SYM-AM-20-041

Proceedings of the Seventeenth Annual Acquisition Research Symposium

Acquisition Research: Creating Synergy for Informed Change

May 13–14, 2020

Published: April 06, 2020

Approved for public release; distribution is unlimited.

Prepared for the Naval Postgraduate School, Monterey, CA 93943.

The research presented in this report was supported by the Acquisition Research Program of the Graduate School of Defense Management at the Naval Postgraduate School.

To request defense acquisition research, to become a research sponsor, or to print additional copies of reports, please contact any of the staff listed on the Acquisition Research Program website (www.acquisitionresearch.net).

The Budget Control Act: Effects and Unintended Consequences for DoD

Abigail C. Zofchak – MPP, is a budget analyst for the U.S. Air Force (SAF/FM). She has previously held positions with the U.S. Senate Budget Committee; Air Force Operations, Plans, and Requirements, Resources Division (AF/A3); and the office of the Air Force Administrative Assistant, Planning and Programming Division (SAF/AA). Zofchak received her bachelor's degree from Denison University in political science and received her master's degree in public policy from the Sanford School of Public Policy at Duke University.

Abstract

Since Congress enacted the Budget Control Act of 2011 (BCA), the Department of Defense (DoD) has raised concerns about the cuts from sequestration, limited funding to support troops, unpredictable funding, and instability from year to year. Statutory limits have largely failed to control discretionary spending and reduce deficits and have caused long-term effects on the DoD's ability to manage its annual operating budget and acquire necessary new technology and systems. As the DoD works to deter, fight, and win the nation's wars, it cannot afford problems caused by uncertain and unstable funding. However, budget enforcement will be at the forefront of conversations about spending management as the Congressional Budgeting Office (CBO) has reported that the current deficit and debt limits will be unsustainable in the future. While limiting defense spending will not solve all of the problems related to rising deficits and debt, it does hold a prominent place in the conversation about the relationship between budget enforcement and government effectiveness. To determine how much the BCA impacted the stability and predictability of the DoD's budget, this project describes and compares the impact of the Budget Enforcement Act (BEA) and the BCA on the DoD's defense-wide budget over time in terms of year-to-year stability and longer-range planning and programming stability.

Introduction

Since 2011, the DoD has had to manage its resources under limitations set by the BCA. The DoD has raised concerns about the cuts from sequestration, limited funding to support troops, unpredictable funding, and instability from year-to-year. As the U.S. military remains globally engaged in securing U.S. interests in a complex, dynamic, and increasingly uncertain world, it cannot afford problems caused by fiscal stress. Conducting current operations, sustaining readiness, and making progress towards a more modern, capable, and lethal military requires stable, predictable, and sufficient funding. The DoD's senior leaders repeat this sentiment year after year when justifying budget requests, highlighting the importance of all of three components to the DoD's ability to successfully manage its annual operating budget.

When discussing the BCA, many in the defense community focus on the impact the statutory limitations have had on only one of the three components that lead to financial management success, resource sufficiency. However, few have looked at the BCA's impact on the stability and predictability of the DoD's budget. While it is important to look at whether the DoD has sufficient funding, both stability and predictability are crucial to the DoD's fiscal health and its ability to deter, fight, and win the nation's wars.

Congress enacted the BCA to combat rapid increases in spending that contributed to rising deficits and national debt. Since its enactment in 2011, the BCA has failed to reach its goals of balancing the federal budget. Congress has adjusted the caps to higher limits four times under the Bipartisan Budget Acts (BBA) of 2013, 2015, 2018, and 2019 in order to avoid major spending cuts under sequestration. Just in the past five years, the debt has increased by nearly $4 trillion (Treasury Direct, n.d.). The Congressional Budget Office (CBO) projects that under current law, the debt will increase to a debt–GDP ratio of 96.2%. Under current policy, the CBO projects the debt–GDP ratio will be 106.5%, the highest in U.S. history.

This is not the first time that the DoD has had to function under statutory limitations. Since the 1980s, Congress has sought to supplement and modify the budget process by adding a variety of enforcement mechanisms to curb deficit spending. There have been three phases of statutory limits: fixed limits under the Gramm-Rudman-Hollings Act from FY1985–FY1989, adjustable limits under the BEA from FY1990–FY2002, and the reinstatement of adjustable limits with the Pay-as-You-Go Act of 2010 and the BCA in 2011. The government achieved a surplus under the BEA for four years (FY1998–FY2002). This was the only period of time where the government balanced the budget during this 45-year period (see Figure 1).

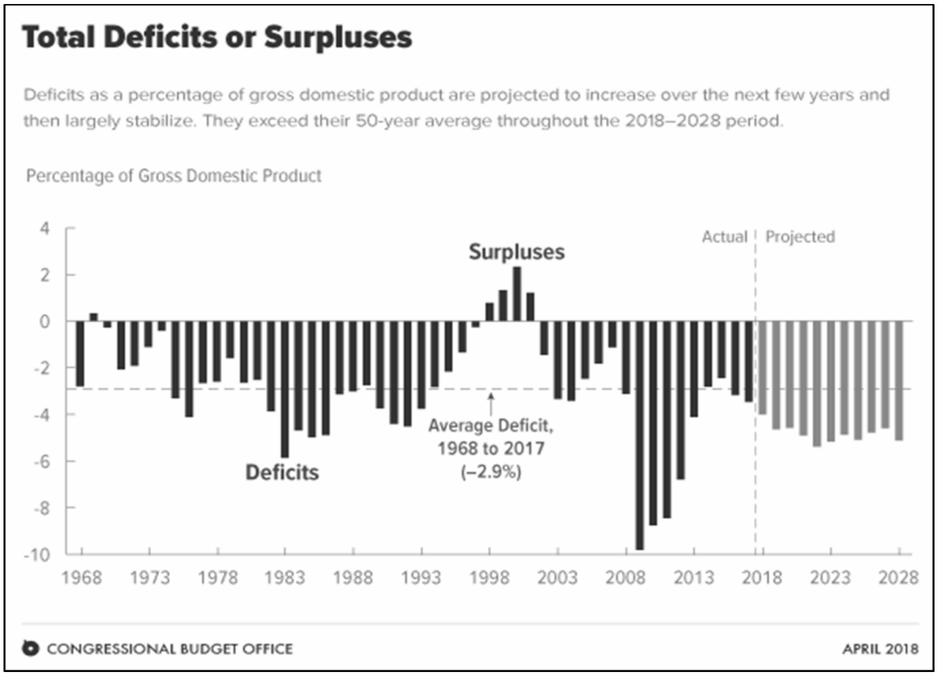


Figure 1: Total Deficits and Surpluses for 1968–2018 with Projections to 2028

While limiting defense spending through statutory caps will not solve all of the problems related to rising deficits and debt, it does hold a prominent place in the conversation about federal spending practices and the relationship between budget enforcement and government effectiveness. Budget enforcement will be at the forefront of conversations about spending management as the CBO has reported that the current deficit and debt limits will be unsustainable in the future (Blom, 2018). Given the concerns raised by the DoD about the BCA, looking at the impact of the BCA on the DoD will help inform conversations about future budget enforcement.

