The U.S. contributed $7.4 billion to the cost of the military intervention, while Saudi Arabia contributed over $16 billion (Khaled 1995, 293).

What Laws, regulation, and controls were in place at the time of Desert Shield and Desert Storm?

In August 1991, controls on civilian contracting in support of military operations were governed by Department of the Army Pamphlet (DA PAM) 690-80, *Use and Administration of Locals in Foreign Areas During Hostilities*, dated 12 February 1971 and US Army Regulation (AR) 700-137, *Logistics Civil Augmentation Program* (LOGCAP) dated 16 December 1985. The Department of the Army Pamphlet (1971, 2) states that "In order to conserve military manpower and reduce logistical support requirements, maximum use will be made of the services of available local national civilian personnel, consistent with operational requirements and the essential manpower needs of the local economy." Furthermore, the Army Regulation (1985, 1) states that "the objective of LOGCAP is to preplan for the use of civilian contractors to perform selected services in wartime to augment Army forces." Likewise, by using civilian contractors in a theater of operation contractors can fill shortfalls in the military forces available or release military units for other missions. Moreover, using contractors provides the Army with an additional means to adequately support the current and programmed forces in theater.

In general, the Army regulation asserts that "The Army continually seeks to increase its combat potential within peacetime resource allocations. To achieve the maximum combat potential, maximum support from as many sources as possible is necessary. This requires pursuit of support from external resources" (AR 700-137, 2). One method of external support suggested by the regulation is Host Nation Support (HNS), typically negotiated through Government to Government agreements. The aim of LOGCAP is to provide another support alternative by capitalizing on the civilian sector in the continental United States and overseas locations. Furthermore, the regulation states that LOGCAP is primarily designed to be used in areas where no multilateral or bilateral agreements or treaties exist.

The Army regulation acknowledges the risk associated with using contractors in a wartime situation. The regulation warns that "The use of civilian contractors versus U.S. military personnel involves a higher degree of risk. Contractor employees have supported the Army in overseas locations during previous crises and can provide continued support in the future. However, their performance cannot be accurately predicted" (AR 700-137, 3). Although the regulation primarily focuses on peacetime contracting, it acknowledges that a crisis situation may occur which is not covered by preplanned contracts. The regulation offers that "to provide rapid support in such cases, deviations or waivers from regular procedures should be sought to the maximum extent possible" (AR 700-137, 4).

Pagonis (1992) observes that during the mid-1980s the US military relied on contractor support in Germany, particularly during the yearly military exercise Return of Forces to Germany (REFORGER). He points out that "In Europe, the basic infrastructure within which REFORGER participants were transported, processed, fed, and housed was well established. Lines of supply, including host-nation support, were defined by dormant contracts, which automatically kicked in at the beginning of the maneuver. In addition, "huge stockpiles of supplies and equipment were already in the theater, available to be drawn upon by incoming soldiers" (Pagonis 1992, 66). From his experience in Europe, Pagonis relied on the existing Army regulations to guide his contracting effort in Saudi Arabia. He acknowledges that "My subordinates and I were expected to observe the rules, fill out the forms, and adhere to doctrine – whenever possible" (Pagonis 1992, 111).

The US military followed the guidance provided by Department of the Army regulations during Operation Desert Storm. Stewart (2010, 11) points out that because of the fluid situation

in August 1991, contracting for host-nation support was conducted in a decentralized and informal manner. Initially, there were no controls and people at all levels did their own contracting. However, Stewart observers that "on 10 September 1990, King Fahd orally committed his nation to provide comprehensive support, although the details remained unclear until mid-October, when the Department of Defense sent a negotiating team to Saudi Arabia. Instead of concluding a contract or international agreement with the Saudis, the team reached an understanding that became a de facto agreement" (Stewart 2010, 12). Thus, after a month of negotiations the "Implementation Plan for Logistics Support of the United States Forces in Defense of the Kingdom of Saudi Arabia" was signed by the US and Saudi Arabia (Khaled 1995, 291). In essence, "That was done to prevent bureaucratic delays and to make "gifts" from Saudi Arabia to the United States as easy as possible while accommodating the kingdom's continuing desire to avoid formal ties" (Stewart 2010, 12).

During Operation Desert Storm, it appears that no private military company or private security company provided support to the US military. However, the support came from private individuals or small Saudi companies paid for primarily by the Saudi King. The US military and General Pagonis in particular relied on the pre-existing Army regulations to guide their contracting activities during the first Gulf War.

What laws, regulation, and controls were in place regarding PMCs? This question specifies the limitations or constraints of US bureaucratic controls on the private security industry. The more limitations and constraints, the less private security industry is used. The less limitations and constraints, the more private security is used. At the beginning of Operation Shield and Desert Storm, there were few constraints baring the use of private military contractors or private security contractors.

In fact, the Department of Defense entered Saudi Arabia with an established procedure for contracting, Department of the Army Pamphlet (DA PAM) 690-80, Use and Administration of Locals in Foreign Areas During Hostilities. The regulation encouraged the U.S. Army to contract for host nation support as a substitute for military forces. Although the U.S. military did not hire private military companies, the laws, regulations, and control measures enabled the use of private contractors from the host nation – Saudi Arabia.

What was the duration of the intervention?

This question examines the length of the intervention, specifically from the beginning of the deployment of forces until a drawdown in the conflict area, where applicable. This is important since military forces require logistics support, technical advice, and security even when not directly involved in combat. The expected duration of the intervention is contrasted with the actual duration to analyze decision makers planning assumptions. The theory contends that as the duration of the intervention increases decisionmaker's choose to substitute military troops for private security contractors.

The Gulf War can be divided into three distinct phases: deployment, combat, and redeployment. Pagonis pointed out that these were named Desert Shield (the deployment phase), Desert Storm (the combat phase), and Desert Farewell (the redeployment phase) (Pagonis 1992, 5). Operation Desert Shield (the deployment phase), which lasted from 7 August 1990 until 16 January 1991, consisted of three parts that included the deployment of a joint military force to defend American and allied interests against Iraqi aggression, a force of sufficient strength adequate to enforce UN sanctions while defending the Arabian base (Swain 1994, 29). Swain (1994) asserts that the first part of Desert Shield intended to provide an immediate deterrent force consisted of the concentration of deployed naval forces organized around two carrier battle groups, Air Force air-superiority forces and light ground troops. The second part of Desert Shield brought in ground-attack aircraft, additional air superiority fighters, and US Marine Corps forces (Swain 1994, 37). The third part of Desert Shield completed the deployment of the heavy ground, air, maritime, and sustainment forces required to ensure a successful defense of Saudi Arabia (Swain 1994, 37). In all, Desert Shield lasted just over 150 days.

Operation Desert Storm (the combat phase) began on 17 January 1991 when US and Coalition planes bombed targets in Kuwait and Iraq (Pagonis 1992, 9). The air campaign against Iraq, Iraqi Air Forces in theater, and Iraqi ground forces in Kuwait lasted for six weeks from January 17 through February 24, 1991 (Leyden 1997, 127). The Desert Storm ground campaign to force the withdrawal of Iraq from Kuwait began on 25 February 1991 and lasted just under 100 hours. Hostilities ended on 27 February 1991 (Leyden 1997, 175). On 3 March 1991 Iraqi and Coalition forces met at Safwan, Iraq and signed a ceasefire. President Bush announced on 6 March 1991 that the war had ended (Pagonis 1992, 155). The US turned over the mission in the demilitarized zone to the United Nations Command on 6 May 1991 and removed the last US

soldiers from southeastern Iraq on 9 May 1991 (Swain 1994, 321). Thus, Desert Storm (the combat phase) lasted just under 120 days.

Desert Farewell was the redeployment phase and began almost immediately after hostilities ended (Pagonis 1992, 12). The redeployment consisted of two stages, personnel then equipment. The first stage required the redeployment of two Army Corps to Europe and the United States (Bourque and Burdan 2007, 234). This involved the movement of over 365,000 troops and their equipment within a 90 day period. The second stage took more than a year to accomplish. Pagonis (1992) pointed out that stage two involved the movement of the food, ammunition, fuel equipment and supplies. By January 1992, US logisticians cleaned and shipped more than 117,000 wheeled and 12,000 tracked vehicles, 2,000 helicopters, and 41,000 containers of supplies from Saudi Arabia. Pagonis (1992) asserted that with the help of civilian contractors the remaining 30,000 short tons of supplies were shipped back to the US. Thus, Desert Farewell lasted about 240 days.

Although combat operations lasted just under six weeks, the duration of Operation Desert Shield, Desert Storm, and Operation Desert Farwell lasted much longer. In a period of 17 months, the United States and its coalition partners deployed to Saudi Arabia, conducted offensive combat operations to remove Iraqi forces from Kuwait, and redeployed its troops and equipment. Stewart (2010, 70) asserts that the expectation of rapid deployment would become a way of life for thousands of servicemen and women in the United States and overseas; and the material means to support that way of life became increasingly available as the decade progressed.

The duration of the military intervention was relatively short or approximately 510 days. Following the Gulf War, the 1992 US National Military Strategy assumed that future military interventions would mirror Operations Desert Shield and Desert Storm. One of the essential elements of the national military strategy was to rapidly assemble the forces need, apply decisive force to overwhelm adversaries, and terminate the conflict swiftly with a minimum loss of life (US NMS 1992, 10).

In other words, the duration of the military phase of Operation Desert Shield and Desert Storm lasted seven weeks, from 17 January – 27 February 1991. The air phase took 38 days and the ground war took four days (Woodward 1991, 365). However, military forces began deploying to Saudi Arabia in August 1990. The majority of the combat forces departed the Gulf

Theater of Operations by 6 May 1991, within 9 months of the initial deployment of forces. However, the redeployment of equipment and supplies continued through January 1992. Therefore, the total duration of Operation Desert Shield and Desert Storm was 17 months.

There is no evidence to suggest that the Bush Administration placed a time constraint on Operation Desert Shield and Desert Storm. Therefore, it is difficult to contrast the expected duration with the actual duration of the operation. However, the surprisingly short duration of Operation Desert Shield and Desert Storm reduced the U.S. military's requirement to rotate troops in and out of the Theater of Operation, which reduced the operational tempo on the forces deployed. As a result, the DoD did not have to substitute private military contractors with its existing force.

What was the scope of the intervention?

The theory contends that as military logistics support became privatized, there should be an increase in private military support in relation to the number of troops used during a conflict. Additionally, how the military forces were staged for the intervention, employed during the conflict, arrayed at the end of hostilities should reveal the scope of the conflict. For example, if the military force deployed from one main base, limited their intervention to a small portion of the rival's country, and redeployed through one main base, we should see a smaller use of the private security industry in support.

Scales (1994) asserts that prior to Operations Desert Shield the US Army had never projected such large force so quickly over so great a distance. The United States sent over 560,000 troops to the theater of operation and deployed some 1,200 tanks, 1,800 warplane, and 100 warships (Pagonis 1992, 11). Powell (1995) observes that thirty-five nations were providing manpower, armaments or money. All told, 200,000 coalition troops would be deployed along-side the Americans (Powell 1995, 490). The Gulf States committed forces, along with France, Canada, Italy, Egypt, Syria, and others eventually totaling twenty-eight nations (Khaled 1995, 290). Countries unable to contribute troops helped finance the buildup (Powell 1995, 475).

Swain (1994) points out that conducting military operations in Saudi Arabia is no simple task. The Arabian Peninsula is a large area, approximately the size of the United States east of the Mississippi. The distances were great. Stewart (2010, 13) observes that it was 334 miles from Dhahran, Saudi Arabia to the theater logistics base at King Khalid Military City near Hafar al Batin. Likewise, it was 528 miles from Dhahran to Riyadh, Saudi Arabia along the northern main

supply route. However, the country's few urban areas possess a modern commercial infrastructure from which US forces could draw support. Furthermore, food, fuel, water, a modern phone system, and shelter were all available if they could be tapped. Notwithstanding the absence of a developed road network, buses and trucks – particularly line-haul trucks – were present in abundance (Swain 1994, 23).

The US and its Coalition partners faced a daunting task. They had to deploy combat forces to Saudi Arabia, and establish a defense with sufficient combat power to prevent Iraqi forces from invading Saudi Arabia (Herspring 2005, 318). Scales (1994, 97) points out that three months after being alerted for deployment, the XVIII Corps had in place almost 800 tanks, 525 artillery pieces, and 227 attack helicopters, manned, maintained, and supported by 107,300 soldiers. However, the operation could not progress without capitalizing efficiently on indigenous Saudi support (Scales 1994, 48).

Pagonis (1992, 100) asserts that "We were in desperate need of soldiers to run logistics operations, especially in light of the enormous numbers of combat personnel arriving in the theater each day. In the two-week period between August 10th and August 25th, we received more than 40,000 troops in Saudi Arabia, essentially without benefit of a prepositioned or predefined logistical structure." Scales (1994, 82) suggests that in spite of some unforeseen problems and occasional delays, the American Army had succeeded in establishing a logistics infrastructure capable of supporting half a million troops from all services, the same number sustained in Vietnam at the peak of deployment.

Furthermore, in the year between August 1990 and August 1991, over 122 million meals were planned, moved, and served. Pagonis (1992, 1) asserts that this is compared to feeding all the residents of Wyoming and Vermont three meals a day for forty days. Likewise, he states that during the same time over 1.3 billion gallons of fuel were used. That is seven times the consumption of Washington, D.C. in the same period (Pagonis 1992, 1). Khaled (1995, 299) points out that the fuel supplied by Saudi Arabia was worth $1.9 billion. Moreover, one day's worth of ammunition for the VII Corps weighed 9,000 tons, and constituted 450 truckloads. The XVIII Airborne Corps required slightly less ammunition resupply: about 5,000 tons per day (Pagonis 1992, 147). In practical terms, this was 17,850 round-trip truckloads.

Additionally, Scales (1994, 76) observed that by the time Desert Storm commenced, over 3,500 vehicles had moved across a road network of over 2,746 miles to provide logistics support

to the combat forces. Pagonis (1992, 1) asserts that in a one-year span, the supply units and their contracted drivers drove almost 52 million miles in the war theater. This is the equivalent of more than 100 round trips to the moon, or more than 2,000 trips around the world, or more than 10,000 round-trips from Los Angeles to New York. Furthermore, for half a year, from November 1990 through April 1991, the suppliers and transporters of the Gulf War moved 500 short tons of mail per day. All told, they handled over 31,800 tons of mail – an amount that would cover twenty-eight football fields in mail six feet deep (Pagonis 1992, 2).

Once President Bush authorized the deployment of an additional 200,000 US troops in November 1990, the scope of the deployment doubled. Clancy and Franks (1997, 204) and Pagonis (1992, 127) point out that VII Corps included several mechanized and heavy divisions, comprising more than 6,000 tracked combat vehicles and 59,000 wheeled vehicles, 220,000 troops, requiring 769,000 short tons of equipment. However, getting the combat units into theater was only part of the problem. Clancy and Franks (1997, 203) point out that when VII Corps arrived in Saudi Arabia, everything became a struggle. Basic survival had to be created in the desert for the newly arriving troops.

The Coalition plan to liberate Kuwait called for two US Army Corps to move from eastern Saudi Arabia almost 500 miles west into the Arabian Desert. When the air campaign of Desert Storm commenced in mid-January 1991, the Army Corps began their movement west. Pagonis (1992, 146) and Khaled (1995, 301) point out that VII Corps had to travel more than 330 miles and XVIII Corps had to move some 500 miles just to get into position for future offensive operations. By 3 February both Corps had closed in their attack position with no significant glitches (Bourque 2002, 173). Pagonis praised the private contractors who drove many of the heavy equipment trucks during that timeframe. He stated that “We owe special thanks to those contracted civilians from Saudi Arabia, South Korea, Pakistan, Egypt, the Philippines, India, Bangladesh, and a dozen other countries who drove up and down our main supply routes (MSRs), in many cases entering enemy territory to supply Logbase Charlie and Echo” (Pagonis 1992, 146).

The scope of the intervention during Operation Desert Shield and Operation Desert Storm was enormous. The military operations covered over 500 square miles in Saudi Arabia alone. The size of the coalition force assembled in Saudi Arabia, exceeded three-quarters of a million men and women. With the exception of the Gulf State coalition partners, most of the military

formations deployed from either the United States or Europe with all of their equipment (Bourque 2002, 39). From the US alone, that is close to 7,500 air miles. To transport, house, feed, and maintain the equipment of the coalition force, exceeded the US military force structure, even though the size of the US military was at its Cold War peak. In comparison, there were 500,000 US military personnel at any one time during the peak years of the Vietnam War 1965 to 1968, which took over two years to build up.

The U.S. and its Coalition partners deployed close to 750,000 troops for Operation Desert Shield and Desert Storm. The US military force accounted for 500,000 of that total number. Between August and November 1990, the U.S. deployed 250,000 troops to defend Saudi Arabia as part of Operation Desert Shield. However, when Bush decided to restore Kuwait's sovereignty, an additional 250,000 troops deployed to Saudi Arabia to participate in Operation Desert Storm.

All of the U.S. and Coalition forces committed to the operation deployed to Saudi Arabia to stage for operations in Iraq and Kuwait. Furthermore, the U.S military and its Coalition partners staged forces throughout Saudi Arabia, extending in some cases up to 500 miles into the western desert. Due to the amount of equipment and the extended supply routes, the U.S. military relied on individual private contractors to transport much of its heavy equipment and supplies to the western staging areas.

Other conflicts or deployments

What other conflicts or deployments were ongoing? How many troops participated in other conflicts or deployments? This question examines the larger role of the military in international affairs. The commitment of military forces to areas other than the intervention limits their availability to participate. The result should be an increased demand for the private security industry to fill the gap in available military assets.

It is important to note that even though the US military deployed over a half a million troops in support of Operation Desert Shield and Desert Storm, the US faced other commitments around the world. Another half million troops were forward deployed in foreign countries (US DOD SAID, 1989). These US forces supported ongoing treaty commitments in Europe and Asia. Thus, 25 percent of the active US military was not available to support operations in the Gulf.

Scales (1995) asserts that General Vuono, US Army Chief of Staff, would not let the Gulf crisis drain the Army dry and prevent a response to another crisis that might arise in some other

part of the world. Although stability in Europe was promising, other hot spots were always ready to demand Army intervention. Scales points out that Vuono relied on a base of active forces and trained Reserves to meet these contingencies. During Desert Shield there was an ongoing crisis in Liberia and Somalia that eventually led to evacuation operations. The US also had troops in the Philippines, Korea and Latin America, and these areas might require rapid response by forces not involved in the Gulf. The Army mission at home ranging from firefighting to emergency relief was always a concern (Scales 1994, 53).

In 1990, the U.S. military had troops committed to NATO and Korea. Of the total force, 609,422 troops were stationed outside of the continental United States. Over 291,000 troops were supporting NATO and over 87,000 were stationed in Korea. This represents 30 percent of the total force deployed. Likewise, this represents over 42 percent of the available ground force in the DoD. However, by November 1990, the U.S. military deployed 500,000 soldiers and marines to Saudi Arabia from the continental United States and Europe. Yet, the U.S. military still required private contractors to augment its military capability.

What was the size of the US military?

What was the size of the military? This question examines the total military forces available during the time of the intervention. This includes all branches of the US military, reserve forces, and National Guard forces.

Swain (1994) points out that in the fall of 1989, the postwar global power structure had broken down. The Soviet Union was undergoing dramatic internal stresses, while its European empire was falling away rapidly. As Soviet interest turned inward, military planners everywhere responded by considering the emerging multipolar world as the strategic environment of the 1990s. US estimates examined the restructuring of the American military in light of new threat assessments (Swain 1994, 4).

At the end of September 1989, the total US active military was slightly more than 2,130,000. This all volunteer force included ground combat forces from the US Army and US Marine Corps, totaling 769,741 and 196,956 respectively (US DOD SAID, 1989). Additionally, the US DOD employed 1,075,437 government civilians which supported a wide range of functions for the active military. In essence, the US military was at its peak troop size by the time of Operation Desert Shield.

On 2 August 1990, President George Bush delivered a speech to the Aspen Institute in Colorado (Herspring 2005, 327). Swain (1994) observes that his address concerned the need to restructure US military forces in response to changes in the global environment, specifically the rapid decline of Soviet power. The president's proposal called for an orderly reduction of US military forces over five years. Scales (1994) points out that during the period of Desert Shield and Desert Storm the Army was well down the road of restructuring into a smaller force. Responding to budget pressures and the negotiation of the Conventional Forces in Europe (CFE) Treaty, then in progress, Army planners anticipated removing one US Corps from Europe (Scales 1994, 54). When Saddam Hussein invaded Iraq, the US military had already shed close to 100,000 from its active duty roles. However, as Swain points out, the plan was about to suffer a temporary interruption (Swain 1994, 22).

Although the active military force is immediately available, policy makers must chose to activate reserve and National Guard forces. Following Singer (2003) and Avant (2005), as the overall size the military decreases there should be an increase in the reliance on the private security industry. Additionally, this question should highlight the opportunity costs or shifts in supply that policy makers face when choosing between the private security industry and national armies.

In 1990, the total active military was 2,046,144 personnel. Of this number, 929,055 were U.S. Army and U.S. Marine Corps ground troops. This represents the height of the Cold War U.S. military strength. However, the U.S. military still required about 10,000 private contractors to augment its forces during Operation Desert Shield and Desert Storm.

Percentage of military outlays in the national budget

At the end of the Cold War, the United States government allocated over $303 billion for defense spending (US OBM Historical Tables). This amounted to 5.6 percent of the gross national product (GDP) for the United States (US OBM Historical Tables). Likewise, defense spending accounted for 26.5 percent of total US budget outlays. In comparison, the US government allocated over $568 billion for human resource spending (social security, education, health, and veterans entitlements). This amounted to 10.5 percent of the US GDP or 49.7 percent of the total budget outlays (US OBM Historical Tables).

By 1990, and the beginning of Operation Desert Shield, the defense budget began to decrease. The US government allocated over $299 billion for defense spending. That amounted

to 5.2 percent of the US GDP or 23.9 percent of budget outlays or a decline of 0.4 percent of GDP. In comparison, the US government allocated over $619 billion for human resource spending. This amounted to 10.8 percent of GDP or 49.4 percent of total budget outlays (US OBM Historical Tables).

In turn, the US Department of Defense spent over $157 billion on contracts. This amounted to 54.3 percent of the total DOD outlays. The spending on service contracts amounted to over $49 billion or 31.2 percent of the total percent of DOD contracts. Service contracts differ from product contracts or research and development contracts (US DOD SAID 1990).

I now review the focused question that guides the case study analysis of private security supply-demand behavior. What was the percentage of military outlays in the national budget? This question looks at the US military defense budget at the time of the intervention from the standpoint of total dollars spent on defense, percentage of GDP, and percentage of the US budget outlays dedicated to defense. As the size of the defense budget decreases over time, we should see an increased reliance on the private security industry due to decreased spending on national armies. This should illustrate a shift in the supply curve away from higher costs of personnel for national armies.

In 1990 the U.S. allocated over $299 billion for outlays for defense. Although a slight decrease from the 1989 high, defense outlays in 1990 represented a Cold War high in defense spending. This represents about 30 percent of total budget outlays or 5.6 percent of GDP. Although U.S. defense spending was a Cold War high, the U.S. military still required private contractors to support Operation Desert Shield and Desert Storm.

Choices other than using the private security industry

Did policy makers or military leaders have choices other than using the private security industry? If so, did they use them? This questions look beyond the availability of national armies and military budgets to determine if policy makers had other choices available other than the private security industry. For example, increased participation of allies, coalition partners, and host nations should provide an alternative to the private security industry.

Although the US and its coalition partners relied on host nation contractors to augment shortfalls in logistics support, there is no evidence of a demand for private security contractors. The Saudi government invited and hosted the US and its coalition partners during Operations Desert Shield and Desert Storm. Therefore, the coalition forces operated in an environment

where the host nation maintained a significant security force. In essence, Saudi Arabia provided a broad range for security tasks so the coalition could focus on the defense of Saudi Arabia and eventually the liberation of Kuwait.

Saudi Arabia provided over 45,000 troops, 200 tanks, 250 aircraft, and 8 frigates in support of Operations Desert Shield and Desert Storm (Leyden 1997, 262; Herspring 2005, 313). Likewise, Saudi Arabia had several paramilitary forces, totaling 100,000 men (Woodward 1991). Cordesman (1997, 175) points out that this reflects a system of layered forces designed to protect the regime. There is a regular army that provides external security, but is kept away from urban areas. Additionally, the National Guard provides internal security using loyal tribes and groups under a different chain of command. Likewise, there is a separate frontier Force, and the Ministry of Interior – under the direction of a Prince – and other groups provide internal security at the political and intelligence levels.

Cordesman (1997, 175) observes that the 10,500 man Frontier Force covered Saudi Arabia's land and sea borders. About 4,500 men in the Frontier Force are assigned to the Coast Guard. Likewise, the Ministry of Interior maintains a security service called the General Directorate of Investigation and a Special Security Force of about 500 men. Saudi Arabia also has a large Gendarmerie or national police force with more than 15,000 men (Cordesman 1997, 176). Additionally, there are approximately 35,000 paramilitary policemen in the Public Security Police equipped with small arms and some automatic weapons. They are assigned to provincial governors, and are under the aegis of the Minister of Interior (Cordesman 2003, 261).

The public security forces are recruited from all areas of the country, maintained police directorates at provincial and local levels. Cordesman (2003, 261) asserts that these forces particularly the centralized Public Security Police can be reinforced by the National Guard in an emergency or can get support from the regular armed forces. These formal state institutions carry out most internal security and criminal justice activity in urban areas (Cordesman 2003, 262). This means that critical infrastructure such as supply routes, ports, airfields, and supply depots were protected by the Saudi security forces. The US and its coalition partners could thus focus on the defense of Saudi Arabia and not on force protection.

The U.S. relied on its Coalition partners to provide forces for Operation Desert Shield and Desert Storm. In fact, the Coalition partners provided one third of the total ground forces during the operation. Furthermore, the U.S. activated a substantial amount of its Reserve and

National Guard force to supplement its active duty force in Saudi Arabia. However, the speed at which active duty forces deployed to the Gulf surpassed the logistics capability of the U.S. military. Much of the logistics capability was in the Reserve force. A short-term logistic crisis resulted in the U.S. military substituting host-nation contractors while awaiting the arrival of its Reserve logistics capability to deploy to the Gulf Region.

4.5 Private security supply-demand behavior: an assessment

Given the characteristics presented above, how does the outcome correspond with the theory's prediction? The proposed theory predicts that given a situation where the demand for a service increases, in this case support services, the military choses to contract for host-nation support service to fill shortfalls in capability. In the case of Operations Desert Shield and Desert Storm, private security supply-demand behavior is evident.

Any analysis of supply-demand behavior must start with an examination of the initial conditions prior to Operation Desert Shield. Gordon and Trainor (1995, 475) point out that "Benefiting from the Reagan military buildup, the military used the most advanced high technology against the Iraqis. But, the weak side of the Reagan military buildup was exposed. In a single-minded pursuit of high-tech weaponry, the military ignored some unglamorous but essential areas." Pagonis (1992, 100) argues that "Beginning in 1971, The Total Force Concept stipulated that the majority of slots in the Army's combat and infantry units would be filled by regular, active-duty soldiers; while slots for logistics personnel, whose many civilian skills such as forklift operation, truck driving, and so forth are directly related to the military support role, would be filled by reservists." Therefore, even though the size of the US military was at its peak size in 1991, the active duty force structure was weighted heavily towards combat formations.

Likewise, during the Cold War the US military was built to defend Western Europe against a Soviet ground attack. However, Swain (1994, 3) points out that "the armed forces committed to the Arabian Peninsula had been designed and structured originally for a very different war – a forward defense of NATO on the Central Front in Europe. He argues that this accounts for such anomalies as the Army's shortage of line-haul trucks, particularly heavy equipment transporters (HETs), the large flat-bed trucks used to transport heavy armored vehicles to the front (Swain 1994, 3). Swain observes that "A force built for attack has different communications, logistics, intelligence, and force structure requirements than one created for

deterrence and defense and under political guidance to deploy only minimum essential force" (Swain 1994, 3). In essence, the relatively predictable strategic environment of the Cold War was gone (Clancy and Franks 1997, 497).

When Iraq invaded Kuwait, there was no significant US military presence in Saudi Arabia (Herspring 2005, 312). Fearful that Saddam Hussein would continue his attack south into Saudi Arabia, military planners urgently needed to get combat forces to Saudi Arabia. Swain (1994, 35) points out that "The decision to bring in combat forces first was not without cost. It meant that forces in theater would have to maintain themselves under austere conditions for some time and that host-nation support, both donated and contracted, was a sine qua non to sustain the force for the immediate future" (Swain 1994, 35). Therefore, assistance from Saudi Arabia was imperative (Khaled 1995, 289).

