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NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

**A COMPARATIVE ANALYSIS OF THE TRENDS IN
CONGRESSIONAL CONTROL OF DEFENSE SPENDING**

by

Jason L. Woodruff

December 2006

Thesis Advisor:

Philip Candreva

Thesis Co-Advisor:

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**A COMPARATIVE ANALYSIS OF THE TRENDS IN CONGRESSIONAL
CONTROL OF DEFENSE SPENDING**

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Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF BUSINESS ADMINISTRATION

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**NAVAL POSTGRADUATE SCHOOL
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ABSTRACT

Each year the Department of Defense (DoD) prepares and submits a budget request through the President to Congress. Not only does Defense believe they need the resources that they ask for in the budget, but they also request a certain level of flexibility in spending in order to meet the challenges of an uncertain future with a changing threat environment. When Congress increases their control over spending, the DoD's flexibility in spending directly decreases. So understanding Congressional control over Defense through the budget is important for Defense management.

Levels and trends in Congressional control over Defense spending have been studied in the past. The goal of this thesis is to determine if the levels and trends in Congressional control of Defense spending within the post-Cold War era are consistent with those observed in the Cold War era. Comparative analysis through the use of graphs and statistics is the methodology used to determine the degree of consistency between time periods. Results show that the increasing trends of Congressional control over Defense spending observed in the Cold War era have significantly leveled off. It seems as if Congress has reached maximum capacity to control Defense spending.

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LIST OF ABBREVIATIONS

DoD	Department of Defense
HAC	House Appropriations Committee
HASC	House Armed Services Committee
SAC	Senate Appropriations Committee
SASC	Senate Armed Services Committee
SIG	Special Interest Group

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I. INTRODUCTION

A. SUBJECT AND RELEVANCE

The Department of Defense (DoD) prepares and submits a budget each year to Congress (with concurrence through the President). This proposed budget is determined by analyzing present and predicted future threat conditions and the amount of resources needed to meet those threats. The DoD and other participants including the Department of State and Central Intelligence Agency spend a great deal of time and effort determining the most accurate threat level. Likewise, the DoD spends an incredible amount of time and energy determining the best way to meet those threats including the resources required to do so. Based on this information, it seems likely that no one knows how to spend DoD appropriations better than the DoD itself. Likewise, it seems plausible that no one knows how much the DoD needs to spend each year better than the DoD. The fact that Congress controls Defense spending might suggest that they feel this is not true.

Not only does the DoD believe they need the resources that they ask for in the budget, but they also request a certain level of flexibility in spending in order to meet the challenges of an uncertain future with a changing threat environment. When Congress increases their own control over spending, this flexibility in spending directly decreases. So understanding Congressional control over Defense through the budget is important for Defense management.¹

Levels of Congressional control of Defense spending have been studied in the past. Understanding the trends of the past is often a very useful way to prepare for the future. Therefore, this information might be used as a tool for predicting the level of DoD spending flexibility in the future. Understanding future spending flexibility could eventually lead the DoD to a more effective and efficient budgeting process in years to come.

¹ Philip J. Candreva and L. R. Jones, "Congressional Control over Defense and Delegation of Authority in the Case of the Defense Emergency Response Fund" *Armed Forces and Society* 32, no. 1 (October 2005): 108.

B. RESEARCH QUESTIONS

The main question addressed by this thesis is whether the trends in Congressional oversight of Defense spending observed during the Cold War era have continued in the post-Cold War era. In an effort to answer this question, lower-level questions are also examined: What were the trends in Congressional control of Defense spending during the Cold War? What have been the trends in Congressional control of Defense spending since the end of the Cold War? What is meant by control? How are these trends measured? How are these trends compared? What degree of similarity constitutes consistency?

C. METHODOLOGY

Jones and Bixler analyzed the trends in Congressional control over Defense spending during the Cold War era and concluded that the level of control was increasing.² To support their conclusion, Jones and Bixler described what they believed were specific indicators of Congressional control. Some of the indicators described by Jones and Bixler include the number of pages and amendments in the Defense authorizations and appropriations bills and number of hearings before the Senate and House Armed Services Committees. Besides mentioning the indicators, they also graphed and analyzed annual data associated with each of the indicators. As a whole Jones and Bixler's data ranged from 1960 to 1990 (while the data from any one indicator was only a subset of that range). This is what the author of this thesis considers to be data from the Cold War era.

This thesis extends and compares Jones and Bixler's findings on Congressional control to those of the post-Cold War years. Many of the same indicators that Jones and Bixler described are also examined in this thesis. Data were obtained from the Thomas Library of Congress website³ which contains an archive of bills and government documents that, in some cases, go back as far

² L. R. Jones and Glenn. C. Bixler, *Mission Financing to Realign National Defense* (Greenwich, CT: JAI Press, 1992): 45-85.

³ Thomas Library of Congress. http://thomas.loc.gov/home/abt_thom.html (accessed September – December 2006).

as 1991. The House Armed Services Committee (HASC)⁴ and Senate Armed Services Committee (SASC)⁵ websites contain archives of their committee reports as well as information related to their hearings schedules.

D. SCOPE

This thesis is a comparative analysis of the levels of Congressional control of Defense spending over two periods of time. As mentioned, researchers have studied these levels of control in the past. However, much of the data needs to be updated, analyzed, and compared to the data of the past. Specifically, this is the subject and role of this study.

This thesis examines the levels of Congressional control over Defense spending during the Cold War era, updates this information with post Cold War data, analyzes any trends across or differences between the levels of Congressional control within the two eras, and discusses inferences from the data.

E. ORGANIZATION

This thesis is organized as follows: First, a background on why Congress controls Defense spending, how Congress controls Defense spending, and specific ways to measure Congressional oversight is provided. The next section contains Cold War and post Cold War data. The data are visually depicted on line graphs. Any changes in the two periods are analyzed for each indicator of Congressional control. The following section provides a summary of Congressional control over Defense spending during the Cold War era as described in Jones and Bixler's Chapter Four⁶. Then an empirical analysis is provided. The last section of this thesis draws inferences from the data and identifies areas for further study.

⁴ House Armed Service Committee. <http://www.house.gov/hasc/> (accessed September – December 2006).

⁵ Senate Armed Service Committee. <http://armed-services.senate.gov/index.htm> (accessed September – December 2006).

⁶ Jones and Bixler, 45-85.

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II. BACKGROUND

A. THE POWER TO CONTROL

In the 1780s the forefathers of this nation adopted the Constitution of the United States of America. In some instances the specific language they used within this document was vague enough to allow for flexibility to deal with contingencies. However, other portions of the Constitution are much more rigid and specific. It seems likely that they intentionally used this writing style where they felt future uncertainties were secondary or altogether unimportant. In essence they believed, regardless of what the future held, this Country would be a strong, lasting, democratic nation only if these specific statements were followed without variance in interpretation. One instance of this is quoted below.

No Money shall be drawn from the Treasury, but in Consequence of Appropriations made by Law.⁷

The forefathers believed that having a separation of power between Congress and Defense was a way to keep the strength of Defense at an optimal level. This was a way of increasing the likelihood that the military could be strong enough to deter and/or defeat possible enemy states, but not have the power necessary to threaten the government.⁸ Peter Feaver comments on this balance of control by stating, "...the challenge is to reconcile a military strong enough to do anything the civilians ask them to with a military subordinate enough to do only what civilian authorities authorize them to do."⁹

It does not seem likely that Congress is overly concerned now with Defense attempting to overthrow the U.S. Government in today's environment. This might be directly related to the fact that Congress has so much control over

⁷ Article 1, Section 9 of The Constitution of the United States of America.

⁸ Candrea and Jones, 105.

⁹ Peter Feaver, "The Civil-Military Problematique: Hunting, Janowitz and the Question of Civilian Control" *Armed Forces and Society* 23, no. 2 (Winter 1996): 149.

Defense. Besides having the power to appropriate money for Defense, the Constitution also provides other authorities that Congress has over Defense. These include the power to raise and support armies, provide and maintain a navy, declare war, and many more.¹⁰ It is clear that the Constitution provides Congress with the ability to exercise a great deal of control of over Defense. The Constitution, however, does not specify the amount of control that should be exercised. This is left up to Congress to decide. Since Congress has the ability to form and shape the military, it seems plausible that one of the factors they consider in this decision is the national threat level. The next section briefly discusses the threat level, how it has changed since the end of the Cold War, and why this might affect Congressional control over Defense.

B. CHANGING TIMES

During the years of the Cold War the primary military mission for the United States was to defend the nation and allies from the symmetric Soviet threat of aggression. This was time when the enemy was known and reasonably understood. The Soviet Union was a superpower with nuclear capability that could potential kill millions. For this reason US military leaders developed and executed a strategy to meet and deter the Soviet threat. This strategy included a certain amount of military personnel located in specific locations throughout Europe and Asia, the required quantities and types of weapon systems, and the plans to execute particular missions.

Between 1989 and 1991 the Cold War ended with the dissolution of the Warsaw Pact and later the Soviet Union. The United States currently no longer faces the immediate threat from a major nuclear enemy; rather the threats faced today are largely asymmetric. Many come in the form of suicidal members of extremist terrorists groups. The battle fronts have become blurred and frequency of urban combat is dramatically increasing. Deterrence by military strength does not seem to be as practical as it once was. The threat has changed, and therefore the US military strategy has and will continue to change.

¹⁰ Article I, Section 8 of The Constitution of the United States of America.

The basis for this thesis is to determine if the change in military threat conditions due to the cessation of the Cold War has also had an impact on the level of Congressional control over Defense spending. As mentioned, Congress has the ability to be a very influential in Defense matters. It seems plausible that Congress might want to give Defense more flexibility in spending so they can more efficiently and effectively adapt to this change. In this case Congress would reduce the level of their control over Defense spending. With that said, it also seems conceivable that many members of Congress have their own ideas for how Defense should adapt to this change. This would lead to members of Congress increasing their control over Defense to ensure that their agendas are heeded and accommodated.

C. WHY CONGRESS CONTROLS DEFENSE SPENDING

Candrea and Jones list several reasons why Congress controls Defense spending. These reasons include the legitimate exercise of constitutional power, policy influence, media publicity of DoD mismanagement, and to advocate or protect constituent interests.¹¹ Legitimate exercise of constitutional power means that Congress controls Defense spending because the law states that they have the power to do so.¹² Since they legally can, they will.

The next reason, policy influence, is based on the idea that controlling spending is a way in which they can ensure that resources are allocated in a way that meets their own specific interests.¹³ It is not uncommon for the interests of Congressmen to reflect the interests of their constituents as well.¹⁴ This is particularly true around election time. If members of Congress do not advocate and protect the interests of the people that elected them, it is likely that they

¹¹ Candrea and Jones, 109.

¹² MacKubin Thomas Owens, "Micromanaging the Defense Budget," *Public Interest*, no. 100 (Summer 1990): 142-144.

¹³ Kenneth R. Mayer, "Policy Disputes as a Source of Administrative Controls: Congressional Micromanagement of the Department of Defense," *Public Administration Review* 53, no. 4 (1993): 293-296.

¹⁴ W. D. Hartung, "The Shrinking Military Pork Barrel: The Changing Distribution of Pentagon Spending, 1986-1996" *The Changing Dynamics of U. S. Defense Spending*, ed. Leon V. Sigal (Westport, CT: Praeger), 29-84.

won't get reelected.¹⁵ The last reason mentioned here is the response to media publicity of DoD mismanagement. This is based on the idea that Congress controls Defense spending because situations in the past have caused Congress to feel mistrust in the DoD's ability to manage spending.¹⁶

D. HOW CONGRESS CONTROLS DEFENSE SPENDING

Now that some of the reasons why Congress controls the Defense spending have been outlined, it is necessary to examine some of the different ways that Congress controls Defense spending. Two of the ways mentioned by Candreva and Jones include earmarking funds and through formal information gathering.¹⁷

Earmarks take the form of law when they are contained within statutory legislation. When this is the case, they are often referred to as a form of statutory budget controls. These controls serve many purposes for Congress. They can establish executive departments and agencies and prescribe their form of organization; authorize programs and activities; specify the characteristics of programs, goals and major policies; regulate personnel; delineate operating procedures and methodologies for accomplishing work; impose limitations and conditions on daily activities; and appropriate financial resources for operation.¹⁸

Formal information gathering is conducted by means of reviews, hearings, audits, investigations and any documentation required by Congress to gain insight on program progression and/or spending information. It seems logical that the more information that Congress requests is directly related to the level of control they feel they need to have over Defense spending.