Was the DoD's budget more stable and predictable under the BEA than the BCA? This project considered whether the statutory caps under the BCA had a larger impact on the DoD's budget stability and predictability than the caps imposed by the BEA in the 1990s and early 2000s. The imminent expiration of the BCA in FY2021 offers the opportunity to reflect and act upon the persistent issues related to defense financial management and federal budget enforcement.

Background

Statutory Budget Enforcement

Article 1 Section 9 of the U.S. Constitution states, "No Money shall be drawn from the Treasury, but in Consequence of Appropriations made by Law; and a regular Statement and Account of the Receipts and Expenditures of all public Money shall be published from time to time." This lays the foundation for government spending but gives limited guidance on how exactly the government should exercise these powers. With such limited guidance, Congress has wrestled with how to effectively oversee the government's expenditures. Over time, Congress decided that merely passing a budget resolution and appropriations bills was not sufficient to control spending; there needed to be some form of budget enforcement. Since then, the federal government has created a variety of approaches to enforce set budget limits.

Statutory enforcement was one of these approaches. In the 1980s, Congress began to supplement and modify the budget process by adding statutory limits and sequestration as a means to control spending. The first set of limits came into existence in 1985 under the Gramm–Rudman–Hollings Act, which set fixed statutory limits on government spending to be enforced through points of order on the floor and sequestration. Sequestration enforces deficit limits through an executive order that can be invoked at various times during the budget process if limits are breached. If the president orders sequestration, then automatic across-the-board spending cuts occur at equal percentages for all programs and departments (Spar, 2013). Half of any outlay reductions would be split evenly between defense and non-defense discretionary programs. When sequestration is triggered, legislators do not have any control over where the automatic cuts are made. The spending cuts are intended to impact all programs equally, excluding exempt programs such as Social Security and Medicaid (Spar, 2013).

With some adjustments in 1987 to address constitutionality,[1] the fixed limits under Gramm–Rudman–Hollings Act remained until 1989. Even with these statutory limits, deficits persisted (see Figure 1; Lynch, 2011). With the failure of the fixed limits from FY1985–FY1989, Congress created new budget control processes to address budget deficits. Sequestration procedures were retained, but the fixed deficit targets were replaced with adjustable ones. Congress created these mechanisms under the Budget Enforcement Act of 1990 (BEA), which

[1] The original process of determining the automatic spending cuts during sequestration was ruled unconstitutional in *Bowsher v. Synar* in July 1986. Under the act, following the submission of the comptroller general's report, the president was required to issue an initial sequestration order consistent with the reductions prescribed by the comptroller general. The court ruled that as an official of the legislative branch, the comptroller general could not compel presidential action.

was Title XIII of the Omnibus Budget Reconciliation Act of 1990 and were extended multiple times until FY2002 when they finally expired. This was the only period in time where the government achieved a surplus under statutory limits (see Figure 1).

Since the fallout of the 2008 recession, the government had increased spending a great deal to help stimulate the national economy. Between the Bush and Obama bailouts, Obama's stimulus package, and the enactment of the Affordable Care Act, federal spending was increasing at rapid rates. These increases in spending led to increasing deficits that were approaching over $1 trillion. By 2010, the deficit was just under $1.3 trillion according to CBO. After the 2010 elections, Republicans took control of Congress again and sought to rein in spending. The major tipping point was the Debt Ceiling Crisis of 2011. The debate centered on raising the national debt ceiling. With these high deficits year after year, the debt began to grow rapidly. A decision needed to be made about the debt ceiling, and the newly elected members of Congress wanted to reverse the impact of the recent increases in spending and bring down deficits.

To address all of these concerns, Congress enacted the BCA, which raised the debt ceiling by $400 billion and reinstated statutory limits and sequestration through FY2021 to better control future spending (Driessen & Lynch, 2018). There are two cap categories, one for defense and one for non-defense discretionary spending. The BCA also required Congress to enact legislation developed by a Joint Select Committee on Deficit Reduction, by January 15, 2012, to reduce the deficit by at least $1.2 trillion. The BCA provided that failure to do so would trigger a series of automatic mandatory spending reductions each year from FY2013–FY2021, a one-year sequestration of discretionary spending for FY2013, and lower discretionary spending limits for each year from FY2014–FY2021 (Driessen & Lynch, 2018). The "supercommittee" failed to reach an agreement, and this rule came into effect (Barrett, 2018).

The BCA and Defense Spending

Some defense officials argue the caps impede the DoD's ability to adequately prepare military personnel and support equipment for operations and other national security requirements. Others argue the limits are necessary to curb rising deficits and debt (McGarry, 2018). For example, retired Lieutenant General Tom Spoehr commented, "Despite the increases to $700 billion in FY2018 and $716 billion in FY2019, budget caps, an excessive reliance on OCO, and the department's acceptance of stagnant budget growth are all preventing the military from regaining the strength it needs to defend the nation" (Mehta, 2018).

Other critics of the legislation argue reductions to defense investments “present a grave and growing danger to our national security.” These critics note that the spending caps disproportionately impact defense programs, which in FY2017 accounted for 16% of budgetary resources (excluding net interest payments) and 49% of BCA spending reductions (McGarry, 2018). If sequestration is triggered, the across-the-board cuts prevent any certainty or priority over where the cuts are made. Not only does this present a danger if cuts are made, but it also makes it very hard to plan and prioritize for the future.

Former Defense Secretary James Mattis has said, “Let me be clear: As hard as the last 16 years of war have been on our military, no enemy in the field has done as much to harm the readiness of U.S. military than the combined impact of the BCA’s defense spending caps, worsened by operating for 10 of the last 11 years under continuing resolutions of varied and unpredictable duration.” Continuing resolutions are a major problem for the DoD, as they stagnate acquisitions, development, and innovation. Continuing resolutions just extend the same funding numbers from the previous FY, so there is no new funding designated to support new acquisitions, development, and innovation. Without such progress, the DoD cannot produce the most lethal and ready forces possible.

On the other hand, Lawrence Korb, an assistant secretary of defense during the Reagan administration, said, “The BCA has affected defense capability somewhat,” but noted Congress has limited the potential impact of the BCA by increasing the caps under multiple BBAs and by exempting funding for OCO from the spending limits. These exemptions allowed the DoD to use funds for base budget activities without the same limitations (Mehta, 2018).