Pagonis argues that "The lack of US troops in the theater would necessitate the creation of a military presence, including infrastructure, from scratch, although the (potential) host nation's excellent ports and airbases would offset some of these challenges" (Pagonis 1992, 68). Furthermore, during an early planning session with the Saudis, General Yeosock (the Third US Army Commander) required a list from General Pagonis of the requirements and assistance needed from Saudi Arabia. In essence, Yeosock needed to tell the king what was needed logistically – in other words, a shopping list fit for a king (Pagonis 1992, 67). Fortunately, the military planners were familiar with the usable and "contactable" resources of the various Middle Eastern nations (Pagonis 1992, 68).

Although, as Swain observes "It was known at the outset that much of the absent support structure could be compensated for by host-nation support, but the ability of the host nation to supply support, or perhaps more important, the limits on this ability, was by no means immediately apparent to either Third Army planners or the host-nation government" (Swain 1994, 45). Thus, there was risk associated with the decisions made and the standard order in which units are sent into combat was re-sequenced (Woodward 1991, 267). Pagonis (1992, 89) pointed out that "the combat troops moved up the list, and the logisticians – even logisticians who made up the combat units – moved down." Swain (1994, 35) asserts that "This decision was only possible because of the availability of supplies – particularly tentage, food, and ammunition – prepositioned on ships in the Indian Ocean." Khaled (1995, 285) observes that the situation would have been different if the host nation was poor, hostile, or both.

Scales (1994, 59) contends that based on previous Army wargames, the logistics overhead eventually should have grown to 120,000. Moreover, most of the structure would come from activated Army National Guard and Army Reserve units. Swain (1994, 42) asserts that military planners estimated a requirement for 33,772 Reservist assuming combat operations had not begun, and 88,000 if hostilities commenced. Thus, on 15 August 1990 the Secretary of Defense requested that the president employ his authority to call up the selected Reserves (Swain 1994, 40; Herspring 2005, 317). However, on 22 August 1990 President Bush signed an Executive Order which called only 48,000 reserves to active duty by September 1st (Pagonis 1992, 100; Woodward 1991, 267). To make matters worse, Scales (1994) argues that the Army did not activate many well-trained, well prepared units that could have provided substantial logistical support (Scales 1994, 60).

Swain (1994, 45) and Herspring (2005, 316) observe that in October, decision makers determined that the minimum essential force level deployed into theater did not exceed 250,000. This resulted in a modification of the force deployment. Swain (1994, 40) asserts that "Third Army had long based its war plans on the assumption that Reserve Component forces would be available immediately for any large-scale deployment." However, he observes that the flaw in the concept was that events might not wait upon the convenience of defense decision makers. As a result of the decision to limit the number of troops in theater, the initial Army logistics support element reduced its force size from 20,000 to 12,500 and the theater logistics support command from 25,000 to 10,400 (Swain 1994, 43).

Swain argues that "Much of the balance was to be made up by host-nation support, the remainder by risk and a less than desirable sustainment and transportation capability" (Swain 1994, 43) Ultimately the combat troops would bear part of the cost involved in an austere desert environment. Fortunately, host nation support was available to support the deploying troops. King Fahd agreed to feed and house the coalition forces in Saudi Arabia for the duration of the operation. Additionally, King Fahd reimbursed the US for the cost of contracts between August and September 1991. Furthermore, he assumed responsibility for paying for all coalition force contracts after 1 October 1991 through end of Operation Desert Farewell, a hefty sum of over $16 billion. Khaled (1995, 286) concludes that no host country has ever given such vast and unstinting support to allied troops fighting on its soil.

In summary, supply-demand behavior is evident during Operations Desert Shield and Desert Storm. Military planners and decision makers entered Operation Desert Shield with a force optimized for a particular scenario, the defense of Western Europe. The demand for an expeditionary logistics force capability was low and most of the US logistics force structured resided in the Reserve force. Military planners substituted its existing logistics support for host nation support from Saudi Arabia. As Clancy and Franks (1997, 497) point out, the new security stance for the United States required a distinctly different posture for the US Army.

Additionally, an early decision to deploy combat forces to Saudi Arabia first resulted in an immediate shortage of US logistics support. Thus, the demand for capabilities such as transportation, housing, and food increased dramatically. As a result, military planners immediately turned to host-nation contractors as a substitute. Decisions to impose a ceiling on forces deployed into theater and the ability of the Saudi government filled the void in logistic support. US military planners consequently reduced their requirement for additional homogenous logistics capabilities. In essence, these events represented shifts in the US demand curve.

4.6 Summary and Analysis

Hypothesis one states that when military outlays decrease there is an increase in the use of private military contractors. In 1990, there was no decrease in military outlays; however, the U.S. military still required the use of host-nation private contractors in Saudi Arabia. The evidence from the case study suggests the hypothesis under review is not applicable.

Hypothesis two asserts that when the size of a national military decreases there is an increase need in the use of private military contractors. In 1990, there was no decrease in the size of the military; however, the U.S. military still required the use of host-nation private contractors in Saudi Arabia. The evidence from the case study suggests the hypothesis under review is not applicable.

Hypothesis three contends that when the number of a military disputes, military engagements, and militarized conflicts increases there is an increase in the use of private security contractors. In 1990, 30 percent of the total U.S military force was deployed outside the continental United States. During Operation Desert Shield and Desert Storm the U.S. military required the use of host-nation private contractors in Saudi Arabia. The evidence from the case study suggests the hypothesis under review may not be supported.

Hypothesis four states that when the duration of a military conflict increases there is an increase in the use of private security contractors. Operation Desert Shield and Desert Storm lasted one year and five months (or 17 months) and the U.S. military required the use of host-nation private contractors in Saudi Arabia. Approximately 10,000 private contractors were used in Operation Desert Shield and Desert Storm. The evidence from the case suggests the hypothesis under review is supported.

Hypothesis five states that when there is a decrease in bureaucratic controls and regulations there is an increase in the use of private security. In 1990, U.S. Army regulations encouraged the U.S. Army to contract for host nation support as a substitute for military forces and the U.S. military required the use of host-nation private contractors in Saudi Arabia. Bureaucratic controls and regulations decreased in 1971 allowing the US military to use host nation contractors therefore the evidence from the cases suggests that the hypothesis under review is supported.

The case study provides an alternative explanation on the use of PMCs. First, when there is a force cap placed on the size of the military force there is an increase in the use of private security. In 1990, the initial force cap, of 250,000 U.S soldiers, required military leaders to choose between deploying combat forces or logistics force into theater. When they choose to deploy combat soldiers first, military leaders substituted military logistics support for host nation private contractors. The evidence from the cases suggests that this alternative hypothesis is supported.

Second, when there is no host nation supporting the intervention there is an increase in the use of private security. During Operation Desert Shield and Desert Storm, the U.S. military enjoyed significant host-nation support from Saudi Arabia. King Fahd provided significant financial support, transportation, food, housing, equipment, and labor. As a result, the U.S. military relied on private military companies for support. The evidence from the case suggests that this hypothesis may not hold in all cases, but additional information from other cases will be required for an adequate test of the hypothesis.

Third, when the security environment is non-permissive there is an increase in private security. During Operation Desert Shield and Desert Storm the US and Coalition forces operated in a permissive security environment while preparing for combat operations. As a result the U.S and Coalition forces did not have to allocate troops for force protection; the 110,000 man Saudi

security forces provided the security. The evidence from the case suggests that this alternative hypothesis is supported.

According to Swain (1994, 342), Operation Desert Storm was a transitional war in which forces raised and trained to fight on the Central Front in Europe against a great power were, instead, deployed to the open desert to fight a local tyrant. Furthermore, he asserts that the willing participation of Saudi Arabia in any US military actions was absolutely essential to the achievement of US goals (Swain 1994, 328). Swain (1994) suggests that Operation Desert Storm had two important, even decisive, conditions that may not repeat themselves in future contingencies. First, "Saudi Arabia was well endowed with exactly the sort of infrastructure that could compensate for the allies' own shortcomings in the strategic projection of heavy forces" (p. 343). Second, "the global balance was such that there were no other strategic distractions; the theater of operations could enjoy the full support of the entire American military" (p. 343).

Operations Desert Shield and Desert Storm seem like an unlikely case for examining private security supply-demand behavior. Although the number of employed contractors used by the US did not exceed 10,000, several factors help explain the seemingly lower ratio of contractors to troops. First, the size of the US and Coalition forces was substantial, over 750,000. Second, King Fahd provided significant financial support to the Coalition forces, over $16 billion. The majority of the financial support went towards paying for contract agreements made by Coalition forces such as transportation, food, housing, equipment, and labor. Third, the US and Coalition forces conducted operations in an environment where they did not allocate troops to force protection; the 110,000 man Saudi security forces provided the security. Fourth, the US and Coalition forces could focus on the operation at hand without being distracted by other global conflicts. Fifth, the initial force cap of 250,000 U.S soldiers required military leaders to choose between deploying combat forces or logistics forces into theater. When they chose to deploy combat soldiers first, military leaders substituted private contractors for military logistic support.

Even though the size of the US military and the US military budget were essentially at their Cold War height, the US military was structured and resourced for a defensive war in Germany, not an offensive war in the desert. Clancy and Franks (1997, 499) concluded in the late 1990s that the US military could face a situation where they would not receive local help. The capabilities necessary to conduct expeditionary operations in an austere environment are

significantly different than those for defending in an established theater of war. The shortfalls experienced in Operations Desert Shield and Desert Storm would be magnified as the US conducted expeditionary operations through the remainder of the twentieth century and into the early twenty-first century.

Chapter 5 - Operation Joint Endeavor

5.1 Intro and purpose

How does private security supply-demand behavior fare against the evidence? This chapter provides a case method test of Operation Joint Endeavor, the NATO peacekeeping operation in Bosnia from December 1995 to December 1999. I argue that the details of Joint Endeavor support some of the assertions in the literature on private security. The peacekeeping operation in Bosnia has proven influential in defense debate. Yet the operation's main descriptive fact for most observers – the mission could succeed when contractors on the battlefield equaled the number of US forces – is consistent with the conflicts actual conduct. The contractor count cannot be explained without considering the nature of the intervention, the decisions by senior US leaders to limit the size of US forces in Bosnia, and the scope and duration of the operation. Again, the results tend to corroborate the theory as a post-Cold War example of private security supply-demand behavior.

This chapter contains six sections. First, is the motivation for selecting Joint Endeavor as a case study. Second, is an outline of the main events. The third section develops values for the key independent variables. Fourth, is an assessment of the role of private military contractors during the conflict. The fifth section assesses the theory. A conclusion follows

5.2 Why Operation Joint Endeavor?

Operation Joint Endeavor is a most-likely case in George and Bennett's (2005) terms. With a most-likely case there needs to be very strong evidence of contractor presence, because it is expected. This case meets this criterion. In a most-likely case, because the independent variable is at a level that strongly predicts a particular outcome, the outcome variable must occur or the theory is suspect (Bennett, Lepgold, and Unger 1994, 39). Biddle (2004) points out that a most-likely case is one where extreme values put a theory on its strongest possible ground. He suggests that if it is going to be right anywhere, it should be right in a most-likely case. Biddle (2004, 78) argues that for such cases, a valid theory should fail very rarely; if we nevertheless observe failure, this surprising result warrants a greater loss of confidence in the theory than would a single dis-confirmatory observation under less ideal conditions. George and Bennett (2005, 122) caution that most cases usually fall somewhere between being most and least likely

for particular theories. Therefore, the strength of and interference about the validity of a theory depends to a considerable extent on the difficulty of the test that the theory has passes or failed (King, Keohane, and Verba 1994, 209; also see Gerring 2001, 220).

As this chapter demonstrates, the size of the US military and its budget in this instance were significantly less than at the peak Cold War levels. Additionally, the scope of the intervention is significant, and it lasted for over six years. Aside from the military commitments to NATO and Korea, the US faced competing conflicts around the world during the time of the intervention. For all of these reasons, the likelihood that the US would have to use significant PMC support can be considered to be high.

This is, in fact, what is found in the case. The use of contractors was so essential to the mission that numerous scholars focus on this case when studying the rise of the private security industry. As the chapter demonstrates, the US reliance on PMCs is due mainly to the political imposition of various force caps on troop size throughout the mission. This case thus demonstrates both the utility of supply-demand theory as well as some of its limitations. As such, it offers a challenging test of theory in the form of a George and Bennett (2005) most-likely case.

5.3 Overview of Events

Metz (2001, 8) asserts that the Balkan conflict is multicausal, multidimensional, and complex. Herspring (2005, 355) argues that Bosnia was a case of ethnic cleansing. The problem grew from the breakup of Yugoslavia in the early 1990s. Metz (Metz 2001, 2) points out that a complex state had been formed after World War I from a diverse patchwork of cultures, ethnic groups, religions, traditions and histories. The polyglot combination made Yugoslavia a fragile state from its inception with many fissures that could be manipulated by ambitious or unscrupulous political leaders However, following World War II, Josip Broz Tito, Yugoslavia's leader, held his fractious state together through a complex system of rights and overlapping sovereignties.

Josip Tito died on 4 May 1980 and for much of the remaining decade Yugoslavia's economy began to falter. In the years immediately following the death of Yugoslav strongman Tito, the Yugoslav federation started to become unglued (Albright 2003, 178). Between 1990 and 1992, Slovenia, Croatia, Bosnia, and Macedonia all seceded from Yugoslavia, leaving Serbia and Montenegro as the constituent parts of Federal Republic of Yugoslavia (Metz 2001, 4).

Three waves of conflict and war followed. The first involved Yugoslavia's northern tier states, Slovenia and Croatia. Metz (2001, 4) observes that when Slovenia opted for independence in 1990, Yugoslav military forces initially attempted to stop the secession but, after a short and nearly bloodless war, Yugoslav forces withdrew leaving Slovenia to seek its economic and political future with Western Europe. However, the divorce between Croatia and Yugoslavia was more difficult.

Soon after Croatia declared its independence in 24 June 1991, a civil war, fueled by a Serbian invasion, broke out in Krajina – the former Austro-Hungarian military border area settled by ethnic Croatians, Germans, Hungarians, Serbs, and other Slavs (Metz 2001, 4).[18] By January 1992, the United Nations sponsored a cease-fire, but hostilities resumed the next year when Croatia fought to regain territory taken by Serbs. The United Nations Secretary General established the United Nations Protection Force (UNPROFOR) to monitor the cease-fire. The US army in Europe supported this UN mission with medical and logistical support (Kirkpatrick 2006, 389). However, a cycle of conflict and ceasefire continued until August 1994 when Croatian forces recaptured Krajina with a major offensive and some 150,000 Serbs fled the region, many to Serb-held areas in Bosnia (Metz 2001, 4). The conflict in Bosnia proved even bloodier and more complex. Holbrooke (1999, 1) suggests that between 1991 and 1995, over three hundred thousand were killed in the former Yugoslavia.

In contrast to other Balkan states which tended to have a dominant ethnic group, Bosnia is more evenly split among ethnic Serbs (40 percent), Bosnian Muslims known as "Bosniaks" (38 percent), and ethnic Croats (22 percent) (see Metz 2001, 4). Cigar (1995, 10) asserts that the avowed aim of the Bosnian Serb leadership, backed and originally incited by Belgrade, was the achievement of an "ethnically pure" state, even at the cost of using brutal force and the violation of internationally-recognized borders. In contrast, the Bosnian government pursued an inclusive, plural and tolerant social and political environment, although imperfectly implemented (Cigar 1995, 11). Yet, Klajn (2007, 303) argues that all sides in the conflict committed some form of war crime.

In February 1992, the Bosnian Government held a referendum on independence, and Bosnian Serbs, supported by neighboring Serbia, responded with armed resistance in an effort to

[18] For a detailed discussion of the conflict see John Zametica, 1992. *The Yugoslav Conflict*. London, UK. The International Institute for Strategic Studies.

partition the republic along ethnic lines and drive other ethnic groups from the territory they controlled. In March 1994, the Bosniaks and ethnic Croats created the Federation of Bosnia-Herzegovina, leaving two warring parties – the Muslim-Croat Federation and the Serb dominated Republika Srpska. War between them continued through most of 1995. It was ended by extensive outside pressure and the sheer exhaustion of the combatants (Metz 2001, 5).

Croatia, Bosnia-Herzegovina, and the Federal Republic of Yugoslavia reached an agreement that they initialed on 21 November 1995, and formally signed in Paris on 14 December 1995 (Kirkpatrick 2006, 406; Herspring 2005, 359). The formal conclusion came with the General Framework Agreement for Peace (usually known as the Dayton Accord) in December 1995 (Holbrooke 1999, 321). Herspring (2005, 359) observes that the resulting agreement gave 49 percent of Bosnia to the Serbs and the rest to the Muslim-Croat Federation.[19] Madeleine Albright (2003, 189) argues that three factors ended the Bosnian war. The first was overreaching on the part of the Bosnian Serbs; the second was the changing military situation; and the third factor was President Bill Clinton's willingness to lead.

More specifically, the United Nations Security Council Resolution 1031 gave the North Atlantic Treaty Organization (NATO) the mandate to implement the military aspects of the Dayton Accords (Metz 2001, 5). Furthermore, Implementation Force (IFOR) was created to maintain the cessation of hostilities, separate the armed forces of the Federation and Republika Srpska, transfer territory between the two entities, and move military forces and heavy weapons into approved sites (Metz 2001, 5). At the time of the ceasefire, the three militaries in Bosnia had over 400,000 men under arms, including civilian militias and an estimated 45,000 police who fought in conjunction with the three armies (US GAO October 1998, 9).

The NATO mission in Bosnia was to establish an environment adequately secure for the continued consolidation of peace without further need for NATO led military forces in Bosnia (US GAO October 1998, 42). Four conditions that had to be met for the desired end-state objective to be realized were:

> The political leaders of Bosnia's three ethnic groups must demonstrate a commitment to continue negotiations as the means to resolve political and military differences.
>
> Bosnia's established civil structures must be sufficiently mature to assume responsibility for ensuring compliance with the Dayton Agreement.

[19] For a detailed discussion of the Peace Negotiations, see Holbrooke 1999..

> The political leaders of Bosnia's three ethnic groups must adhere on a sustained basis to the military requirements of the Dayton Agreement, including the virtual absence of violations or unauthorized military activities
>
> Conditions must be established for the safe continuation of ongoing, nation building activities. (US GAO October 1998, 42)

Metz (2001, 10) points out that the US objectives in the Balkans were: maximizing the chances that the region will become stable, prosperous, and integrated into Europe; sustaining NATO's leading role in European security; and doing so in such a way that the US military remains able to implement the National Military Strategy, in particular to fight and win two nearly simultaneous major theater wars. NATO named the mission Operation Joint Endeavor (OJE). As a result, the NATO implementation force crossed the Sava River at the end of December 1995 and the Americans began operations in eastern Bosnia around Tuzla (Herspring 2005, 359; Holbrooke 1999, 324).

Swain (2003, 107) observed that in December 1996, NATO activated the Stabilization Force (SFOR) to implement the military aspects of the Dayton Accord as the legal successor to IFOR. Like IFOR, SFOR operated under Chapter VII of the UN Charter (peace enforcement) (Metz 2001, 6). According to NATO (1996), its specific tasks were to: deter or prevent a resumption of hostilities or new threats to peace; promote a climate in which the peace process can continue to move forward; and provide selective support to civilian organizations within its capabilities. This phase of NATO involvement was named Operation Joint Guard (OJG).

On 15 November 1997, President Clinton announced US support for extending the NATO Bosnia operations to June 1998 (Holbrooke 1999, 362). Clinton presented this as a new mission because progress in Bosnia had not been as rapid as anticipated (Swain 2003, 91). In late January 1998, President Clinton decided that the United States would prefer to contribute about 6,900 troops to the SFOR follow-on force in Bosnia rather than continue to provide about 8,900 troops. As a result, NATO lowered its operational requirements for the follow-on force after the United States decided to draw down forces. The US drawdown occurred by mid-July 1998 (US GAO October 1998, 14). Operation Joint Forge (OJF) became the official designation for NATO-led forces in Bosnia after 20 June 1998 (Munden 1999, 3-2).

Swain (2003, 164) observed that the most notable change in the circumstances in Bosnia in 1998 was the empowerment of the United Nations High Representative. With the empowerment of the High Representative, SFOR's priorities shifted even more from the

mandated military provisions to the civil implementation authorities. However, as Swain (2003, 165) points out, SFOR remained the essential default force for preservation of civil order absent full acceptance of the rule of law. A gradual but substantial force reduction of NATO troops from 32,000 to 20,000 was announced in September 1999 (Swain 2003, 226). By 1999, the threat of military violence was well under control, though it still represented a potential threat as opposed to an immediate challenge. Because of the potential for renewed armed conflict remained, SFOR remained in place, but after NATO's military intervention in Kosovo it became smaller and less central to international efforts (Swain 2003, 277).

5.4 Private Contractors in Operations Joint Endeavor.

From the beginning of the planning process, US Army planners had been constrained by the imposition of the 25,000-man force cap on Task Force Eagle (Kirkpatrick 2006, 411).[20] Kirkpatrick (2006) explains that army planners were heavily biased toward combat forces because of uncertainty about the situation that Task Force Eagle would find in Bosnia. Thus, the task force order of battle necessarily skimped on such things as construction engineers. Consequently, the use of the Logistics Civil Augmentation Program, or LOGCAP, to build camps became an essential part of the plan (Kirkpatrick 2006). Clements and Young (2005, 16) explain that LOGCAP is a US Army initiative for peacetime planning for the use of civilian contractors in wartime and other contingencies. These contractors perform selected service to support US forces in support of DOD missions. Use of contractors in a theater of operations allows the release of military units to perform other missions or to fill contingency shortfalls. This program provides the Army with additional means adequately support the current and programmed forces (Clements and Young 2005, 16).

Shrader (2001, 10) explains that the principle LOGCAP contractor, Brown and Root Services Corporation (BRSC), began providing support of Operation Joint Endeavor in Hungary, Bosnia and Croatia on 27 November 1995, and continued to provide support for the successive increments of US Army Europe (USAREUR) troops deployed to Bosnia. Moreover, BRSC provided a wide range of services including base camp construction, transportation, the distribution of ice and water, POL support at selected locations, food service, laundry and

[20] Task Force Eagle was the name assigned to the US military task force employed in Bosnia.

tailoring, showers, latrines, trash and garbage removal, contingency equipment, the maintenance of organizational clothing and equipment, and an unskilled labor pool (Shrader 2001, 10).

The original plan for Bosnia was to build eight base camps; each with a population around three thousand soldiers (Kirkpatrick 2006, 412). However, once in Bosnia, US Army engineers discovered that the compartmentalization of terrain in the area of operations, combined with the presence of far more land mines than anticipated, meant that Task Force Eagle instead needed more than twenty smaller base camps to facilitate efficient peace enforcement operations. As a result, that decision produced a major change in infrastructure planning an induced further delays, because the efficiencies the logistical planners meant to gain by having large bases were lost (Kirkpatrick 2006, 412).

Kirkpatrick (2006) explains that the principal contractor, Brown and Root, had, agreed to deliver sufficient housing units within a specified amount of time. However, the investments in site clearance – meticulous removal of mines – and living facilities, power generation, water supply, and waste management were constants, whether a base camp held three thousand soldiers or two hundred, therefore, construction requirements mushroomed accordingly. By the time the construction was underway, some areas were experiencing repeated snow falls with up to fourteen inches of snow on a single day (Kirkpatrick 2006, 412).

Brown and Root had not contracted to provide engineering support on the scale required for Bosnia. Furthermore, availability of tentage proved to be a problem. Contractors on 10 December estimated that they could emplace tents in Bosnia for about three thousand soldiers within five days. In fact, they were unable to do it until 18 December, a three-day extension that seemed short to planners but long to soldiers living in the cold (Kirkpatrick 2006, 412).

As a consequence of contractor's limitations, the task force made use of Navy Seabee construction units and Air Force "Red Horse" construction teams and "Prime Beef" power teams to get the work under way (Kirkpatrick 2006, 412). The BRSC, aided by US Air Force and Navy construction engineers, eventually built some twenty-five camps to accommodate 20,400 US troops in Bosnia and Hungary (Shrader 2001, 10). Kirkpatrick (2006) explains that those units had to be inserted into the personnel force flow into Bosnia, at a cost of some further disruption of the plan, and allowances had to be made to deliver their heavy equipment, for which transportation likewise had to be arranged. Moreover, the multiple base camps by then

planned also required much more construction material and gravel fill than had been allowed for in the original planning (Kirkpatrick 2006, 412).

Shrader (2001, 11) observes that although the main LOGCAP contract in support of Operation Joint Endeavor cost $480.41 million up to 27 December 1996, USAEUR authorities claim that the use of the BRSC and other contractors resulted in significant cost savings.[21] He points out that the participation of BRSC in Operation Joint Endeavor was typical of its activities as the principle LOGCAP contractor. Furthermore, he asserts that Operation Joint Endeavor was the largest and most complex logistical effort undertaking by the United States Army Europe (USAREUR) since World War II. Munden (1999) suggests that most military commanders recognize the availability and contribution of the Department of Defense civilians and contractors as part of the total force. Moreover, civilians often provide expertise not otherwise available, thereby allowing commanders to more effectively use assigned resources. Munden (1999, 4-2) observes that, since civilians are not counted against a force cap in the area of operation, military commanders can maximize their manpower by using contractors when feasible.

In all, the logistics services provided by contractors included force provider, setup & maintenance, base camp operations and maintenance, facilities management, theater transportation/distribution support, fuel distribution, prime power, water/ice production, laundry & bath, airfield operations, supply operations, firefighting, security assistance, and mortuary affairs (Clements and Young 2005, 19). Shrader (2010, 10) concludes that the effort was facilitated, indeed made possible, by the participation of a number of contractors, including Lockheed, Raytheon, Martin Marietta, Serv-Air, Esko, Ogden and various Hungarian, Bosnian, and Croatian firms. However, logistics support was only one component contracted out by the military.

One form of US military activity in the Balkans was military to military activities designed to help with the development and professionalization of local security forces (Metz 2001). This included the provision of professional military education using International Military Education and Training (IMET) and Extended International Military Education and Training

[21] Reeve (2001, 11) points out that the British Army also found similar financial, equipment, and manpower savings in Bosnia and Croatia by using contractor elements for support. For example, the British awarded a food contract to Bookers Foodservices which saved 560,000 pounds during the first year of use and a further savings projected at almost 2 million pounds.

(EIMET) programs, security assistance, mobile training teams (MTTs), and combined exercises (Metz 2001, 14). However, there were insufficient military forces available to conduct this training. Therefore, the Bosnian Federation hired the US firm Military Professional Resource Incorporated (MPRI) to train and integrate the Bosniak and Bosnian Croat militaries. The two-year contract was valued at $80 million (US GAO June 1998, 22).

Beginning in 1996, MPRI helped establish and train the Federations Ministry of Defense, the Joint Military Command, the joint logistics and the training command. Additionally, MPRI conducted "train the trainer" courses in small-unit tactics for 9 of the 15 Bosniak and Bosnian Croat brigades. In October 1996, MPRI established the Federation Army School which trained about 1,900 Bosniak and Bosnian Croat officers and noncommissioned officers. The school's leadership and technical training ranged from basic non-commissioned officer's classes up to brigade and battalion commander and staff courses (US GAO June 1998, 23).

In January 1997, MPRI opened the Federation Army combat simulation center near Hadzici which trained Bosniak and Bosnian Croat commanders and staff on defensive strategy and defensive warfare. By 1998, MPRI trained an additional 1,500 officers and noncommissioned officers at the Federation Army School. Furthermore, 1,823 Federation Army personnel completed training on the operation and maintenance of the US-provided tanks and armored personnel carriers (US GAO June 1998, 23). Over $250 million in international cash donations were committed to funding the Federation training program (US GAO June 1998, 59).

In addition to military training, the US provided about $8.4 million to assist in training and equipping the local police forces in Bosnia. Furthermore, the US Justice Department committed $9.97 million for the International Criminal Investigative Training Assistance Program for police training and other assistance in Bosnia. This assistance consisted of human dignity and basic skills training, the establishment of model police stations, the purchase of forensics equipment and training, executive development, and development of the Federation Police Academy (US GAO June 1998, 160). It is unclear if contractors were hired to implement these programs.

However, between July and December 1997, three regionally based teams formed joint ventures with international demining companies and conducted demining operations funded by the World Bank. In March 1998, the regional teams (and their international partners) commenced work on another series of demining contracts financed by a US grant to the World Bank

Demining Trust Fund (US GAO June 1998, 188). The European Union, Bosnian government, nongovernmental organizations, and private contractors contributed to the effort to rid Bosnia of landmines in 1997. In 1997, the European Union hired a contractor that trained, equipped, and supervised 18 demining teams of 12 people each. Six teams conducted demining operations in Republika Srpska, and 12 teams operated in the Federation (US GAO June 1998, 188). Furthermore, nine explosive ordnance disposal teams of four people each were trained, equipped, and supervised under another contract. The explosive ordnance disposal teams funded by the European Union were the only dedicated teams of this type operating in Bosnia in 1997 and were responsible for clearing approximately 66 percent (13,000 pieces) of the total unexploded ordnance (US GAO June 1998, 189).