¹⁵ James M. Lindsay, "Congressional Oversight of the Department of Defense: Reconsidering the Conventional Wisdom," *Armed Forces and Society* 17, no. 1 (Fall 1990): 7-33.

¹⁶ J. Ronald Fox, *The Defense Management Challenge Weapons Acquisition* (Boston, MA: Harvard Business School Press, 1988), 80-83.

¹⁷ Candreva and Jones, 109.

¹⁸ J. P. Harriss, *Congressional Control of Administration* (The Brookings Institute, 1964), 8.

E. MEASURING CONGRESSIONAL CONTROL

Jones and Bixler state that "...statutory budget controls are manifest primarily in annual defense authorization and appropriation legislation."¹⁹ They also suggest that there is strong positive correlation between the amount of these controls and the number of pages within these types of legislation.²⁰ For this reason, one of the methodologies they use to measure Congressional control is to analyze the number of pages in legislative documents including Defense authorization and appropriation bills and accompanying committee reports.

Another measurement technique they use is to simply count the number of general provisions found within the annual Defense appropriation bills. General provisions are basically earmarks that often specify exactly how and how much money is to be spent of particular resources. Jones and Bixler suggest that there is a positive correlation between the number of general provisions found within the legislation and amount of Congressional control.²¹

Jones and Bixler also state that Congress exercises control over defense spending "...during House and Senate debates on annual Defense authorization and appropriations bills."²² Jones and Bixler suggest that the number of amendments to these bills during such debates is correlated with the amount of control Congress uses over Defense spending.

As mentioned earlier, Congress also controls Defense spending by the means of information gathering. In particular, Jones and Bixler address the number of hearings held by the House Armed Services Committee (HASC) and the Senate Armed Services Committee (SASC)²³. Jones and Bixler suggest that the number of hearings and number of witnesses per hearing are directly related to the amount of information the HASC and/or SASC requires, and this is correlated with the amount of control Congress imposes over defense spending. Another interesting element of information gathering Jones and Bixler examine is

¹⁹ Jones and Bixler, 45.

²⁰ *Ibid.*, 49.

²¹ *Ibid.*, 78.

²² *Ibid.*, 54.

²³ *Ibid.*, 72.

who the witnesses to the HASC and SASC hearings represent. Are they members of the DoD, government personnel other than DoD, or lobbyist (special interest groups, think tanks, academia, etc.)? Scheir states that non-DoD “groups are playing an increasingly important part in structuring the flow of information to legislative assemblies.²⁴ Jones and Bixler also suggest that one of the reasons Congress is using a broader base of witnesses is to get, what Congress might consider, a clearer picture of information related to Defense spending.²⁵ Therefore the use of non-DoD witnesses in HASC and SASC hearings is a method Congress uses to control Defense spending. Hence, a positive correlation exists between the number and percentage of non-DoD witnesses and the amount of Congressional control over Defense spending.

This chapter provided reasons why and how Congress controls Defense spending, and discussed some specific measurable indicators of the level of Congressional control over Defense spending. The next chapter contains a presentation and analysis of the data for each of those indicators. Specifically, the next chapter addresses the question how much each indicator of Congressional control has changed since the Cold War era.

²⁴ E. Scheir, *Legislators' New Sources of Information and Misinformation*. Paper presented at the 1969 Annual Meeting of the American Political Science Association, New York (October 1974).

²⁵ Jones and Bixler, 72.

III. DATA PRESENTATION AND ANALYSIS

A. OVERVIEW

Chapter II described some methods for measuring the levels of Congressional control over Defense spending as characterized by Jones and Bixler. This chapter presents Jones and Bixler's data from the Cold War era and compares it to the corresponding data from the post-Cold War years. The goal is to determine if a change has occurred in the level of Congressional control over Defense spending since the end of the Cold War.

The indicators of Congressional control over Defense spending are categorized here under two headings, controlling through legislation and controlling by information gathering. The Congressional control indicators in the legislation category are the number of pages in several legislative documents, number of total amendments in the Defense authorization and appropriation bills, and number of general provisions in the Defense appropriation bill. The Congressional control indicators in the information gathering category are the number of hearings before the HASC and SASC and the specific makeup (DoD personnel, non-DoD government personnel, or lobbyists/special interest groups) of the witnesses within those hearings. Jones and Bixler concluded that the level of Congressional control over Defense spending was increasing during the Cold War era.²⁶

Each indicator of Congressional control is analyzed by first presenting the Cold War data from Jones and Bixler. While the Cold War had no clear ending date, most of their data ran through about 1991. This study has chosen that date as the demarcation. Their data is provided, and in some cases, linear regression lines are fit to the data.

Next the post-Cold War data (after 1991) are provided in the same format. This is followed by a comparison of the two sets of data to determine if there is significant difference between them. Finally, other observations relating to the

²⁶ Jones and Bixler, 85.

data are presented. These observations are not necessarily related to the main research question and raise interesting possibilities for further study.

B. CONTROLLING THROUGH LEGISLATION

Jones and Bixler state that one way Congress controls Defense spending is through annual authorization and appropriation legislation.²⁷ They suggest that the length and complexity of the legislation is indicative of control. These dimensions are measured by page count, number of amendments, and number of general provisions. Specifically, these measures include: the number of pages in the annual Defense authorization and appropriation bills, the number of pages in the annual HASC and SASC reports, the number of pages in the annual Defense appropriation committee reports (House and Senate versions), the number of amendments to the annual Defense authorization and appropriation bills, and the number of general provisions within the annual Defense appropriation bills.

1. Pages in the Defense Authorization Bills

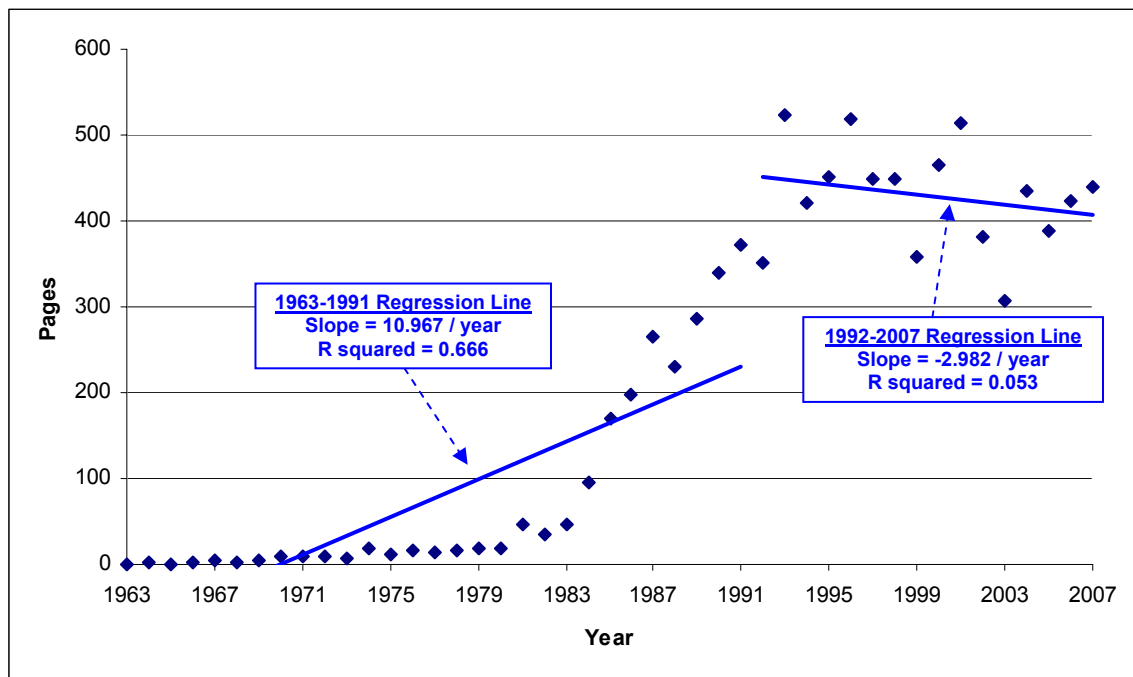
Table 1 shows the number of pages in the Defense authorization bills for the years 1963 through 2007. Figure 1 displays this data on a scatter plot and contains two regression lines, one for the Cold War data and one for the post-Cold War data.

²⁷ Jones and Bixler, 45.

Table 1. Number of Pages in the Defense Authorization Bills
(Fiscal Years 1963-2007)

Fiscal Year	Pages	Fiscal Year	Pages	Fiscal Year	Pages
1963	1	1978	17	1993	524
1964	2	1979	19	1994	421
1965	1	1980	19	1995	452
1966	3	1981	47	1996	519
1967	5	1982	36	1997	450
1968	3	1983	46	1998	450
1969	4	1984	95	1999	359
1970	10	1985	170	2000	465
1971	10	1986	197	2001	515
1972	9	1987	265	2002	382
1973	7	1988	230	2003	306
1974	19	1989	285	2004	435
1975	11	1990	339	2005	389
1976	16	1991	371	2006	423
1977	15	1992	351	2007	439

Sources: For Fiscal Year 1963 through Fiscal Year 1991, adapted from Jones and Bixler (1992, p.49). For Fiscal Year 1992 through 2007, Thomas Library of Congress website archive of Defense authorization bills



(Fiscal Years 1963-2007)

Figure 1. Number of Pages in the Defense Authorization Bills

a. Cold War Data

Jones and Bixler comment that there is an increase in the number of pages in the Defense authorization legislation during the Cold War era.²⁸ The slope of the linear regression line supports this statement by showing that on average the Defense authorization bill grows by nearly 11 pages per year during that timeframe. The relatively high R squared value of 0.67 suggests that the pattern is fairly linear, but upon closer examination, it appears the relationship is more exponential than linear.

b. Post-Cold War Data

The data from the post-Cold War era (1992-2007) is very sporadic with a range from 306 to 524 and a mean of 430 pages. On average, the size of the Defense authorization bill decreased by nearly 3 pages per year...A regression resulted in an R squared value of only 0.05 from which we can infer there is no linear relationship between the numbers of pages in the authorization bills during those years.

c. Cold War / Post-Cold War Comparison

The most significant difference between the Cold War data and the post-Cold War data is the clarity of the trend. While the year-to-year pattern in the Cold War data is not constant, at least the vast majority of these years show some sort of increase. The post-Cold War years, on the other hand, show a seemingly sporadic arrangement of data with eight years of increased page count, six years of decreased page count, and one year remaining the same. Therefore, the Cold War trends of increasing page counts do not continue in the post-Cold War. With that said, there does seem to be something interesting going on in the data. Figure 1 shows two separate equilibriums for the numbers of pages in the Defense authorization bills. The first equilibrium spans twenty one years, 1963-1983, and has a mean of approximately 14 pages. The other equilibrium spans 15 years, 1993-2007, and has a mean of approximately 435 pages. The decade, 1983-1993, that separates these two equilibriums nearly averages a 48-page increase per year. This information poses some interesting

²⁸ Jones and Bixler, 49.

questions. For instance, what caused this ten-year run of substantial growth in the Defense authorization bills? Was it at this point that Congress realized that earmarking was a management tool they could use? Why did this high rate of increase eventually level off? Is it based on the idea that preparing a document through coordination and debate with so many people can establish some sort of arbitrary limit on the size of the document?

2. Pages in the Defense Appropriation Bills

Table 2 shows the number of pages in the Defense appropriation bills for the years 1963 through 2007. Figure 2 displays this data on a scatter plot and contains two regression lines, one for the Cold War data and one for the post-Cold War data.