Members of Congress have also made comments about the BCA in relation to defense spending. Senator John McCain and Representative William Thornberry, former chairs of the Senate and House Armed Services Committees, said the law was a failure (Mehta, 2018). However, Representative Mark Meadows, chair of the House Freedom Caucus, opposed the 2018 budget deal to raise the spending caps and stated, “I want to fund our military, but at what cost? Should we bankrupt our country in the process?”

What’s Next?

The BCA caps will expire in FY2021, and it is up to Congress to determine what type of discretionary enforcement should be in place, if at all, once the caps expire. Congress enacted the BCA to combat the rising $1 trillion deficits that occurred after the 2008 recession. However, even after the BCA, the deficit neared $1 trillion, and the CBO projects it will be at an average of

$1.2 trillion between 2020 and 2029. Although mandatory spending accounts for the largest amount of deficit spending, the DoD has the largest portion of federal discretionary spending. Major changes in deficit spending behavior will likely not happen quickly or all at once. It will likely be a process of making smaller impactful changes over time that will help bring down deficits incrementally. While changes to defense spending will not fix problems with federal spending alone, the DoD's budget still holds a place in the conversation about federal spending reform.

Evaluating the impact that the BCA had on the stability and predictability of the DoD's budget compared to the impact under BEA will help provide a better understanding of the persistent tension between combating rising deficits and combating threats against the United States. With a better understanding of these issues, the federal government can better control spending without forfeiting the quality of its services to the public.

Data and Design

Research Question

Was the DoD's budget more stable and predictable under the BEA than the BCA?

Operationalizing This Question

I analyzed whether DoD budgets were more stable and predictable under the BEA or under the BCA. I elected to compare the BCA to the BEA because Congress was able to balance the budget under the BEA. While the budget was not balanced for the entirety of the BEA, the government did see surpluses under the BEA from FY1998–FY2002. Moreover, there was less backlash from the defense community about the BEA than there has been about the BCA. Both laws impose adjustable statutory caps on discretionary spending but do so at different limits over time and under different cap categories. The DoD's budget, as discretionary funding, is subject to these caps (Driessen & Lynch, 2018; Lynch, 2011). The other specific characteristics that vary between the two mechanisms include the following: what the cap categories were, the limits of the caps for the DoD in each FY, how many fiscal years the caps were intended to last, if sequestration was triggered, if any extensions or adjustments occurred, and if extension or adjustments occurred, how it changed the nature of the caps for that time period.

Conducting current operations, sustaining readiness, and making progress towards a more modern, capable, and lethal military requires stable, predictable, and sufficient funding.

When discussing the BCA, many in the defense community focus on the impact the statutory limitations have had on only one of the three components that lead to financial management success, resource sufficiency. However, few have looked at the BCA's impact on the stability and predictability of the DoD's budget. While it is important to look at whether the DoD has sufficient funding, both stability and predictability are crucial to the DoD's fiscal health and its ability to deter, fight, and win the nation's wars. In this study, I compared the effects of the BEA on the DoD's budget to the impact of the BCA on the DoD's budget to help determine the effect of each enforcement mechanism on the DoD's budget in terms of budget stability and predictability. I focused on these two factors to provide a more well-rounded understanding of how statutory budget enforcement impacts an agency's fiscal health and effectiveness.

Budget stability for this study was defined as little to no change from year-to-year in requests and appropriations. This will be referred to as "year-to-year stability." One of the best predictors for how much the DoD will spend in the upcoming year is to look at how much it spent in the previous year. Budgets tend to not change much from year to year (Candreva, 2017). If there is change, it was considered stable if the changes are incremental and similar in size from year to year. It is important to note, however, that another key determinant for changes in spending is changes in levels of threat, whether the nation is expected to be involved in armed conflict, degree of international involvement, to what extent the nation's leader wants to build the military, and political climate (Candreva, 2017). These factors were considered in this analysis.

To determine budget predictability, I looked at how variant the DoD's five-year projections were for each FY under each set of caps and if those projections accurately predicted the amount that Congress eventually appropriated to the DoD. This concept will be referred to as "budget predictability." There are two ways to think about DoD planning with regard to the defense budget, with the first being "big p" planning. "Big p" planning focuses on the larger picture of security strategy and is the first component of the Planning, Programming, Budgeting, and Execution system (PPBE) that the DoD uses. This includes the National Security Strategy of the administration and the National Defense Strategy of the DoD. "Small p" planning refers to the budget forecasting and estimating the future needs of the DoD. Understanding "small p" planning allows me to evaluate the predictability of the DoD's budget. As I mention predictability and planning throughout this report, I will be referring to "small p" planning.

The cap limits of BEA lasted for 12 years, and the BCA has been in place for nearly nine years. I compared the DoD's budget request data and appropriations data from FY1990–

FY2002 (for the BEA) to DoD budget request data and appropriations data from FY2012–FY2020 (for the BCA). The data were collected from budget tables in the National Defense Budget Estimates Report (The DoD Comptroller Green Books). The data are in U.S. dollars and are adjusted for inflation to make them better suited for comparison.

The time frames for both mechanisms are relatively similar in length and make for a sound comparison over time. Tracking and comparing changes over time will reveal any persistent trends of growth or decline under each mechanism and to what extent budget stability existed for the DoD for both cases. While the situational contexts for each time period are different from one another, there were enough years in each to see transfers of executive power and legislative power. Moreover, both time frames experienced control by both Democrats and Republicans at a certain point in time. This does not limit all situational influences, but it does eliminate any absolute bias from one leader or one party throughout the entire time frame in each case. To account for other major situational contexts that could impact the data, such as national emergencies or macroeconomic conditions, this study acknowledges such conditions in the analysis as confounding factors.

I analyzed the DoD's defense-wide budget by its four main appropriation titles: military personnel, procurement, research, development, test, and evaluation, and operations and maintenance. While there are other titles, such as military construction or related agencies, the other smaller titles are not constant throughout both time periods, do not make up a major portion of the DoD's budget, and would have blurred my comparisons between the DoD's budget under the BEA and BCA.

I began by analyzing the year-to-year stability of DoD budget requests under the BEA and the BCA. This gave an overview of what requests looked like up front at the agency level of the DoD's budget. Making a macro-level comparison of what trends occurred over time for budget requests under each mechanism helped me assess whether the DoD's budget requests were more stable under the BEA or under the BCA.

After analyzing the year-to-year stability of budget requests, I analyzed the year-to-year stability of appropriations enacted for each year under the BEA and the BCA. This laid out the amount of money given to the DoD over time and helped me understand how stable the amount of money Congress gave from year to year is. After looking at each time period in isolation, I compared the trends in appropriations under the BEA to the trends in appropriations under the BCA. For the amount appropriated, I looked solely at budget authority. Congress provides budget authority by law to federal agencies to obligate money for goods and services. Budget authority can carry over from year to year, meaning that some budget authority given in the previous year may not have been spent and will remain in the account for the next year. This was a potential limitation of my study.