In sum, private contractors provided logistical support to combat troops, trained the Federation military forces, conducted demining, and participated in demining operations in Bosnia. From 1997 to 2000, approximately 14,000 contractors supported military operations in Bosnia (Isenberg 2007, 4). As a result, the US was able to reduce its national military presence in Bosnia, which never exceeded 15,000 ground troops. The US troops deployed to Bosnia were able to focus on peacekeeping operations, the military portion of the Dayton Agreement. The next step it is to review the focused questions.

What was the number of PMCs used during the intervention and what was their role?

What was the number of PMCs used during the intervention and what was their role? These questions attempt to determine how many private security contractors participated in the intervention. To answer these questions, two factors are examined: actual numbers of private security contractors (where available) and the amount of DOD procurement funds spent on contracts during the intervention (following Krahmann).

Approximately 14,000 contractors supported military operations in Bosnia, almost a 1:1 ratio of military troops to private military contractors. The U.S. relied on private contractors to provide logistic support to combat troops, train the Bosnia Federation military forces, and conduct demining operations throughout Bosnia. There is insufficient data on how many private contractors were U.S. citizens, third country nationals, or Bosnian, Croat, or Serb nationals.

Between 1995 and 2000, the DoD spent an average of $150 billion a year on procurement contracts. Of this total, DoD spent an average of $40 billion a year on service contracts. Service contracts represent about 40 percent of the total procurement purchases for DoD. The U.S.

Government Accounting Office estimates that the military and civilian costs for Operation Joint Endeavor exceeded 10 billion dollars. Although there are insufficient data on the total cost of private contractors in Operation Joint Endeavor, 1 billion dollars is a fair estimate of their cost for the duration of the operation (GAO 1996).

What Laws, regulation, and controls were in place at the time of Operation Joint Endeavor?

What laws, regulation, and controls were in place regarding PMCs? This question specifies the limitations or constraints of US bureaucratic controls on the private security industry. The more limitations and constraints, the less private security industry is used. The less limitations and constraints, the more private security is used. At the beginning of Operation Joint Endeavor, there were few constraints baring the use of private military contractors or private security contractors.

The US military entered Bosnia with an established procedure for contracting, the logistics capability program (LOGCAP). Clements and Young (2005) explain that LOGCAP is a US Army initiative for peacetime planning for the use of civilian contractors in wartime and other contingencies. The first utilization of the LOGCAP program was in 1985 when the Third United States Army (TUSA) requested that the US Army Corps of Engineers (USACE) contract out a management plan to construct and maintain two petroleum pipeline systems in Southwest Asia in support of contingency operations (Clements and Young 2005, 18).

However, the first LOGCAP contract for contingency operations was awarded to Brown and Root Services Corporation (BRSC) of Houston, Texas. This contract was competitively awarded to BRSC on August 3, 1992 as a cost-plus-fee contract with a one-year base period and a fourth year option (Clements and Young 2005, 18). The contract required services such as food preparation and services, laundry, logistics support such as local transportation, building large portions of the base camps, and performing other construction as directed by the Army. In 1995, the US Navy awarded the Construction Capabilities Contract (CONCAP) and the US Air Force followed suit with the Air Force Contractor Augmentation Program (AFCAP) contract in 1997 (Whitson 2001, 4).

In essence, the contract for contingency operations expanded upon the guidance from US Army Regulation (AR) 700-137, Logistics Civil Augmentation Program (LOGCAP) dated 16 December 1985. Instead of relying on the services of available local national civilian personnel, as the US military did in Desert Storm, the new contract relied on a US company for logistical

support. The use of private contractors was not new. Whitson (2001, 3) points out that at the conclusion of Vietnam, civilian contractors had established an acceptable means of augmenting logistical capabilities, especially during contingency operations conducted on short notice and usually conducted in the rear area of operations. However, the Department of State had to approve BRSC to work outside the United States.

Ortiz (2010) explains that the US government controls and regulates the international supply of defense articles and services through the Arms Control Act (AECA), first implemented in 1968. Furthermore, the AECA confers on the president the authority to control the export and import of defense articles and services. The US Department of State manages the International Traffic in Arms Regulation (ITRA) that controls and regulates defense services outside the US. Ortiz (2010, 138) points out that defense services are defined as furnishing assistance to foreign persons in the development or maintenance of defense articles, and military training of foreign units and forces. ITAR requires the registration and licensing of US persons willing to export defense articles and services. This means that any US private contractor working overseas must register with the US Department of State and receive a license before services can be provided.

In fact, the Department of Defense entered Bosnia with an established procedure for contracting; the logistics capability program (LOGCAP). Furthermore, private contracting firms received approval from the Department of State to work in a foreign country. The Arms Control Act (AECA) and the International Traffic in Arms Regulation severed as the control measures for the U.S. government to monitor the activities of private military companies in Bosnia. Therefore, the laws, regulations, and control measures enabled the use of private military contractor use in Operation Joint Endeavor.

What was the duration of the intervention?

What was the duration of the conflict? This question examines the length of the intervention, specifically from the beginning of the deployment of forces until a drawdown in the conflict area, where applicable. This is important since military forces require logistics support, technical advice, and security even when not directly involved in combat. The expected duration of the intervention is contrasted with the actual duration to analyze decision makers planning assumptions. The duration of the intervention should reveal if decision maker's choices in private security changed during the conflict based on expected price or a change in price.

Beginning in December 1995, the United States and its allies deployed military forces to Bosnia-Herzegovina to implement the military elements of the Dayton Peace Accords. Operation Joint Endeavor marked the first time that NATO committed forces. The military component was designated the Implementation Force (IFOR). On 20 December 1996 IFOR came to a successful conclusion and the Stabilization Force (SFOR) began Operation Joint Guard. On 20 June 1998, the NATO-led Stabilization Force in Bosnia-Herzegovina transitioned to a slightly smaller follow-on force. Simultaneously, Operation Joint Guard ended and Operation Joint Forge began (GlobalSecurity.org).

On 2 December 2003 SFOR confirmed that due to the improved security situation in Bosnia and Herzegovina it would reduce to a deterrent force of approximately 7,000 multinational soldiers by June 2004. At the Istanbul Summit in June 2004, NATO Heads of State and Government agreed that in light of the improved security situation in the country SFOR could be concluded at the end of the year. A ceremony in Sarajevo on 2 December 2004 marked the conclusion of the NATO-led SFOR mission in Bosnia and Herzegovina and the beginning of the European Union's follow-on mission EUFOR. The NATO-led Stabilization Force was brought to a successful conclusion almost exactly nine years after NATO deployed forces in Bosnia and Herzegovina in what was the alliance's first peacekeeping operation (GlobalSecurity.org).

The successful termination of SFOR did not spell the end of NATO's engagement in Bosnia and Herzegovina. The Alliance retained a military headquarters in Bosnia and Herzegovina but the nature of NATO's engagement was now very different. The NATO Headquarters, which was headed by a one-star US general with a staff of around 150, focused on security sector reform in the country, as well as counter-terrorism, apprehending war-crimes suspects and intelligence-gathering (GlobalSecurity.org).

The duration of the military phase of Operation Joint Endeavor lasted nine years. The Clinton Administration expected the military intervention to last one year. However, the fragile security situation in Bosnia required the U.S. and it NATO partners to maintain a military presence to ensure security while the civilian component of the Dayton Peace Accords were implemented.

Therefore, the DOD required private military contractors to assist in providing logistics over a much longer period of time than expected. Furthermore, the establishing, training, and

equipping the Bosnian Army required more time than expected. Therefore, private military contractors, assigned the train and assist mission, maintained a presence in Bosnia through the duration of Operation Joint Endeavor. As a result, there was a significant increase in the use of private military contractors in Operation Joint Endeavor.

What was the scope of the intervention?

What was the scope of the conflict? Specifically, how many troops were used during the intervention? This question attempts to determine if the scale of the intervention results in an increased use of the private security industry. As military logistics support became privatized, there should be an increase in private military support in relation to the number of troops used during a conflict. Additionally, how the military forces were staged for the intervention, employed during the conflict, arrayed at the end of hostilities should reveal the scope of the conflict. For example, if the military force deployed from one main base, limited their intervention to a small portion of the rival's country, and redeployed through one main base, we should see a smaller use of the private security industry in support.

Operation Joint Endeavor marked the first time, since its inception, that NATO committed force in Europe. The United States and its NATO partners deployed into Bosnia a military force of 54,000 as part of the initial implementation force. The US military force accounted for 16,200 of that total number. Additionally, the US stationed 6,000 troops in Croatia and Hungary to support IFOR operations in Bosnia (US GAO April 1998, 2). Most of the US troops deployed to Bosnia came from military formations stationed in Germany. In all, 36 countries provided military forces to support both the IFOR and SFOR operations in Bosnia (US GAO October 1998).

In December 1996, when the IFOR operation transitioned to the SFOR mission, Operation Joint Guard, both the US and its NATO partners reduced the size of the military mission. A total of 31,000 NATO troops supported the SFOR operation. The US provided 8,300 troops to this NATO force, with an additional 3,400 support troops in Croatia and Hungary (US GAO April 1998, 2). In June 1998, NATO once again reduced its military presence to 27,588 in Bosnia. The US provided 6,900 soldiers as part of Operation Joint Forge, with an additional 2,600 support troops in Hungary and Italy (US GAO October 1998). By far, the US provided the largest military contingent to IFOR and SFOR.

Most of US troops participating in Bosnia were active duty forces. However, almost 16,000 Army reservists and about 10,000 Air Force Air Reserve Component members participated in the Bosnia mission between its inception in December 1995 and January 1998 (US GAO April 1998, 4). This required that the President invoke the Presidential Selected Reserve Call-up (PSRC). The PSRC can call military reservist to active duty for a maximum of 270 days. Yet the duration of the Bosnia mission led to a situation where, in some instances, all of the reservist with needed capabilities had been ordered to duty and served the maximum time allowed for a single call-up (US GAO April 1998, 3). Requirements for these personnel totaled several hundred persons per rotation.

By 1998, the US had provided a total of about $10.6 billion for military and civilian support to the Bosnia peace operation. From this total, about $8.6 billion was spent on military-related operations and about $2 billion for the civilian-related operations (US GAO June 1998, 4). The US civilian-related operations focused on programs designed to assist in the economic, political, and social transition taking place in Bosnia. Most of this assistance, almost $250 million, was funded by USAID. The State Department provided about $190 million; the remainder was obligated by other civilian agencies, including USAID and the Departments of Justice, Commerce, and the Treasury (US GAO June 1998, 22).

The type of peacekeeping operation and terrain further expanded the scope of the US operation. Initially, the US planned to occupy and operate out of eight base camps in Bosnia. However, the limited availability of suitable terrain and the extent of the minefields caused the US to increase the number of base camps (Johnson 1999, 43). Instead of eight base camps occupied by about 3,000 soldiers, the US built over 20 base camps throughout Bosnia. Additionally, the nature of the mission, enforcement of the zones of separation, spread the US military forces over an area the size of Connecticut (Johnson 1999, 138).

In order to get to Bosnia, the US deployed forces from Germany. From Germany, US forces traveled over 1,500 kilometers (about 900 miles) through Austria, the Czech Republic, Hungary, and Croatia into Bosnia. It typically took 3 to 4 days to reach Hungary by rail from Frankfurt am Main, Germany. Once the US military units got to the Sava River, they had another 50 kilometers (about 30 miles), or 2 hours by road march, to reach Tuzla. Between December 1995 and February 1996, the US deployed more than 16,000 personnel, 1,000 vehicles and pieces of equipment, and 145 helicopters into the U.S. sector of operations in Bosnia and

Herzegovina. The force deployed into 24 base camps in and around the zone of separation (ZOS), from where it could best monitor the terms of the Dayton Accord. Sustaining the deployed forces required a daily flow of three convoys and 12 air sorties carrying 75,000 meals, 192,000 gallons of water, 130,000 gallons of fuel, and 133 short tons of supplies (AE Pamphlet 525-100, October 2003).

The U.S. and its NATO partners deployed close to 54,000 troops for Operation Joint Endeavor. The US military force accounted for 16,200 of that total number. In 1996, the NATO mission decreased the size of the military mission to 31,000 troops, of which 8,300 were U.S. military. Further military reductions occurred in 1998, once again decreasing the number of NATO troops in Bosnia to 27,588. The majority of the U.S. and NATO forces deployed from Germany, and staged out of one major base in Hungary.

As noted previously, the U.S. military planned to conduct operations from eight base camps in Bosnia. However, the availability of suitable terrain and the extensive minefields forced the U.S. military to build a total of 24 base camps in Bosnia. As a result, the number of private military contractors increased in order to provide logistic support at the additional camps.

Other conflicts or deployments?

What other conflicts or deployments were ongoing? How many troops participating in other conflicts or deployments? This question examines the larger role of the military in international affairs. The commitment of military forces to areas other than the intervention limits their availability to participate. The result should be an increased demand for the private security industry to fill the gap in available military assets.

Although the US deployed over 16,000 troops in support of operations in Bosnia, the US faced other commitments around the world. Another quarter million troops were forward deployed in foreign countries (US DOD SAID, 1995). These US forces supported ongoing treaty commitments in Europe and Asia. Thus, 25 percent of the active US military was not available to support operation in the Bosnia. Furthermore, the US military remained committed to supporting Operation Uphold Democracy in Haiti.

In 1995, the US military had over 109,000 stationed in Europe in support of NATO. However, in the spring of 1995, 1,600 soldiers were deployed outside of the NATO region. Swain (2003, 35) points out that they were in Italy and Croatia providing logistics and medical support for Operation Provide Promise, watching the border of the former Yugoslavian Republic

of Macedonia, the UN Preventive Deployment Force (UNPREDEP) observation mission, providing support to the Embassy in Beirut, and operating an air defense artillery battalion in Saudi Arabia as part of Operation Desert Vigilance.

Swain (2003) explains that most units were away from their home stations in Germany between 40-50 percent of the time. He asserts that these figures make it clear how little room for maneuver the commander of US forces in Europe actually had to mitigate the intense personnel tempo for his units, even before he had to send a third of his command to conduct operations in Bosnia (Swain 2003, 36). Moreover, Secretary of Defense William Perry had adopted as one of his personal priorities the initiation of frequent professional contacts with former Warsaw Pact defense establishments to encourage and facilitate their progressive democratization. Swain points out that in January 1994, NATO undertook a program of exchanges called Partnership for Peace (PFP). The Army in Europe supported 19 of the 51 teams for PFP (Swain 2003, 37).

In 1995, the U.S. military had troops committed to NATO, Korea and Haiti. Of the total force, 238,064 troops were stationed outside of the continental United States. Over 109,000 troops were supporting NATO, over 75,000 were stationed in Korea, and 1,600 troops were still in Haiti supporting Operation Uphold Democracy. This represents 15 percent of the total force deployed. Likewise, this represents over 19 percent of the available ground force in the DoD. As a result, the U.S. increased it use of private military contractors to fill the shortfalls in logistics in Operation Joint Endeavor.

What was the size of the military?

What was the size of the military? This question examines the total military forces available during the time of the intervention. Although the active military force is immediately available for policy makers must chose to activate reserve and National Guard forces. Following Singer and Avant, as the overall size the military decreases there should be an increase in the reliance on the private security industry. Additionally, this question should highlight the opportunity costs or shifts in supply that policy makers face when choosing between the private security industry and national armies.

At the end of September 1995, the total US active military was slightly more than 1,513,000. This all volunteer force included ground combat forces from the US Army and US Marine Corps, totaling 508,559 and 174,639 respectively (US DOD SAID, 1995). Additionally, the US DOD employed 820,189 government civilians who supported a wide range of functions

for the active military. In essence, the US military decreased by 30 percent from its peak size during Operation Desert Shield and Desert Storm.

The size of the U.S. military in 1995 represented the Base Force envisioned by General Powell and President Bush. Snider (1993, 33) points out that the outcome of the Gulf War influenced the executive decision making on the size of the military. The Gulf War validated the strategy of crisis response and supported the assumption that US high-technology capabilities decisively defeated the Iraqi force, therefore troop strength could be reduced while continuing to fund high-tech capabilities. Herspring (2005, 324) asserts that the military restructuring was a result of the collapse of the Soviet Union which eliminated the immediate threat to the United States. Additionally, the increasing national fiscal problems left the Pentagon deeply in debt which resulted in significant cuts in the force structure. However, Metz (2001, 19) asserts that there is a mismatch between national-level strategic objectives and the force end strength which effected the role of the Army in the Balkans. He suggests that the high operational tempo in the 1990s, particularly in the Balkans, forced in U.S. military to postpone many procurement programs and stretch out maintenance and replacement activities.

In 1995, the total active military was 1,518,224 personnel. Of this number, 683,198 were U.S. Army and U.S. Marine Corps ground troops. This represents a 30 percent decrease in the size of the U.S. military from a high of 2,130,299 in 1989. As a result, the U.S. military increased its use of private military contractors during Operation Joint Endeavor to fill shortfalls in logistics and training.

Percentage of military outlays in the national budget?

What percentage of the national budget did military outlays represent? This question looks at the US military defense budget at the time of the intervention from the standpoint of total dollars spent on defense, percentage of GDP, and percentage of the US budget outlays dedicated to defense. As the size of the defense budget decreases over time, we should see an increased reliance on the private security industry due to decreased spending on national armies. This should illustrate a shift in the supply curve away from higher costs of personnel for national armies.

By 1995, and the beginning of Operation Joint Endeavor, the US defense budget was decreasing. The US government allocated over $272 billion for defense spending (US OBM Historical Tables). This amounted to 3.7 percent of the US GDP or 17.9 percent of budget

outlays. In a matter of five years since the end of the Cold War, US military spending decreased over $32 billion. This amounted to a 2 percent reduction in GDP allocation or a 9 percent reduction of the total US budget outlays. Herspring (2005, 328) asserts that the changes introduced during the Bush administration significantly changed the face of the American military.

In comparison, the US government allocated over $923 billion for human resource spending. This amounted to 12.6 percent of GDP or 60.9 percent of total budget outlays. US spending on domestic programs increase by almost $400 billion in five years. This amounted to a 2 percent increase in GDP or 11 percent of budget outlays.

In turn, the US Department of Defense spent over $157 billion on contracts (US DOD SAID 1995). This amounted to 54.3 percent of the total DOD outlays. The spending on service contracts amounted to over $49 billion or 31.2 percent of the total percent of DOD contracts. Service contracts differ from product contracts or research and development contracts.

Thus, between 1991 and 1995 the U.S. decreased its defense spending by 9 percent of the total budget outlays. By 1995, total U.S. outlays for defense were $272 billion. In short, this amounted to a decrease of $32 billion per year or a 2 percent decrease in GDP allocation. Herspring (2005, 325) points out that a number of members of Congress argued that these defense cuts provided a peace dividend. Thus, in Operation Joint Endeavor, the use of private contractors increased as the U.S. defense budget decreased.

Choices other than using the private security industry?

Did policy makers or military leaders have choices other than using the private security industry? If so, did they use them? This questions look beyond the availability of national armies and military budgets to determine if policy makers had other choices available other than the private security industry. For example, increased participation of allies, coalition partners, and host nations should provide an alternative to the private security industry.

Although the US and its NATO partners relied on private military contractors to augment shortfalls in logistics support and conduct the train and equip mission, there is no evidence of a demand for private security companies. The Dayton Agreement resulted in an end to hostilities in Bosnia prior to the US and its NATO partners deployed for Operation Joint Endeavor. Therefore, the NATO forces operated in an environment that was semi-permissive. In essence,

IFOR and SFOR provided its own security tasks along with the military tasks outlined in the Dayton Accords.

Moreover, Bosnia-Herzegovina did not provide host nation security, each party maintained local security within their zones of occupation in an environment with over 400,000 men under arms (Bosnian Serbs, Croats, and Bosniaks) including civilian militias with an estimated strength of 45,000. In spite of this, there were only a few US casualties due to hostile action. The US and NATO were able to maintain security for themselves and their civilian counterparts working throughout Bosnia. Therefore, there was not a demand for additional private security forces.

The U.S. relied on its NATO partners to provide forces for Operation Joint Endeavor. In fact, NATO provided the bulk of the ground forces during the operation. Furthermore, the U.S. activated a substantial amount of its Reserve and National Guard force to supplement its active duty force in Bosnia. However, Congressional restrictions on the duration that a Reservist could remain on active duty limited their use as the operation in Bosnia extended beyond its first year. Additionally, the nature of the mission in Bosnia, peace enforcement, prevented the U.S. and NATO from using host nation security forces. Therefore, the U.S. turned to private military contractors as a substitute.

5.5 Private security supply-demand behavior: an assessment

Given the characteristics presented above, how does the outcome correspond with the theory's prediction? The proposed theory predicts that given a situation where the demand for a service increases, in this case support services, the military chose to contract for private military support service to fill shortfalls in capability. In the case of Operation Joint Endeavor, private security supply-demand behavior is evident.

Any analysis of supply-demand behavior must start with an examination of the initial conditions prior to Operation Joint Endeavor. Kaufman (2002) points out that the transitions in government, as well as other domestic political considerations and economic realities, directly affected the decisions that were made by NATO as an alliance. Additionally, by 1991, most Western countries were facing economic recessions that further caused them to focus inward, rather than outward (Kaufman 2002, 4). As Yugoslavia was beginning to disintegrate, the governments of Western Europe and the United States had other concerns that held higher

priority than the Yugoslavia crisis (Woodward 1995, 395). Furthermore, the United States and Western Europe had just fought the Persian Gulf War and were not eager to get engaged in another conflict, preferring to pay attention to domestic concerns (Kaufman 2002, 216).

Snider (1993) asserts that as the Bush administration came into office in early 1989, it brought a consensus that the government was financially broke, and that priority must be placed on reducing the twin deficits of budget and trade. Thus, the decision of building down America's defenses was very strongly – perhaps most strongly – influenced by domestic economic problems. As a result, Colin Powell, the Chairman of the Joint Chiefs, began to develop his ideas for an altered force structure that would respond to the changes in both the strategic and the fiscal environments in a way that would make it possible for the United States not only to maintain a strong defense but also to retain its superpower status (Jaffe 1993, 11).

Jaffe (1993, 12) explains Powell's thinking that major force realignments were necessary, because, if funding continued to decline while the size of the armed forces and their missions remained unchanged, Powell feared, the result would be a hollow force. Jaffe (1993, 12) observes that Powell regarded his principal challenge as Chairman to be reshaping defense policies and the armed forces to deal with the changing world and the declining defense budget. As a result, Powell proposed a new military force structure: the Base Force (Herspring 2005, 325).

The Base Force would have a total active strength of 1.6 million instead of the then current 2.1 million and a Reserve component strength of 898,000 instead of the then current 1.56 million. Jaffe (1993, 21) points out that the conventional component would be composed of 12 active and 8 reserve Army divisions, 16 active and 12 reserve Air Force tactical fighter wings, 150,000 personnel in the 3 active Marine Corps division/wing teams and 38,000 in the Marine Corps reserve division/wing team, and 450 ships, including 12 carriers in the Navy. She concludes that since the late 1940s the United States had based its national military strategy on the necessity of deterring and, if deterrence failed, successfully fighting a global war against the Soviet Union (Jaffe 1993, 1). However, Powell argued that the prospect of an accelerated decline in defense funding, together with the sweeping changes taking place within the former Warsaw Pact, the Base Force would not only meet US defense needs in the new era but provide an expandable base upon which a larger force could be reconstituted should the need arise (Jaffe

1993, 21). Interestingly, Cheney allowed Powell and the service chiefs decide which forces they should cut (Herspring 2005, 325).

By the summer of 1995, there were slightly more than 62,500 Army troops stationed in Europe in contrast to more than 216,000 Army troops in 1989. This represented a 66 percent reduction as a result of the Base Force strategy/policy (Swain 2003). Furthermore, the Army's budget in Europe decreased from $6 billion to $2.5 billion (59 percent) and only two combat divisions remained in Germany (Swain 2003, 35). Metz (2001) asserts that the US defense budget and force size affected the role of the Army in the Balkans. He also states that nearly every analyst of American defense strategy admits that there is a mismatch between national-level strategic objectives and the force end strength. Yet, the Army planners were delighted to find that, for the first time, they were not given an up-front constraint on the number of soldiers that could be used in Bosnia (Kirkpatrick 2006).

Kirkpatrick (2006) contends that planners developed a force structure for Operation Joint Endeavor based on the assumptions that the units would operate in northern Bosnia and that they would have to monitor a zone of separation between warring parties. Therefore, the plans developed provided a range of options that called for 31,000 to 38,000 ground troops (Kirkpatrick 2006, 397). However, a force cap of 25,000 was eventually imposed on the total US strength in Bosnia (Kirkpatrick 2006, 395). Faced with this limitation, the military planners concluded that American troops could be augmented by some three brigades of multinational forces, each of which would bring its own logistical support. However, as Kirkpatrick (2006, 396) points out, the US division assigned the Bosnia mission would also need augmentation.

By 23 August 1995, the force cap was reduced again to 20,000 (Kirkpatrick 2006, 397). However, the train and equip mission for the Bosnian Army was deleted, later to be given to private contractors (Kirkpatrick 2006, 396). A few days later, the force cap was reduced again, this time to 14,900 (Swain 2003, 49). Military planners responded to the force limitations by asking V Corps which parts of the force could satisfactorily be replaced by multinational units. The corps staff concluded that foreign construction engineers, combat engineers, and bridging units would present no interoperability problems (Kirkpatrick 2006, 397). Similarly, transportation units for line haul could be from other armies, as could the chemical units, heavy rotary-wing aircraft, and some signal units. Medical support, however, should remain based on American units. Furthermore, much of the logistics support would be located outside of Bosnia

in Kaposvar-Taszar, Hungary. Military personnel assigned to the US National Support Element would not count against the 15,000 force cap (Swain 2003, 57).

Shrader (2001, 11) observes that the United States Army has always found itself short of skilled logistical support personnel, particularly during periods of relative peace. He points out that Combat Service Support personnel are sometimes viewed as being nice to have rather than essential, and when economic and political pressures for reductions in defense spending and the size of the standing Army have risen, logistical personnel and capabilities have often been the first to be sacrificed. Thus, since the late 1950s, no major operation undertaken by the Army – including Vietnam and Gulf wars as well as a host of large and small contingency operations – could have been successfully completed without the assistance of civilian contractors (Shrader 2001, 11).

By mid-1998, the extended mission in Bosnia caused the military services to seek alternative ways to provide some needed capabilities. One US government report pointed out that although the vast majority of the ground based combat support and aviation related requirements were filled, about a dozen unit capabilities required special attention because the capabilities were primarily in the reserves and many of these capabilities had been mobilized and deployed in support of the operation (US GAO April 1998, 7). The report goes on to suggest that if US Atlantic Command is unable to find other services to meet these requirements, other solutions will be considered. These include using more ad hoc units, contracting civilians to perform the function, and seeking to have other NATO partners assume some of these responsibilities (US GAO April 1998, 10). For example, fire-fighting functions typically performed by military engineers would be contracted out to private firms.

Furthermore, in October 1998, US trained Hungarian air traffic controllers replaced US controllers, further reducing operator requirements. Additionally, the US Air Force planned to implement contractor maintenance for the maintenance portion of the mission by November 1998. The goal for the US Air Force was to reduce the need to involuntarily activate Guard personnel for the air traffic control mission (US GAO April 1998, 11). Thus, some specialty capabilities are transferred to other countries after the US trains them (US GAO April 1998, 10).

The military planners and policy makers had the choice to activate reservists to meet the force structure needed in Bosnia. If the President determines that it is necessary to augment the active forces for an operational mission, he may initiate a PSRC call-up under 10 U.S.C. 1234.

With this authority, units and members of the Selected Reserve may be ordered to active duty without their consent. Reservists cannot be required to serve on a mission for more than 270 days (US GAO April 1998, 12). Prior to 1995, PSRC authority had been used twice – for the Gulf War and the operation in Haiti (US GAO April 1998, 12). However, the statute also caps at 200,000 the total number of reservists who may be serving on active duty under PSRC at any one time.

Metz (2001, 18) points out that the reserve components have been central to all Army peace operations, largely because a high proportion of the type of combat support and combat service support units that are needed for these activities are in the reserves. For Operation Joint Endeavor, the reserve component (RC) personnel were called to duty for 270 days. That allowed time for mobilization, training, six months to execute the mission in Bosnia, and demobilization (Munden 1999, 4-3). However, by 1998, most reserve units with the skills required for Bosnia had already served their 270 days on active duty and the President chose not to initiate a second PSRC call-up.

In summary, supply-demand behavior is evident during Operations Joint Endeavor. Military planners and decision makers entered Operation Joint Endeavor with a force significantly reduced from its Cold War peak. The demand for an expeditionary logistics force capability was high, yet most of the US logistics force structured resided in the Reserve force. Military planners substituted its homogenous logistics support for contractors hired through the LOGCAP program.