Table 2. Number of Pages in the Defense Appropriation Bills
(Fiscal Years 1963-2007)

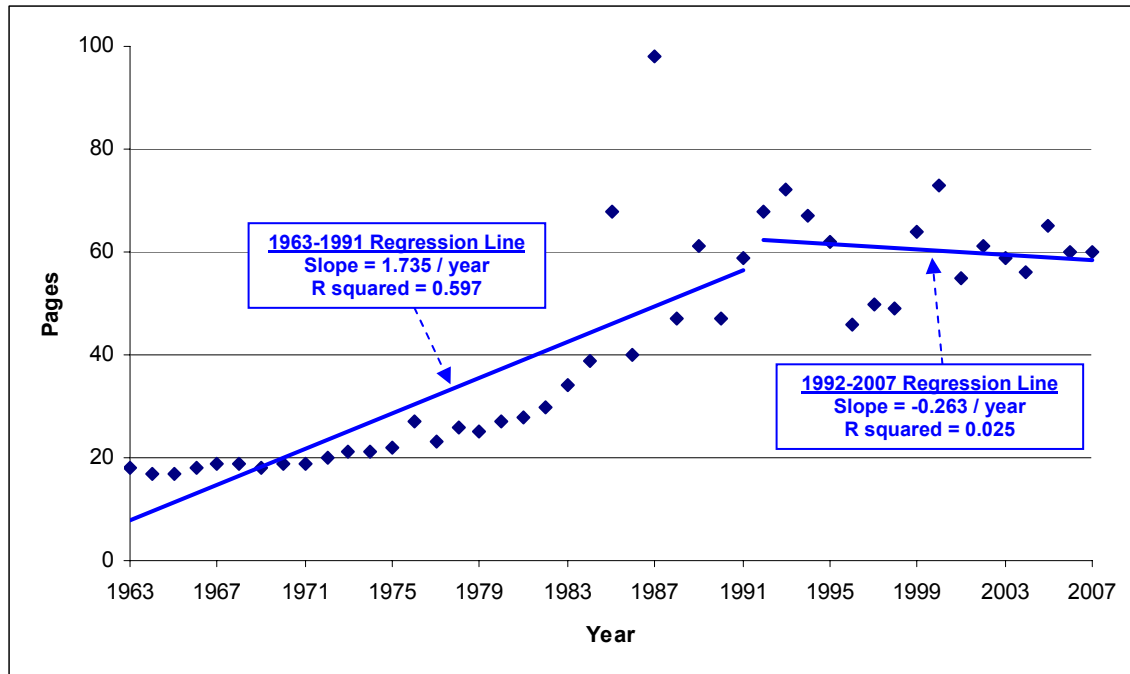
Fiscal Year	Pages	Fiscal Year	Pages	Fiscal Year	Pages
1963	18	1978	26	1993	72
1964	17	1979	25	1994	67
1965	17	1980	27	1995	62
1966	18	1981	28	1996	46
1967	19	1982	30	1997	50*
1968	19	1983	34	1998	49
1969	18	1984	39	1999	64
1970	19	1985	68	2000	73
1971	19	1986	40	2001	55
1972	20	1987	98	2002	61**
1973	21	1988	47	2003	59
1974	21	1989	61	2004	56
1975	22	1990	47	2005	65
1976	27	1991	59	2006	60***
1977	23	1992	68	2007	60

Sources: For Fiscal Year 1963 through Fiscal Year 1991, adapted from Jones and Bixler (1992, p.49).
For Fiscal Year 1992 through 2007, Thomas Library of Congress website archive of Defense appropriation bills.

Notes: * The 1997 Defense Appropriation Bill contains 750 total pages; however, only 50 pages are applicable to Defense.

** The 2002 Defense Appropriation Bill contains 126 total pages; however, only 61 pages are applicable to Defense.

*** The 2006 Defense Appropriation Bill contains 153 total pages; however, only 60 pages are applicable to Defense.



(Fiscal Years 1963-2007)

Figure 2. Number of Pages in the Defense Appropriation Bills

a. Cold War Data

Figure 2 shows a clear trend of increasing pages in the Defense appropriation bills during the Cold War era. Jones and Bixler state that they feel the trend reflects a “steady increase” in appropriation legislation during the period.²⁹ The slope of the regression line shows that on average the page count in the annual Defense appropriation bills grew more than 1.7 pages per year, and the R squared value of nearly 0.6 shows that it did so in a fairly linear manner. While this growth rate is much smaller than the increase observed in the Defense authorization bills during the same period, it is still very significant based on the fact that the Defense appropriation bills more than tripled in less than 30 years.

b. Post-Cold War Data

The 1992-2007 data does not resemble a linear pattern. A negative regression slope and an R squared value of only 0.025 support this observation. The data shows six years of increase, eight years of decrease, and

²⁹ Jones and Bixler, 49.

one year of no change in the number of pages in the Defense appropriation bills. The post-Cold War data ranged from 46 pages in 1996 to 72 pages in 1993 with an overall average of approximately 60 pages.

c. Cold War / Post-Cold War Comparison

The Cold War pattern of increasing page count in the annual Defense appropriation bills no longer exists in the post-Cold War era. However, Figure 2 shows a new pattern in the post-Cold War data. The first 1992-2000 portion of the post-Cold War data has an average residual length of 6.3 pages while the corresponding value for 2001-2007 timeframe is only 3.2 pages. This can be seen in Figure 3 by the way the data are surrounding and converging on the regression line in the later half of the post-Cold War era. This poses some interesting questions. For instance, why are the numbers of pages in the annual Defense appropriation bills converging on a single value (approximately 60 pages)? Has some higher levels of authority determined that this is the optimal value and the boundaries of deviation from this value are continuing to be tightened?

3. Pages in the HASC Reports on Defense Authorization Bills

Table 3 shows the number of pages in the House Armed Services Committee (HASC) reports on Defense authorization bills for the years 1969 through 2007. Figure 3 displays this data on a scatter plot and contains two regression lines, one for the Cold War data and one for the post-Cold War data. Due to time and resource constraints, the author was unable to attain the applicable data for the fiscal years 1992 through 1995.

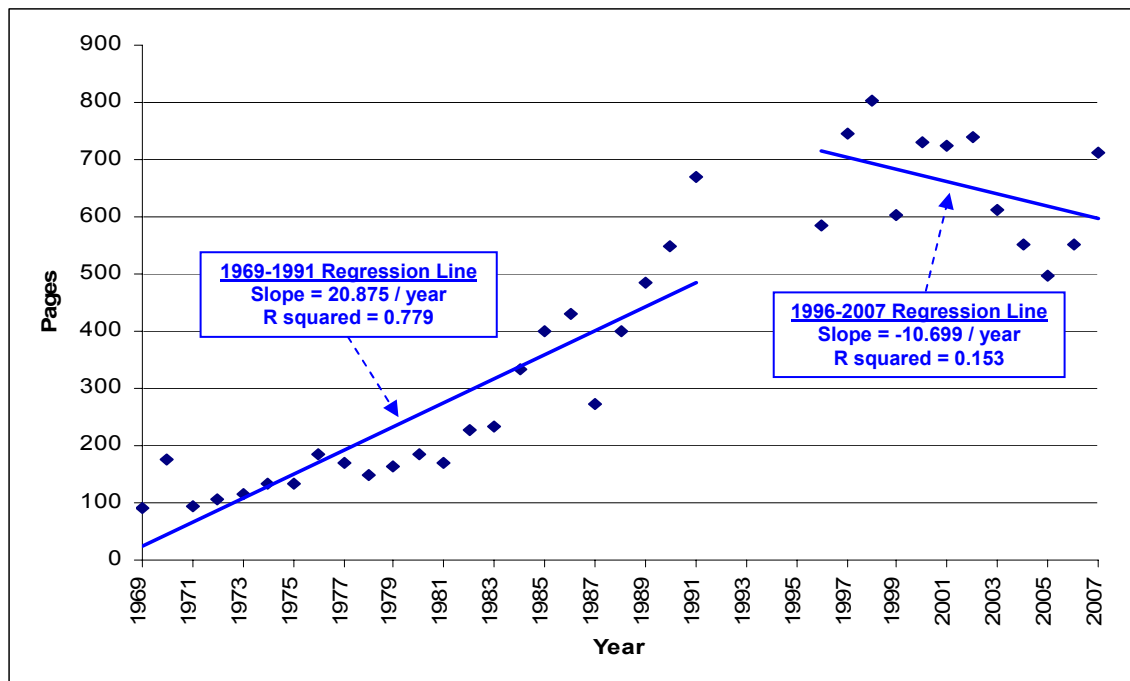
Table 3. Number of Pages in the House Armed Services Committee Reports on Defense Authorization Bills (Fiscal Years 1969-1991, 1996-2007)

Fiscal Year	Pages	Fiscal Year	Pages	Fiscal Year	Pages
1969	91	1982	228	1995	N/A
1970	176	1983	233	1996	584
1971	95	1984	332	1997	745
1972	107	1985	399	1998	803
1973	115	1986	431	1999	602
1974	132	1987	272	2000	730
1975	132	1988	399	2001	725
1976	185	1989	486	2002	740
1977	169	1990	549	2003	612
1978	150	1991	670	2004	552
1979	163	1992	N/A	2005	497
1980	186	1993	N/A	2006	552
1981	171	1994	N/A	2007	712

Sources: For Fiscal Year 1969 through Fiscal Year 1991, adapted from Jones and Bixler (1992, p.64).

For Fiscal Year 1996 through 2007, House Armed Services Committee website archive of committee reports.

Note: Author was not able to attain data for Fiscal Years 1992-1995.



(Fiscal Years 1969-1991, 1996-2007)

Figure 3. Number of Pages in the House Armed Services Committee Reports on Defense Authorization Bills

a. Cold War Data

Figure 3 shows that the Cold War data has a trend that is substantially increasing. This is in agreement with Jones and Bilxer's findings.³⁰ Comparing the 1969 HASC report to the 1991 HASC report shows that the page length grew by more than a factor of seven. The average rate of increase in page count in the HASC reports was over 20 pages per year during this time period. The R squared value of .779 reflects the fact that the pages were increasing in a fairly linear manner.

b. Post-Cold War Data

The post-Cold War information in Table 3 and Figure 3 are represented by the data for fiscal years 1996 through 2007. The negative regression slope in Figure 3 shows that on average the number of pages in the HASC reports was decreasing by over ten pages per year during the post-Cold War era. However, the fairly small R squared value of 0.153 supports the observation that the data does not seem to be decreasing in a linear manner. Instead, the data looks to be relatively sporadic with maximum, minimum, and average page counts of 803, 497, and 655 respectively.

c. Cold War / Post-Cold War Comparison

Figure 3 shows that the relatively consistent and linear increase in HASC reports page count that took place in the Cold War era does not exist in the post-Cold War era. This can be seen in the average rate reduction between periods; specifically, going from an increase of over 20 pages per year to decreasing by over 10 pages per year. Another interesting observation is that the average residual length from 1969 to 1990 is approximately 50 pages, but the corresponding value from 1996 to 2007 is more than 80 pages. This is why the trend appears to be more clearly defined in the Cold War data.

³⁰ Jones and Bixler, 63.