To further my analysis of year-to-year stability under each mechanism, I compared the amounts requested and the amounts appropriated defense-wide under the BEA and the BCA. This helps pull together trends in requests and money given for the same year over time and allow me to determine whether there is any relationship between what is requested and what is given in each year

I then looked to the trends in budget predictability under the BEA and BCA. I analyzed the variance in the Future Years Defense Program (FYDP) projections for each FY over time. The DoD makes five-year projections each year, estimating future requirements and budget requests. The greater variance in projections suggests lower budget predictability, and less variance indicates higher budget predictability. The data for the five-year projections were collected from the DoD Comptroller Green Books. I also compared the five-year projections to the budget authority given for each of FY. This allowed me to compare what the DoD planned for on average to what Congress ended up appropriating to them.

The five-year projections are presented in the Green Books in terms of the budget function instead of appropriations title, meaning they are projections for the national security budget function (050). While this offered another perspective to broaden my total data outlook for the study, it does present some limitations. The 050 budget function is not exclusively DoD spending. 96% of the 050 budget function is designated to the DoD, while the other 4% is for atomic energy defense activities and other non-DoD defense related activities (Congressional Research Service, 2017). It would have been preferable to use the 051 subfunction, which is exclusively DoD spending, but not all of the DoD Comptroller Green Books include projections for the subfunctions. To remain consistent in my analysis, I used the 050 numbers. This means the data might have been skewed by including a small percentage of projections for other agencies outside of the DoD. However, the DoD comprises most of the 050 budget function, and the 050 budget function generally acts as a proxy for DoD defense spending. I also was not able to compare the differences between appropriations titles to see if there was more stability for certain types of spending over others.

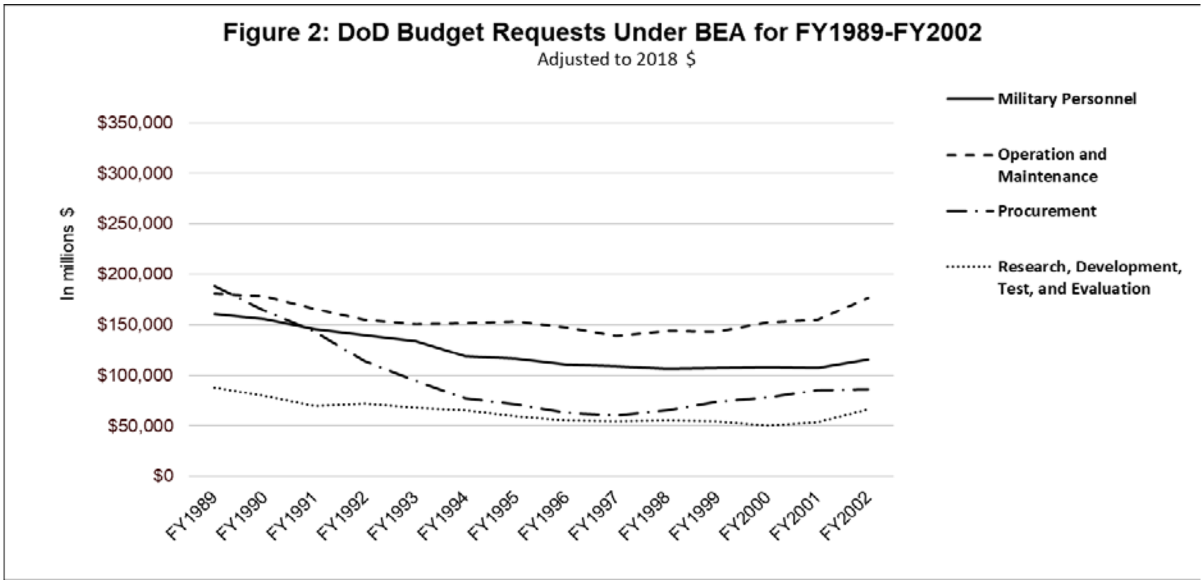
Findings: Year-To-Year Stability

The BEA Era

I began by looking at the DoD's budget requests under the BEA from FY1989–FY2002. The BEA was not enacted until 1990, but I have included FY1989 to provide data prior to enactment to show if any immediate change occurred. Overall, I expected to see stable trends in year-to-year changes for budget requests during this time with slight declines due to the "peace dividend" after the end of the Cold War. The "peace dividend" resulted in a decline of defense spending to 2.9% of GDP (Candreva, 2017). However, I expected to see more stability in budget requests than in budget authority given because requests can be more incremental and budget authority given may be subject to immediate demands that cause changes after the request is submitted.

Figure 2 shows the DoD's budget requests for FY1989–FY2002.[2] As I expected, there is a slight decline throughout the time period, with the greatest decline occurring right after 1991 when the Berlin Wall fell and the Cold War ended. Procurement saw the greatest decline in budget requests. This makes sense because spending for procurement includes new military hardware such as aircraft, ships, armored vehicles, and other major equipment (e.g., radios and satellites); upgrades to existing equipment, including extending service life or remanufacturing existing systems; weapons and ammunition, ranging from air-to-air missiles to rounds for individual rifles; and spare parts, particularly those that are centrally managed. With the "peace dividend," the DoD was downsizing, so it was not going to need to acquire, build, or upgrade weapons and equipment.

[2] The y-axis for Figure 2 has been extended to $350,000 to make it useful for comparison between other figures later in the study that display data from the BCA era.



There was an incline in amounts requested for all of the appropriations titles, except for procurement which remained steady, starting in the early 2000s. With the terrorist attacks of 9/11 and the start of the war in Afghanistan, it makes sense why there would be the change in direction for budgeting during the time. Procurement likely remained steady for the first year or two after the 9/11 attacks and engagement in Afghanistan because the budget cycle starts a year before the actual year where funding occurs, so the DoD was likely still determining the demand of those efforts. It is hard to budget for programs and policies that are not determined yet.