Additionally, an early decision to deploy combat forces first into Bosnia resulted in a requirement for logistics support. Therefore, the demand for capabilities such as transportation, housing, and food increased dramatically. As a result, military planners immediately turned to private contractors as a substitute. Furthermore, decisions to impose a ceiling on forces deployed into theater and ability of the private contractor filled the void in logistic support US military planners reduced their requirement for additional homogenous logistics capabilities. In essence, these events represented shifts in the US demand curve.

5.6 Summary and Analysis

Hypothesis one states that when military outlays decrease there is an increase in the use of private military contractors. Between 1990 and 1995, there was a decrease in military outlays

and the U.S. military used private military companies in Bosnia. The evidence from the case study suggests the hypothesis under review is supported.

Hypothesis two asserts that when the size of a national military decreases there is an increase need in the use of private military contractors. Between 1990 and 1995, there was a decrease in the size of the military and the U.S. military used private military companies in Bosnia. The evidence from the case study suggests the hypothesis under review is supported.

Hypothesis three contends that when the number of a military disputes, military engagements, and militarized conflicts increases there is an increase in the use of private security contractors. In 1995, 15 percent of the total U.S military force was deployed outside the continental United States and the U.S. military used private military companies in Bosnia. The evidence from the case study suggests the hypothesis under review may not be supported.

Hypothesis four states that for every year increase in the duration of a military conflict there is an increase in the use of private security contractors. Operation Joint Endeavor lasted nine years (or 108 months) and the U.S. military used private military companies in Bosnia. Approximately 14,000 private contractors were used in Operation Joint Endeavor. The evidence from the cases suggests the hypothesis under review is supported.

Hypothesis five states that when there is a decrease in bureaucratic controls and regulations there is an increase in the use of private security. By 1995, the DoD formalized the use of LOGCAP and the Department of State regulated private military companies working in a foreign country and the U.S. military used private military companies in Bosnia. Bureaucratic controls and regulations decreased from 1990 through 2000 therefore the evidence from the cases suggests that the hypothesis under review is supported.

The case study provides an alternative explanation on the use of PMCs. First, when there is a force cap placed on the size of the military force there is an increase in the use of private security. In 1995, a force cap, of 15,000 U.S. soldiers, required military leaders to choose between deploying combat forces or logistics force into theater. When they choose to deploy combat soldiers, military leaders substituted military logistic support for private military companies. The evidence from the cases suggests that this alternative hypothesis is supported.

Second, when there is no host nation supporting the intervention there is an increase in the use of private security. During Operation Joint Endeavor, the U.S. military did not have host-nation support from the Bosnian Serbs, the Bosnian Croats, or the Bosniaks. As a result, the U.S.

military relied on private military companies for support. As a result, the U.S. military relied on private military companies for support. The evidence from the case suggests that this alternative hypothesis is supported.

Third, when the security environment is non-permissive there is an increase in private security. During Operation Joint Endeavor the US and NATO forces operated in a semi-permissive security environment while conducting peace enforcement operations. Moreover the U.S and Coalition forces allocated a portion of their troops for force protection. As a result, the U.S. military relied on private military companies for support. The evidence from the case suggests that this alternative hypothesis is supported.

The US commitment to Bosnia involved a major commitment of national resources and prestige to an alliance effort, for a prolonged period of time in a dangerous undertaking of doubtful positive political value (Swain 2003, 68). Moreover, Swain (2006, 68) asserts that it occurred during a period of radical political division at home. Swain suggests that because of the unique nature of the mission, and the force cap limits, creativity was required in designing the mission. That creativity resulted in the use of private military contractors to supplement US military forces in Bosnia.

Kirkpatrick (2006, 424) observes that the US Army Corps assigned to the Bosnia mission had little influence on the force structure decisions, especially in light of the centrally directed drawdown of forces that was even then gradually coming to an end in Germany. Thus, the Corps was obliged to accept shortages in deploying units and as a result, they would borrow soldiers and equipment from units that would remain in Germany. Furthermore, for other essential services, private contracting filled the void. As Reeves (2001, 12) notes, the widespread use of civilian contractors enabled military units not committed to Bosnia to be available for other major regional conflicts. Additionally, the use of private contractors solved the problem of troop ceilings, which often are imposed in certain operational theaters. Political constraints limited the number of troops in Bosnia, so the United States gave most support functions to contractors because they were not included in the total force figures (Reeve 2001, 12).

The overall performance of BRSC and other civilian contractors in Bosnia was excellent (Shrader 2001, 12). Although some difficulties were encountered on the whole, the logistical contractors involved have worked diligently and effectively to support US troops. Furthermore, Whitson (2001, 12) points out that another advantage of using contractors is not quite so evident.

He suggests that, when contractors hire local civilians, contractor support becomes a political tool for putting hard-pressed local nationals back to work in what is frequently a depressed economy. The use of contract labor in support of the mission in Bosnia produced a definite economic impact on the region secured by US forces and supported a basic pillar in the operational commander's strategic campaign plan (Whitson 2001, 12).

Operation Joint Endeavor is a most likely case for examining private security supply-demand behavior. Although the number of employed contractors used by the US did not exceed 14,000 the high ratio of contractor to troops (1:1) fit the demands of a most-likely case. There are a number or reasons for this outcome. First and foremost, the size of the US forces in Bosnia never exceeded 15,000 troops. The force cap imposed on military planners forced them to substitute military force structure for private contractors. Military planners determined that the mission they were assigned in Bosnia required 38,000 ground troops. However, once the force cap was imposed, planners' assigned military forces to the core military tasks assigned by the Dayton Accords and used private contractors for logistic support and training assistance. Second, the security environment in Bosnia was only semi-permissive, a far different scenario than the US military encountered in the Persian Gulf in 1990. The US and Coalition forces conducted operations in and environment where they had to allocate troops to force protection. The combined Bosniak, Croat, and Serbs security forces exceeded 440,000 but they did not provide the security for IFOR or SFOR. In Bosnia, there was no host nation. The Dayton Accords provided the US and Coalition forces international legitimacy, however, the terms of the agreement forced the political parties in Bosnia to comply. As a result, the US and its NATO partners conducted Operation Joint Endeavor as a neutral external force.

Chapter 6 - Operation Iraqi Freedom

6.1 Intro and purpose.

How does private security supply-demand behavior fare against the evidence? This chapter provides the third case, Operation Iraqi Freedom, the United States military operation in Iraq from March 2003 to December 2011. The argument is that the details of Iraqi Freedom support some of the assertions in the literature on private security. The military operations in Iraq are central in defense debate. Yet the operation's main descriptive fact for most observers – that contractors on the battlefield equaled that of US forces – is consistent with the conflicts actual conduct. The contractor count cannot be explained without considering the nature of the intervention, the decisions by senior US leaders to limit the size of US forces in Iraq, the scope and duration of the operation, and the nature of the security environment. The results tend to corroborate the theory as a post-Cold War example of private security supply-demand behavior.

This chapter is organized as follows. First is the motivation for selecting Iraqi Freedom as a case study. Second, is an outline of the main events. Third, is to develop values for the key independent variables. Fourth, is to assess the role of private military contractors during the conflict. Fifth, is to assess the theory and considerations of other explanations of the Iraqi Freedom outcome. A summary follows.

6.2 Why Operation Iraqi Freedom?

Operation Iraqi Freedom is a most-likely case in George and Bennett's (2005) terms. With a most-likely case there needs to be very strong evidence of contractor presence, because it is expected. This case meets this criterion. As this chapter shows, the size of the US military and its budget were significantly less than the peak Cold War levels at the beginning of Operation Iraqi Freedom. Additionally, the scope of the intervention is significant, and it lasted for over eight years. Aside from its military commitments to NATO, Korea, Afghanistan, and the Philippines, the US faced competing conflicts around the world during the time of the intervention. For all of these reasons, the likelihood that the US would have to use significant PMC support can be considered to be high.

The use of contractors was so essential to the mission that numerous scholars focus on this case when studying the rise of the private security industry. As the chapter demonstrates,

however, there are details beyond supply-demand theory that are necessary to understand the US reliance on PMCs, most notably the political imposition of various force caps on troop size throughout the mission and the security environment in Iraq. This case thus demonstrates both the utility of supply-demand theory as well as some of its limitations. As such, it offers a challenging test of theory in the form of a George and Bennett (2005) most-likely case.

6.3 Overview of Events.

The complex and conflictive U.S. relationship with Iraq emerged from the 1979 revolution in Iran which threatened to destabilize the vital oil-producing Southwest Asia region (Metz 2010a). In September 1980, Saddam Hussein, decided to invade Iran hoping to capitalize on a badly weakened military due to Iran's recent revolution (Allawi 2007, 3). After some initial gains, the war turned against Iraq and the Reagan administration offered economic and military assistance. By 1988 Iran and Iraq signed a ceasefire. However, U.S.-Iraqi relations flipped dramatically after Saddam Hussein invaded Kuwait in 1990 invasion of Kuwait (Metz 2010a, 1).

Following Operation Desert Storm, the U.S. made deliberate preparation for operations against Iraq focused primarily on defensive operations in the event of a second Iraqi invasion of Kuwait. Additionally the U.S. conducted air operations to maintain the northern and southern no-fly zones within Iraq. The U.S. military presence in the region served as a deterrent "trip wire" and confirmed the continuing U.S. commitment to the Kuwaiti people (Fontenot 2005, 29). After almost two decades of conflict, Iraq's economy was less than 1 percent of that of the United States by 2003 (Stiglitz 2008, 1). Yet, in the face of UN sanctions and diplomatic isolation, Saddam Hussein remained firmly in control of Iraq.

In October 1998, Congress passed H.R. 4655, the Iraq Liberation Act of 1998, which made support for Hussein's opponents' official U.S. policy. It called for assistance to Iraqi opposition organization, and for the United States to push the UN to create a war crimes tribunal to prosecute Saddam Hussein and other senior Iraqi officials (Metz 2010a, 3). Furthermore, with the election of George W. Bush in 2000 and the subsequent attacks on 11 September 2001 (9/11) a dramatic shift occurred in American strategy toward Iraq (Metz 2010a, 5) (Herspring 2008, 98). Herspring (2005, 398) argues that Secretary of Defense Donald Rumsfeld and several civilian leaders in the Pentagon favored using military force to get rid of Saddam Hussein.

Meanwhile, Allawi (2007, 7) maintains that in official Washington, the ignorance of what was going on inside Iraq before the war was monumental.

President Bush concluded that Hussein would never comply with the 1991 settlement, that the threat Iraq posed was growing, and that containment and limited force would neither compel compliance nor inspire the Iraqi military to overthrow the dictator. The result was Operation Iraqi Freedom (Metz 2010a, 6). Tyner (2006, 56) argues that three primary and interlocking fear-based explanations were used to justify the invasion and occupation of Iraq. Saddam Hussein and his Ba'athist Regime possessed weapons of mass destruction (WMD); Saddam would sell the WMDs to terrorists' networks; and the Iraqi government had ties to Al Qaeda. President Bush's strategy for dealing with Iraq aimed to exhaust diplomatic alternatives, seek UN approval to use armed force in conjunction with allies, however, he would choose to act unilaterally and without explicit UN approval if necessary (Metz 2010a, 35).

General Richard Myers (former Chairman of the Joint Chiefs) points out that in late 2001, the plan for Iraq was badly outdated (Myers 2009, 215). He asserts that the established military plan for Iraq was based on 1991 invasion plan and did not reflect degraded Iraqi military strength or expanded U.S. technological improvements since Desert Storm (Meyers 2009, 215). Myers recalls that when General Franks (Commander of US Central Command (CENTCOM)) briefed Secretary Rumsfeld on the military strategy for Iraq, two objectives emerged: regime change and the removal of weapons of mass destruction (WMD) (Meyers 2009, 218; Herspring 2008, 90). Fontenot (2005, xiii) observes that the military campaign developed by CENTCOM transcended removing Saddam Hussein and the Ba'athists from power. He argues that the strategic goal included establishing a stable, secure, prosperous, peaceful, and democratic Iraqi nation that is a fully functioning member of the community of nations.

Myers' pointed out that "This was an unusual situation: The United States had very rarely chosen to attack. We had almost always responded to attack. Preparing for preemptive war was a new experience for our force" (Myers 2009, 229; Battisetella 2008, 2). Tyner argues that under the pretext of a global war on terrorism, the administration of George W. Bush embarked on a massive attempt to remake the political space of the Middle East (Tyner 2006, 133). This may be why John Keegan (2007, 2) describes Operations Iraqi Freedom as the mysterious war.

Operation Iraqi Freedom consisted of four phases: planning and preparation (Phase I), posturing coalition forces to conduct sustained combat operations (Phase II), conventional air

and ground operations (Phase III), and post-hostilities operations (Phase IV). Myers asserts that "One key planning assumption was that it was possible to safely conduct lightning-fast, near simultaneous air and ground operations once the "kinetic" phase began. The emphasis on lightning-fast would mean fewer military and civilian casualties, less danger or region instability, mass starvation, refugees, and sabotage of oil fields" (Myers 2009, 219). However, Myers' questioned how the U.S. military would handle the post-conflict stability and reconstruction phase (Myers 2009, 221).

The Authorization for Use of Military Force Against Iraq Resolution of 2002 passed in both houses of Congress on 10 October 2002 (Herspring 2008, 111). The vote had the support of a strong majority of members of both parties in both houses.[22] President Bush signed the bill into law on 16 October (Meyers 2009, 230). On 8 November 2002, the United Nations Security Council passed Resolution 1441 by unanimous vote with no abstentions (Sifer and Cerf 2003, 648; Meyers 2009, 230). Resolution 1441 declared that Iraq "has been and remains in material breach of its obligations under relevant resolutions." It demanded that Saddam Hussein provide "immediate, unimpeded, unconditional, and unrestricted access" to weapons inspectors. It also reminded Iraq that "it will face serious consequences as a result of its continued violations of its obligations" (Metz 2010a, 37).

In early February 2003, Secretary of State Colin Powell briefed the UN Security Council about the grave threat posed by an Iraq that had developed and stockpiled WMD (Herspring 2008, 122; Sifer and Cerf 2003, 465). In that address, Powell forcefully argued that Saddam continued to defy UN resolutions, possessed WMD, and was in league with al-Qaeda (Wright and Reese 2008, 14). The following month, on 1 March 2003 Turkey's Grand National Assembly rejected the United States' request that 4th U.S. Infantry Division use Turkey's land corridors as an invasion route to Iraq (Wright and Reese 2008, 14).

By mid-March 2003, CENTCOM had sufficient combat power to begin ground offensive operations. President Bush made the decision to launch OIF on 16 March 2003 and issued an ultimatum with a 48-hour deadline on the 17th (Fontenot, et. al. 2005, 86; Herspring 2008, 128). On 20 March 2003, Coalition troops breached the berm along the border between Kuwait and Iraq to secure the Rumaila oil fields and to set the conditions for their march up-country

[22] The Senate passed the resolution with 77 yes votes and 23 no votes. The House of Representatives passed the resolution with 296 yes votes, 133 no votes, and 3 abstentions (Govtrack.us)

(Fontenot 2005, 86). Over the next few days, coalition aircraft averaged between 1,500 and 2,000 air combat sorties a day in support of Operation Iraqi Freedom. Furthermore, the US Air Force launched 100 cruise missiles and Coalition warships also launched another 500 cruise missiles. Coalition air forces attacked senior Iraqi leadership, air defense systems, surface-to-surface missiles, and artillery batteries to reduce the threat to coalition air and ground forces in Kuwait (Fontenot 2005, 86).

When the war began the military campaign itself was less dramatic than expected (Myers 2009, 244). Coalition ground forces encountered little initial resistance as they moved into Iraq. In the west, Special Operations Forces had entered the country from advanced bases in Jordan and Saudi Arabia and, along with airpower, quickly took control of vast sections of desert, which the Iraqis would have needed had they intended to launch Scud missiles against their neighbors (Myers 2009, 244).

After Turkey denied the U.S. a ground route from the north into Iraq, military planners decided to conduct an airborne operation. On the night of 26 March 2003, six days after the ground war began; fifteen giant C-17 Globemasters dropped almost one thousand paratroopers of the Army's 173rd Airborne Brigade from Vicenza, Italy, on the short, muddy Bashur airstrip in northern Iraq. The Airborne Brigade linked up with Special Operations Forces already working with Iraqi Kurd Peshmerga guerrillas (Meyers 2009, 248). The airborne operation succeeded in preventing the Iraqi divisions in the north and from repositioning against the main U.S. ground attack in the south.

The US Army V Corps advanced north towards Baghdad, west of the Euphrates River, while the US Marine Corps I Marine Expeditionary Force advanced north towards Baghdad, east of the Euphrates River. The British Army 1st Armored Division conducted amphibious and ground operations toward Basra (in Southern Iraq) and successfully secured the oil infrastructure (Fontenot 2005, 89). By 5 April 2003, lead combat elements of the V (US) Corps seized the International Airport on the outskirts of Baghdad (Fontenot 2005, 308). For the next four days, US combat forces struck at the center of Baghdad forcing the collapse of the Iraqi defenses around the city (Herspring 2008, 129).

Although the collapse of the Iraqi Army was swift, it was not without significant resistance to Coalition Forces.[23] On 20 March, Iraq responded to the Coalition operations with the first of 17 Theater Ballistic Missile (TBM) attacks against troop concentrations in Kuwait (Fontenot 2005, 97). Furthermore, to defend Iraq, Iraqi military commanders fielded 17 regular army (RA) divisions and six Republican Guard (RG) divisions. In Baghdad, the Special Republican Guard (SRG), a force of approximately 15,000 soldiers, had the specific task of defending key sites. Likewise, a host of paramilitary and militia forces, including the infamous Saddam Fedayeen and Ba'ath Party militia defended key cities throughout Iraq (Fontenot 2005, 99).

The Iraqi paramilitary organizations prepared to fight as irregulars rather than as standing conventional forces. Fontenot (2005, 101) points out that the Iraqi regime used many of these troops in the south: in Basra (2,000 fighters), An Najaf (12,000-14,000 fighters) and Karbala (2,000-3,000 fighters). He notes that military planners had not anticipated or accounted for these paramilitary fighters during planning (Fontenot 2005, 101). Their tenacious resistance and will to fight foretold the violence that was yet to come. As General Meyers (2009, 249) points out, Phase IV Post-Hostility proved to be more difficult than the Major Combat phase. Furthermore, he notes that "though many of us in Washington knew that the future of post-Saddam Iraq was uncertain and risky, we did not expect it to be as violent and challenging as it turned out to be" (Meyers 2009, 242).

On 9 April 2003, Phase III of Operation Iraqi Freedom, Major Combat Operations, had ended (Meyers 2009, 249). The disheartened Republican Guard and Special Republican Guard soldiers and officers returned to their homes, defeated (Fontenot 2005, 378). Furthermore, Fontenot (2005, 378) argues that even more astounding than the rapid collapse of resistance, Baghdad remained standing. Most of the infrastructure—utilities, water, power, and sewage—remained in the condition left by the failed Ba'athist regime (Fontenot 2005, 378). However, Wright and Reese (2009, 9) point out that many perceived the US forces' swift and stunning victory over Iraqi dictator Saddam Hussein as the end of hostilities.

On 1 May 2003, President George W. Bush reinforced this feeling when, standing aboard the USS Abraham Lincoln under a large banner proclaiming "Mission Accomplished," he congratulated soldiers, sailors, airmen, and marines for their success in Operation Iraqi Freedom

[23] For a detailed discussion of the military plans to defend Iraq See Kevin M. Woods, et al. (2006).

(OIF) (Wright and Reese 2008, 9; Herspring 2008, 134). On 9 May 2003, President Bush appointed L. Paul Bremer as Presidential Envoy to Iraq with full authority over all U.S. government personnel, activities, and funds there (Bremer 2006, 12). Bremer arrived in Baghdad on 12 May to assume leadership of the Coalition Provisional Authority (Herspring 2008, 135).[24] His chain of command ran thru Secretary of Defense Donald Rumsfeld and straight to the President (Bremer 2006, 4).

When Bremer arrived in Iraq, he found that a "chaotic power vacuum prevailed" (Bremer 2006, 9). Wright and Reese (2008, 19) point out that few, if any, in the White House, Department of Defense, or the US Army had foreseen the impending struggle to create a new Iraq in place of the Saddam regime as the greatest challenge of OIF. Bremer (2006, 26) suggests that the Pentagon assumed that most of the Iraqi army of 715,000 men, 400,000 of whom were Shiite conscripts would surrender en masse. Furthermore, units would remain intact and so the soldiers could be employed on ambitious reconstruction projects that paid a steady living wage (Bremer 2006, 26). However, the Iraqi Army had "self-demobilized" (Bremer 2006, 27; Herspring 2008, 147).

Wright and Reese (2008, 25) argue that the institutions held together by Saddam's reign had collapsed along with his regime, furthering Iraq's descent into chaos. Furthermore, he points out that long suppressed political, religious, and ethnic conflicts bubbled violently to the surface. As a result, Wright and Reese (2008, 25) and Allawi (2007, 90) suggest that some Iraqis began to sense an absence of authority in their country and saw an opportunity to pursue their violent goals. Bremer observes that "at the end of World War II, the United States and the other Allies had clearly defeated the countries we had occupied. The entire nations of Germany and Japan had been mobilized to fight long, relentless wars. They had lost and surrendered" (Bremer 2006, 37). However, in Iraq the US defeated a hated regime, not a country (Bremer 2006, 37).

At the end of May 2003, approximately 160,000 Coalition troops had spread out across Iraq to begin post-conflict efforts (Wright and Reese 2008, 28). However, Bremer (2006, 357) notes that the security situation in several areas of Iraq was becoming grave. He argues that "the speed of the war had left us with little time to plan for the ensuring social upheaval, while decades of chronic mismanagement had left Iraq's economy devastated" (Bremer 2006, 37). In the meantime, Wright and Reese (2008, 27) and Delong and Lukeman (2007, 121) point out that

[24] For a detailed discussion of the Coalition Provisional Authority, see Dobbins, et al. (2007).

General Franks had told his subordinate leaders during a 16 April visit to Baghdad to be prepared to conduct an abbreviated period of stability operations and then to redeploy the majority of their forces out of Iraq by September 2003. Furthermore, Franks recommended that reinforcements still stateside would not be needed to stabilize Iraq (Wright and Reese 2008, 27; Herspring 2008, 157). This proved to be a grave error, as violence in Iraq soon escalated.

On 16 May, Bremer issued CPA Order No. 1, "De-Baathification of Iraqi Society," which removed from public life those Iraqis who had held the top four ranks in the Baath Party (Wright and Reese 2008, 26; Herspring 2008, 143). On 23 May, Bremer issued CPA Order No. 2, "Dissolution of Entities," which disbanded all of Saddam's military and intelligence institutions (Bremer 2006, 57; DeLong and Lukeman 2007, 123). Tyner argues that "Not only did the decree turn 400,000 former soldiers against the US-led coalition, if one considers the average size of an Iraqi household; the decision directly affected the lives of 2.4 million people – roughly 10 percent of Iraq's population" (Tyner 2006, 79). Bremer admits that the order wasn't perfect (Bremer 2006, 42). However, he received his instruction on De-Baathification of Iraqi Society from Under Secretary of Defense Douglas Feith (Bremer 2006, 39). Herspring (2008, 145) notes that the CIA warned that by night fall on 16 May 2003 upwards of 30,000 to 50,000 Baathist would be driven underground.

Many Coalition military figures believed at the time that these important CPA decisions created a pool of disaffected and unemployed Sunni Arabs from which a growing insurgency could later recruit (Wright and Reese 2008, 26). The Baath Party boasted that it had over two million members.[25] However, many people had to join the party because it was the only way to get a government job (Bremer 2006, 39). Now they were out of work. By mid-summer 2003, even many senior Iraqi leaders observed that the security vacuum resulted in lawlessness and street crime that had never been experienced before (Herspring 2008, 151). They pointed out that people needed more protection (Bremer 2006, 48). Bremer admits that "the message to most Iraqis was that the Coalition can't provide them the most basic government service: security. We have become the worst of all things – an ineffective occupier" (Bremer 2006, 358).

On 19 August 2003, a massive truck bomb was driven into the UN compound in Baghdad and detonated. The suicide bomber took the lives of 22 people, including Chief UN Envoy Sergio Vieira de Mello (Wright and Reese 2008, 32). By November the Coalition recorded

[25] For a detailed discussion of the Baath Party, see Allawi (2007, Chapter 8).

approximately 1,000 insurgent attacks throughout Iraq. Herspring (2008, 158) points out that despite the increased violence, Rumsfeld insisted that the policy for improving security was on track. Although Coalition forces capture Saddam Hussein on 13 December 2003, violence continued to rise (Wright and Reese 2008, 36). As a result of the increase in bombings, other countries in the international community decided to reconsider sending troops to aid reconstruction in Iraq because of the questionable security conditions (Wright and Reese 2008, 387).

Violence in Iraq continued to increase through the remainder of 2003 and into 2004 (Allawi 2007, 169). By June 2004, Bremer (2006, 378) notes that security remained a big problem. The insurgency in Baghdad and in the Sunni Triangle was intensifying as the terrorists and insurgents saw Iraq moving to democracy. On 8 June, UN Security Council Resolution 1546 recognized the Iraqi interim government (Bremer 2006, 382). However, on 16 July General John Abizaid (the new Commander of CENTCOM) acknowledged in a press conference that he believed Coalition forces faced "a classical guerrilla-type campaign" (Wright and Reese 2008, 32; Herspring 2008, 158). Wright and Reese (2008, 32) argue that until that date, none of the Coalition's senior commanders had offered this kind of overt recognition that an insurgency appeared to be forming in Iraq.

An insurgency in post-conflict Iraq was unexpected. Bremer acknowledged that "we planned for the wrong contingency" (Bremer 2006, 26). Metz (2010b, 1) points out that the administration assumed that the Iraqi bureaucracy and security forces—both military and police—would return to work once they had new leadership untainted by association with Hussein. However, American policymakers did not understand how fragile and precarious Iraq was after decades of pathological rule (Metz 2010b, 1). According to Bremer (2006, 393) the insurgents proved that they were better organized and more difficult to penetrate than we had expected.

On 30 January 2005, millions of Iraqis voted for the first time. The voter turnout was approximately 60 percent of eligible voters, although a large majority of Sunni Arabs boycotted the elections. Wright and Reese (2008, 46) highlight the astonishing percentage considering the very real dangers facing the voters. Metz (2010b, 40) argues that, from 2004 to 2006 the Iraq conflict changed from a predominantly anti-American insurgency to one dominated by sectarian

war stoked by outside extremists. Furthermore, he asserts that by 2006, the insurgents had seized the strategic initiative and changed the nature of the conflict (Metz 2010b, 40).

Moreover, Metz (May 2010b, 5) suggests that the essential nature of the conflict changed, thus requiring a strategic shift to allow the United States and the Iraqi government to recapture the initiative. He argues that the most important contextual component framing the strategic shift of 2007 was the decaying security situation in Iraq itself. Violence was endemic and paralyzing. Large parts of the country had minimal or no government control (Metz 2010b, 13). Thus, the Bush administration made the decision to increase the number of troops in Iraq, commonly called "the surge."

Full implementation of the revised strategy began just as General Petraeus replaced General Casey as the overall American military commander in Iraq (Metz 2010b, 37). Metz (2010b, 37) points out that General Petraeus and U.S. Ambassador Ryan Crocker developed ceasefires with key Iraqi individuals and organizations. Moreover, they capitalized on growing rifts within the insurgency, particularly between al Qaeda and Sunni Arab tribal leaders. U.S. forces secured the approaches to and "belts" around Baghdad and established a permanent presence in neighborhoods in conflict (Metz May 2010b, 38). As a result, security in Baghdad and other violent areas improved dramatically. By the end of the summer of 2007, overall violence, particularly sectarian attacks, was in decline (Metz 2010b, 38).

The security situation in Iraq continued to improve between 2007 and 2009 and the newly elected President, Barack Obama called for a withdrawal of all American troops by December 2011.[26] This announcement was in line with the previously agreed upon 2009 U.S.-Iraq Security Agreement, which called for the complete withdrawal of U.S. forces (Katzman 2011, 25). Katzman (2011, 24) points out that overall levels of violence are 90% lower than they were at the height of the sectarian conflict of 2006-2007. However, he suggests continuing violence has caused some experts to question whether stability will continue after all U.S. forces are to depart at the end of 2011 (Katzman 2011, 24).

On 12 January 2011, Kuwait's prime minister visited Iraq and on 16 February 2011, the Iraqi Prime minister visited Kuwait. Katzman (2011, 24) points out that these key exchanges took place after the U.N. Security Council on December 15, 2010, had passed three resolutions

[26] For a detailed discussion of the situation in Iraq from 2006 to 2009, see the Quarterly Report and Semiannual Report to the United States Congress from the Special Inspector General for Iraq Reconstruction. July 30, 2009.