4. Pages in the SASC Reports on Defense Authorization Bills

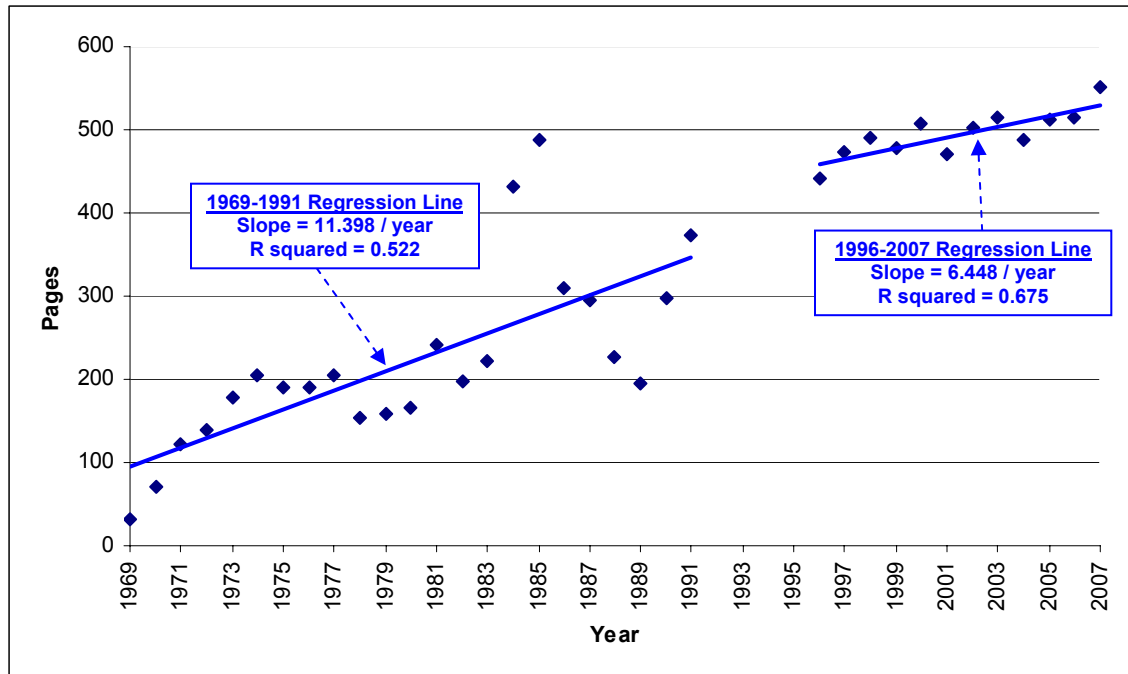
Table 4 shows the number of pages in the Senate Armed Services Committee (SASC) reports on Defense authorization bills for the years 1969 through 2007. Figure 4 displays this data on a scatter plot and contains two regression lines, one for the Cold War data and one for the post-Cold War data. Due to time and resource constraints, the author was unable to attain the applicable data for the fiscal years 1992 through 1995.

Table 4. Number of Pages in the Senate Armed Services Committee Reports on Defense Authorization Bills
(Fiscal Years 1969-1991, 1996-2007)

Fiscal Year	Pages	Fiscal Year	Pages	Fiscal Year	Pages
1969	31	1982	197	1995	N/A
1970	70	1983	222	1996	441
1971	121	1984	432	1997	473
1972	140	1985	489	1998	490
1973	177	1986	309	1999	477
1974	205	1987	296	2000	507
1975	190	1988	228	2001	470*
1976	191	1989	194	2002	502
1977	204	1990	297	2003	515
1978	153	1991	373	2004	488
1979	158	1992	N/A	2005	512
1980	166	1993	N/A	2006	514
1981	242	1994	N/A	2007	551

Sources: For Fiscal Year 1969 through Fiscal Year 1991, adapted from Jones and Bixler (1992, p.64). For Fiscal Year 1996 through 2007, Senate Armed Services Committee website archive of committee reports.

Notes: * The 2001 Senate Armed Services Report contains an additional 513 pages of minority views from Senator McCain.
Author was not able to attain data for Fiscal Years 1992-1995.



(Fiscal Years 1969-1991, 1996-2007)

Figure 4. Number of Pages in the Senate Armed Services Committee Reports on Defense Authorization Bills

a. Cold War Data

Figure 4 shows that the Cold War data has an increasing trend. Jones and Bixler also comment on this trend of page count growth.³¹ On average, the number of pages in the SASC reports grew by more than 11 pages per year during the 1969-1991 timeframe. Overall, an R squared value of greater than 0.5 reflects the notion that the pages were increasing in a fairly linear manner during the Cold War era. The data holds a relatively clear pattern during 1969-1983 timeframe with an average residual length of approximately 33 pages. However, during the 1984-1991 timeframe the average residual length increased to 85 pages which results in great diminishment of clarity of any linear-like pattern.

b. Post-Cold War Data

Figure 4 shows that the post-Cold War data increases at an average rate of approximately 6.4 pages per year. All the data points are in a

³¹ Jones and Bixler, 63.

very close approximation to the regression line. The R squared is very high, 0.675, and supports the observation that each the residual lengths are relatively small. Therefore the trend appears to be increasing at a fairly stable rate.

c. Cold War / Post-Cold War Comparison

The trend of page count increase in the SASC reports on DoD authorizations has changed little since the Cold War era. Both the Cold War and post-Cold War trends are increasing, but the average rate of increase in the post-Cold War era has slowed to less than 60 percent of that observed in the Cold War era. Another interesting observation is that the average residual length observed during the Cold War era is more than 51 pages while the post-Cold War data only averages a length of 13 pages. That is a nearly a 75 percent reduction in variability from the Cold War to the post-Cold War data set. This poses some interesting question. For instance, have higher levels of authority determined an optimal rate of annual page increase for the annual SASC reports? If so, have they established limits of deviation from this rate as well as a method to control and ensure these limits are not breached?

5. Pages in the HAC Reports on Defense Appropriation Bills

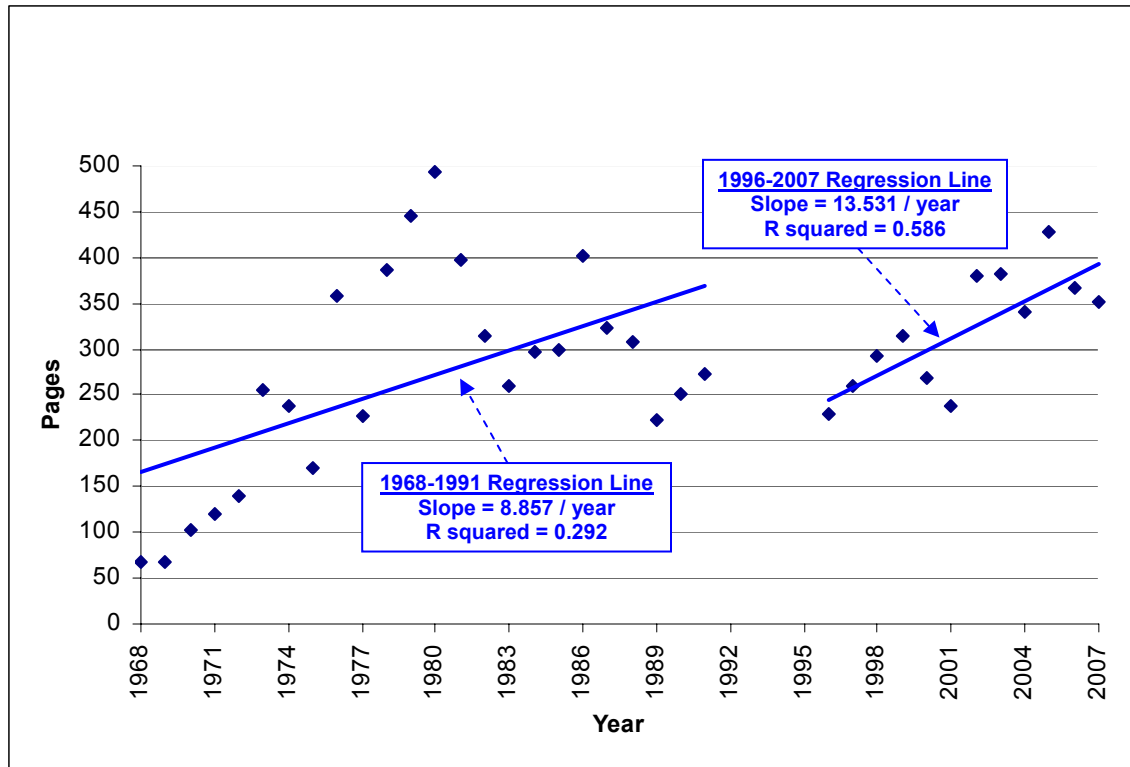
Table 5 shows the number of pages in the House Appropriations Committee (HAC) reports on Defense appropriation bills for the years 1968 through 2007. Figure 5 displays this data on a scatter plot and contains two regression lines, one for the Cold War data and one for the post-Cold War data. Due to time and resource constraints, the author was unable to attain the applicable data for the fiscal years 1992 through 1995.

Table 5. Number of Pages in the House Appropriations Committee Reports on Defense Appropriation Bills
(Fiscal Years 1968-1991, 1996-2007)

Fiscal Year	Pages	Fiscal Year	Pages
1968	67	1988	307
1969	68	1989	223
1970	102	1990	251
1971	119	1991	273
1972	139	1992	N/A
1973	256	1993	N/A
1974	239	1994	N/A
1975	171	1995	N/A
1976	358	1996	229
1977	226	1997	259
1978	387	1998	292
1979	446	1999	315
1980	493	2000	269
1981	398	2001	237
1982	315	2002	379
1983	259	2003	382
1984	298	2004	341
1985	299	2005	427
1986	401	2006	367
1987	324	2007	351

Sources: For Fiscal Year 1968 through Fiscal Year 1991, adapted from Jones and Bixler (1992, p.65). For Fiscal Year 1996 through 2007, Thomas Library of Congress website archive of Appropriations committees' reports.

Note: Author was not able to attain data for Fiscal Years 1992-1995.



(Fiscal Years 1968-1991, 1996-2007)

Figure 5. Number of Pages in the House Appropriations Committee Reports on Defense Appropriation Bills

a. Cold War Data

Jones and Bixler graphically suggest that the number of pages in the annual HAC reports were increasing in the Cold War era.³² By increasing nearly 9 pages per year, the slope of the regression line during this time period supports their findings. However, the variation from year to year is often large based on a relatively insignificant R squared value of 0.292 and a large average residual length of nearly 80 pages.

b. Post-Cold War Data

Figure 5 shows that the page counts in the HAC reports increased an average of over 13 pages per year during the post-Cold War timeframe. The corresponding R squared value of 0.586 and an average residual length of only 33 pages support the notion that the increase was fairly linear.

³² Jones and Bixler, 67.

c. Cold War / Post-Cold War Comparison

The slopes of the regressions lines in each time period show that the page count during the Cold War and post Cold War eras were increasing at fairly similar rates. Based on this information alone, it would appear that the post-Cold War trends were consistent with those of the Cold War timeframe. However, the average length of the residuals observed during the Cold War era is nearly 2.5 times larger than those observed in the post-Cold War era. This might suggest that some sort of variation control is more prominent in the post-Cold War era.

An interesting observation that can be seen in Figure 5 is that there was a dramatic increase in page count during the years 1968-1980. Then the page count averaged a decrease of more than 14 pages per year over the following decade. By 1996 the average page count was increasing again. Therefore, it seems like there was more than one major shift in the data. Earlier comments in this thesis discussed possible reasons for the second shift, the end of the Cold War. What was the reason for the shift in slope observed around 1980?

Another observation that can be seen in Figure 5 is that there does not appear to be any clear linear pattern within the data ranging from 1973 to 2007. Running a linear regression over the time period supports this observation by resulting in an increasing slope that is smaller than one page per year and an insignificant R squared value of less than 0.016. This suggests that the page count during this period was either sporadic or possibly followed some other non-linear trend that does not appear to be obvious in the Figure 5.