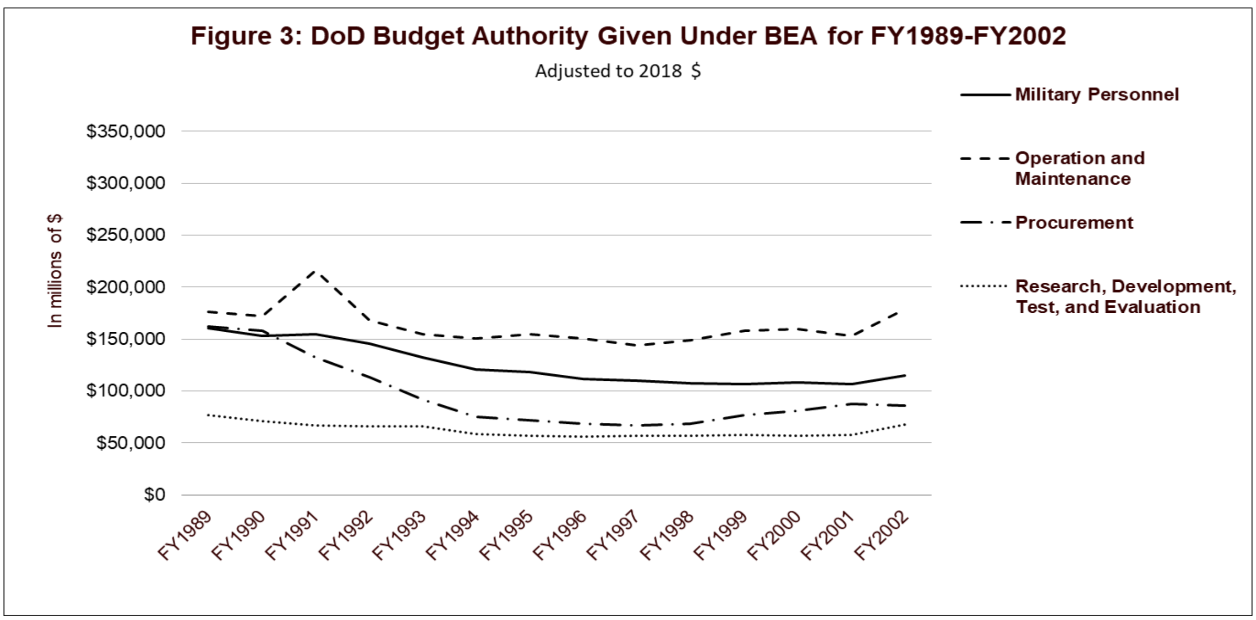
In directing specific attention to the years 1993 and 1997, when the caps had been extended, there is not much fluctuation during those extension years or directly after. In light of the caps, changing cap categories, and two extensions of the policy, the budget request data suggest relative stability throughout.

I then looked at the budget authority given to the DoD through appropriations for FY1989–FY2002 to see what funding was given in response to what the DoD had been requesting. As I anticipated, Figure 3 shows that budget authority given to the DoD was slightly more volatile than the budget requests.[3] The biggest difference in what the DoD requested versus what Congress appropriated was the change in operation and maintenance for FY1991. The numbers were fairly stable for the budget requests, while the money given to operation and maintenance went up to $215 billion from $171 billion. The amount requested for FY1991 was

[3]The y-axis for Figure 3 has been extended to $350,000 to make it useful for comparison between other figures later in the study that display data from the BCA era.

$165 billion, showing an intention to decrease operations and maintenance instead of increase it for FY1991. This increase was likely the result of the start of the Gulf War (Operation Desert Storm; see Candreva, 2017). The Gulf War started in August 1990, meaning the president's budget for FY1991 had already been submitted before the United States engaged in the operation in early August. However, there was still time to change the amount during the appropriations process to address the increased demand from the Gulf War efforts for spending during that year.

Two small sequestrations were triggered under the BEA as a result of FY1991 spending (Crippen, 2001). These sequestrations resulted in across-the-board discretionary spending cuts (Office of Management and Budget, 2000). Congress funded parts of Operation Desert Storm under H.R. 1281 and H.R. 1282 in 1991. Most of the appropriations under these two bills were supplemental appropriations under the emergency designation, meaning they were not subject to sequestration under the cap limits (Keith, 2000). However, a portion of H.R. 1281 provided $512 million in budget authority under non-emergency spending, meaning it was subject to sequestration. The non-emergency spending breached the domestic caps by about $2 million, resulting in sequestration cuts of 0.00013% from the domestic budget (Good, 2013). While there was some non-emergency defense funding under these bills, they did not breach the defense caps at this time (Keith, 2000).



The other sequestration was caused by a drafting error in the Foreign Operations Act of 1991. In the OMB's final sequestration report for FY1991, the OMB identified a breach of $395 million in the discretionary budget authority for international programs. 1.9 percent was cut from the international category, yielding $191 million in outlay savings. However, this sequestration was later rescinded after one the two supplemental appropriations acts related to Operation Desert Storm (H.R. 1281 and H.R. 1282) corrected the drafting error made in the original Foreign Operations Act of 1991 (Keith, 2000).

Other than the spike in operations and maintenance spending in FY1991, there is not much difference between the budget requests and budget authority given during this time period. There is also not much volatility from year to year for both budget requests and budget authority given. These findings suggest that there was year-to-year stability for the DoD under the conditions of the BEA from FY1989–FY2002.

The BCA Era

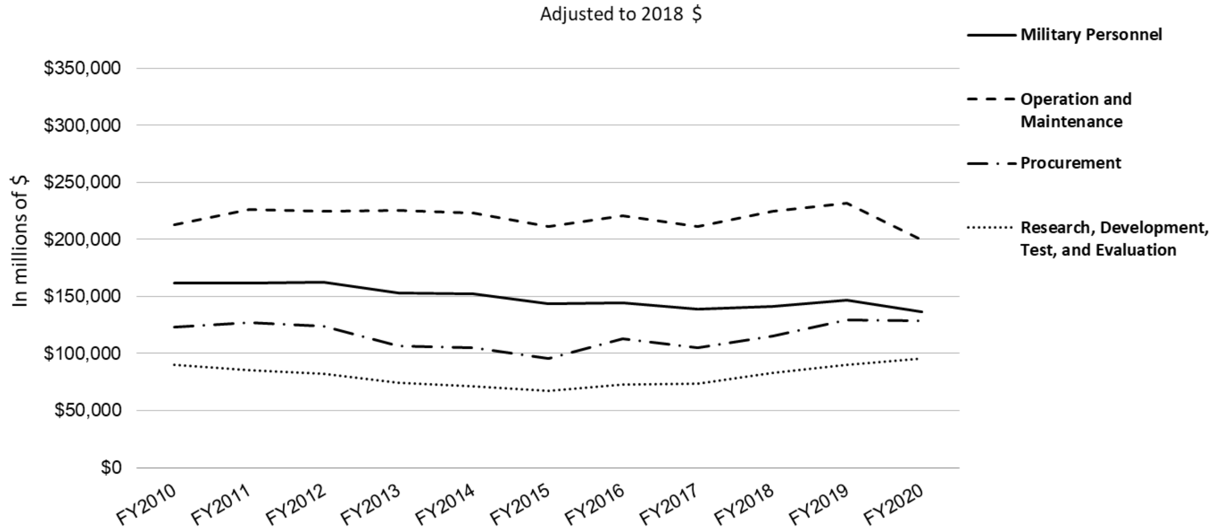
After looking at the year-to-year stability under the BEA, I looked at the year-to-year stability for the DoD's budget requests and budget authority given under the BCA. For this analysis, I looked at budget requests from FY2010–FY2020. The BCA was not enacted until 2011, but I have included FY2010 to provide data prior to enactment to show if any immediate change occurred. I expected to see less stability under the BCA than the BEA, especially at the onset of the legislation when the caps were the harshest and the sequestration of 2013 came into effect. Additionally, I predicted that budget requests would be more stable than budget authority given because planning can be more incremental than budget authority, which may be subject to immediate demands after the president's budget request is submitted.