(1956, 1957, and 1958). They had the net effect of lifting most Saddam-era sanctions on Iraq, although the U.N.-run reparations payments process remains intact (and which deducts 5 percent from Iraq's total oil revenues). Furthermore, Katzman suggests that if Iraq's major factions have permanently shifted away from supporting violence and toward peaceful political competition, "some might argue that U.S. funding has contributed to that transition." In contrast, he points out that others might argue that the change was caused by numerous factors, such as the improvement of security and rejection of foreign terrorist influence and that it is virtually impossible to assess the contribution made by U.S. assistance (Katzman 2011, 25).

The size of U.S. forces in Iraq decreased from a high of 170,000 in 2008, to 47,000 in June 2011. Officially the formal end of the U.S. combat mission in Iraq was on 31 August 2010 (Katzman 2011, Summary). The State Department will transition to the lead U.S. agency in Iraq, on 1 January 2012. Katzman (2011, 25) points out that there is a vibrant U.S. debate over whether the State Department, using security contractors, will be able to fully secure its personnel in Iraq if all U.S. forces were to depart.

6.4 Private Contractors in Operations Iraqi Freedom.

The invasion and subsequent occupation of Iraq reveals the confluence of many transnational practices, although two in particular stand out: the use and movement of private military corporations (warriors) and the deployment of private contract labor (workers) (Tyner 2006, 69). Furthermore, Tyner (2006, 69) asserts that "combined, the transnational movement of warriors and workers demonstrates the business of war and why Occupied Iraq signifies a neoliberal, privatized and ultimately de-humanized space." Orszag (2008, 1) contends that, contractors play a substantial role in supporting the United States' current military, reconstruction, and diplomatic operations in Iraq, accounting for a significant portion of the manpower and spending for those activities.

Contractors provided a wide range of products and services in Iraq. Most contractual obligations were for logistics support, construction, petroleum products, or food. Orszag (2008, 1) points out, personnel counts are rough approximations, however, the Congressional Budget Office estimated that as of early 2008 at least 190,000 contractor personnel, including subcontractors, were working on U.S.-funded contracts in the Iraq theater. About 20 percent (38,700) of all contractor personnel working in Iraq are U.S. citizens. Furthermore, roughly 40

percent of the contractor population were local nationals (70,500) (defined as citizens of the country in which they are working), or third-country nationals (81,000) (who are neither U.S. citizens nor local nationals) (Orszag 2008, 8).

Schwartz (2011, 3) points out that third-country nationals are generally cheaper than U.S. coalition contractors. Furthermore, local nationals are generally the least expensive to hire, in part because there are no large overhead costs related to transportation, housing, and sustenance. As of 2011, there are 100 private security contractors (PSCs) registered and licensed with the Iraq Ministry of Interior (72 Iraqi companies and 28 foreign companies). Schwartz (2001, 3) explains that these PSCs employ more than 30,000 armed employees working for a variety of government and private sector clients. Therefore, the U.S. government is just one of many entities—including foreign governments, international organizations, and private industry—that employ private security contractors in Afghanistan and Iraq (Schwartz 2011, 1).

By far, the Department of Defense employed the most contractors in Iraq. For example, in 2004 over 24,000 contractors provided services to Army forces in Southwest Asia (OIF and OEF) under LOGCAP. Wright and Reese (2008, 497) observe that the overall LOGCAP budget for the first 16 months of OIF exceeded $5.2 billion. Moreover, Wright and Reese (2008, 497) assert that the 24,000 LOGCAP employees freed critical military manpower for other duties and lessened the number of combat service support Soldiers needed to support operations. Ricks (2006, 371) points out that in 2003-4 alone, over $750 million was spent on private security. This paid for about 6,000 private security contractors.

The Department of State also employed a significant number of contractors in Iraq, many of whom are armed security contractors. As of late 2007, about 40 percent of the approximately 6,700 contractor personnel working for DOS in Iraq were providing armed security (Orszag 2008, 8). Once the Department of State assumes the leading role in Iraq, it is estimated that the number of security contractors working for State will increase to approximately 5,500, with some 1,500 providing personal security for diplomatic movements and an additional 4,000 providing perimeter security (Schwartz 2011, 11).

Contractors in Iraq are exposed to the ongoing violence as they work alongside the military. Although the number of private contractors killed or wounded is not well documented, Stiglitz (2008, 51) estimates that by 2006 1,000 contractors have been killed and more than 12,000 wounded. The best documented were the four American contractors who worked for the

Blackwater security company who were killed on 31 March 2004, by insurgents in Fallujah, Iraq (Wright and Reese 2008, 38).

However, other private contractors were subject to attack amidst the violence in Iraq. Wright and Reese (2008, 387) note that in November 2003, the US Army Corps of Engineers and Kellogg, Brown, and Root (KBR) suspended oil industry work in northern Iraq after a KBR engineer was killed. Likewise, Washington Group International, a large engineering firm, halted work just north of Baghdad after two subcontracted workers were killed. By mid-December 2003, 18 contractors had been killed in Iraq, and contractor deaths from attacks temporarily halted at least two reconstruction projects. As a result, many private firms spent as much as 15 percent of contract costs on either obtaining security providers or purchasing needed equipment for security purposes or both. Many reconstruction projects had been canceled outright due to the poor security (Wright and Reese 2008, 387).

However, Wright and Reese (2008, 526) argue that unquestionably private contractors have performed their roles with great skill and often with bravery on the complex and dangerous noncontiguous battlefield in Iraq. For example, Vinnell Corporation provided planners, operations officers, unit trainers, and translators to support the creation of the Iraqi National Army (Wright and Reese 2008, 435; Dobbins, Jones, Runkle, and Mohandas 2009, 63). Furthermore, the US Army Corps of Engineers (USACE) awarded contracts to five civilian firms to collect, sort (usable stocks were provided to the Iraqi Security Forces), and destroy huge stockpiles, of unexploded ordnance (estimated to total some 400,000 tons). Some 2,600 contractors destroyed over 450,000 tons of munitions in between 2003 and 2006 (Wright and Reese 2008, 518).

Elsea, Schwartz, and Nakamura (2008, 40) also contend that that from 1 January to 18 September 2007, armed private security contractors working for the Department of State conducted 3,073 missions in which American diplomats or visitors were escorted outside of the secured Green Zone in Baghdad. Of those missions, there were 77 incidents involving PSC personnel using weapons. Furthermore, over 30 Blackwater employees were killed while performing their security duties. However, no American diplomat or visitor was killed or seriously injured while being escorted by Blackwater (Elsea, Schwartz, and Nakamura 2008, 40).

In the final months of the Operation Iraqi Freedom, the Department of Defense reports that approximately 64,253 contractors worked in Iraq from January to April 2011 (DASD April

2011, 2). Of these, 18,393 were U.S. citizens; 36,523 are third country nationals; and 9,337 are Iraq nationals. The main categories of contracts in Iraq and the percentages of contractors working on them are: base support (38,966/60.6 percent); security (10,448/16.3 percent); translator / interpreter (4,099/6.4 percent); logistics / maintenance (324/.5 percent); construction (858/1.3 percent); transportation (1,229/1.9 percent); communication support (495/.8 percent); training (599/.9 percent); and other (7,235/11.2 percent).

According to a DoD (DASD April 2011, 2) as of mid-2011, the military to contractor ratio in Iraq is now 1 to 1.25 (based on 51.5K military). Furthermore, the overall number of contractors is expected to decrease as more bases are closed and the size of the US military in Iraq continues to decrease. However, as the military transitions with the Department of State, it is estimated that the post-2011 contract support requires approximately 17,000 to 22,000 contractors to remain after 31 December 2011 to support the Office of Security Cooperation-Iraq (DASD April 2011, 3).

Schooner and Swan (2010, 16-18) assert that contractors have long and proudly served the US alongside the military. However, they are making the ultimate sacrifice. They point out that in Iraq more than 1,487 contractors have died since 2003. Furthermore, more than 44,000 contractors have been injured, of whom more than 16,000 were seriously wounded. In 2003, contractor deaths represented only 4 percent of all fatalities in Iraq and Afghanistan. From 2004 to 2007, that number rose to 27 percent. From 2008 to the second quarter of 2010, contractor fatalities accounted for 40 percent of the combined death toll. In the first two quarters of 2010 alone, contractor deaths represented more than half—53 percent—of all fatalities. Schooner and Swan conclude that this point bears emphasis: since January 2010, more contractors have died in Iraq and Afghanistan than U.S. military soldiers. The next step it is to review the focused questions.

What was the number of PMCs used during the intervention and what was their role?

What was the number of PMCs used during the intervention and what was their role? These questions attempt to determine how many private security contractors participated in the intervention. To answer these questions, two factors are examined: actual numbers of private security contractors (where available) and the amount of DOD procurement funds spent on contracts during the intervention (following Krahmann).

Between 2003 and 2011, there was ratio a 1:1 ratio of U.S. military troops to private contractors in Iraq. In 2007, the DoD began maintaining an official count of PMCs in Iraq. At the height of the surge, there were 162,428 contractors in Iraq. Over 26,000 were U.S. citizens, over 62,000 were third country nations, and over 70,000 were Iraqi nationals. Of this number, over 7,704 were private security contractors. The private contractors played a role in construction, base support, translators, security, transportation, and communication support.

Likewise, at the height of the surge, the DoD spent over $387 billion on procurement contracts in 2008. Total DoD procurement represents 65 percent of the total DoD outlays. Of this total, close to $150 billion was spent on service contracts. Service contracts represent 38 percent of the total procurement purchases for DoD.

What Laws, regulation, and controls were in place at the time of Operation Iraqi Freedom?

What laws, regulation, and controls were in place regarding PMCs? This question specifies the limitations or constraints of US bureaucratic controls on the private security industry. The more limitations and constraints, the less private security industry is used. The fewer limitations and constraints, the more private security is used. At the beginning of Operation Iraqi Freedom, there were few legal constraints baring the use of private military contractors or private security contractors.

In essence, the Department of Defense entered Operation Iraqi Freedom using the same procedures for contracting as it had used during Operation Joint Endeavor. However, several new laws and regulations governed the activities of private contractors in Iraq. Elsea, Schwartz, and Nakamura (2008, 14) point out that contractors in Iraq operate under three levels of legal authority: the international order of the laws and usages of war and resolutions of the United Nations Security Council; U.S. law; and Iraqi law, including orders of the CPA that have not been superseded. On 23 June 2003, the Coalition Provisional Authority issued Order 17 (CPA 17), Status of the Coalition, Foreign Liaison Missions, Their Personnel and Contractors (USD AT&L 2008, 1). The order requires that contractors operating in Iraq understand and comply with U.S., host nation, and third country national laws; treaties and international agreements;

U.S. regulations, directives, instructions, policies; and orders, standing operating procedures, and policies issued by the combatant and / or operational commanders.[27]

Elsea, Schwartz, and Nakamura (2008, 19) observe that contractors to U.S. agencies or any of the multinational forces or diplomatic entities in Iraq operate under the law of the government of Iraq, which includes orders issued by the CPA prior to the hand-over of sovereignty to the Iraqi Interim Government that have not been rescinded or superseded. Furthermore, they point out that contractors must be licensed by the Iraqi Ministry of Interior to possess and carry firearms and military weapons. Other restrictions include that contractors must be registered to operate in Iraq; contractors are prohibited from conducting law enforcement activities; contractors are prohibited from joining Coalition and Multi-national Forces in combat operations except in self-defense; and contractors are subject to all applicable criminal, administrative, commercial and civil laws and regulations (Elsea, Schwartz, and Nakamura 2008, 19).

U.S. contractor personnel and other U.S. civilian employees in Iraq may be subject to prosecution in U.S. courts under the Military Extraterritorial Jurisdiction Act of 2000 (MEJA), the Uniform Code of Military Justice (UCMJ), the Special Maritime and Territorial Jurisdiction (SMTJ) of the United States (Elsea, Schwartz, and Nakamura 2008, 20). The Department of Justice (DOJ) is responsible for prosecuting crimes in this category (Elsea, et. al. 2008, 20-21). Elsea, Schwartz, and Nakamura (2008) point out that courts in Iraq do not have jurisdiction to prosecute contractors without the permission of the relevant member country of the Multi-National Forces in Iraq. Furthermore, she notes that some contractors, including those with the State Department, may remain outside the jurisdiction of U.S. courts, civil or military, for improper conduct in Iraq (Elsea, Schwartz, and Nakamura 2008).

In section 854 of the FY 2007 National Defense Authorization Act, the US Congress directed the Department of Defense to provide centralized policy, management, and oversight for contracts and contractor performance in support of declared wars as well as contingency and post-conflict operations (USD AT&L 2008, 1). In October 2006, the Department of Defense established the Office of the ADUSD (Program Support) under the Under Secretary of Defense for Acquisition, Technology and Logistics to implement the program. Thus, since 2006 the U.S.

[27] For a detailed discussion of the legal status and issues of private security contractors, see Jones, Elsea and Serafino (2010).

Central Command (USCENTCOM) provided information detailing DoD-funded contractors in the theater of operations in support of U.S. military forces in Iraq on a quarterly basis.

Furthermore, the DOD developed the Synchronized Pre-deployment and Operational Tracker (SPOT), a web-based software system to manage, track and report the visibility of contractors authorized to accompany U.S. forces overseas (USD AT&L 2010, 13). In their report to Congress, the Under Secretary for Acquisition Technology and Logistics (2010, 13) acknowledged that the main challenges to gaining full accountability of contractors supporting contingency operations are obstacles faced when registering local nationals in the SPOT database. However, the DoD recognizes that contractors represent a large proportion of the workforce supporting contingency operations. Therefore the Department acknowledged that they need to determine where the Joint Force is most dependent on contractor support. With that information the DoD can better understand the range and depth of contractor capabilities needed to support the Joint Force and guide the development of future contingency planning efforts (USD AT&L 2010, 18). The report concludes that the success of our warfighters is directly affected by the success of the management of our contracting workforce.

However, as the number of private contractors increased, Congress became increasingly concerned with the oversight of contractors in Iraq. Consequently, Congress directed DoD to improve its oversight of contractors in Iraq. Furthermore, Congress enacted several laws that placed private contractors under the jurisdiction of the DoD to enhance legal controls. Yet, as the limitations and constraints on private contractors increased, the number of private contractors supporting Operation Iraqi Freedom did not decrease.

What was the duration of the intervention?

What was the duration of the conflict? This question examines the length of the intervention, specifically from the beginning of the deployment of forces until a drawdown in the conflict area, where applicable. This is important since military forces require logistics support, technical advice, and security even when not directly involved in combat. The expected duration of the intervention is contrasted with the actual duration to analyze decision makers planning assumptions. The duration of the intervention should reveal if decision maker's choices in private security changed during the conflict based on expected price or a change in price.

Fontenot (2005, xiii) and Ricks (2006, 4) suggest that even though combat operations in Iraq began on 17 March 2003, preparations for Operation IRAQI FREEDOM began on 1 March

1991—the day after the first Gulf War ended. While it may be true, the United States did not begin deploying major combat units to the Gulf Region until late 2002. For the purposes of this study, November 2002 is used as the beginning of Operation Iraqi Freedom. From November 2002 through March 2003, the U.S. military staged military forces in Kuwait, in preparation for major combat operations (Myers 2009, 230).

President Bush made the decision to launch OIF on 16 March 2003, and issued an ultimatum to Saddam Hussein, with a 48-hour deadline on the 17th. Combat operations began on 19 March 2003 (20 March in Iraq) with airstrikes targeting Saddam Hussein and his military commanders (Myers 2009, 239). Coalition ground forces breached the berm along the Kuwait-Iraq border on the 20 March and began their march up-country (Fontenot 2005, 86). Within 21 days, Iraqi military resistance crumbled and U.S. ground forces occupied Baghdad. On 9 April 2003, Phase III of Operation Iraqi Freedom, Major Combat Operations, had ended (Meyers 2009, 249; Keegan 2005, 1) .

However, Phase IV of Operation Iraqi Freedom (the Post-Hostility Operation) proved to be more difficult than the Major Combat phase (Myers 2009, 249). For the next eight years, the U.S. and its Coalition partners would attempt to stabilize Iraq in order to support the reconstruction efforts and build a new government of Iraq in the face of a violent insurgency. On 31 December 2011, Operation Iraqi Freedom ended. All U.S. combat troops departed Iraq, thus turning over security and stability to the sovereign Iraqi government. In essence, the duration of U.S. military operations in Iraq lasted just over nine years.

The duration of the military phase of Operation Iraqi Freedom lasted nine years and one month. The initial military deployments to Kuwait began in November 2002. The DoD is on schedule to hand over the military phase of Operation Iraqi Freedom to the Department of State on 1 January 2012. The Bush administration and senior military planners expected that the duration of the military phase of Operation Iraqi Freedom would end in 2003. This expectation was based on the assumption that DoD would hand over responsibility for Iraq to the Coalition Provision Authority. However, a full blown insurgency, the level of violence, and the scale of the reconstruction efforts required the DoD to maintain responsibility for operations in Iraq. Therefore, DoD required private military contractors to assist in providing logistics over a much longer period of time than expected. Furthermore, the massive reconstruction effort in Iraq, undertaken by the CPA, required a significant use of private contractors. Furthermore, the

overwhelming level of violence required the DoD, DoS, and private military contractors to increase their use of private security contractors to protect their personnel and projects. As a result, there was a significant increase in the use of private military contractors and private security contractors in Operation Iraqi Freedom.

What was the scope of the intervention?

What was the scope of the conflict? Specifically, how many troops were used during the intervention? This question attempts to determine if the scale of the intervention results in an increased use of the private security industry. As military logistics support became privatized, there should be an increase in private military support in relation to the number of troops used during a conflict. Additionally, how the military forces were staged for the intervention, employed during the conflict, arrayed at the end of hostilities should reveal the scope of the conflict. For example, if the military force deployed from one main base, limited their intervention to a small portion of the rival's country, and redeployed through one main base, we should see a smaller use of the private security industry in support.

In March 2003, the Coalition Ground Forces Component had a total of 183,000 soldiers and Marines, including 41,000 British troops, 4,000 Australians, a battalion of Spanish soldiers numbering 1,300, and a Polish contingent of special operations forces poised along the Iraqi border (Myers 2009, 240). Myers notes that there were forty countries providing contingents of troops, naval units, or logistics support to Operation Iraqi Freedom.[28] In addition, there were over 2,000 Abrams tanks, Stryker fighting vehicles, and Bradley fighting vehicles; 43,000 other vehicles, including more than 18,000 Humvees; more than 700 aircraft; and more than 140,000 metric tons of equipment and supplies staged in Kuwait for OIF (Stiglitz 2008, 44). Opposing the Coalition was over 400,000 Iraqi soldiers equipped with thousands of tanks, armored vehicles, and artillery pieces (Keegan 2005, 3).

By the summer of 2004, NATO contributed 90 troops (from 10 countries) in support of the Iraqi Security Forces training mission (Wright and Reese 2008, 454). Furthermore, in January 2005, NATO donated 30,000 vehicles and weapons to Iraq. In particular, Hungary donated 77 T-72 tanks and 36 BMP armored personnel carriers while Greece provided the ships to transport equipment (Wright, et. al. 2008, 455). Many other countries provided training

[28] See Keegan (2005), Appendix 1.

support including; Jordan, the United Arab Emirates (UAE), Spain, the United Kingdom, Australia, Poland, Canada, Sweden, Denmark, Austria, Finland, the Czech Republic, Germany, Hungary, Slovenia, Slovakia, Singapore, and Belgium (Wright and Reese 2008, 456).

Bremer (2006, 4) points out that Iraq is the size of California with a population of more than 30 million people. Iraq covers over 438,000 square kilometers and has more than 3,600 kilometers of borders (CIA Fact book). The distance from Kuwait to Baghdad is over 350 miles. Iraq shares its borders with Saudi Arabia, Jordon, Syria, Turkey, Iran, and Kuwait. The four largest cities in Iraq are Baghdad, the capital, with a population over 5 million, Mosul with a population over 1 million, Erbil with a population over 1 million, and Basra with a population of 923,000. Shiites make up 60 percent of the population, Kurds make up 20 percent of the population, and Sunni Arabs make up 19 percent of the population (Bremer 2006, 4).

When Operation Iraqi Freedom began in March 2003, the tempo of advance maintained by US and Coalition troops from Kuwait to Baghdad was unprecedented, covering a distance of over 350 miles in less than 14 days of combat (Wright and Reese 2008, 497). Fontenot (2005, 333) points out that the line of supply supporting V (US) Corps extended across a greater distance than the historic Red Ball Express (during World War II), and fuel demands exceeded the highest requirement the Red Ball Express had to meet. As the war progressed, the scope and scale of the logistic effort was truly monumental, Joint logistics functioned across a span of over 8,000 miles (Fontenot 2005, 411). Wright and Reese (2008, 506) suggest that the scope and complexity of planning and monitoring all Coalition military and civilian road movements in a country the size of California should not be underestimated. For example, on an average day, approximately 130 to 140 major logistical convoys were on the roads in Iraq, consisting of roughly 1,800 to 2,200 trucks and around 4,000 personnel (Wright and Reese 2008, 506).

Since 2003, the United States has established over 500 hundred of military bases across Iraq (France-Presse 2011). Several were massive compounds that appeared to be designed for long-term U.S. occupation (Stiglitz 2008, 167). The largest included Al-Asad, the main supply base for troops in Al Anbar Province, about 120 miles west of Baghdad (housing about 17,000 troops and contractors); Al-Balad (also known as Camp Anaconda), which is the U.S. military's main air transportation and supply hub (housing about 22,500 troops and several thousand contractors); Camp Taji (which has the largest shopping center in Iraq); and Al-Talil, in the south, a key stopping point for supply convoys from Kuwait (Stiglitz 2008, 167). Wright and

Reese (2008, 500) note that LSA Anaconda became a city in its own right, providing support to 13,000 Soldiers in more than 200 buildings surrounded by 13 miles of fences and 49 observation towers for base defense. The base included fuel farms, ammo bunkers, an airfield, a water treatment plant, and an asphalt plant among many other fixed facilities.

In a recent report to Congress, Belasco (2011, 1) found that the cumulative total appropriated from 2001 to 2011 for war operations, diplomatic operations, and medical care for Iraq and Afghan war veterans was $1.283 trillion. Of this total, 63 percent is for Iraq, 35 percent for Afghanistan, 2 percent for enhanced security and ½ percent is unallocated. Of the $1.283 trillion, $806 billion was allocated for Iraq (Belasco 2011, 1). Stiglitz (2008, 6) asserts that the In 2007, the Iraq war cost $400,000 per troop (Stiglitz 2008, 6). In contrast, during World War II the cost per troop was less than $100,000 in 2007 dollars.

Much of the cost of Operation Iraqi Freedom occurred after 2003. Wright (2008, 369) observes that the reconstruction mission in Iraq was far more ambitious than those in Bosnia and Kosovo. He suggests that the Coalition Provision Authority confronted the equivalent of both a defeated Germany in 1945 and a failed Soviet Union in 1989. Thus, such a massive undertaking consumed a great deal more resources and effort than expected (Belasco 2011, 3). Allawi (2007, 459) acknowledges that the billions of dollars the Americans had spent went unrecognized and unappreciated by most Iraqis.

The U.S. and its Coalition partners deployed close to 160,000 troops for Operation Iraqi Freedom. The U.S. maintained over 130,000 troops in Iraq during 2003 and 2004. By 2008, the number of U.S. troops in Iraq increased to over 157,000 during the surge. By 2010, the troop levels began to decrease and in 2011, the U.S. troop level in Iraq was close to 43,000. When the DoS assumes the lead role in Iraq in 2011, U.S. military presence is projected to be less than 100 troops. The majority of the U.S. forces in Iraq deployed to and staged out of Kuwait.

After the conclusion of combat phase of Operation Iraqi Freedom, the U.S. forces occupied bases throughout Iraq, each requiring base support and sustainment. Private military companies provided the logistic support to these base camps. Furthermore, the significant level of violence during the insurgency required private security companies to assist in protecting critical infrastructure, reconstruction projects, and diplomats. The massive reconstruction effort undertaken by the CPA also required private contractors to help rebuild Iraq's infrastructure. As

a result, there was a significant increase in the use of private contractors during the post-conflict phase of Operation Iraqi Freedom.

Other conflicts or deployments?

What other conflicts or deployments were ongoing? How many troops participating in other conflicts or deployments? This question examines the larger role of the military in international affairs. The commitment of military forces to areas other than the intervention limits their availability to participate. The result should be an increased demand for the private security industry to fill the gap in available military assets.

Fontenot (2005, xv) asserts that not since World War II have the armed forces of the United States operated in multiple theaters of war while simultaneously conducting security operations and support operations in several other theaters. During Operation Iraqi Freedom the US also conducted operations in Afghanistan (Operation Enduring Freedom), the Philippines (Operation Enduring Freedom-Philippines), and homeland defense (Operation Noble Eagle). Furthermore, the US maintained its commitments to NATO in Bosnia and Kosovo. Likewise, the US maintained its presence in Korea.

On 9 June 2003, 369,000 soldiers were deployed overseas, of which about 140,000 were from the Reserve Components (Fontenot 2005, xv). Moreover, these soldiers were serving in 120 countries, conducting missions ranging from combat to deterring adversaries, to training the nation's allies, to protecting the nation's vital assets. By 2008, there were over 10,000 soldiers forward-stationed in Korea, Europe, and other overseas locations. Furthermore, another 27,000 are in military occupational specialties that support the current war efforts or other contingency missions, but are not located within Iraq or Afghanistan (Bonds 2010, xii).

In addition, Bonds (2010, 22) points out that the Army provided 11,000 active-duty soldiers for theater air and missile defense forces and national missile defense, and another 4,000 soldiers for a global response force (or GRF—formerly known as the "division ready brigade" or DRB). On average 3,000 soldiers are unavailable for deployment due to injuries incurred during training. Bonds' concludes that there are 210,000 soldiers available at any one time to deploy either to Iraq or Afghanistan. The average number of soldiers deployed (to Iraq and Afghanistan) from March 2003 through April 2009 was 117,000. However, the number increased during the surge in Iraq when the average monthly number of active-duty soldiers from September 2005 through April 2009 was 128,000.

In 2002, the U.S. military had troops committed to Afghanistan, the Philippines, Bosnia, Kosovo, NATO, and Korea. Of the total force, 230,484 troops were stationed outside of the continental United States. Over 101,000 troops were supporting NATO, close to 80,000 were stationed in Korea, just over 3,000 were in Bosnia, 2,800 were in Kosovo, and slightly over 19,000 were in either Afghanistan or the Philippines. This represents 16 percent of the total force deployed. Likewise, this represents over 20 percent of the available ground forces in the DoD. As a result, the U.S. increased its use of private military contractors to fill the shortfalls in logistics and security during Operation Iraqi Freedom.

What was the size of the military?

What was the size of the military? This question examines the total military forces available during the time of the intervention. This includes all branches of the US military, reserve forces, and National Guard forces. Although the active military force is immediately available for policy makers must chose to activate reserve and National Guard forces. Following Singer and Avant, as the overall size the military decreases there should be an increase in the reliance on the private security industry. Additionally, this question should highlight the opportunity costs or shifts in supply that policy makers face when choosing between the private security industry and national armies.

At the end of September 2002, the total US active military was slightly more than 1,400,000. This all volunteer force included ground combat forces from the US Army and US Marine Corps, totaling 486,542 and 173,733 respectively (US DOD SAID, 2002). Additionally, the US DOD employed 670,166 government civilians that supported a wide range of functions for the active military. In essence, the US military was at its lowest troop size since the end of the Cold War.

Over the course of operations in Iraq, the U.S. DOD sought authority to increase Army end strength (Cordesman 2006, 321). Between 2002 and 2008, the Army active-duty end strength increased from 487,000 to an active-duty strength of 557,000 soldiers (Bonds 2010, 26). The Army active-duty numbers include approximately 541,000 active component soldiers and nearly 16,000 Army Reserve soldiers on Title 10 active guard and reserve (AGR) status as of December 2008 (Bonds 2010, 3). From March 2003 through December 2008, the Army maintained an average of 117,000 active-duty soldiers in Operation Iraqi Freedom and Operation

Enduring Freedom (Afghanistan) combined. However, the combined average increased to 128,000 active-duty soldiers between September 2005 through December 2008 (Bonds 2010, x).

By 2008, approximately 373,000 soldiers in the Army had served in OIF or OEF. Over 121,000 deployed for one year, 173,000 for two years, and 79,000 for three years or longer (Bonds 2010, x). The Army provided the bulk of U.S. troops to OIF and OEF: over 1 million troop years as of December 2008. These deployments represent 52 percent of the total troop deployments within the area of operations, and over 75 percent of the deployments on the ground in Iraq, Kuwait, and Afghanistan in 2008 (Bonds 2010, xii).

In 2002, the total active U.S. military was 1,411,634 personnel. Of this number, 660,275 were U.S. Army and U.S. Marine Corps ground troops. This represents a 50 percent decrease in the size of the U.S. military from a high of 2,130,299 in 1989. As a result, the U.S. military increased its use of private military contractors during Operation Iraqi Freedom to fill shortfalls in logistics and security. However, by 2010, the total active force increased to 1,430,985 personnel. The U.S. Army increased to 566,045 and the U.S. Marine Corps increased to 202,441. Although the U.S. military ground forces increased, there was no decrease in the use of private contractors in Operation Iraqi Freedom.