6. Pages in the SAC Reports on Defense Appropriation Bills

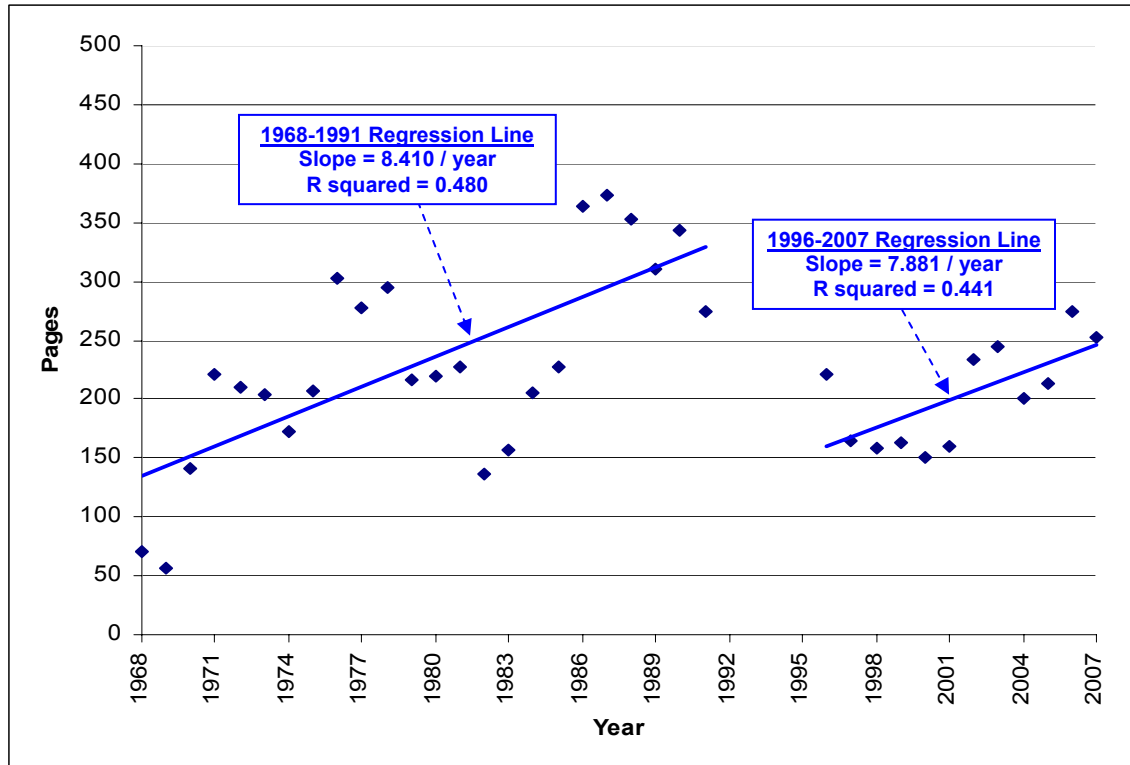
Table 6 shows the number of pages in the Senate Appropriations Committee (SAC) reports on Defense appropriation bills for the years 1968 through 2007. Figure 6 displays this data on a scatter plot and contains two regression lines, one for the Cold War data and one for the post-Cold War data. Due to time and resource constraints, the author was unable to attain the applicable data for the fiscal years 1992 through 1995.

Table 6. Number of Pages in the Senate Appropriations Committee Reports on Defense Appropriation Bills
(Fiscal Years 1968-1991, 1996-2007)

Fiscal Year	Pages	Fiscal Year	Pages
1968	71	1988	353
1969	56	1989	311
1970	141	1990	343
1971	221	1991	274
1972	210	1992	N/A
1973	204	1993	N/A
1974	173	1994	N/A
1975	207	1995	N/A
1976	302	1996	221
1977	277	1997	165
1978	295	1998	159
1979	217	1999	163
1980	219	2000	151
1981	227	2001	160
1982	137	2002	234
1983	157	2003	244
1984	205	2004	201
1985	227	2005	213
1986	363	2006	274
1987	373	2007	253

Sources: For Fiscal Year 1968 through Fiscal Year 1991, adapted from Jones and Bixler (1992, p.65). For Fiscal Year 1996 through 2007, Thomas Library of Congress website archive of Appropriations committees' reports.

Note: Author was not able to attain data for Fiscal Years 1992-1995.



(Fiscal Years 1968-1991, 1996-2007)

Figure 6. Number of Pages in the Senate Appropriations Committee Reports on Defense Appropriation Bills

a. Cold War Data

Jones and Bixler suggest an increasing trend in the number of pages in the SAC reports during the 1968-1991 timeframe.³³ Figure 6 supports their findings by showing an average increase of over eight pages per year during that time. The Cold War data have an average residual length of 52, but the R squared value of 0.48 suggests that the data is fairly linear.

b. Post-Cold War Data

Figure 6 shows that the data representing the post-Cold War era is increasing at an average rate of nearly eight pages per year. The data have an average residual length of 26 pages, and the R squared value of 0.44 suggests that the data is relatively linear.

³³ Jones and Bixler, 67.

c. Cold War / Post-Cold War Comparison

The fact that both sets of data in Figure 6 show an average annual increase of approximately eight pages per year might suggest that the trend is continuous throughout the entire data set. However this is not the case. Notice that the Cold War regression line has a value of approximately 330 pages in 1991 while the post-Cold War regression line has a value close to 160 pages in 1996. It is plausible to assume there must have been a large reduction shift in the early 1990s. However, there could be another explanation for this. Maybe the data does not show two fairly clear patterns after all. Instead, perhaps there is no discernable pattern in the data at all. For example, when only looking at the 1972-2007 data, it appears that there is not any significant trend. This is supported by a decreasing linear regression slope of only half a page per year and a very insignificant R squared value of 0.01. Likewise, if there was an increasing pattern throughout the entire data set, it would be highly unlikely that the number of pages in the SAC reports for the years 1973, 1984, and 2004 would be within four pages of each other.

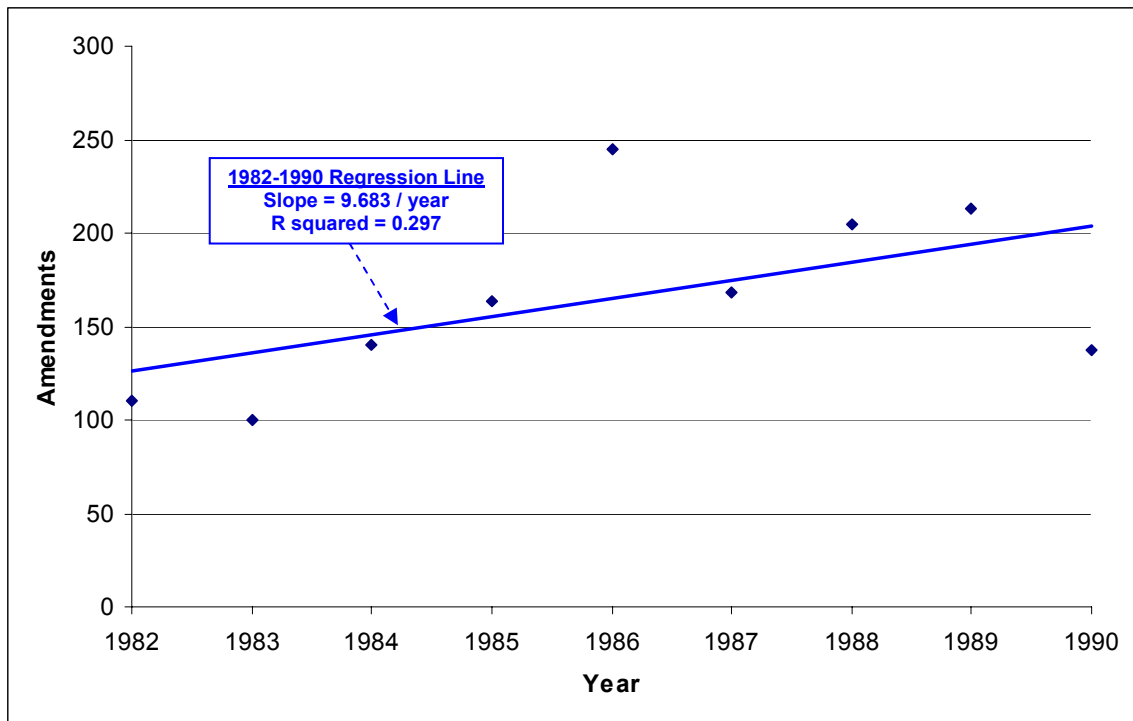
7. Amendments to the Defense Authorization and Appropriation Bills

Table 7 and Figure 7 show the number of amendments to the annual Defense authorization and appropriation bills during the Cold War era. Due to time and resource constraints the Cold War data is limited to fiscal years 1982 to 1990. The post-Cold War data encompasses 1992 to 2007 and is shown in Table 8 and Figure 8. The reason the Cold War data and post-Cold War data are shown separately is because there is good reason to believe that the numeric values within the Cold War data do not correspond to the numeric values within the post-Cold War data. This could be caused by using different data definitions. Therefore, while the analysis between data sets is problematic, each may be analyzed individually.

Table 7. Number of Amendments to the Defense Authorization and Appropriation Bills
(Fiscal Years 1982-1990)

Fiscal Year	Amendments
1982	110
1983	100
1984	140
1985	164
1986	245
1987	168
1988	205
1989	213
1990	137

Source: adapted from Jones and Bixler (1992, p.54)



(Fiscal Years 1982-1990)

Figure 7. Number of Amendments to the Defense Authorization and Appropriation Bills

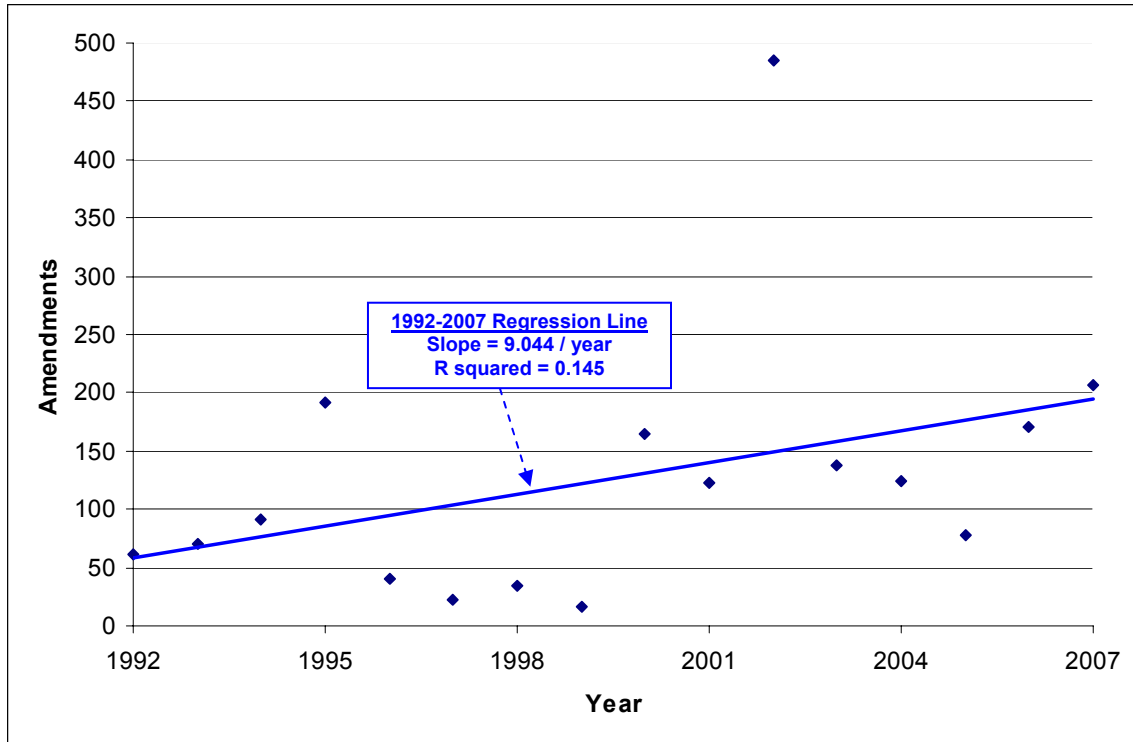
a. Cold War Data

Figure 7 shows that the number of amendments to the Defense authorization and appropriation bills increased at an average rate of nearly ten per year during the 1982-1991 timeframe. The R squared value of approximately 0.3 is fairly insignificant. The average residual length for the data is approximately 29 amendments which is 17 percent of the average number of amendments each year.