At the onset, the BCA signaled a shift in emphasis from the War on Terror to cutting down deficits. In 2011, many expected an extended period of U.S. military retrenchment following the most intensive phases of the long war in Afghanistan and Iraq (National Defense Strategy Commission, 2018). This is not the first time the United States enacted enforcement legislation in reaction to a shift like this. The BEA and the Gramm–Rudman–Hollings Act of 1985 also reflected a similar shifts in policy priorities (Candreva, 2017). While the United States has shown to devote more resources to defense during times of conflict, the willingness to spend more on conflict has declined over time. For example, the United States spent about 10% of GDP on the military in the 1950s. After the Vietnam War, it fell to 4.5% of GDP. At the end of the Cold War in the 1990s, it was all the way down to 2.9%. It increased again to 4.7% at the height of the War on Terror but fell to 3.2% of GDP in 2018 (Candreva, 2017).

Regardless of these macro-level changes in attitude, enactment of the BCA received a strong response from the defense community. With the BCA cutting the 10-year projection of the defense budget by about $1 trillion, DoD officials and the White House tried to convince Congress that the caps had been set too low. Defense officials testified before Congress about how portions of the National Defense Strategy were at risk or were unable to be attained in light of the limits set by the BCA (Candreva, 2017). Many critics of the BCA noted that the spending caps disproportionately affected defense programs, which in FY2017 accounted for 16% of the federal budget (excluding net interest payments) but was 49% of the BCA spending reductions (McGarry, 2018).

Figure 4: DoD Budget Requests Under BCA for FY2010-FY2020

Adjusted to 2018 $



Did the BCA impact the DoD as much as these critics warned? I started with looking at the DoD's budget requests for this time period. Figure 4 shows the changes over time in DoD budget requests under the BCA from FY2010–FY2020.[4] Overall, the changes from year to year suggest that there is some stability in the DoD's budget requests during this time. The largest fluctuation that Figure 4 shows is between FY2019 and FY2020. The requests for operations and maintenance and military personnel funding decreases from FY2019 to FY2020. However, the request for research, development, test, and evaluation increases, and the request for procurement remains relatively the same. While this might suggest some instability, these changes fall into line with the intentions laid out by the 2018 National Defense Strategy to

[4]The y-axis for Figure 4 has been extended to $350,000 to make it useful for comparison between other figures later in the study.

modernize the force and increase readiness to deter threats from great power competition with China and Russia.

Although the requests fluctuated more in recent FYs, there is nothing to suggest the DoD felt an overwhelming amount of year-to-year instability. While the budget request data make it seem like there was also strong budget predictability, looking at the five-year projections later in the study will help show to what extent that was actually true during this time period.

I then looked at the budget authority given to the DoD during this time period to compare what the DoD requested to what Congress eventually gave the DoD. Figure 5 shows the budget authority given to the DoD under the BCA for FY2010–FY2020. The first data point to note is the decline in operations and maintenance spending in FY2011. Generally, cutting operations and maintenance is an easier place to cut than the other titles because it is an annual current expense account instead of one that focuses on investments. It could also have been a response to changes in Afghanistan and Iraq. After the 9/11 attacks until about a decade later, Congress generally funded the military with whatever was needed as threats seemed proximate and imminent. However, this perspective dwindled away around 2010 as the efforts in Afghanistan and Iraq became more permanent than temporary and as Congress became more concerned with increasing deficits and debt after the recession in 2008. These policy changes could also explain the stark decrease in budget authority given for FY2011.

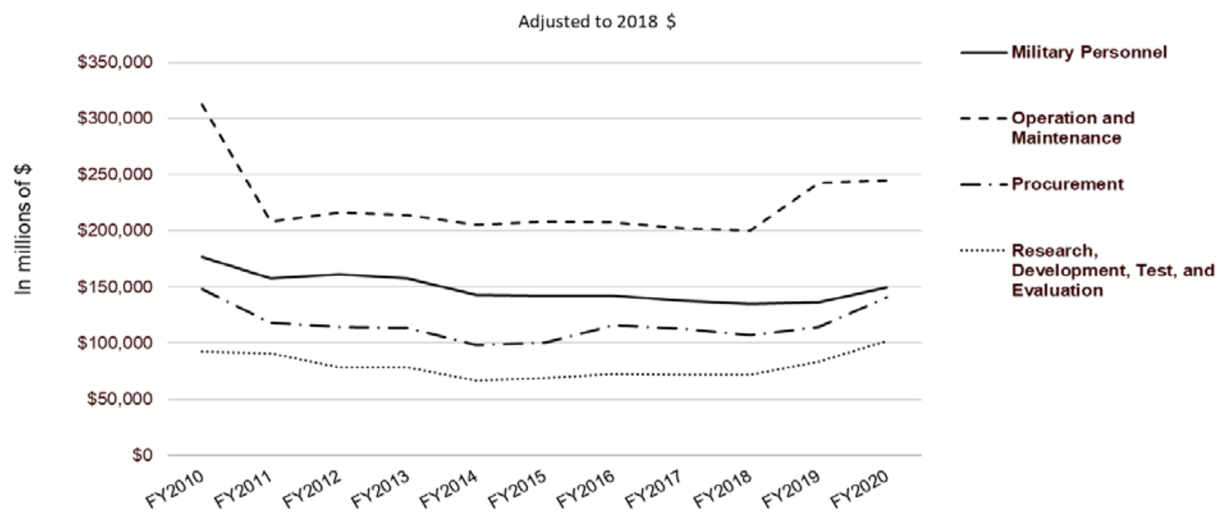
When defense officials discuss their frustration with the BCA, they often cite the sequestration triggered in 2013. The sequestration triggered for FY2013 resulted in across-the-board cuts to the defense and non-defense categories. This was the first sequestration to occur since 1991. While sequestration takes an equal percentage from each category, it does not necessarily take an equal amount. The cuts are relative to the size of the budgets in each category. With the DoD's budget making up about half of all discretionary spending, it took a bigger cut relative to other discretionary programs. For example, the 2013 sequestration cut defense by just over $40 billion, while all of the non-defense discretionary items together were cut by just under $30 billion. However, this was only true for FY2013, as the rest of the discretionary cuts were implemented by adhering to lowered spending caps and not through across-the-board cuts in the following years (House Budget Committee, 2018).