Percentage of military outlays in the national budget?

What percentage of the national budget did military outlays represent? This question looks at the US military defense budget at the time of the intervention from the standpoint of total dollars spent on defense, percentage of GDP, and percentage of the US budget outlays dedicated to defense. As the size of the defense budget decreases over time, we should see an increased reliance on the private security industry due to decreased spending on national armies. This should illustrate a shift in the supply curve away from higher costs of personnel for national armies.

By 2003, and the beginning of Operation Iraqi Freedom, the US defense budget was increasing from its 1996 low. The US government allocated over $404 billion for defense spending (US OBM 2003). This amounted to 3.7 percent of the US GDP or 18.7 percent of budget outlays. In a matter of seven years since the intervention in Bosnia, US military spending increased by over $140 billion per year. This amounted to a .5 percent increase in GDP allocation or a 1 percent increase of total US budget outlays.

In comparison, the US government allocated over $1.4 trillion for human resource spending (US OBM 2003). This amounted to 13.1 percent of GDP or 65.6 percent of total budget outlays. US spending on domestic programs increase by almost $500 billion in seven years. This amounted to a 1 percent increase in GDP or 4.6 percent of budget outlays.

In turn, the US Department of Defense spent over $248 billion on contracts in 2003, increasing to over $379 billion by 2009 (US DOD SAID 2003). This amounted to 63.9 percent and 59.6 percent (respectively) of the total DOD outlays. The spending on service contracts amounted to over $104 billion or 41.9 percent of the total percent of DOD contracts in 2003 and over $160 billion or 42.4 percent of the total DOD contracts in 2009. Service contracts differ from product contracts or research and development contracts.

Between 1996 and 2003, the U.S. increased its defense spending by 18.7 percent of the total budget outlays. By 2003 total U.S. outlays for defense were $404 billion. In short, this amounted to an increase of $140 billion per year or a .5 percent increase in GDP allocations. By 2010, total U.S. outlays for defense were over $666 billion. If the use of private contractors increases when defense budgets are reduced, it follows that if outlays for defense increase then the use of private contractors should decrease. However, this did not occur during between 2003 and 2010. In fact, the use of private contractors increased dramatically.

Choices other than using the private security industry?

Did policy makers or military leaders have choices other than using the private security industry? If so, did they use them? This questions look beyond the availability of national armies and military budgets to determine if policy makers had other choices available other than the private security industry. For example, increased participation of allies, coalition partners, and host nations should provide an alternative to the private security industry.

The US and its Coalition partners relied heavily on private military contractors to augment shortfalls in logistic support, assist in training the Iraqi security forces, and assist in providing security. After the seizure of Baghdad and the fall of the Saddam regime, the security environment in Iraq was non-permissive. The level of violence exceeded the Coalition's capacity to provide a secure environment for the Iraqi population and the reconstruction effort. In essence, the demand for security exceeded the supply of forces able to provide that security.

When Bremer dissolved Saddam's army as well as the security and intelligence services a security vacuum existed until the establishment of a new Iraqi security service (Bremer 2006, 54)

(Allawi 2007, 147). General Myers (2009, 259) asserts that the overall objective was simple; increase the size and competency of the Iraq forces so they could eventually replace U.S. and Coalition forces. He that this military initiative, in combination with political, economic, and security progress, would lead to a stable Iraq (Myers 2009, 259). However, as Metz (2010b, 4) and Cordesman (2006) point out creating a new ISF proved harder than expected. With few effective Iraqi security forces and not enough Americans to secure all of the country around the clock, the insurgency spread and mutated (Metz 2010b, 4; Herspring 2008, 186).

Myers (2009, 260) acknowledged that training the Iraqi security forces stretched the Army and Marine Corps to their limits as they provided the more than one thousand midcareer officers and NCOs that the effort demanded. However, by early 2005 the numbers and capability of Iraqi Security Forces began to climb, reflecting the vastly increased size of the train and equip mission. By January 2005, over 125,000 Iraqi security forces were trained and operational. This included the Iraqi Army, Navy, Air Force, National and Local Police, and Border Security Troops (Wright and Reese 2008, 454; Cordesman 2006). Furthermore, with 6,300 Iraqi Highway Police trained, their ability to secure roadways freed up Coalition troops to perform other security missions (Wright and Reese 2008, 467). Likewise, with the creation of the Department of Border Enforcement (DBE), 32,000 Iraqis' were able to secure their borders.

The U.S. used allies, coalition partners, and host nation resources during Operation Iraqi Freedom. Although many countries provided troops and resources to Iraq, they limited the number of troops on the ground (with the exception of Great Britain)(Cordesman 2006, 324). Additionally, the U.S. activated more than 28,000 Army National Guard and 13,000 Army Reserve soldiers. Likewise, the U.S. Marine Corps activated over 5,000 Marine Corps Reservist. Furthermore, Iraqi security forces did not significantly participate in the operation until 2006. Once the size of the Iraqi security forces increased, the U.S. military began to reduce the number of troops in Iraq. Therefore, the use of allies, coalition partners and DoD Reserve and National guard forces did not result in a decrease of private contractors. However, as the size of the Iraqi security forces increased, the number of private contractors decreased.

6.5 Private security supply-demand behavior: an assessment

Given the characteristics presented above, how does the outcome correspond with the theory's prediction? The proposed theory predicts that given a situation where the demand for a

service increases, in this case support services and security services, the military should choose to contract for private military support service to fill shortfalls in capability. In the case of Operation Iraqi Freedom, private security supply-demand behavior is evident.

Any analysis of supply-demand behavior must start with an examination of the initial conditions prior to Operation Iraqi Freedom. The previous chapter provided a detailed review of the downsizing of the US military in the 1990s. Although the reduction in the size of the military placed strains on the US military intervention in Bosnia, the full impact of the downsizing revealed itself during Operation Iraqi Freedom. Fontenot (2005, 5) points out that the absence of any clear threat encouraged the perception that it was prudent to reduce the armed forces. Furthermore, he asserts that strategic ambiguity made it difficult for decision makers and the citizenry to reach a consensus on just what the military requirements should be.

The reduction in the size of the military during the 1990s resulted in enormous pressure on the America's military in general, and the US Army in particular, to man, equip, train, field, and sustain an effective force in a new security environment (Fontenot 2005, 5). According to Fontenot (2005, 5) these conditions compelled the Army to man, equip, and train a military force capable of providing for the common defense, but "on the cheap." Metz (2010a, 5) suggests that because the military adapted quickly to multinational peacekeeping in Bosnia without extensive preparation, the Bush administration concluded that it could adapt equally well to stabilization and counterinsurgency in Iraq. Furthermore, he points out that the military's personnel, training, equipment, and force structure—accompanied by its often-stated reputation as the world's greatest military—led the civilian leaders to believe that the overthrow of Saddam would be a simple affair (Metz 2010a, xv).

The Bush administration's pre-war assumptions are directly related to the size of the force envisioned for the intervention (Herspring 2008, 90). Metz (2010a, 51) asserts that the administration deliberately did little to prepare for extensive stabilization and reconstruction activities, precisely because its political opponents would have used this to derail the intervention. Furthermore, the Bush administration deliberately downplayed the potential costs and risks of war with Iraq (Herspring 2008). However, Army Chief of Staff General Eric Shinseki testified before Congress in February 2003 that occupation duty in Iraq would require several hundred thousand troops (Myers 2009, 234; Herspring 2008, 123).

The historical record demonstrated that to achieve stability in the initial years after military occupation there should be twenty occupying troops for every one thousand people in the country occupied (Bremer 2006, 10; Herspring 2008). According to Bremer (2006 10) with a population of 25 million in Iraq, it would require 500,000 troops on the ground to meet a standard of 20 troops per thousand residents. However, General Franks planned for an invasion force of 122,000 US troops and 21,000 British troops (Meyers 2009, 223; Herspring 2008, 131). Likewise, most UN Peacekeeping missions routinely deployed one international police officer for every ten soldiers. This equates to about 65,000 police needed for Iraq. Therefore, the Department of State proposed sending 5,000 armed civilian police to Iraq once the fighting stopped (Dobbins, Jones, Runkle, and Mohandas 2009, 73). Yet only 1,500 civilian police were authorized by the White House.

Despite the evidence, senior members of the Bush administration defended their position based on the assumption that in Iraq, post-conflict would present a benign environment. For instance, Deputy Secretary Wolfowitz argued that "the Iraqi people will greet us as liberators, and that they will help us to keep requirements down and we can say with reasonable confidence that the notion of hundreds of thousands of American troops is way off the mark" (Metz 2010a, 17; Herspring 2008, 124). Likewise, Secretary Rumsfeld asserted that "the idea that it would take several hundred thousand U.S. forces I think is far from the mark" (Metz 2010a, 17). Furthermore, Vice-President Cheney stated that "I really do believe that we will be greeted as liberators and to suggest that we need several hundred thousand troops there after military operations cease, after the conflict ends, I don't think is accurate. I think that's an overstatement" (Metz 2010a, 18).

However, as Metz (2010a, xv) points out, when policymakers expanded their goals to include regime replacement—much harder than regime removal—the military would have advised that the force structure were inadequate for that task. The number of forces required to conduct the operation was the single most important variable around which all of the variants of the plan revolved (Fontenot 2005, 46). In spite of this, the force requirement was based on regime removal (Herspring 2008). Therefore, the military plan developed for Operation Iraqi Freedom and the forces allocated for the operation only focused on the defeat of the Iraqi military and the removal of the Saddam regime.

Metz (2010a, 51) argues that had military leaders believed that removing Saddam Hussein by force would lead to protracted instability and conflict in Iraq, they might have begun preparing for this earlier than they did. However, he asserts that even this would have been difficult—perhaps even impossible—under the forceful leadership of Secretary Rumsfeld. In fact, Rumsfeld suppressed the Department of State's study on a post-Saddam Iraq conducted between October 2001 and April 2003 (Herspring 2005). Metz (2010a, 51) believes that the Secretary was convinced that the military's tendency to assume and prepare for the worst outcome was an impediment to action. General Myers argues that "We always understood that there would be a fine line between too many troops and too few. And we were mindful of the strain on overall armed services force levels that sending more troops to Iraq would bring" (Myers 2009, 255). Furthermore, Myers (2009, 250) states that "How many would be needed and for how long was hard to judge, and at this point the U.S. government still believed that a significant number of those troops would come from friendly Arab or Muslim nations that had not contributed forces to the major combat operation, but might be willing to help with the stability and reconstruction phase." In hindsight, Ricks (2006, 115) suggests that the incompleteness of the plan helped create the conditions for the difficult occupation.

In early May 2003, the Bush Administration's assumptions seemed to be correct. Myers (2009, 252) points out that, early on, the security situation was relatively quiet from a military standpoint. With just over 160,000 Coalition troops in Iraq the overall security situation seemed fairly stable. However, by the time he arrived in Baghdad, Bremer faced a deteriorating security situation (Herspring 2008, 135). Even though there were over 40,000 Coalition troops in Baghdad, law and order essentially broke down (Delong and Lukeman 2007, 117). Bremer (2006, 17) points out that in Baghdad, unchecked looting was out of control; therefore establishing law and order was the first priority. Furthermore, he observes that there were around 14,000 Iraqi policemen missing from their posts in Baghdad; that is to say, most of them just disappeared, like the Army (Bremer 2006, 19).

This is in stark contrast to the pre-war assumptions. Wright and Reese (2008, 429) and Herspring (2008) contended that even though planners within the US Government envisioned the large-scale surrender of Iraqi Army units during the invasion they assumed that police and justice systems would remain intact. Thus, the Coalition would adopt an advisory role to facilitate bureaucracies that would continue to function in a post-Saddam Iraq. Military plans also called

for the rapid handover of responsibility for rebuilding security forces to Iraqi civilians (Wright and Reese 2008, 429). However, this assumption proved to be false. From Ricks' (2006, 115) perspective, the US military fought the battle it wanted to fight, mistakenly believing it would be the only battle it faced.

As a result, military leaders faced the choice of securing key tactical objectives or establishing law and order. US military planners in Iraq concluded that a force of 300,000 was required to accomplish its mission in light of the security situation (Ricks 2006, 120). In view of that fact, Bremer requested that CENTCOM send more military police to Baghdad to help restore order (Bremer 2006, 32; Delong and Lukeman 2007, 117). Concerned over the security situation, Bremer states that he brought up issue of troops levels to Rumsfeld and President Bush. Herspring (2008, 135) credits Bremer for halting the planned withdrawal of US troops from Iraq. Although Bush stated that Secretary Powell was attempting to enlist more troops from friendly countries, there was no increase to the troop levels in Iraq until 2007 (Bremer 2006, 12).

It was clear by the summer of 2006 that the United States was not on track for victory as President Bush described it (Metz 2010b, 16). Violence continued to increase as Coalition forces fought the post-conflict insurgency. Bonds (2010, iii) asserts that the demand for active-duty soldiers in Iraq would have exceeded supply under the Army's normal deployment policies. Therefore, the Army took several actions to increase supply: it increased the overall size of the active component; it reassigned soldiers from other missions to the pool of soldiers rotating to Iraq and Afghanistan; and it greatly increased the rate at which soldiers rotate to and from the wars (Bonds 2010, iii; Herspring 2008, 187). However, the Army retains very limited unutilized capacity to deploy additional active-duty soldiers beyond the current troop levels.

Pressure on the ground forces increased as soon as the insurgency emerged. Neither the Army nor the Marine Corps were configured for large-scale, protracted counterinsurgency (Metz 2010b, 12). Metz (2010) argues that a decade of defense transformation had created a force optimized for intense, short-duration operations, not stabilization or counterinsurgency. Therefore, the DoD sought authority to increase Army end strength. Army active-duty end strength increased from 487,000 in FY2002 to an active-duty strength of 557,000 soldiers in December 2008 (Bonds 2010, iii). However, as Cebrowski points out, Post-World War II history shows that adding, manning, training, and equipping a new active Army brigade will take up to two years (Bicksler 2003, 314).

At the same time, Bush announced a troop increase in Iraq. However, the main problem was, about the size of the troop increase be. Senior military advisors recommended a surge of two Army brigade combat teams and two Marine battalions, with most of the new forces dedicated to training and advising the Iraqis. President Bush approved the maximum increase that the Pentagon said it could support—five brigades—and, importantly, using them for population security rather than simply training and advising (Metz 2010b, 19). The results, as mentioned earlier, were a significant reduction in violence by late 2007. This set the conditions for the Obama administration to end combat operations by 2010 and to withdraw all military forces by 2011.

In summary, supply-demand behavior is evident during Operations Iraqi Freedom. Military planners and decision makers entered Operation Iraqi Freedom with a force significantly reduced from that used in Operation Desert Storm. The decision to begin Operation Iraqi Freedom with a smaller force resulted in a higher demand for troops during the post-conflict phase when violence increased. Furthermore, the initial demand for an expeditionary logistics force capability was low due to the lower number of troops deployed. However the demand for logistics increased as military forces spread out across Iraq to establish security.

The decision not to increase the size of the military force in Iraq once the insurgency began resulted in a higher demand for forces to maintain security. Military planners, State Department planners, and contractors conducting reconstruction substituted private security contractors for US military forces to provide security. Likewise, military planners substituted private military contractors for military logistics forces for logistic support. Without host-nation support from Iraq, the number of private contractors increased.

6.6 Summary and Analysis

Hypothesis one states that when military outlays decrease there is an increase in the use of private military contractors. In 2003, there was an increase in military outlays (that continued through 2011) and the U.S. military increased its use of private military and security companies in Iraq. The evidence from the case study provides a mixed outcome that suggests the hypothesis under review is not supported.

Hypothesis two asserts that when the size of a national military decreases there is an increase need in the use of private military contractors. In 2003, there was a decrease in the size

of the military and the U.S. military increased its use of private military and security companies in Iraq. In 2008, there was an increase in the size of the military and the U.S. military continued to increase its use of private military and security companies in Iraq. The evidence from the case study provides a mixed outcome.

Hypothesis three contends that when the number of a military disputes, military engagements, and militarized conflicts increases there is an increase in the use of private security contractors. In 2003, 16 percent of the total U.S military force was deployed outside the continental United States and the U.S. military increased its use of private military and security companies in Iraq. Between 2004 and 2010, 35 percent of the total U.S military force was deployed outside the continental United States and the U.S. military continued to increase its use of private military and security companies in Iraq. The evidence from the case study provides suggests the hypothesis under review is supported.

Hypothesis four states that for every year increase in the duration of a military conflict there is an increase in the use of private security contractors. Operation Iraqi Freedom lasted nine years and one month (or 109 months) and the U.S. military used private military and security companies in Iraq from 2003 onward than they did during Operation Desert Shield and Desert Storm. Approximately 150,000 private contractors were used during Operation Iraqi Freedom. The evidence from the case study suggests the hypothesis under review is supported.

Hypothesis five states that when there is a decrease in bureaucratic controls and regulations there is an increase in the use of private security. By 2003, Congressional oversight on the use of private contractors began to increase and the U.S. military nonetheless continued to increase its use of private military and security companies in Iraq. Bureaucratic controls and regulations increased from 2003 through 2010 therefore the evidence from the cases suggests that the hypothesis under review is not supported.

The case study provides an alternative explanation on the use of PMCs. First, when there is a force cap placed on the size of the military force there is an increase in the use of private security. In 2003, a force cap, of 160,000 U.S. soldiers, required military leaders to reduce the number of combat forces and logistic forces into theater. When military leaders realized that insufficient forces were available to accomplish all of the critical tasks they choose to substituted combat forces and military logistic support for private military companies. The evidence the case suggests that this alternative hypothesis is supported.

Second, when there is no host nation supporting the intervention there is an increase in the use of private security. During Operation Iraqi Freedom, the U.S. military did not have host-nation support from the Iraqis'. As a result, the U.S. military relied on private military companies for support. The evidence from the case suggests that this alternative hypothesis is supported.

Third, when the security environment is non-permissive there is an increase in private security. During Operation Iraqi Freedom the US and Coalition forces operated in a non-permissive security environment while preparing conducting counter insurgency and reconstruction operations. Moreover the U.S and Coalition forces allocated a majority of their troops for force protection. As a result, the U.S. military significantly increased their use of private military companies and private security companies for support. The evidence from the case suggests that this alternative hypothesis is supported.

Metz (2010a, 1) suggests that forcibly removing Saddam Hussein from power was arguably the most momentous act of the Bush administration, its effects profound and far-reaching. Furthermore, as Wright and Reese (2008, 489) point out, no army in the world could dream of conducting and sustaining two military campaigns in some of the world's most remote and inhospitable regions, more than 10,000 miles from their home territory in 2003. Fontenot (2005, 23) claims that the Bush Doctrine fundamentally changed the way the United States would ensure its national security. He points out that the shift from the previous "shape, respond, prepare" posture to the new "assure, dissuade, deter forward, and decisively defeat" had fundamental implications for how the armed forces, and the Army in particular, mans, trains, and equips itself. As a result, the new strategy requires a fully expeditionary force capable of rapidly imposing America's will on hostile foreign soil and then maintaining a robust presence to ensure the change is lasting (Fontenot 2005, 23).

Most of the U.S. military was always located in the United States, and most of the forces deployed abroad were usually located in garrisons and overseas bases that had been maintained since the end of World War II in Europe, Japan, and Korea (Bicksler 2003, 310). Therefore, in the event of hostilities, US military strategy called for a reinforcement of these forward garrisons. Yet, Operation Iraqi Freedom was different. Wright (2008, 475) points out that the US military was well trained to defeat Saddam's army and ensure that the dictator's regime fell so they could assist with the installation of a new representative government in Iraq. However, he asserts that when Coalition military forces entered Iraq in March 2003 they did not come

prepared to rebuild, in a literal sense, the country they hoped to liberate. Furthermore, Wright and Reese (2008, 475) and Delong and Lukeman (2007, 117) argue that no American military leader entered Iraq in 2003 expecting to train, equip, or advise the entire body of security forces in a new Iraq on a multiyear basis, and to do so in the midst of an intense insurgency.

Military force allocated to Operation Iraqi Freedom achieved its objective of defeating the Iraqi military and deposing Saddam Hussein from power (Ricks 2006, 135; Delong and Lukeman 2007). However, the scope and duration of the post-conflict reconstruction phase exceeded the capabilities of the Coalition forces in Iraq. With few alternatives, it is understandable that the Bush administration and military leaders turned to the private contracting industry to provide security and logistic support. In essence, the US military just was not large enough to rebuild a nation the size of California while securing a population of over 3 million people.

Operation Iraqi Freedom is a most likely case for examining private security supply-demand behavior. The empirical results meet two demanding tests. As in the Bosnia case, the ratio of contractors to US soldiers was 1:1. Given the scale of OIF, with 160,000 US troops eventually deployed this is remarkable. As in the previous case, there are a number of overlapping reasons for the extensive use of PMCs and PSCs in OIF. The force cap imposed on military planners forced them to substitute military force structure for private contractors. Military planners determined that the mission they were assigned in Iraq required more ground troops than they were allotted. However, once the force cap was imposed, planners' assigned military forces to the core military tasks of defeating first the Iraqi Army and then the insurgency. Therefore, military planners used private contractors for logistic support, training assistance, reconstruction, and security. Second, the security environment in Iraq was non-permissive. The US and Coalition forces conducted operations in an environment where they did not have adequate troops for force protection. The Iraqi security forces dissolved in 2003 and were not capable of providing security until 2006. Third, in Iraq, there was no host nation. The US and Coalition forces conducted a regime change in Iraq and established a new Iraqi government. As a result, the US and its NATO partners conducted Operation Iraqi Freedom as an external hostile force without the support of the host nation.

Chapter 7 - Cross Case Analysis and Findings

7.1 Introduction

The purpose of this chapter is to conduct a cross case analysis of the three cases examined in the previous chapters. First, is to review the findings from the three cases. Second, is to determine if the findings support the proposed hypothesis. Third, is to examine alternative explanations for the outcomes. Some tentative conclusions based on the case studies follow.

7.2 Findings from the case studies

How many PMCs were used during the intervention? During Operation Desert Shield and Desert Storm, the U.S. military hired approximately 10,000 private contractors to provide logistics and transportation. The majority of the contractors were third country nationals. There is no evidence that any private military company provided support to US or Coalition force. During Operation Joint Endeavor, the U.S. military and U.S. Department of State hired over 14,000 private military contractors to provide logistics, construction, and training in Bosnia. The US relied primarily on private military companies during Operation Joint Endeavor. During Operation Iraqi Freedom, the U.S. military and U.S. Department of State hired on average 130,000-160,000 private military and private security contractors to provide logistics, construction, and security in Iraq. The private companies hired U.S. civilians, third country nationals, and Iraqi nationals as contractors. The US relied primarily on private military companies and private security companies during Operation Iraqi Freedom. Thus, between 1990 and 2010 the U.S. increased its use of private contractors to support military interventions.

What was the percentage of the national budget did military outlays represent? In 1990, the U.S. spent over $299 billion for defense, which represents 23.1 percent of the national budget. In 1995, the U.S. spent over $272 billion for defense, which represents 17.1 percent of the national budget. In 2003, the U.S. spent over $404 billion for defense, which was 18 percent of the national budget. However, by 2010 the U.S. spent over $693 billion for defense, which represented 19.3 percent of the national budget. Thus, between 1990 and 2010 the U.S. defense spending decreased until 1998 then increased steadily until 2010.

What was the size of the military? In 1990, the total U.S. active military force was 2,046,144 personnel. The U.S. military ground force consisted of 732,403 Army personnel and

196,652 Marine Corps personnel, totaling 929,055. In addition, the DoD employed 1,034,152 civilians. By 1995, the total U.S. active military force was 1,518,224 personnel. The U.S. military ground force consisted of 508,559 Army personnel and 174,639 Marine Corps personnel, totaling 683,198. In addition the DoD employed 820,189 civilians.

In 2002, the total U.S. active military force was 1,411,634 personnel. The U.S. military ground force consisted of 486,542 Army personnel and 173,733 Marine Corps personnel, totaling 660,275. The DoD also employed 670,166 civilians. However, by 2010, the total U.S. active military force was 1,430,985 personnel. The U.S. military ground force consisted of 566,045 Army personnel and 202,441 Marine Corps personnel, totaling 768,486. In addition the DoD employed 772,601 civilians. From 1990 to 2002 the size of the U.S. active military force decreased by 37 percent. However, from 2002 to 2010 the size of the U.S active military force increased by 2 percent. From 1990 to 2002 the size of the DoD civilian workforce decreased by 56 percent. However, from 2002 to 2010 the size of the DoD civilian workforce increased by 14 percent.

What other conflicts or deployments were ongoing? In 1990, the U.S. military had troops committed to NATO and Korea. Of the total active force, 609,422 troops were stationed outside of the continental United States. This represents 30 percent of the total force deployed. Over 291,000 troops were supporting NATO and over 87,000 were stationed in Korea.

In 1995, the U.S. military had troops committed to NATO, Korea and Haiti. Of the total force, 238,064 troops were stationed outside of the continental United States. This represents 15 percent of the total force deployed. Over 109,000 troops were supporting NATO, over 75,000 troops were stationed in Korea, and 1,600 troops were still in Haiti supporting Operation Uphold Democracy.

In 2002, the U.S. military had troops committed to Afghanistan, the Philippines, Bosnia, Kosovo, NATO, and Korea. Of the total force, 230,484 troops were stationed outside of the continental United States. This represents 16 percent of the total force deployed. Over 101,000 troops were supporting NATO, close to 80,000 were stationed in Korea, just over 3,000 were in Bosnia, 2,800 were in Kosovo, and slightly over 19,000 were in either Afghanistan or the Philippines.

By 2010, the U.S. military had troops committed to Afghanistan, the Philippines, Kosovo, NATO, Korea, and Iraq. Of the total force, 297,286 were stationed outside of the

continental United States, 96,200 were deployed to Iraq, and 105,900 were deployed to Afghanistan. Thus, 499,386 military personnel were deployed or stationed outside of the continental United States. This represents 35 percent of the total force deployed. From 1990 to 2002, the size of the U.S. military forces deployed outside of the United States decreased from 30 percent of the total force to 16 percent of the total force. However, after the start of Operation Iraqi Freedom, the size of the U.S. military force deployed outside of the United States increased to 35 percent.

What was the duration of the conflict? The total duration of Operation Desert Shield and Desert Storm was one year and five months (or 17 months). The total duration of Operation Joint Endeavor was nine years (or 108 months). The total duration of Operation Iraqi Freedom was nine years and one month (or 109 months).

What was the scope of the conflict? The United States initially deployed 250,000 troops for Operation Desert Shield; however, in November 1990 the U.S. deployed 250,000 additional troops to conduct Operation Desert Storm. For Operation Joint Endeavor, the United States initially deployed 16,200 troops. However in 1996 the U.S. reduced the size of the military force to 8,300. The United States deployed 160,000 troops for the initial stage of Operation Iraqi Freedom. However, the number of troops decreased to 130,000 in late 2003. Eventually, the number of troops increased to 157,000 by 2008 to support the surge. By 2010, the number of troops in Iraq decreased to 93,000, with a further decrease to 43,000 in 2011.

What laws, regulation, and controls were in place regarding PMCs? In 1990, U.S. Army regulations governed the use of private contractors on the battlefield. The regulation encouraged the U.S. Army to contract for host nation support as a substitute for military forces. By 1995, the DoD formalized the use of LOGCAP which allowed the use of private military companies to provide support to the U.S. military. The Department of State regulated private military companies working in a foreign country using the Arms Control Act (AECA) and the International Traffic in Arms Regulation. By 2003, Congressional oversight on the use of private contractors began to increase. As the number of private contractors increased – particularly private security contractors – Congress passed several laws that formalized the legal controls over contractors supporting the U.S. military and the Department of State. Table 7.1 summarizes the findings.