Table 8. Number of Amendments to the Defense Authorization and Appropriation Bills
(Fiscal Years 1992-2007)

Fiscal Year	Amendments
1992	62
1993	70
1994	92
1995	191
1996	40
1997	23
1998	34
1999	17
2000	164
2001	123
2002	485
2003	138
2004	125
2005	78
2006	171
2007	207

Source: Thomas Library of Congress website archive of Defense authorization and appropriation bills



(Fiscal Years 1992-2007)

Figure 8. Number of Amendments to the Defense Authorization and Appropriation Bills

b. Post-Cold War Data

Figure 8 shows that the number of amendments to the Defense authorization and appropriation bills increased at an average rate of more than nine per year during the 1992-2007 timeframe. However, the 2002 outlier of 485 amendments has significant pull on the regression line. 2002, however wasn't the only year that shows significant change in amendment count. For instance, the number of amendments decreased by almost 80 percent from 1995 to 1996 and increased by more than 850 percent from 1999 to 2000. Therefore, the average trend of increasing amendment count throughout the period is by no means consistent on a year-to-year basis. These are some of reasons the R squared value of 0.145 is so insignificant. Furthermore, this variation shows up in the average residual length of 64 which translates into more than 50 percent of the average number of amendments each year.

c. Cold War / Post-Cold War Comparison

The rates of amendment count growth within the Defense authorization and appropriation bills in the Cold War and post-Cold War data are very similar. Both data sets show an average amendment increase of approximately nine per year. Likewise, the specific patterns within the two eras are not overly dissimilar. This biggest difference is in variation. The post-Cold War data has an average residual, as a percentage of average amendment count, value that is nearly three times higher than that of the Cold War era. Much of this difference, however, is attributed to the 2002 outlier of 485 amendments. Therefore, it appears that there is no notably significant change between the Cold War and post-Cold War trends.

8. General Provisions in the Defense Appropriation Bills

Table 9 shows the number of general provisions in the Defense appropriation bills for the years 1976 through 2007. Figure 9 displays this data on a scatter plot and contains two regression lines, one for the Cold War data and one for the post-Cold War data.

Table 9. Number of General Provisions in the Defense Appropriation Bills (Fiscal Years 1976-2007)

Fiscal Year	General Provisions	Fiscal Year	General Provisions
1976	96	1992	157
1977	87	1993	168
1978	101	1994	156
1979	109	1995	158
1980	125	1996	130
1981	138	1997	138
1982	158	1998	132
1983	183	1999	148
1984	217	2000	176
1985	213	2001	166
1986	227	2002	173
1987	236	2003	150
1988	158	2004	141
1989	185	2005	142
1990	180	2006	129
1991	237	2007	112

Sources: For Fiscal Year 1976 through Fiscal Year 1991, adapted from Jones and Bixler (1992, p.78). For Fiscal Year 1991 through 2007, Thomas Library of Congress website archive of Defense appropriation bills.

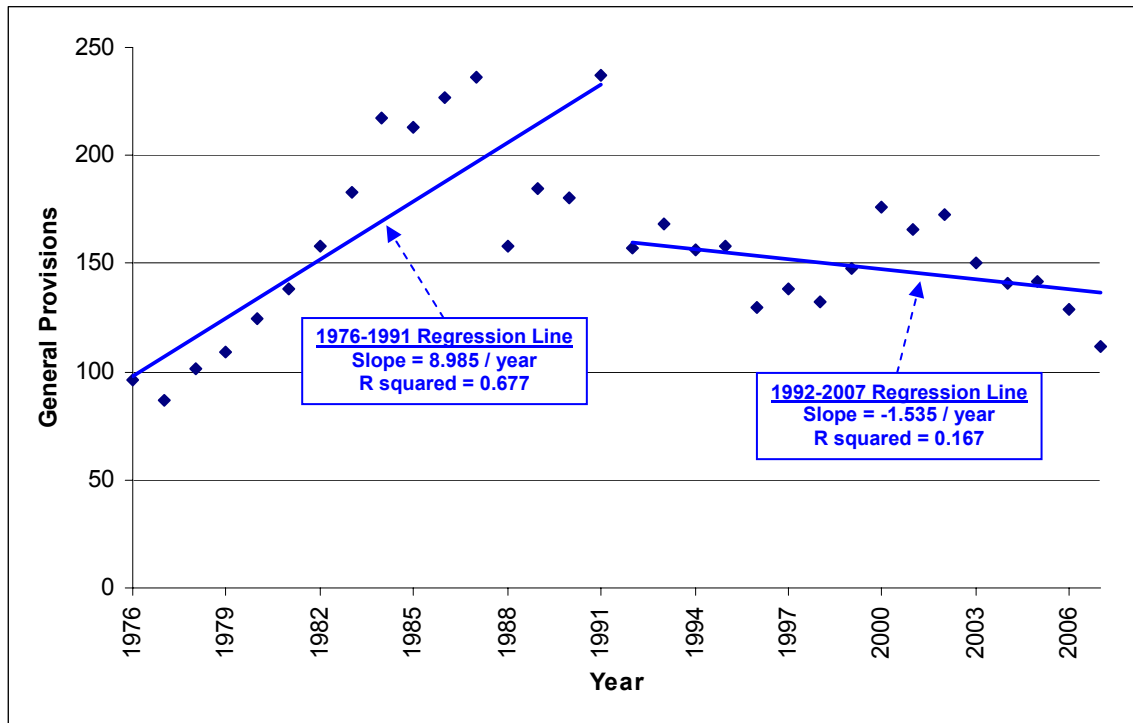


Figure 9. Number of General Provisions in the Defense Appropriation Bills (Fiscal Years 1976-2007)

a. Cold War Data

Figure 9 shows that on average the number of general provisions in the Defense appropriation bills increased by nearly nine per year during the 1976-1991 timeframe. Jones and Bilxer comment on the increase by describing it as a “proliferation.”³⁴ The data has an R squared value of 0.677 which suggests that the numbers of general provisions are increasing in a relatively linear manner.

b. Post-Cold War Data

The post-Cold War data shows that on average the number of general provisions in Defense appropriation bills decreased by approximately 1.5 per year during the 1992-2007 timeframe. The corresponding R squared value of 0.167 implies that the decreasing trend is not very linear. By observing Figure 9, it appears that around 1997 there is a shift from a decreasing number of provisions to an increasing number of provisions. Then around 2002 it shifts back to a decreasing trend.

c. Cold War / Post-Cold War Comparison

The large difference in the value of regression line slopes between the Cold War and post-Cold War data suggests that a change has definitely occurred. The trend of the Cold War era is not continued during the post-Cold War era. However, there is an additional observation that can be seen in Figure 9. It appears that the end of the Cold War, 1991, is not when the change took place. Instead, when observing all the data as a whole, it seems that there were several shifting points. The trend was increasing until approximately 1987, when it shifted to a decreasing pattern. The trend continued to decrease over the next decade until it began to increase again around 1997. It increased until approximately 2001, when it shifted back to a decreasing pattern that continues to be observed in 2007. This poses questions related to the causes of these shifts in slope. What specific event(s) took place during these periods of changing slope that affected the number of general provisions within the appropriation bills?

³⁴ Jones and Bixler, 78.

C. CONTROLLING THROUGH INFORMATION GATHERING

Jones and Bixler suggest that another way Congress controls Defense spending is through information gathering. They state that measuring the amount of Defense-related Congressional hearings and analyzing the makeup of the witnesses to these hearings are a few methods for determining the level of Congressional control.³⁵ Jones and Bixler's specific measures are the number of annual hearings before the HASC, number of annual hearings before the SASC, and the percentage witnesses that attend HASC hearings that are DoD personnel, non-DoD government personnel, and lobbyists / special interest groups.

1. Hearings before the HASC

Table 10 shows the number of hearings held annually by the House Armed Services Committee for the years 1966 through 1972 and 1997 through 2006. Note that the Cold War data is represented by the 1966 to 1972 sample while the post-Cold War data is represented by the 1997 to 2006 sample. Figure 10 displays both sets of data on a single scatter plot. Data samples of such small size do not promote reliable regression analysis within each time period. However, some observations may still be made.

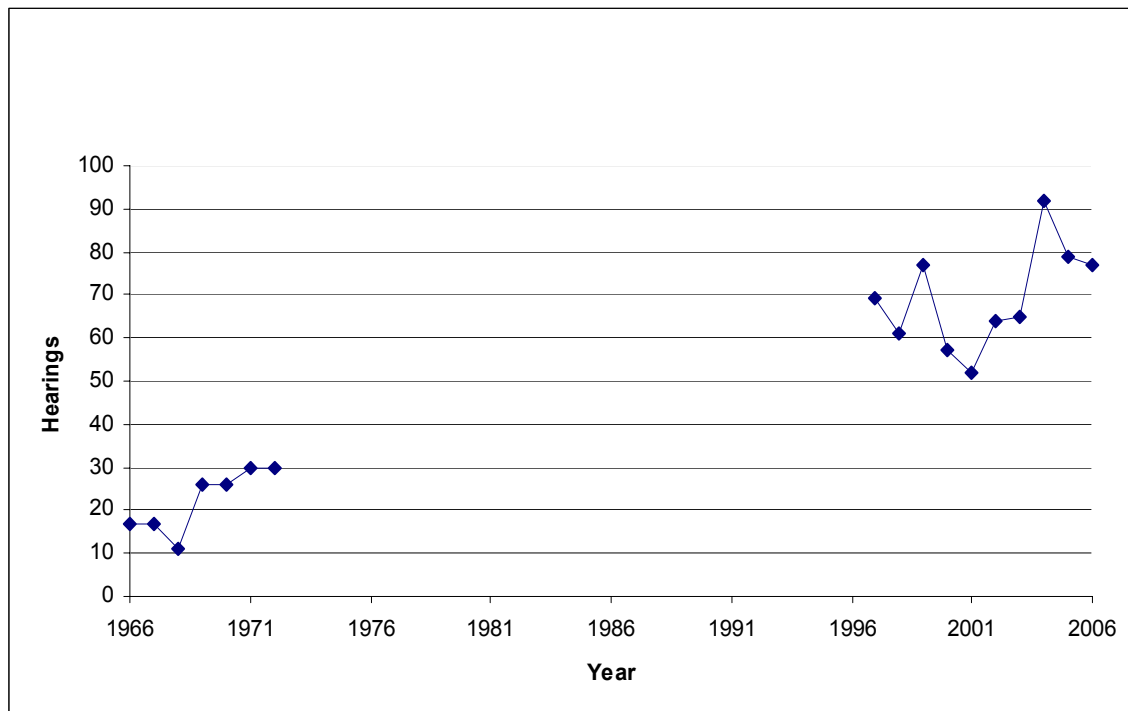
³⁵ Jones and Bixler, 71-75.

Table 10. Number of Hearings Held by the House Armed Services Committee (Fiscal Years 1966-1972, 1997-2006)

Fiscal Year	Hearings	Fiscal Year	Hearings
1966	17	1997	69
1967	17	1998	61
1968	11	1999	77
1969	26	2000	57
1970	26	2001	52
1971	30	2002	64
1972	30	2003	65
		2004	92
		2005	79
		2006	77*

Sources: For Fiscal Year 1966 through Fiscal Year 1972, adapted from Jones and Bixler (1992, p.72). For Fiscal Year 1997 through 2006, House Armed Services Committee website archive of hearings schedules.

Note: * Any 2006 hearings that took place after 17 Nov. 2006 are not included in this number.



(Fiscal Years 1966-1972, 1997-2006)

Figure 10. Number of Hearings Held by the House Armed Services Committee

a. Cold War Data

The HASC averaged approximately 22 hearings per year during the 1966-1972 timeframe. Figure 10 shows an increasing trend in the number of hearings per year, nearly twofold from 17 to 30.

b. Post-Cold War Data

The HASC averaged nearly 70 hearings per year during the 1997-2006 timeframe. Figure 10 suggests that the average trend in the number of hearings per year is increasing within this time period, but there is variation ranging from 52 to 79.

c. Cold War / Post-Cold War Comparison

Figure 10 shows that there was a dramatic increase in the number of hearings held by the HASC between the two sets of data. The average number of hearings in the post-Cold War data is more than triple that of the Cold War data. This poses some interesting questions. For example, how do the average number of days spent in hearings compare between time periods? Jones and Bixler tracked that information for a short period within the Cold War era. Unfortunately, the corresponding post-Cold War data was not accessible. It is conceivable that the Cold War hearings were longer because more topics were covered within each hearing compared to hearings in the post-Cold War era.