I expected to see greater instability in budget authority given from year to year during this time period. However, Figure 5 does not show any major changes between FY2011 and FY2018. So, what is going on here? To start, the initial decrease in FY2011 in the operations and maintenance title is likely a result of Obama's policy to decrease the number of troops in

Afghanistan by the end of his second term coupled with the implementation of BCA caps for the first time. After FY2018, spending starts to trend upward. The increases in the operations and maintenance title might suggest some instability from FY2018–FY2020, but these changes fall in line with Congress and the Trump administration's desire to boost defense spending. What is odd is the fact that the trend for the operations and maintenance was decreasing while the amount given increased for the most recent FYs. The top lines for both requests and budget authority given for FY2019 and FY2020 were larger than previous years, but it is interesting that Congress increases did not align by appropriations titles. This could have caused some degree of uncertainty or fiscal stress for the DoD.

I was expecting to see sharp declines after FY2013 as a result of the 2013 sequestration and post-sequestration caps that further limited DoD spending. Figure 5 does not display any major decreases after the implementation of the BCA, especially after the sequestration was triggered. However, after taking a closer look at the raw numbers, a large decrease in funding did occur after the 2013 sequestration. There was a total decrease of about $41 billion from FY2013–FY2014. Having the four separate appropriations title lines in Figure 5 makes the cuts from the sequestration seem less dramatic because it was about $41 billion spread across the four titles instead of in one line. Plus, it is hard to see the change of $41 billion in a graph when the entire budget is above $500 billion.

Figure 5: DoD Budget Authority Given Under BCA for FY2010-FY2020



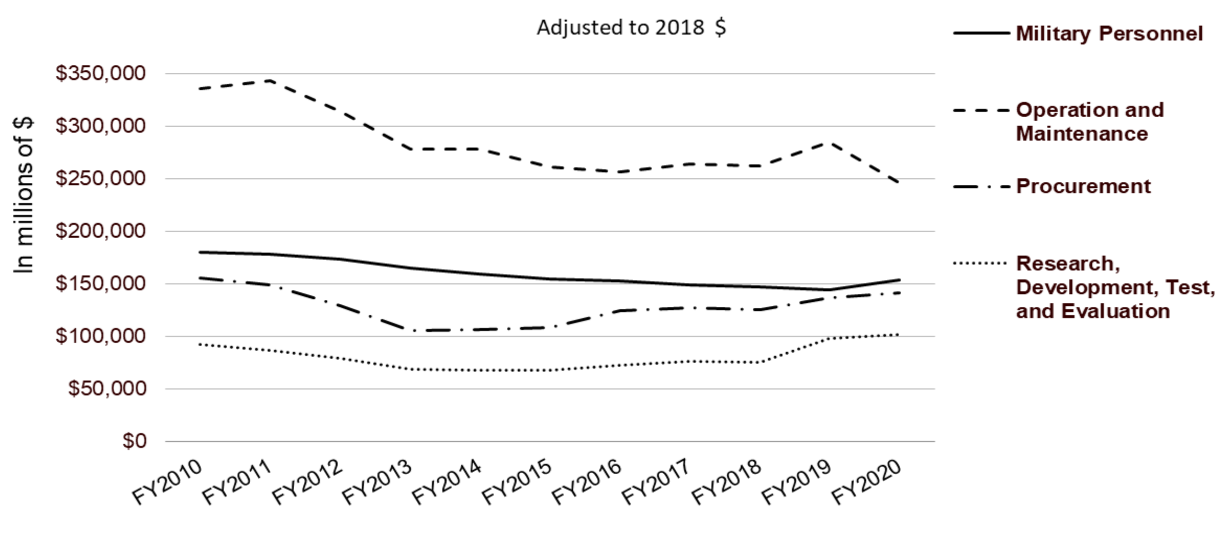
It seems surprising that there was such stability over time given the strong response to the BCA and the following sequestration during this time period. The stability shown in the base budget authority given does not mean there was not instability elsewhere that would have caused the negative response from defense officials and some members of Congress. Why is the DoD's budget relatively stable and what else could have been causing the DoD fiscal stress during this time period? I will be able to speak more to the budget predictability in my next section when I look at the five-year projections, but there are some potential issues to note with regard to the surprising year-to-year stability shown in Figure 5.

The first potential reason for the relative stability is the BBAs that occurred in 2013, 2015, 2018, and 2019. The BBAs raised the caps to alleviate some of the pressure off of both the defense and non-defense agencies. When the caps were raised, Congress raised the caps for each following FY. This would mean that in a given year that was supposed to decrease spending, the budget authority given could remain relatively the same because the cap limits were increased and fear of triggering sequestration was lower. With three iterations of cap increases under the BBAs, this phenomenon likely occurred throughout the entire time period. While the total amount for budget authority given increased in FY2015 and FY2016, the total for each FY after FY2014 never went above the total of FY2013, suggesting the caps were dictating spending to a certain extent.

Another potential issue to discuss is the role of OCO. The fluctuation and instability highlighted by many DoD officials after the BCA could have been felt more in the OCO account. The OCO account is not a part of the base budget, and as a result, it is not subject to the BCA caps. The OCO account was originally intended for funding the War on Terror and was meant to be a temporary supplemental account. However, over time the OCO account began to take on funding to support enduring efforts that otherwise would have been in the base budget (Woodward, 2018). In the FY2020 budget request, the DoD explicitly recognized their use of OCO funding for base budget related activities by designating "OCO" and "OCO for Base" categories within the OCO account (Office of the Under Secretary of Defense [Comptroller]/Chief Financial Officer, 2018). Since OCO has not been subject to the caps, it was a possible way to receive more funding without triggering sequestration. When OCO funding is used to support part or all of a base budget activity, the base budget will not accurately reflect how much money that activity actually requires. As a result, because estimates of future spending are generally based on current spending, the anticipated future costs of base budget activities can become skewed if those activities are supported by OCO funds (Woodward, 2018). Even when OCO funding does not support base budget activities, it can impact the DoD's base budget health. As previously mentioned, OCO could be more volatile than the base budget, making it harder for the DoD to plan from year-to-year. The DoD could be experiencing fiscal stress caused by the volatility of OCO over time.