Table 7.1 Summary of Findings from the Case Studies

	Operation Desert Shield and Desert Storm	Operation Joint Endeavor	Operation Iraqi Freedom
Use of PMC/PSC	Host nation contracts: ~10,000	PMC: ~14,000	PMC: ~150,000 PSC: ~10,000
When military outlays decrease there is an increase in the use of private security.	No decrease in military outlays; Host nation contracts	Decrease in military outlays; Use of PMC	Increase in military outlays: Use of PMC and PSC
When the size of a national military decreases there is an increase in the use of private military security.	No decrease in the size of the national military; Host nation contracts	Decrease in the size of the national military: Use of PMC	Decrease in the size of the military (2003), Modest increase in the size of the military (2006); Use of PMC and PSC
When the number of a military disputes, military engagements and militarized conflicts increases there is an increase in the use of private security internationally.	Supported NATO and Korea, Desert Storm the only conflict; Host nation contracts	Supported NATO and Korea, Joint Endeavor the only conflict; Use of PMC	Supported NATO, Korea, Bosnia, Kosovo, Operation Enduring Freedom, and Iraqi Freedom; Use of PMC and PSC
When the duration of a military conflict increases there is an increase in the use of private security.	Duration of intervention: ~ 13 months; Host nation contracts	Duration of intervention: ~9 years; Use of PMC	Duration of intervention: ~9 years
When there is a decrease in bureaucratic controls and regulations there is an increase in the use of private security.	Minimal bureaucratic controls; Host nation contracts	Minimal bureaucratic controls; Use of PMC	Minimal to moderate bureaucratic controls; Use of PMC and PSC
When there is a force cap placed on the size of the military force there is an increase in the use of private security	Initial force cap: 250,000, final force cap: 500,000; Host nation contracts	Initial force cap: 15,000, subsequent force cap: 6,900; Use of PMC	Initial force cap: ~130,000, subsequent force cap: ~160,000; Use of PMC and PSC
When the security environment is non-permissive there is an increase in private security	Permissive (in Saudi Arabia); Host nation contracts	Semi-Permissive; Use of PMC	Non-Permissive; Use of PMC and PSC

7.3 Hypotheses

Hypothesis one states that when military outlays decrease there is an increase in the use of private military contractors. In 1990, there was no decrease in military outlays; however, the U.S. military still required the use of host-nation private contractors in Saudi Arabia. In 1995, there was a decrease in military outlays and the U.S. military used private military companies in Bosnia. In 2003, there was an increase in military outlays (that continued through 2011) and the U.S. military increased its use of private military and security companies in Iraq. The evidence from the case studies provides a mixed outcome that suggests the hypothesis under review is not supported.

It may be that military spending has to be relatively high to sustain a post-conflict stabilization operation the size of that accounted in Iraq. The moderate increase after 2002 was therefore not sufficient, because overall levels of spending were too low to sustain the operation,

regardless of the slight increase in the spending. In other words, there may be a threshold of total military spending that is needed to support a mission like Iraq, and even though military spending rose after 2002, it did not approach this threshold. The difference is between the degree of change in military spending and the level of spending. This means that change may be in the appropriate direction but the level may not have reached a sufficient level yet.

Hypothesis two asserts that when the size of a national military decreases there is an increase need in the use of private military contractors. In 1990, there was no decrease in the size of the military; however, the U.S. military still required the use of host-nation private contractors in Saudi Arabia. In 1995, there was a decrease in the size of the military and the U.S. military used private military companies in Bosnia. In 2003, there was a decrease in the size of the military and the U.S. military increased its use of private military and security companies in Iraq. In 2008, there was an increase in the size of the military and the U.S. military continued to increase its use of private military and security companies in Iraq. The evidence from the case studies provides a mixed outcome that suggests the hypothesis under review is supported in two of the three cases.

Hypothesis three contends that when the number of a military disputes, military engagements, and militarized conflicts increases there is an increase in the use of private security contractors. In 1990, 30 percent of the total U.S military force was deployed outside the continental United States. During Operation Desert Shield and Desert Storm the U.S. military required the use of host-nation private contractors in Saudi Arabia. In 1995, 15 percent of the total U.S military force was deployed outside the continental United States and the U.S. military used private military companies in Bosnia. In 2003, 16 percent of the total U.S military force was deployed outside the continental United States and the U.S. military increased its use of private military and security companies in Iraq. Between 2004 and 2010, 35 percent of the total U.S military force was deployed outside the continental United States and the U.S. military continued to increase its use of private military and security companies in Iraq. The evidence from the case studies provides a mixed outcome that suggests the hypothesis under review may not be supported until at least 30 percent of the total force is committed to other military disputes, military engagements or militarized conflicts.

Hypothesis four states that when the duration of a military conflict increases there is an increase in the use of private security contractors. Operation Desert Shield and Desert Storm

lasted one year and five months (or 17 months) and the U.S. military required the use of host-nation private contractors in Saudi Arabia. Approximately 10,000 private contractors were used in Operation Desert Shield and Desert Storm. Operation Joint Endeavor lasted nine years (or 108 months) and the U.S. military used private military companies in Bosnia. Approximately 14,000 private contractors were used in Operation Joint Endeavor. Operation Iraqi Freedom lasted nine years and one month (or 109 months) and the U.S. military increased its use of private military and security companies in Iraq. Approximately 150,000 private contractors were used during Operation Iraqi Freedom. The evidence from the cases suggests the hypothesis under review is supported.

Hypothesis five states that when there is a decrease in bureaucratic controls and regulations there is an increase in the use of private security. In 1990, U.S. Army regulations encouraged the U.S. Army to contract for host nation support as a substitute for military forces and the U.S. military required the use of host-nation private contractors in Saudi Arabia. By 1995, the DoD formalized the use of LOGCAP and the Department of State regulated private military companies working in a foreign country and the U.S. military used private military companies in Bosnia. By 2003, Congressional oversight on the use of private contractors began to increase and the U.S. military increased its use of private military and security companies in Iraq. Bureaucratic controls and regulations increased from 1990 through 2010 therefore the evidence from the cases provided a mixed outcome that suggests the hypothesis under review The evidence from the case studies provides a mixed outcome that suggests the hypothesis under review is supported in two of the three cases.

7.4 Alternative explanations

The three case studies provide alternative explanations on the use of PMCs. First, when there is a force cap placed on the size of the military force there is an increase in the use of private security. In 1990, the initial force cap, of 250,000 U.S soldiers, required military leaders to choose between deploying combat forces or logistics force into theater. When they choose to deploy combat soldiers first, military leaders substituted military logistics support for host nation private. In 1995, a force cap, of 15,000 U.S. soldiers, required military leaders to choose between deploying combat forces or logistics force into theater. When they choose to deploy combat soldiers, military leaders substituted military logistic support for private military companies. In

2003, a force cap, of 160,000 U.S. soldiers, required military leaders to reduce the number of combat forces and logistic forces into theater. When military leaders realized that insufficient forces were available to accomplish all of the critical tasks they choose to substituted combat forces and military logistic support for private military companies. The evidence from all three cases suggests that this alternative hypothesis is supported.

Second, when there is no host nation supporting the intervention there is an increase in the use of private security. During Operation Desert Shield and Desert Storm, the U.S. military enjoyed significant host-nation support from Saudi Arabia. King Fahd provided significant financial support, transportation, food, housing, equipment, and labor. During Operation Joint Endeavor, the U.S. military did not have host-nation support from the Bosnian Serbs, the Bosnian Croats, or the Bosniak. As a result, the U.S. military relied on private military companies for support. During Operation Iraqi Freedom, the U.S. military did not have host-nation support from the Iraqis'. As a result, the U.S. military relied on private military companies for support. The evidence from all three cases suggests that this alternative hypothesis is supported.

Third, when the security environment is non-permissive there is an increase in private security. During Operation Desert Shield and Desert Storm the US and Coalition forces operated in a permissive security environment while preparing for combat operations. As a result the U.S and Coalition forces did not have to allocate troops for force protection; the 110,000 man Saudi security forces provided the security. During Operation Joint Endeavor the US and NATO forces operated in a semi-permissive security environment while preparing conducting peace enforcement operations. Moreover, the U.S and Coalition forces allocated a portion of their troops for force protection. As a result, the U.S. military relied on private military companies for support. During Operation Iraqi Freedom the US and Coalition forces operated in a non-permissive security environment while preparing conducting counter insurgency and reconstruction operations. Moreover, the U.S and Coalition forces allocated a majority of their troops for force protection. As a result, the U.S. military significantly increased its use of private military companies and private security companies for support. The evidence from all three cases suggests that this alternative hypothesis is supported. Table 7.2 summarizes the findings.

Table 7.2 Summary of Hypotheses Findings

	Operation Desert Shield and Desert Storm	Operation Joint Endeavor	Operation Iraqi Freedom	Hypotheses Outcome
Use of PMC/PSC	Host nation contracts: ~10,000	PMC: ~14,000	PMC: ~150,000 PSC: ~10,000	
When military outlays decrease there is an increase in the use of private security.	Not Applicable	Supported	Mixed Outcome	Mixed Outcome
When the size of a national military decreases there is an increase in the use of private military security.	Not Applicable	Supported	Supported (Initially) Not Supported (after 2006)	Mixed Outcome
When the number of a military disputes, military engagements and militarized conflicts increases there is an increase in the use of private security internationally.	Not Supported	Not supported	Supported	Mixed Outcome
When the duration of a military conflict increases there is an increase in the use of private security.	Supported	Supported	Supported	Supported
When there is a decrease in bureaucratic controls and regulations there is an increase in the use of private security.	Supported	Supported	Supported	Supported
When there is a force cap placed on the size of the military force there is an increase in the use of private security	Supported	Supported	Supported	Supported
When there is no host nation supporting the intervention there is an increase in the use of private security	Supported	Supported	Supported	Supported
When the security environment is non-permissive there is an increase in private security	Supported	Supported	Supported	Supported

7.5 Summary and Tentative conclusion

The evidence from the case studies suggests that only two of the five hypotheses under review demonstrate unambiguously significant results. When the duration of a military conflict increases there is an increase in the use of private security contractors. The evidence from the three cases suggests that the duration of the military conflict is a significant indicator of an increased use of private military contractors. The evidence from the three cases suggests that decreased bureaucratic controls are a significant indicator of an increased use of private military contractors. The remaining hypotheses are support by, at best, with mixed results.

Three of the alternative hypotheses are supported by empirical evidence. When there is a force cap placed on the size of the military force there is an increase in the use of private

security. When there is no host nation supporting the intervention there is an increase in the use of private security. When the security environment is non-permissive there is an increase in private security.

It may be that decreases in military spending, decreases in the size of the military, increased conflict, and increased bureaucratic controls are necessary conditions for the increased use of private military contractors. However, these explanations may not be sufficient to fully understand when the United States is more likely to use private contractors during military interventions.

It is possible that a more nuanced theory emerges from a review of the cases studies that helps explain the increased use of private military and private security contractors by the United States. It seems that when political leaders place force caps on the number of military forces allocated to a military intervention, then it is more likely that there is an increased use of private military contractors. Furthermore, when the U.S. is involved in a military intervention where there is no host nation, then it is more likely that there is an increased use of private military contractors. Likewise, when the U.S. is involved in a military intervention where the security environment is non-permissive, then it is more like that that there is an increased use of private military contractors. Moreover, when the duration of the military intervention increases, then it is more like that that there is an increased use of private military contractors. Table 7.3 summarizes the findings from the alternative explanations.

This chapter conducted a cross case analysis of the three cases examined in the previous chapters. After a review and comparison of the findings from each case, it examined how well that the findings held up against the theory. Based on the results, I determined that several alternative explanations emerged from the cases that may improve our understanding of private security supply and demand behavior. As a result, these additional independent variables will be included in the quantitative analysis chapter to determine their statistical significance.

Chapter 8 - Statistical Analysis

8.1 Introduction

Statistical methods enjoy a number of advantages, including a stronger claim to external validity and a more systematic treatment of chance and happenstance than case method can provide. Statistical approaches thus result in a broad picture of the relationships between multiple explanatory variables and help to evaluate their explanatory power. More importantly, findings can be replicated. However, statistical analysis suffers from some important drawbacks. For the purpose of this study, the most important is data availability. The dependent variable relies on the number of private contractors used during a military intervention. There is no complete dataset available covering the time period under investigation.

This chapter is organized into three sections. The first provides the research datasets. The second discusses the statistical results. The final section summarizes and assesses the implications of the findings.

8.2 Research Design and Methods

This dissertation uses interrupted time series analysis of private contractors for the United States from 1950 to 2010. Data availability issues have restricted this research to the United States. The choice of time, from 1950 to 2010 was selected for three reasons. First, US government statistical datasets are readily available and provide the majority of the data to test the hypotheses. Second, the year 1950 provides a useful starting point to test them. In 1942, Under Secretary of War Robert Patterson militarized the American war effort effectively ending the use of private contractors until after 1945. Third, the choice of 1950 to 2010 allows sufficient time to measure supply-demand behavior as it relates to the use of private contractors beyond what is in extant literature.

Operational definitions.

This research analyzes the reasons why the United States uses private contractors during conflicts. The dependent variable is the use of private contractors by the US military. The independent variables are the internal and external conditions facing decision makers when they chose to use private contractors as a substitute for military force.

Dependent variable.

As outlined in the literature, private contractors are used as a substitute for functions that a military force can accomplish. As Avant (2005), Singer (2003), and Kidwell (2007) point out, determining the number of private military companies used by the United States is a difficult endeavor. The operational definition of private contractors is an interval variable that measures the following: any private contractor or private contracting firm that provides logistic support, consulting services, technical services, or security functions as a substitute for a military force. Thus, the dependent variable, *contractors*, is the number of private contractors used by the United States military in a conflict by year.

There is no single dataset available prior to 2008. As a way of addressing this shortcoming, this research uses a newly created dataset drawn from several sources. The first comes from Office of the Deputy Assistant Secretary of Defense, Quarterly Contractor Census Report. Beginning in 2008, the Department of Defense started collecting information on contractors in Iraq and Afghanistan to satisfy the requirements outlined in section 854 of the fiscal year 2007 National Defense Authorization Act. The quarterly reports contain data on the number of private contractors are supporting the US military in Iraq and Afghanistan.

The second source of data on private contractors comes from a report by the Department of Defense, Office of General Counsel, on Overseas Jurisdiction. This report provides data on how many private contractors supported the US military during the 1990s. The report gives the number of contractors supporting military operations in Saudi Arabia, Somalia, Rwanda, Haiti, Bosnia, and Croatia. The data from this report are cross referenced with several primary and secondary sources. Where there is a discrepancy, the lower number is used to prevent inflation of the data results.

The third source of data on private contractors is from Isenberg (2007). In his work, Isenberg provides data on the use of contractors in Korea and Vietnam. However, the data are the total contractors used during the conflict and is not categorized by year. Thus, it is hard to determine if and when there is an increase or decrease in the use of private contractors over the duration of the conflict.

From these sources, only the reported use of private contractors is added to the dataset. Diligent effort went into ensuring that the number of contractors used by the United States was

not inflated. Where possible, more than one source was used to validate the number of contractors in a conflict.

Independent variables.

Five independent variables are used to examine internal and external conditions that US decision makers face when they chose to use private contractors as a substitute for military force. The independent variables used in the statistical analysis are military outlays, the size of the national military, the number of military disputes, the duration of the intervention, and decline in bureaucratic controls. Each variable is operationalized by using available data.

The first independent variable is the size of the Department of Defense Budget, *DOD Budget*. The US defense budget acts as a measure of institutional constraint on the US military. The US defense budget can be measured in three different ways: the total dollar amount allocated for defense spending, the budget as a percent of gross national product, or the budget as a percentage of US budget outlays. This dissertation operationalizes the US defense budget as the total dollar amount allocated for defense spending. Data are from the historical budget data compiled by the US Office of Budget Management (US OMB Historical Tables).

The second independent variable is the total number of US military personnel, *DOD Personnel.* The total number of US military personnel also acts as a measure of institutional constraints on the US military and policy makers considering the employment of military force. The operational definition is the size of the US military as the total number personnel on active military duty in a given year. The data are from the US Department of Defense Statistical Analysis Division (US DOD SAID 1950-2010).

The third independent variable is the number of conflicts where the US is involved, *DOD Conflicts*. In addition to the US budget and number of forces available, the number of conflicts in which the US is involved acts as a measure of institutional constraint as well. The operational definition is the total number of US forces deployed outside the continental United States. This includes the number of US forces deployed in a conflict and the number of US forces committed to regional alliances and strategic partnerships. The total number of US forces deployed represents forces that are not readily available to US policy makers when making decisions about force employment. The data are from the US Department of Defense Statistical Analysis Division (US DOD SAID 1950-2010).

The fourth independent variable is duration. *Duration* is operationalized as the absolute number of days during a year that the US was involved in a conflict. Furthermore, each year the conflict continues, the number of days become additive. Data for the duration of a conflict comes from the US Department of Defense Statistical Analysis Division based on the years the US DOD had military force deployed in a conflict area. US conflicts are categorized into five global regions; the Middle East, Eastern Europe, Asia, Africa, with the Western Hemisphere as the base category.

The fifth independent variable is bureaucratic controls. Two indicators are used to measure decisions to use private contractors by US policy makers. The first, *71 executive decision,* is the decision in 1971 to encourage the use of host nation contractors to augment military forces in conflict. The 1971 decision followed the Nixon Administration's announcement to reduce the military force in Vietnam (Sorely 1999, 128). The second, *92 executive decision,* is the decision in 1992 to implement the logistics capability contract (LOGCAP), which formalized the substitution of military force for private contractors. These decisions are operationalized using interrupted time series variables to analyze how these discrete decisions impacted the level and trend of contractor use.

Control variables.

Two control variables are used to examine external conditions that US decision makers face when they choose to use private contractors as a substitute for military force. The control variables used in the statistical analysis capture both the host nation support of the intervention and the security environment in the target state.

Three proxies are used to capture host nation conditions: the number of US troops that are killed in action due to hostile fire, *DOD KIA*; the number of US troops that are wounded in action due to hostile fire, *DOD WIA*; and the level of mass unrest in a conflict, *Mass Unrest*.

Data on the number of US military personnel killed or wounded are from the US Department of Defense Statistical Analysis Division. Following Goldberg (2010, 220) a casualty is defined as any soldier who is lost to his or her organization or unit. DOD classifies casualties as "hostile" if sustained as the direct result of combat between US forces and opposing forces, or if sustained going or returning from a combat mission. Killed in action (KIA) are those soldiers who die immediately on the battlefield. Wounded in action (WIA) are those who survive their injuries beyond initial hospitalization. Goldberg (2010, 220) points out that casualty rates in

Operation Iraqi Freedom (OIF) have been considerably lower than during the Vietnam conflict, and a greater proportion of troops wounded in Iraq survive their wounds. The survival rate in Iraq was 90.4 percent while the survival rate in Vietnam was 86.5 percent. Goldberg notes that the increased survival rate in Iraq is due to factors such as advanced body armor, the innovative use of forward aid stations located closer to the combat units, and advances in aeromedical evacuation. Goldberg (2010, 220) cities Linda Bilmes casualty data, pointing out that in Iraq the ratio of wounded to killed was 16:1, while in Vietnam and Korea the ratio was 3:1, and in during WWII and WWI the ratio was 2:1.

Mass unrest is defined as a state of dissatisfaction, disturbance, and agitation, typically involving public demonstrations or disorder (Oxford Dictionary 2011). Data on mass unrest comes from the Uppsala Conflict Data Program (UCDP), Peace Research Institute, Oslo (PRIO) Armed Conflict Dataset, specifically the measure of intensity level (state-based). The intensity variable denotes what level of fighting a state-based conflict or dyad reaches in each specific calendar year. The variable has two categories: Minor: At least 25 but less than 1000 battle-related deaths in one calendar year; War: At least 1000 battle-related deaths in one calendar year. The variable minor is used as a proxy to measure mass unrest.

Time Series Cross Sectional Analysis

This study relies on a methodology now common in political science, time series cross section (TSCS) design. Time series studies allow intensive investigation of long-term trends of one variable. Cross sectional studies examine multiple variables at one point in time. However, TSCS looks at multiple points in time with more variables. Time-series–cross-section (TSCS) data consist of comparable time series data observed on a variety of units (Beck 2006). The advantage of TSCS allows researchers to look for change s over time and complicated relationships between variables (Beck 2001). Typically, the observations are annual and there is no upper limit on the number of observations. The time series properties of the data are examined using a time series method, which means that the researcher can plot the data against time to examine for trends (Beck 2006).

Interrupted Time-Series Model

In addition to TSCS, this study uses the interrupted time-series design of Lewis-Beck (1979, 1131) to investigate the impact of one of the independent variables, bureaucratic

decisions. Glass (1997, 3) argues that one of the most promising quasi-experimental designs is the interrupted time-series experiment. Perrin (2009, 3) explains that the approach of interrupted time series is to estimate the trend in the dependent variable prior to the intervention; estimate the trend after the intervention; test for changes in the dependent variable pre and post intervention; and test for changes in the slope of the trend pre and post intervention. Lewis-Beck (1979, 1131) describes the development of a satisfactory statistical model of decision effects as a "decision experiment." He argues that decisions ought to be consciously evaluated as social "treatments" with statistically analyzable effects (Lewis-Beck 1979, 1131).

Following Beck-Lewis (1979) the following linear regression models of the interrupted time-series are used in this study:

Model 1:

Ln(Contractors t)= β0 + β1 Trend + β2 71DecisionLevel + β3 71DecisionTrend + + β4DOD KIA + β5Mass Unrest + β6Duration Middle East + β7Duration East Europe + β8Duration Asia + β9Duration Africa + β10DOD Budget + β11DOD Personnel + β12DOD Overseas + et

Model 2:

Ln(Contractors t)= β0 + β1 Trend + β2 92DecisionLevel + β3 92DecisionTrend + β4DOD KIA + β5Mass Unrest + β6Duration Middle East + β7Duration East Europe + β8Duration Asia + β9Duration Africa + β10DOD Budget + β11DOD Personnel + β12DOD Overseas + et

Model 3:

Ln(Contractors t)= β0 + β1 Trend + β2 71DecisionLevel + β3 71DecisionTrend + β4 92DecisionLevel + β5 92DecisionTrend + β6DOD KIA + β7Mass Unrest + β8Duration Middle East + β9Duration East Europe + β10Duration Asia + β11Duration Africa + β12DOD Budget + β13DOD Personnel + β14DOD Overseas + et

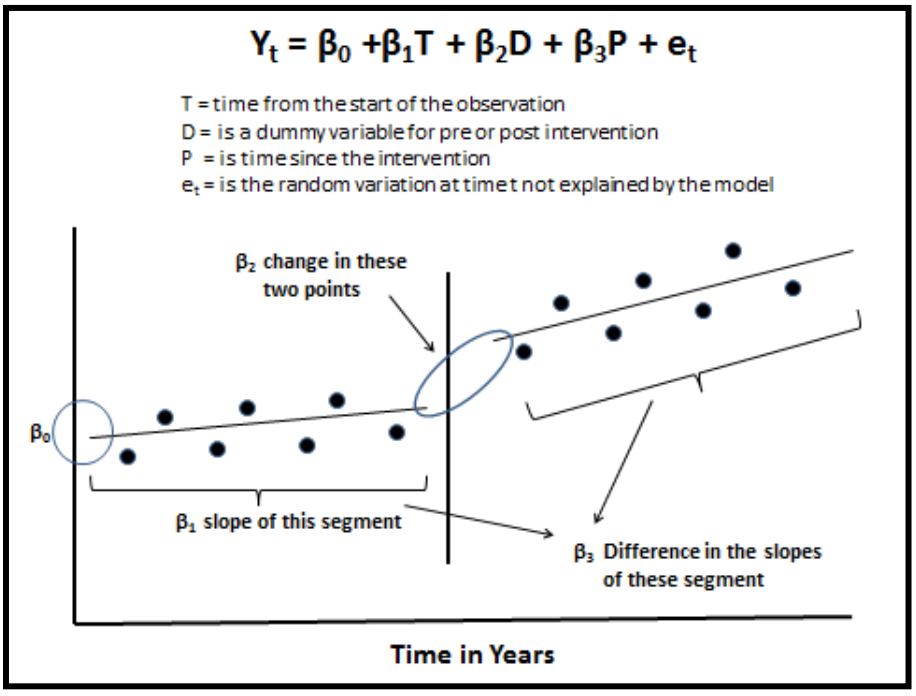
Where **Ln(Contractors)** = yearly observations on use of private contractors; **β_1 Trend** = a counter for years from 1 to N, the number of observations; **β_2 71DecisionLevel** = a dichotomous variable scored 0 for observations before the decision and 1 for observations after the decision; **β_3 71DecisionTrend** = a counter for years scored 0 for observations before the decision and 1,2,3,… for observations after the decision; **β_4 92DecisionLevel** = a dichotomous

variable scored 0 for observations before the decision and 1 for observations after the decision; **β_5 92DecisionTrend** = a counter for years scored 0 for observations before the decision and 1,2,3,… for observations after the decision. B_0, B_1, B_2, B_3, B_4, B_5 = the parameters to be estimated; and e_t = error (Lewis-Beck 1979, 1132).

β_0 is the baseline level of the outcome or the value at time zero; **β_1 Trend** is the slope prior to the intervention or the change over time before the intervention was implemented; **β_2 71DecisionLevel** and **β_4 92DecisionLevel** are the changes in level immediately after the intervention or the changes in the outcome measure from the last time point before the intervention of the first time point after the intervention; ; **β_3 71DecisionTrend** and **β_5 92DecisionTrend** are the changes in the slope form pre to post intervention or the differences in the slope of the time period before the intervention and the slope of the time period after the intervention.

Figure 8.1 provides a graphical depiction of interrupted time series.

Figure 8.1 Interrupted Time Series (Perrin 2009)



8.3 Descriptive Statistics.

Table 8.2 provides the mean, standard deviation, and the range for each of the variables used in this paper. All the variables have 61 observations. The dependent variable *contractor* has 61 observations, with a minimum score of 0 and maximum of 243735. In terms of frequency of the use of *contractor*, there were 33 years where the US used private contractors in conflict. The mean, which is the average or the common measure of tendency, is 39334.64.

The independent variable *time trend* has 61 observations, with a minimum score of 1 and a maximum of 61. The variable had a mean score of 30.98. The independent variable *71 executive decision level* has 61 observations, with a minimum score of 0 and a maximum of 1. The variable had a mean score of .6557. The independent variable *71 executive decision trend* has 61 observations, with a minimum score of 1 and a maximum of 40. The variable had a mean score of 13.44. The independent variable *92 executive decision level* has 61 observations, with a minimum score of 0 and a maximum of 1. The variable had a mean score of .3114. The independent variable *92 executive decision trend* has 61 observations, with a minimum score of 0 and maximum of 19. The variable had a mean score of 3.114. The independent variable *DOD KIA* has 61 observations, with a minimum score of 0 and maximum of 16592. The variable had a mean score of 1594.57. The independent variable *Mass Unrest* has 61 observations, with a minimum score of 0 and maximum of 2. The variable has a mean score of .9672. The independent variable *Middle East* has 61 observations, with a minimum score of 0 and maximum of 2855. The variable has a mean score of 217.78. The independent variable *Eastern Europe* has 61 observations, with a minimum score of 0 and maximum of 5140. The variable has a mean score of 610.90. The independent variable *Asia* has 61 observations, with a minimum score of 0 and maximum of 3650. The variable has a mean score of 392.62. The independent variable *Africa* has 61 observations, with a minimum score of 0 and maximum of 940. The variable has a mean score of 22.37. The variable *Western Hemisphere* has 61 observations, with a minimum score of 0 and maximum of 455. The variable has a mean score of 9.91.

The control variable *DOD Budget* has 61 observations, with a minimum score of 13724 and a maximum score of 693586. The variable has as means score of 202698.8. The control variable *DOD Personnel* has 61 observations, with a minimum score of 1379551 and a maximum score of 3555067. The variable has a mean score of 2157701. The control variable

DOD Overseas has 61 observations, with a minimum score of 227258 and a maximum score of 1228638. The variable has a mean score of 578773.4.

Table 8.1 Descriptive Statistics

Variables	Obs	Mean	Std. Dev	Min	Max
Contractors	61	39334.64	66597.05	0	243735
Time Trend	61	30.98	17.76	1	61
71 Executive Decision Level	61	0.6557	0.479	0	1
71 Executive Decision Trend	61	13.44	13.61	0	40
92 Executive Decision Level	61	0.3114	0.4669	0	1
92 Executive Decision Trend	61	3.114	5.5949	0	19
DOD KIA	61	1594.57	3759.04	0	16592
Mass Unrest	61	0.9672	0.9481	0	2
Duration Middle East	61	217.78	617.76	0	2855
Duration East Europe	61	610.9	1369.07	0	5140
Duration Asia	61	392.62	863.91	0	3650
Duration Africa	61	22.37	129.74	0	940
Duration Western Hemisphere	61	9.91	59.29	0	455
DOD Budget	61	202698.8	171953.2	137240	693586
DOD Personnel	61	2157701	640687.8	1379551	3555067
DOD Conflicts	61	578773.4	289525	227258	1228638

8.4 Statistical Analysis

A brief discussion of some methodological issues is warranted before analyzing the statistical results. The first is the issue of multicollinearity. An assessment of the influence of multicollinearity is performed by estimating the variance inflation factor (VIF). When employing standard regression, it is desirable to have explanatory variables that are highly correlated to a response variable. However, to obtain reliable estimates, it is not desirable for explanatory variables to be correlated with each other. Thus, as multicollinearity increases the greater the standard errors. When high multicollinearity is present, confidence intervals for coefficients tend to be very wide and t-statistics tend to be very small. Coefficients will have to be larger in order to be statistically significant, i.e. it will be harder to reject the null when multicollinearity is present. Multicollinearity is a concern when estimates average is above 1 and the VIF model is

above 10. The VIF score of the models suggest that multicollinearity is an issue in the estimates of the three models under review.[29]

The variables exhibiting a high correlation are *Time Trend*, *71 executive decision level*, *71 executive decision trend*, *92 executive decision level*, and *92 executive decision trend*. Multicollinearity is par for the course when a model consists of two or more interrupted time series variables. Where you have multiple regressions you almost always have multicollinearity, especially in time series data where dummy variables are used. Multicollinearity does not bias your parameter estimates, but it inflates their variance, making them inefficient or untrustworthy. However, if the goal is simply to predict Y from a set of X variables, then multicollinearity is not a problem. The predictions will still be accurate, and the overall R2 (or adjusted R2) quantifies how well the model predicts the Y values. One approach is to run a couple of different models, and comparing their degree of multicollinearity with that of the original model.