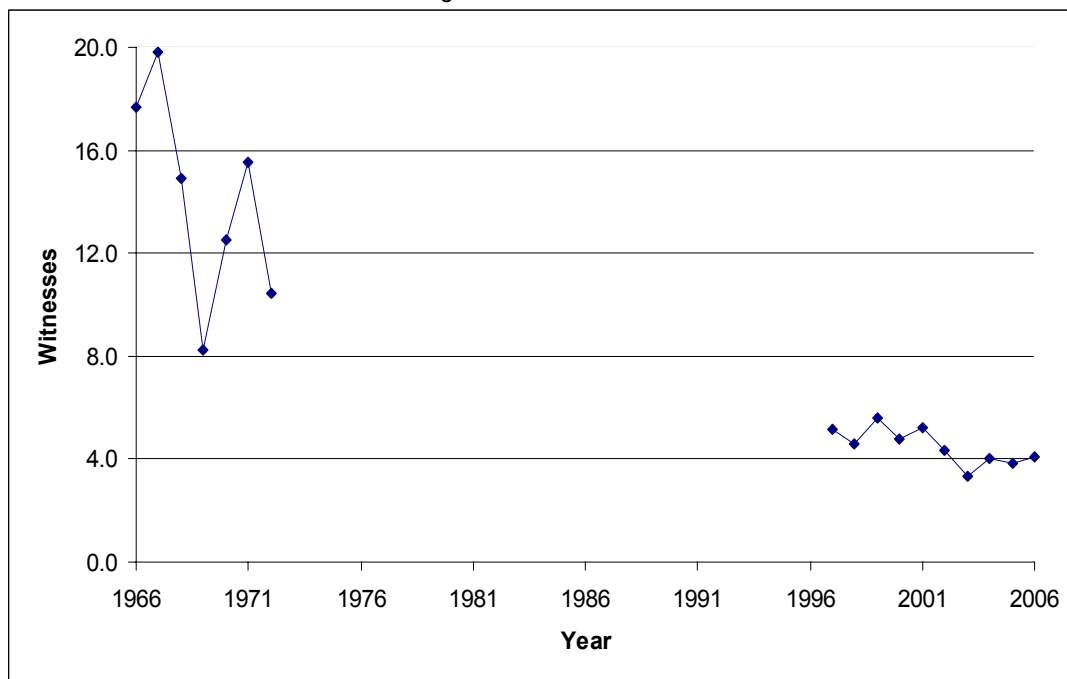
Another way to test this theory could be to compare the number of witnesses per hearing for each time period. Table 11 and Figure 11 contain this information. The numbers of witnesses per hearing in 1966-1972 are substantially higher than those observed in 1997-2006. The 1966-1972 average was greater than 14 witnesses per hearing while the 1997-2006 average was only 4.5 witnesses per hearing. Figure 11 shows this difference on a scatter plot. Notice how Figure 11 and Figure 10 appear to be inverses of each other. Comparing the two shows that as the number of HASC hearings increased, the number of witnesses per hearing decreased. What did remain similar, however, was the average number of witnesses per year throughout the Cold War and post-Cold War data; 303 and 310 respectively. This might suggest that the HASC is focusing on a greater number of specific issues; which is indicative of

higher oversight. It could also mean that the HASC is becoming more decentralized, allowing subcommittees to handle issues that used to be covered within the full committee hearings. These speculations should be examined in further study.

Table 11. Number of Witnesses per House Armed Services Committee Hearing (Fiscal Years 1966-1972, 1997-2006)

Fiscal Year	Witnesses / Hearing	Fiscal Year	Witnesses / Hearing
1966	17.6	1997	5.2
1967	19.8	1998	4.6
1968	14.9	1999	5.6
1969	8.3	2000	4.8
1970	12.5	2001	5.2
1971	15.5	2002	4.3
1972	10.5	2003	3.4
		2004	4.0
		2005	3.9
		2006	4.1

Sources: For Fiscal Year 1966 through Fiscal Year 1972, derived from Jones and Bixler (1992, pp.72, 75). For Fiscal Year 1997 through 2006, House Armed Services Committee website archive of hearings schedules.



(Fiscal Years 1966-1972, 1997-2006)

Figure 11. Number of Witnesses per House Armed Services Committee Hearing

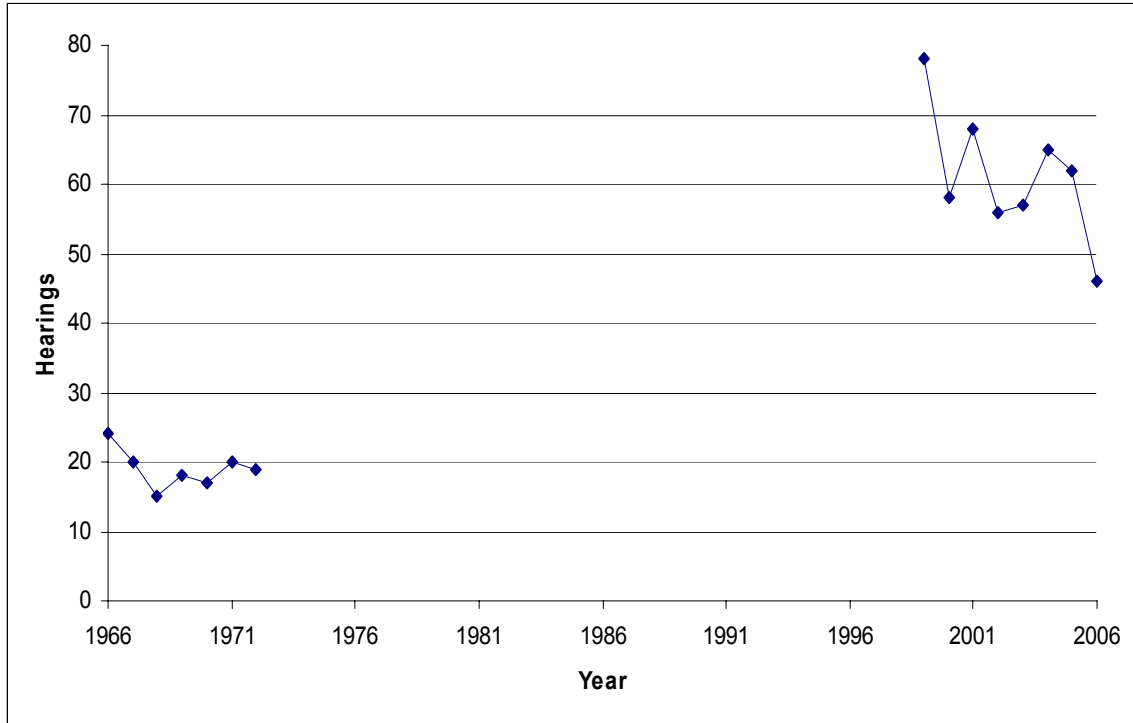
2. Hearings Before the SASC

Table 12 shows the number of hearings held annually by the Senate Armed Services Committee for the years 1966 through 1972 and 1999 through 2006. Note that the Cold War data is represented by the 1966 to 1972 sample while the post-Cold War data is represented by the 1999 to 2006 sample. Figure 12 displays both sets of data on a single scatter plot. Data samples of such small size don't promote reliable regression analysis within each time period. However, by comparing other measures of analysis, additional observations are made.

Table 12. Number of Hearings Held by the Senate Armed Services Committee (Fiscal Years 1966-1972, 1999-2006)

Fiscal Year	Hearings	Fiscal Year	Hearings
1966	24	1999	78
1967	20	2000	58
1968	15	2001	68
1969	18	2002	56
1970	17	2003	57
1971	20	2004	65
1972	19	2005	62
		2006	46

Sources: For Fiscal Year 1966 through Fiscal Year 1972, adapted from Jones and Bixler (1992, p.72). For Fiscal Year 1999 through 2006, Senate Armed Services Committee website archive of hearings schedules.



(Fiscal Years 1966-1972, 1999-2006)

Figure 12. Number of Hearings Held by the Senate Armed Services Committee

a. Cold War Data

The SASC averaged approximately 19 hearings per year during the 1966-1972 timeframe. Figure 12 does not show a clear trend, increasing or decreasing, during this period of time.

b. Post-Cold War Data

The SASC averaged more than 61 hearings per year during the 1999-2006 timeframe. Figure 12 suggests that the average trend in the number of hearings per year is decreasing within this time period from a high of 78 to a low of 46.

c. Cold War / Post-Cold War Comparison

Figure 12 shows that there was a dramatic increase in the number of hearings held by the SASC between the two sets of data. The average number of hearings in the post-Cold War data is more than triple that of the Cold War data.

However, this information should not stand alone. If the trends in the number of witnesses per SASC hearing are similar to that of the HASC hearings, then the same type of inquiries are applicable. Likewise, the average length of each SASC hearing should be examined in further study.

3. Composition of Witnesses in the HASC Hearings

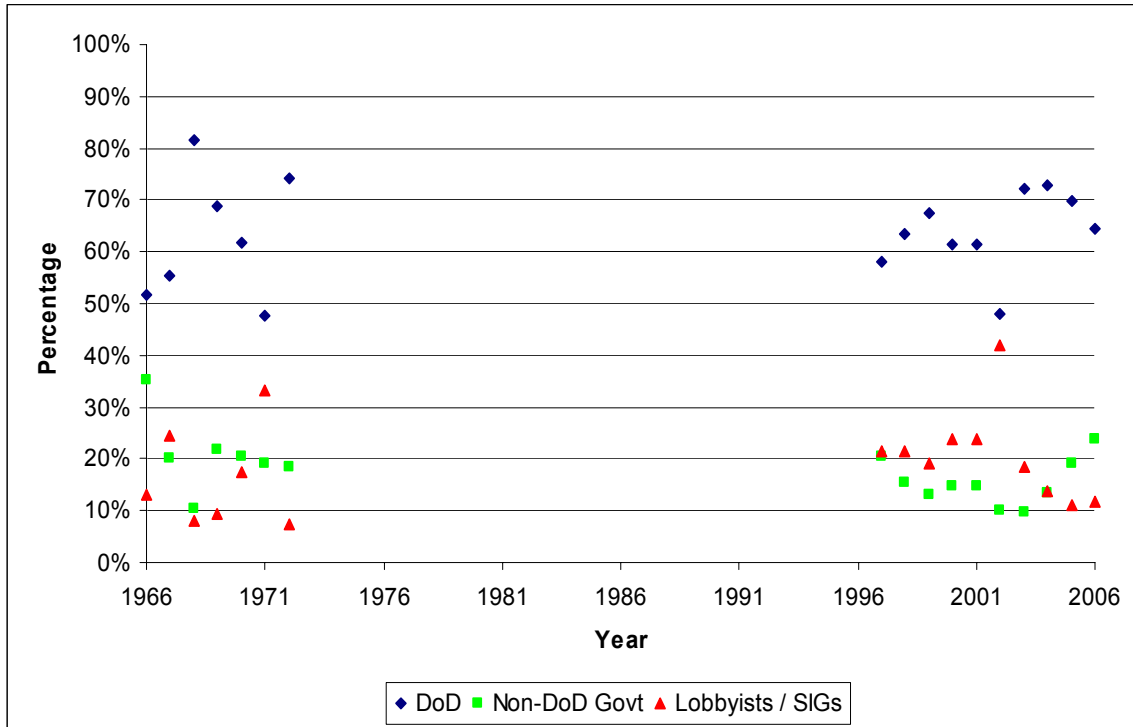
Table 13 shows the composition of witnesses as percentages within HASC hearings for the years 1966 through 1972 and 1997 through 2006. Note that the Cold War data is represented by the 1966 to 1972 sample while the post-Cold War data is represented by the 1997 to 2006 sample. Figure 13 displays both sets of data on a single scatter plot.