The second methodological issue is serial correlation. Autocorrelation is a violation of the assumption that the errors are uncorrelated and independent, meaning that the size and direction of one error term has no bearing on the size and direction of another. Autocorrelation is usually associated with time series data since by definition, time series data is ordered in time. Since the past is the best predictor of the future, what occurs in time *t* is the best predictor of what will occur in time *t*+1. Usually the observations are not independent, which means that an observation from one year is probably not too far off the observation of the previous year. For the error term, this means that differences between the predicted and actual (error) in one time period is probably related (positively) to the error in the next. As a consequence, the OLS estimators are no longer efficient, the estimated variances of OLS estimators are biased, and the estimated R^2 will not be a reliable estimate of the true R^2. The statistical test used to detect serial correlation is the Durbin-Watson *d* test.

The results of the Durbin-Watson d test on Model 3 fall into the zone of indecision. The way the Durbin-Watson d test is structured there is an acceptance region and a rejection region. In between acceptance and rejection there is a zone of indecision where it is recommended the null hypotheses, no auto correlation, neither be accepted or rejected. Therefore, autocorrelation

[29] The composite VIF score of model 1 is 23.76, the composite VIF Score of model 2 is 17.87, and the composite VIF score of model 3 is 30.06. The results suggest that multicollinearity is a factor in the estimates.

may be a problem in Model 3. As a result, Model 4 is developed using the Prais-Winsten transformation for the first observation.

Table 8.2 Statistical Results

	Model 1	Model 2	Model 3	Model 4
Intercept	45.68**	-9.16	-11.07	13.28
	(2.08)	(-0.45)	(-0.39)	(0.38)
DOD Budget	-4.92**	-3.69**	-5.90**	-6.35**
	(-1.84)	(-1.97)	(-1.90)	(-2.21)
DOD Personnel	-1.04	-1.42*	-1.12	-1.33*
	(-0.95)	(-1.53)	(-1.09)	(-1.29)
DOD Overseas	1.49	4.95***	5.90**	5.29**
	(0.56)	(2.62)	(2.04)	(1.81)
Duration				
Middle East	-.001**	-.001	-.0008	-.0005
	(-1.91)	(-0.82)	(-0.66)	(-0.44)
East Europe	-.0003	-.0004	-.0004	-.0004
	(-1.13)	(-1.22)	(-1.11)	(-1.08)
Asia	.0007	-.0004	-.00004	-.00004
	(1.20)	(-0.92)	(-0.07)	(-0.07)
Africa	-.001	-.004**	-.003*	-.003*
	(-0.48)	(-1.67)	(-1.60)	(-1.56)
Bureaucratic Controls				
Time Trend	.270**	.267**	.288**	.298**
	(1.91)	(2.02)	(2.10)	(2.18)
71 Exec Dec (Level)	-4.06***		.011	-.275
	(-2.69)		(0.01)	(-0.14)
71 Exec Dec (Trend)	.344**		.152	.245
	(1.94)		(0.78)	(1.16)
92 Exec Dec (Level)		7.21***	7.02***	6.21**
		(3.56)	(2.83)	(2.42)
92 Exec Dec (Trend)		.081	-.013	-.109
		(0.32)	(-0.04)	(-0.36)
Intensity				
DOD KIA	.551***	.709***	.685***	.740***
	(3.52)	(4.95)	(4.48)	(4.65)
Mass Unrest	1.75***	1.64***	1.38**	1.40**
	(2.65)	(2.89)	(2.08)	(2.12)
OBS	61	61	61	61
R2	.866	.887	.889	.891
Adj R2	.833	.859	.855	.857

* ** and *** indicate statistical significance at the p<.10, p<.05, and p<.01 level (1.296<.10, 1.671<.05, and 2.390<.01). One tailed test. Note: standard errors are in the parentheses below the estimates.

The first model represents the first test of the hypotheses under investigation. Model 1 includes the dependent variable, *contractors*; the independent variables *DOD Budget*, *DOD Personnel*, *DOD Overseas*, duration of the conflict using four independent variables covering four geographic regions *Middle East*, *East Europe*, *Asia*, and *Africa*; an interrupted time series test of the independent variable *71 executive decision*, and test of the control variable intensity *DOD KIA* and *Mass Unrest*.

Model 1:

Ln(Contractors t)= β0 + β1 Trend + β2 71DecisionLevel + β3 71DecisionTrend + + β4DOD KIA + β5Mass Unrest + β6Duration Middle East + β7Duration East Europe + β8Duration Asia + β9Duration Africa + β10DOD Budget + β11DOD Personnel + β12DOD Overseas + et

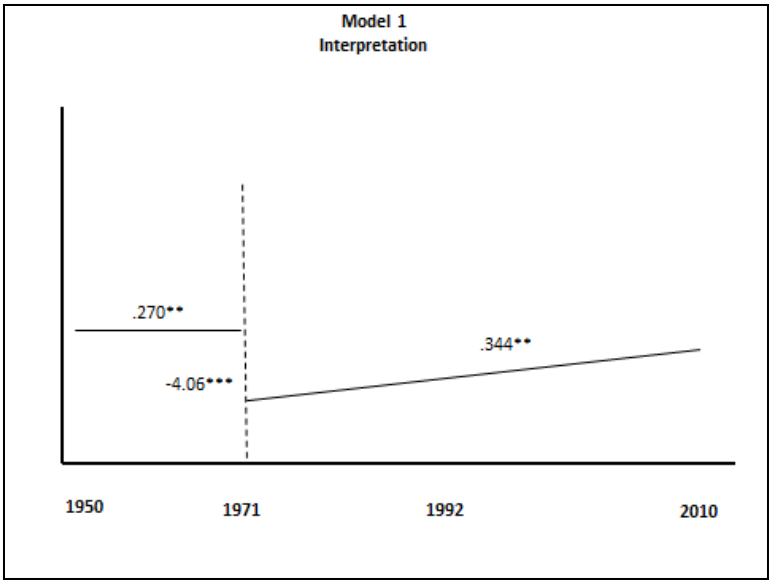
The variable representing defense budgets, *DOD Budget* is statistically significant at the p<.05 level. The coefficient for the *DOD Budget* variable is -4.92, which suggests that for every decrease of $100 million dollars there is a corresponding increase of approximately 495 private contractors, holding other variables constant. Neither of the variables representing defense personnel, *DOD personnel*, nor the variable *DOD overseas* are statistically significant.

The variable representing duration, *Middle East* is statistically significant at the p<.05 level. The coefficient for the *Middle East* variable is -.001, which suggests that when conflicts in the Middle East are reduced by 300 days, there is a corresponding decrease in private contractors by about 3, holding all other variables constant. The variables representing duration in *East Europe*, *Asia*, and *Africa* are statistically insignificant.

The variable representing *Time Trend* is statistically significant at the p<.05 level. The coefficient of the *Time Trend* variable is .270, which suggests that for every year before 1971 there was a .27 percent increase in the use of private contractors, holding other variables constant. *71 executive decision level* is statistically significant at the p<.01 level. The coefficient of the *71 executive decision level* is -4.06, which suggest that the level of contractor use decreased by about 4 percent immediately after the decision, holding other variables constant.

71 executive decision trend is statistically significant at the p<.05 level. The coefficient of *71 executive decision trend* is .344, which suggest that the rate of change after the decision increased by .34 percent every year, holding other variables constant.

Figure 8.2 Time Series Analysis of the 1971 Executive Decision



DOD KIA is statistically significant at the p<.01 level. The coefficient for this intensity variable is .551, which suggests that as the intensity of a conflict increases by 1000 military casualties there is an increase of approximately 550 private contractors, holding other variables constant. The variable representing intensity *Mass Unrest* is also statistically significant at the p<.01 level. The coefficient for the intensity variable is 1.75, which suggests that as the intensity of the conflict increases for every 1000 civilian casualties there is an increase of approximately 1750 private contractors, holding other variables constant.

The second model represents the second test of the hypotheses under investigation. Model 2 includes the dependent variable, *contractors*; the independent variables *DOD Budget*, *DOD Personnel*, *DOD Overseas*, the duration of the conflict using four independent variables covering four geographic regions *Middle East*, *East Europe*, *Asia*, and *Africa*; an interrupted time series test of the independent variable *92 executive decision*, and a test of the intensity of the conflict using two independent variables *DOD KIA* and *Mass Unrest*.

Model 2:

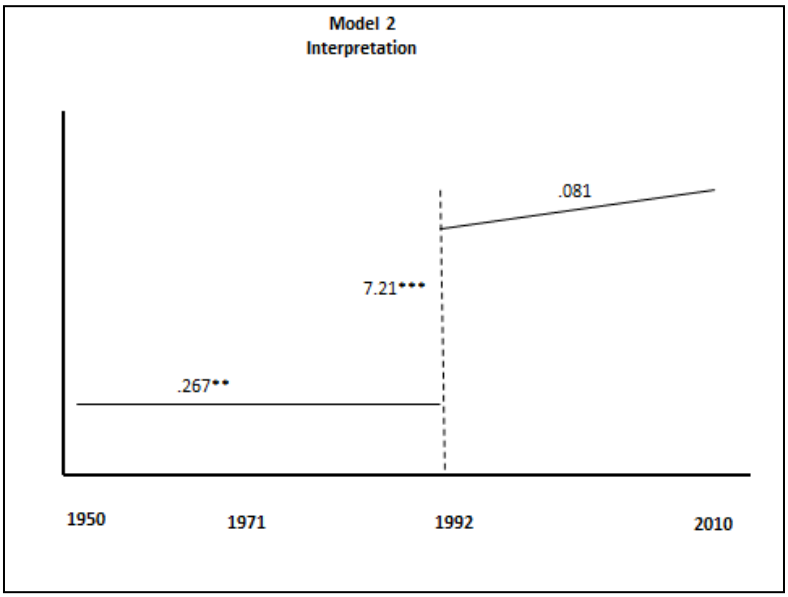
Ln(Contractors t)= β0 + β1 Trend + β2 92DecisionLevel + β3 92DecisionTrend + β4DOD KIA + β5Mass Unrest + β6Duration Middle East + β7Duration East Europe + β8Duration Asia + β9Duration Africa + β10DOD Budget + β11DOD Personnel + β12DOD Overseas + et

DOD Budget is statistically significant at the p<.05 level. The coefficient for the *DOD Budget* variable is –3.69, which suggests that for every decrease of $100 million dollars there is a corresponding increase of about 370 private contractors, holding other variables constant. *DOD personnel* is statistically significant at the p<.10 level. The coefficient for the *DOD personnel* variable is -1.42, which suggests that for every 1,000 decrease in DOD personnel there is a corresponding increase of approximately 1400 private contractors, holding other variables constant. *DOD overseas* is statistically significant at the p<.01 level. The coefficient for the conflict variable is 4.95, which suggests that for every 1,000 DOD personnel committed overseas, there is a corresponding increase of approximately 4,900 private contractors, holding other variables constant.

The variables representing duration in the *Middle East*, *East Europe*, and, *Asia* are not statistically significant. The variable representing duration in *Africa* is, however, statistically significant at the p<.10 level. The coefficient for *Africa* is -.004, which suggests that in Africa, for every 1000 days decrease in the duration of the conflict, there is a corresponding decrease of approximately 4 private contractors, holding other variables constant.

Moving to the interrupted time series variables, *Time Trend* is statistically significant at the p<.05 level. The coefficient of the *Time Trend* variable is .267, which suggests that for every year before the 1992 decision there was a 26 percent increase in the use of private contractors, holding other variables constant. *92 executive decision level* is statistically significant at the p<.01 level. The coefficient of the *92 executive decision level* is 7.21, which suggest that the level of contractor use increased by approximately 72 percent after the 1992 decision, holding other variables constant. *92 executive decision trend* is not statistically significant. The coefficient of the *92 executive decision trend* is 0.81.

Figure 8.3 Time Series Analysis of the 1992 Executive Decision



DOD KIA is statistically significant at the p<.01 level. The coefficient for the intensity variable is .709, which suggests that as the intensity of a conflict increases by 1000 military casualties there is an increase of approximately 700 private contractors, holding other variables constant. *Mass Unrest* is also statistically significant at the p<.01 level. The coefficient for the intensity variable is 1.64, which suggests that as the intensity of the conflict increases for every 1000 civilian casualties there is an increase of approximately 1640 private contractors, holding other variables constant.

The third model represents the third test of the hypotheses under investigation. Model 3 includes the dependent variable, *contractors*; the independent variables *DOD Budget*, *DOD Personnel*, *DOD Overseas*, the duration of the conflict using four independent variables covering four geographic regions *Middle East*, *East Europe*, *Asia*, and *Africa*; an interrupted time series test of the independent variable *71 executive decision* and *92 executive decision*, and a test of the intensity of the conflict using two independent variables *DOD KIA* and *Mass Unrest*.

Model 3:

Ln(Contractors t)= β0 + β1 Trend + β2 71DecisionLevel + β3 71DecisionTrend + β4 92DecisionLevel + β5 92DecisionTrend + β6DOD KIA + β7Mass Unrest + β8Duration Middle East + β9Duration East Europe + β10Duration Asia + β11Duration Africa + β12DOD Budget + β13DOD Personnel + β14DOD Overseas + et

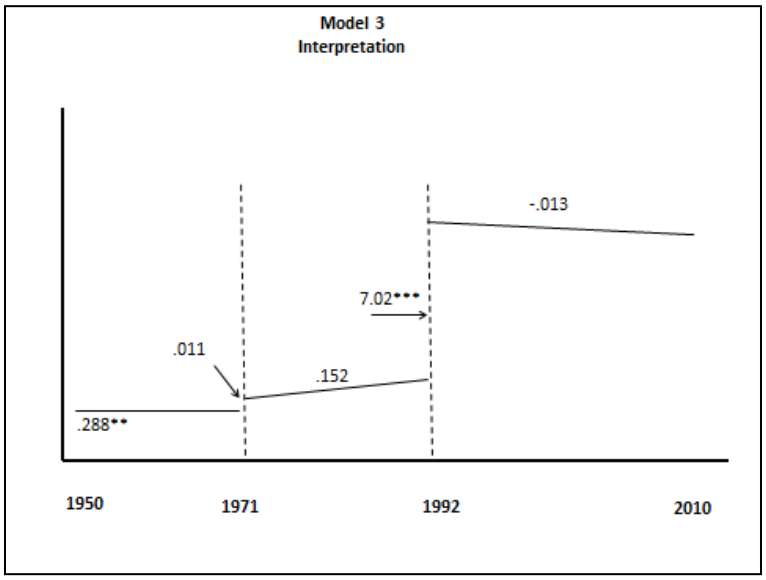
Again, *DOD Budget* is statistically significant at the p<.05 level. The coefficient for the *DOD Budget* variable is –5.90, which suggests that for every decrease of $100 million dollars there is a corresponding increase of approximately 590 private contractors, holding other variables constant. While *DOD personnel* is not statistically significant, *DOD overseas* is statistically significant at the p<.05 level. The coefficient for the conflict variable is 5.90, which suggests that for every 1,000 DOD personnel committed overseas, there is a corresponding increase of approximately 5,900 private contractors, holding other variables constant.

Once again, the variable representing duration in the *Middle East*, *East Europe*, and *Asia* are not statistically significant. The variable representing duration, *Africa* is statistically significant at the p<.10 level. The coefficient for *Africa* is -.003, which suggests that for every 1000 days decrease in the duration of the conflict, there is a corresponding decrease of approximately 3 private contractors, holding other variables constant.

Time Trend is statistically significant at the p<.05 level with a coefficient of .288. This suggests that for every year before the 1971 decision there was approximately a 28 percent increase in the use of private contractors, holding other variables constant. *71 executive decision level* and *71 executive decision trend* are not statistically significant.

92 executive decision level is statistically significant at the p<.01 level with a coefficient of 7.02, which suggest that the level of contractor use increased by approximately 70 percent after the 1992 decision, holding other variables constant. *92 executive decision trend* is not statistically significant.

Figure 8.4 Time Series Analysis of the 1971 and 1992 Executive Decision



DOD KIA is statistically significant at the p<.01 level. The coefficient for the intensity variable is .685, which suggests that as the intensity of a conflict increases by 1000 military casualties there is an increase of approximately 680 private contractors, holding other variables constant. *Mass Unrest* is statistically significant at the p<.05 level with a coefficient of 1.38, which suggests that as the intensity of the conflict increases for every 1000 civilian casualties there is an increase of approximately 1380 private contractors, holding other variables constant.

The fourth model represents the fourth test of the hypotheses under investigation. Model 4 is developed from Model 3 using the Prais-Winston transformation for the first observation. Like Model 3, Model 4 includes the dependent variable, *contractors*; the independent variables *DOD Budget*, *DOD Personnel*, *DOD Overseas*, the duration of the conflict using four independent variables covering four geographic regions *Middle East*, *East Europe*, *Asia*, and *Africa*; an interrupted time series test of the independent variable *71 executive decision* and *92 executive decision*, and a test of the intensity of the conflict using two independent variables *DOD KIA* and *Mass Unrest*.

Model 4 (using Prais-Winston Transformation):

Ln(Contractors t)= β0 + β1 Trend + β2 71DecisionLevel + β3 71DecisionTrend + β4 92DecisionLevel + β5 92DecisionTrend + β6DOD KIA + β7Mass Unrest + β8Duration

Middle East + β9Duration East Europe + β10Duration Asia + β11Duration Africa + β12DOD Budget + β13DOD Personnel + β14DOD Overseas + et

DOD Budget is statistically significant at the p<.05 level. The coefficient for the *DOD Budget* variable is –6.35, which suggests that for every decrease of $100 million dollars there is a corresponding increase of approximately 640 private contractors, holding other variables constant. *DOD personnel* is statistically significant at the p<.10 level. The coefficient for the *DOD personnel* variable is -1.33, which suggests that for every 1,000 decrease in DOD personnel there is a corresponding increase of approximately 1300 private contractors, holding other variables constant. *DOD overseas* is statistically significant at the p<.05 level. The coefficient for the conflict variable is 5.29, which suggests that for every 1,000 DOD personnel committed overseas, there is a corresponding increase of approximately 5,300 private contractors, holding other variables constant.

Middle East, *East Europe*, and *Asia* are again not statistically significant. The variable representing duration, *Africa* is statistically significant at the p<.10 level. The coefficient for *Africa* is -.003, which suggests that for every 1000 days decrease in the duration of the conflict, there is a corresponding decrease of approximately 3 private contractors, holding other variables constant.

Time Trend is statistically significant at the p<.05 level. The coefficient of the *Time Trend* variable is .298, which suggests that for every years before the 1971 decision there was approximately a 29 percent increase in the use of private contractors, holding other variables constant. *71 executive decision level* and *71 executive decision trend* are not statistically significant.

92 executive decision level is statistically significant at the p<.05 level. The coefficient of the *92 executive decision level* is 6.21, which suggest that the level of contractor use increased by approximately 60 percent after the 1992 decision, holding other variables constant. *92 executive decision trend* is not statistically significant.

DOD KIA is statistically significant at the p<.01 level. The coefficient for the intensity variable is .740, which suggests that as the intensity of a conflict increases by 1000 military casualties there is an increase of approximately 740 private contractors, holding other variables constant. *Mass Unrest* is also statistically significant at the p<.05 level. The coefficient for the

intensity variable is 1.40, which suggests that as the intensity of the conflict increases for every 1000 civilian casualties there is an increase of approximately 1400 private contractors, holding other variables constant.

8.5 Discussion of Findings

In general, the results of the statistical tests demonstrate the basic working of supply and demand theory. When the DOD budget decreases there is a statistically significant increase in the use of private contractors. Likewise, when the number of DOD personnel decreases there is a statistically significant increase in the use of private contractors. Furthermore, when the number of conflicts or engagements in which DOD personnel are involved rises there is a statistically significant increase in the use of private contractors. The direction of the causal effect of DOD budget, DOD personnel, and DOD personnel involved in conflicts are consistent with extant literature and support the hypotheses in this study. This may help explain the underlying conditions that led to the demand for the use of private contractors. In essence, reductions in military budgets result in an increased demand for private contractors. In like manner, decreases in the size of national militaries result in an increased demand for private contractors. Finally, as the numbers of US troops are committed to conflicts or engagements around the world increase the results are an increased demand for private contractors to augment the military.

On the other hand, as the duration of a conflict increases there is not a statistically significant increase in the number of private contractors used by the US. Although the US interventions in Eastern Europe (Bosnia and Kosovo) and the Middle East (Iraq and Afghanistan) lasted more than a year, it appears that the duration of the conflict is not correlated with an increased use of private contractors.

When there is a decrease in the executive bureaucratic controls and regulations there is an increase in the use of private contractors by the US military. In 1971, the DOD established a policy encouraging the use of host nation private contractors to support military forces deployed outside the United States. Moreover, in 1992, the DOD went further and established the logistics capability program (LOGCAP) to ensure the availability of private contractors in the event that a host nation could not, or would not provide support. This may help explain the steady rise of the private security industry beginning in the 1990s. The direction of the causal effect of the executive decisions to use private contractors supports the hypotheses in this study.

As the intensity of a conflict increases in the target state, the reliance on private contractors tends to increase. This is evident in conflicts where the security environment is particularly intense and there are insufficient US forces or host nation security forces to conduct combat operations and protect the population. The intensity of the conflict can be measured by the level of US casualties (killed or wounded) and the level of casualties in the host nation (mass unrest). This may help explain the significant rise of private security contractors in Iraq and Afghanistan. The direction of the causal effect of the intensity of a conflict in the target nation supports the hypotheses in this study. In essence, as the demand for security increases, there is a corresponding increase in the supply of private contractors.

Table 8.3 Summary of Findings

	Supply and Demand Behavior
When military outlays decrease there is an increase in the use of private security.	Significant
When the size of a national military decreases there is an increase in the use of private military security.	Significant
When the number of a military disputes, military engagements and militarized conflicts increases there is an increase in the use of private security internationally.	Significant
When the duration of a military conflict increases there is an increase in the use of private security.	Significant
When there is a decrease in bureaucratic controls and regulations there is an increase in the use of private security.	Significant
When the security environment is non-permissive there is an increase in private security	Significant

This chapter focused on a statistical analysis to provide additional information on which factors are important to the increased use of private contractors by the United States. The statistical findings lend support to the hypotheses on the increased use of private contractors and provide a broad picture of the relationships between multiple explanatory variables. More importantly, the findings of the statistical analysis can now be replicated in future research. The results of the findings should dispel the notion that the private contracting industry mysteriously appeared at the end of the Cold War. Indeed, the increased use of private contractors by the United States demonstrates normal supply and demand theory behavior.

Chapter 9 - Conclusion

9.1 Summary

This dissertation was framed around the question of why there has been a rapid growth in the reliance on the private security industry in US foreign policy in the past two decades. More importantly this dissertation sought to demonstrate: first, that the use of private security contractors by the United States is not a new phenomenon; second, that the recent increased use of private security as an instrument of military policy or foreign policy may in fact be a consequence of deliberate policy decisions of successive presidential administrations; and third, that the security environment in the target state of an intervention is a factor that results in an increase of private security contractors. The goal of this dissertation was to move beyond most of the extant literature which describes the phenomenon, and develop theory that helps explains why there has been a rapid growth in the reliance on the private security industry.

This study argues that when political leaders chose to reduce their nation's military force structure, they may face conflicts beyond their anticipated scope and duration. Such decision-makers are left with no choice but to legalize and legitimize the use of PMCs resulting in the increased use of PMCs as a deliberate tool of foreign policy. Using "supply-demand" theory as the theoretical approach, this dissertation built upon the three key influences emphasized first by Singer (2003) and then by others: the decreasing supply of national troops, decreasing national defense budgets, and the rising demand from global conflicts and humanitarian emergencies.

As the previous chapters demonstrate the basic theory and thus insights from the descriptive literature have value, however they failed to provide a fully exhaustive explanation of this important phenomenon. The additional elements added to the relatively spare theory resulted in a more convincing explanation of the increased use of PMCs. In sum, this study added precision to our understanding of the causes of the increased use of PMCs.

This chapter examines the findings of my dissertation, a few methodological problems, and suggests some areas for further research. The next section presents the theoretical discussion and empirical findings and conclusions from the qualitative and quantitative section. The section that follows provides a few suggestions on how to improve the research design. The final section offers a few policy prescriptions and areas for further research.

9.2 Findings

This study asserted that the private security industry fills vacuums created when the US government does not have the means or the will to fully provide domestic and international security. To understand the broader context of the private security industry's relationship to mature democracies this dissertation focused initially on five hypotheses:

H1: When military outlays decrease there is an increase in the use of private security.

H2: When the size of a national military decreases there is an increase in the use of private military security.

H3: When the number of a military disputes, military engagements and militarized conflicts increases there is an increase in the use of private security internationally.

H4: When the duration of a military conflict increases there is an increase in the use of private security.

H5: When there is a decrease in bureaucratic controls and regulations there is an increase in the use of private security.

Three additional hypotheses were added to this study upon completion of the case studies. They are:

H6: When there is a force cap placed on the size of the military force there is an increase in the use of private security.

H7: When there is no host nation supporting the intervention there is an increase in the use of private security.

H8: When the security environment is non-permissive there is an increase in private security.

Using a mixed methods approach, the hypotheses were tested using both a qualitative and quantitative approach. The qualitative approached relied on the case method, using a series of structure focused questions to compare the outcome of three historical cases where the US used private contractors. As a result, the controlled comparison helped identify the outcome of the dependent variable, private contractors, and provided a historical explanation of private contractors in relation to a set of independent variables. In this instance, structured, focused comparison helped to tease out exactly how supply, demand and other pressures help to stimulate the rise of PMCs.

The quantitative approach relied on a statistical method, using interrupted time series to examine the use of private contractors by the US from 1950 to 2010. The quantitative component analyzed a larger time period and increased the generalizability of the findings. It also provided insight on the relative explanatory weight of different causal influences.

The findings of this research demonstrates that the three key influences asserted in the extant literature the decreasing supply of national troops, decreasing national defense budgets, and the rising demand from global conflicts and humanitarian emergencies are very important to understanding the rise of the private security industry in the past two decades. Yet as this dissertation shows the nature of the security environment in the target state and the reduction (or elimination) of bureaucratic controls in the acting state are also important to explaining the increased reliance of the private security industry. Two other variables that were prevalent in the case studies that may be a factor in the increased reliance on private contractors: limitations on the number of troops committed to an intervention, and the duration of the intervention.

9.3 Methodological Issues

The result of this dissertation provides an additional explanation to when and why the United States chooses to use private contractors. In fact, it presents a significant improvement to the arguments of Singer (2003) and Avant (2005) who do not empirically examine the theories they advance about the rise of private contractors. Nevertheless, this dissertation has one weakness that needs to be addressed in future research: the availability and accuracy of data on the number of private contractors used by the United States. The most common complaint about research on private contracting is that the availability and accuracy of data, which invariably raises questions about reliability of any findings. Since there was no readily available dataset to model the phenomena under investigation, a complete dataset had to be constructed in this study. For much of the aggregate data, multiple existing databases on contracting were tapped. However, in doing so, there were at times problems associated with determining the accuracy of the data across different sources. In some cases the number of private contractors used ranged widely across existing sources. Of note, after 2007, the accuracy of data improved. Despite tedious attention to reduce coding errors in the dataset it is possible that in a few cases the numbers of private contractors used by the US are incorrect. Where there were inconsistencies in the literature or the datasets, in most cases, I tended to rely on the more conservative number.

9.4 Policy Implications

State policy makers may be able to use the results of this study to inform decisions on military budgeting, structure, or civil-military relations. As the worldwide economic crisis continues, policy makers faced with budget choices will look to reduce their military expenditures and possibly their military force structure. However, if they are faced with foreign policy problems requiring military intervention, then it should not be surprising if they substitute national military forces for private security forces. It is likely that more state policy makers may move towards the legalization of private security companies. Thus, the trend towards legalization leads toward further legitimization of the use of private security contractors. The US has certainly set the example in the past twenty years for other nations to follow.

9.5 Future Research

Several areas for future research are evident from this dissertation. First, the continued development and refinement of a database on the number of private contractors used by the US and other nations is certainly needed. Second, the dataset could be refined to identify the typology of private contractors used: for example security, logistics, or consulting. Third, as the field of study advances, improved data collection and available databases that include more cases, beyond the US, may provide alternative answers to the issue examined in this dissertation.

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