Table 13. Composition of Witnesses in the House Armed Services Committee Hearings
(Fiscal Years 1966-1972, 1997-2006)

Fiscal Year	DoD		Non-DoD Govt		Lobbyists / SIGs	
1966	52%		35%		13%	
1967	55%	<u>Average</u>	20%	<u>Average</u>	24%	<u>Average</u>
1968	82%	63%	10%	21%	8%	16%
1969	69%		22%		9%	
1970	62%	<u>Range</u>	21%	<u>Range</u>	18%	<u>Range</u>
1971	48%	34%	19%	25%	33%	26%
1972	74%		18%		7%	
1997	58%		20%		22%	
1998	63%		15%		21%	
1999	68%	<u>Average</u>	13%	<u>Average</u>	19%	<u>Average</u>
2000	61%	64%	15%	15%	24%	21%
2001	61%		15%		24%	
2002	48%	<u>Range</u>	10%	<u>Range</u>	42%	<u>Range</u>
2003	72%	25%	10%	14%	18%	31%
2004	73%		13%		14%	
2005	70%		19%		11%	
2006	64%		24%		12%	

Sources: For Fiscal Year 1966 through Fiscal Year 1972, derived from Jones and Bixler (1992, p.75). For Fiscal Year 1997 through 2006, derived from House Armed Services Committee website archive of hearings schedules.

Note: * Special Interest Groups (SIGs)



(Fiscal Years 1966-1972, 1997-2006)

Figure 13. Composition of Witnesses in the House Armed Services Committee Hearings

a. Cold War Data

Figure 13 shows that for each year in the 1966-1972 timeframe a large percentage of witnesses in HASC hearings were DoD personnel ranging from 48 percent in 1971 to 82 percent in 1968 with an average of 63 percent over the period. The average percentage of non-DoD Government employees that were HASC hearing witnesses was 21 percent while the lobbyists and special interests groups composed of 16 percent of the witnesses during this timeframe.

b. Post-Cold War Data

A large percentage of witnesses in HASC hearings were DoD personnel ranging from 48 percent in 2002 to 73 percent in 2004 with an average of 64 percent over the 1997-2006 timeframe. Non-DoD Government employees that were HASC witnesses represented an average composition of 15 percent while Lobbyists and special interests groups made up the remaining 21 percent in the hearings

c. Cold War / Post-Cold War Comparison

Jones and Bixler suggested that Congress is using a broader base of witnesses to get, what some may consider, a clearer picture of information related to Defense spending.³⁶ The data shows that the amount of HASC witnesses that were DoD employees in the post-Cold War data, 64 percent, remain fairly consistent with those in Cold War data, 63 percent. Therefore, from a percentage standpoint, the HASC does not seem to be increasing the amount of non-DoD witnesses within their hearings.

One interesting feature that becomes apparent when comparing the two time periods is that the average percentage of non-DoD Government witnesses and the average percentage of lobbyists and special interest groups seem to have swapped. In the 1966-1972 timeframe the average percentage of non-DoD Government employees that were HASC hearing witnesses was 21 percent while the lobbyists and special interests groups composed of 16 percent. However, the 1997-2006 data shows the average percentage of non-DoD Government employees that were HASC hearing witnesses was 15 percent while the lobbyists and special interests groups composed of 21 percent. The reasoning for this exchange of witness type and its effects are beyond the realm of this thesis, however, should be considered for further study.

D. SUMMARY OF ANALYSIS

The purpose of this chapter was to analyze and compare Cold War and post-Cold War era data for specific indicators of Congressional control of Defense spending to determine if there is a difference in the levels and trends of Congressional control from period to period. Two of the ways that Congress controls Defense spending are through verbiage in legislation and by gathering information.³⁷ Jones and Bixler describe several pieces of specific legislation as well as particular methodologies to measure the level of Congressional control over Defense spending within the legislation.³⁸ Within this chapter, Cold War and

³⁶ Jones and Bixler, 72.

³⁷ Ibid., 45, 71.

³⁸ Jones and Bixler, 45-54.

post-Cold War data for each piece of legislation described by Jones and Bixler were analyzed and compared. Table 14 is a top-level summary of the information observed while analyzing and comparing the levels and trends from the Cold War to the post-Cold War era for each measure of legislation.

Table 14. Controlling Through Legislation; a Summary of Significant Observations in the Cold War to the Post-Cold War Comparison

Measurements	Observations
Pages in Defense authorization bills	<ul style="list-style-type: none"> • The increasing trend that existed during the Cold War era has not continued in the post-Cold War era. • Year-to-year variation is much larger in the post-Cold War era.
Pages in Defense appropriation bills	<ul style="list-style-type: none"> • The increasing trend that existed during the Cold War era has not continued in the post-Cold War era. • Year-to-year variation is much larger in the post-Cold War era.
Pages in HASC reports	<ul style="list-style-type: none"> • The increasing trend that existed during the Cold War era has not continued in the post-Cold War era. • Year-to-year variation is much larger in the post-Cold War era.
Pages in SASC reports	<ul style="list-style-type: none"> • The increasing trend that existed during the Cold War era has decelerated in the post-Cold War era.
Pages in HAC reports	<ul style="list-style-type: none"> • The Cold War and post-Cold War eras show increasing trends, but they are discontinuous.
Pages in SAC reports	<ul style="list-style-type: none"> • The Cold War and post-Cold War eras show increasing trends, but they are discontinuous.
Amendments to Defense authorization and appropriation bills	<ul style="list-style-type: none"> • There are no significant changes apparent.
General provisions in Defense appropriation bills	<ul style="list-style-type: none"> • The increasing trend that existed during the Cold War era has not continued in the post-Cold War era.

Table 14 lists several significant ways that the levels and trends observed in the methods Congress uses to control Defense spending through legislation during the Cold War era have significantly changed in the post-Cold War era. Seven of the eight measures show that the trends or levels observed in the Cold

War era are significantly different than those observed in the post-Cold War data. In most cases, the increasing levels and trends of Congressional control in the Cold War era have either leveled or rebaselined.

Three ways that Congress controls Defense spending through information gathering were analyzed to determine if significant change exist between the Cold War and the post-Cold War data. The specific measurements and top-level observations from the Cold War to the post-Cold War era comparisons are displayed in Table 15.

Table 15. Controlling Through Information Gathering; a Summary of Significant Observations in the Cold War to the Post-Cold War Comparison

Measurements	Observations
Hearings held by the HASC	<ul style="list-style-type: none"> The number of hearings in the Cold War era has tripled in the post-Cold War era. However, the number of witness per hearing observed during the Cold War era is three times smaller in the post-Cold War era. Therefore, the significance is undetermined.
Hearings held by the SASC	<ul style="list-style-type: none"> The number of hearings in the Cold War era has tripled in the post-Cold War era. However, the number of witness per hearing observed during the Cold War era is three times smaller in the post-Cold War era. Therefore, the significance is undetermined.
Composition of witnesses in HASC hearings	<ul style="list-style-type: none"> The trend of increasing non-DoD witnesses that existed in the Cold War era has not continued in the post-Cold War era.

Comparing the Cold War and post-Cold War data for the numbers of HASC hearings alone may result in misleading information related to the levels of Congressional control over Defense spending. While the numbers of hearings have dramatically increased, the numbers of witnesses per hearing have decreased at nearly the same rate. This suggests that a new structure for hearings has been implemented sometime after the 1972. Without knowing the specific reasoning for this restructuring, any changes in the levels and trends of Congressional control are difficult to determine. The author was unable to attain data for the number of SASC witnesses per hearing. Understanding that

restructuring may have skewed this measurement also, speculations related to any change in Congressional control are undetermined here as well. Therefore, even though there was a significant change in the annual numbers of HASC and SASC hearings, the effects on the levels and trends in Congressional control over Defense spending are undetermined.

Jones and Bixler suggest that Congress was using a broader base of witnesses to get a clearer picture of information related to Defense spending.³⁹ Since the amount of non-DoD HASC witnesses decreased by one percent from the Cold War-to the post Cold War averages, it appears the trend of using a broader base of witnesses has not continued, and therefore has changed.

Eleven of Jones and Bilxer's measures of Congressional control were analyzed in this thesis. Eight show strong indications of significant change in the levels or trends in Congressional control over Defense spending. Therefore, it appears that the recent trends and levels observed in Congressional control of Defense spending have changed since the Cold War era.

³⁹ Jones and Bixler, 72.

IV. CONCLUSIONS

A. RESULTS

The goal of this thesis was to determine if the levels and trends in Congressional control of Defense spending observed in the Cold War era have continued in the post-Cold War era. To answer this question, data reflecting the level of Congressional control from the Cold War and post-Cold War eras were obtained, compared and analyzed. The results of the comparative analysis show that the levels and trends of Congressional control over Defense spending observed in the Cold War era have changed. The general trend of increasing Congressional oversight observed during the Cold War era has ended. It appears to have reached a plateau. It seems as if Congress has reached maximum capacity to control Defense spending. They manage Defense spending as much as they can, but they may have reached a level of control that can go no higher. Complaints from Congress, dating back to 1948, suggest that there is an upper limit on the amount of control Congress can have over Defense spending.⁴⁰ The more Congress micromanages the DoD, the more work they make for themselves. Therefore, since there is a maximum amount of work that Congress can do, there is a maximum amount oversight they can have over DoD spending. Trends in the data suggest they have reached their utmost level of oversight.

B. ADDITIONAL OBSERVATIONS / RECOMMENDATIONS FOR FURTHER STUDY

One interesting observation is that the clarity of any pattern in many of the measures of Congressional control of Defense spending has substantially diminished from the clarity levels observed by Jones and Bixler in the Cold War data. There does not seem to be any significant long-term pattern of increase or decrease. Instead, many measures of control show substantial year-to-year variation that often differ from other measures of control. It is as if Congress is

⁴⁰ Jones and Bixler, 51.

shifting their primary means of control from time to time. Therefore, if Congress is at capacity, this suggests that the relevant question is no longer “how much” control. Instead, the questions are “what form” of control, and “what influences the level of that form” of control.

Figure 2 and Figure 9 seem to show cyclical patterns in the number of pages in the Defense appropriations bills and in the number of general provisions within the appropriation bills respectively. What is the driving factor in these cycles? Jones and Bixler noted some possible variables including public attitudes towards Defense spending, amount of DoD budget authority, amount of DoD spending, and the number of House and Senate employees⁴¹. An additional driver that likely affects the level of Congressional oversight is party affiliation. This includes the party affiliation of the presidential administration as well as which party is in the majority of the House and Senate. Testing these variables was beyond the scope of this thesis but should be considered for further research. With that said, a cursory look was made to determine whether variability in the level of Congressional control over Defense spending was tied to overall Defense spending and annual changes in Defense spending. No significant correlation was found. However, if the question is “what form” of control, there may be a multivariate relationship that is beyond the scope of this study.

Another interesting observation is the apparent restructuring of the HASC hearings. Figure 11 and Figure 10 show that as the number of HASC hearings increased, the number of witnesses per hearing decreased. This implies that the HASC is focusing on a greater number of specific issues; which is indicative of higher oversight. It also suggests that the HASC is becoming more decentralized, allowing subcommittees to handle issues that used to be covered within the full committee hearings. The possible reasoning is that information flow within large groups is often difficult. Discussions get sidetracked, and points get lost or misinterpreted. Hearings of smaller size often provide a better environment for information where many specific details can surface and be

⁴¹ Jones and Bixler, 96-125.

covered in greater depth, which enables more and better quality oversight. Beyond my speculations, it would be interesting to understand why the HASC hearings have been restructured and the impact of this restructuring on Congressional oversight of Defense. This should be considered for further study. The author was unable to obtain the data pertaining to the number of witnesses per SASC hearing, but suspects that the same type of restructuring has occurred within these hearings as well.

C. IMPORTANCE OF RESULTS

Each year the President submits a budget request to Congress on behalf of the DoD. Much of the information contained within the budget request was prepared many months prior to the actual submission date. Therefore, not only does Defense believe that need the resources they ask for in the budget, but they also request a certain level of flexibility in spending in order to meet the challenges of an uncertain future. When Congress increases their control over spending, the DoD's ability to effectively react to changes and uncertainties dramatically decreases.

The results of this thesis suggest that the Cold War era trends of Congressional control over Defense spending no longer show the same signs of continuous increase in the post-Cold War era. A broad look shows that the levels of Congressional control over Defense spending to have reached a plateau. The level of the plateau is high, but no longer appears to be increasing. From a short-term standpoint, year to year variations are often large. Therefore, DoD leadership should be cognizant and prepared for sustained high levels of oversight, the form of which may vary from year to year. Understanding the levels and trends of Congressional control over Defense spending could lead the DoD to more effective and efficient budgeting processes and better outcomes in the future.

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