I decided to look at what budget authority was given including OCO funding to see if that shows a different trend than base budget authority given alone. Figure 6 shows the budget authority given to the DoD including both the base budget and OCO for FY2010–FY2020. When accounting for OCO, the stability was relatively the same. The greatest difference between Figure 5 and Figure 6 is the operations and maintenance title. Figure 5 showed a fairly straight, stable line, while Figure 4 shows a stronger trend of decreases over time. The base budget alone had an average of -0.18% change over this time period, while OCO had an average of -17% change. The decline in OCO spending could reflect the changing priorities of the United States in the War on Terror, which is the effort that the OCO account funds (Candreva, 2017). Although efforts in Iraq and Afghanistan declined and true OCO funding decreased, some base budget funding could have been moved over to the OCO account to avoid caps as previously discussed. It is hard to tell for previous FYs since the DoD did not distinguish “OCO” and “OCO for Base” like it did in the FY20 request.

Figure 6: DoD Budget Authority Given (OCO Included) Under BCA for FY2010-FY2020



Additionally, the unexpected stability shown under the BCA might be a result of the continuing resolutions (CRs) that have been enacted because of Congress’s increasing inability to pass timely appropriations legislation. The DoD’s funding was subject to CRs at some point in time for every single year during the BCA era. DoD spent an average of 119 days each year functioning under a CR. While CRs help keep government operations going, they only provide the same levels of funding that were given in the previous year. This means there is not much room for policy changes or innovation within the DoD. CRs often happen last minute and do not provide much room for adaptation. Once the annual appropriation is enacted, there is often a last-minute push to spend all of the money in a condensed time period. With this sort of unpredictable funding practice happening so frequently, it makes it hard for DoD officials to carry out policy and make plans for future budget requests. With this degree of uncertainty, the DoD could feel pressured to ask for similar amounts from year-to-year because they are not sure whether Congress will appropriate the money for that FY or whether Congress will pass another CR.

Findings: Budget Predictability

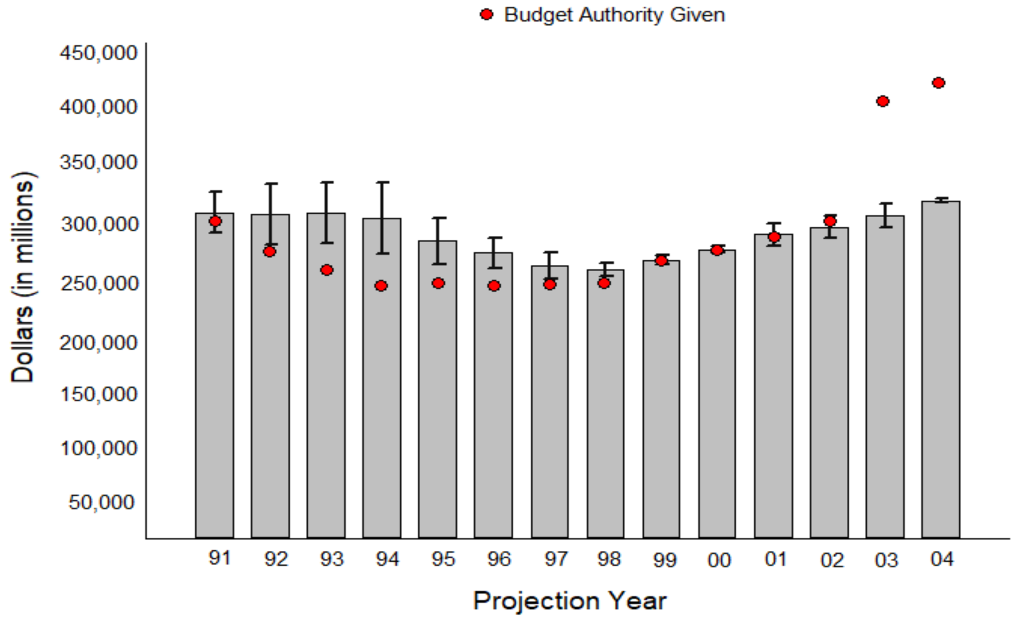
The BEA Era

To take a deeper look into the budget stability under the BEA from FY1998–FY2002, I then analyzed the DoD's five-year projections. Looking at these data will lend insight into the budget predictability under the BEA. Generally, I expected to see stability throughout this time period, with the most stability occurring in the late 1990s.

Figure 7 shows the variance of the DoD's projections under the BEA. The bars show the average of the projections made for that FY. The confidence intervals (CI) on top of the bars provide a range of values that give a certain probability that the true value falls within those parameters. The CIs allow me to show the variance in the projections for each FY. The wider the CI the more variant the projections were, which suggests lower budget predictability. The narrower the CI the less variant the projections were, which suggests greater budget predictability. I also plotted the budget authority given to the DoD for each FY to see if what the DoD planned for matched up with what Congress appropriated for that FY.

Figure 7 reveals a general degree of stability for the average projections in each FY. It declines after FY1994, but that is not entirely unexpected. With the enactment of the BEA in 1990, the DoD was able to plan for less spending under the new caps in the 1990s. While the average amounts for projections do not change much from year to year, the CIs are wider earlier on, suggesting greater variance in the projections that were made for the FY. This means there was less budget predictability for these FYs compared to others under the BEA. This could be because these were the first few years of the BEA and the DoD was not completely set on how to plan under the new caps. It also could be reflecting the divergent policies of the "peace dividend" after the Cold War and the efforts in the Gulf War in the early 1990s. It would have been hard to decrease the size of the military when the country was becoming engaged in a major effort overseas.

Figure 7: Variance in DoD Budget Authority Projections Under the BEA



The CIs for the late 1990s and early 2000s are narrower, indicating greater budget predictability. This makes sense because these were also the years when the government balanced its budget and experienced surpluses. I cannot make any causal claims that the budget predictability indicated here was a factor that led to balanced budgets and surpluses, but I can say that the data highlights budget predictability existed under the BEA caps. The DoD made fairly consistent projections for these FYs, meaning they had a general sense of how much money needed and what they could plan for.

When comparing the projections to what Congress eventually appropriated for that FY, Figure 7 shows the projections did not match up in the early 1990s, falling in line with the previous finding that there was less budget predictability during these FYs. On average, the DoD was projecting higher than what Congress ended up appropriating during the early 1990s. However, later on in the late 1990s and first couple of years of the 2000s, the amount given matched with the projections, which were also more stable during those years. Again, these were the same years that government surpluses occurred. There is also no causal claim that I can make from these data, but they do suggest the DoD had stable predictions that were eventually matched by what Congress appropriated.

After FY2002, the amount given jumps up and does not align with the DoD's average projections. This is likely a response to the 9/11 attacks and the increasing efforts of the War on Terror. The money appropriated for FY2002 was enacted in the late summer or early fall of 2001, so it might have been too soon to know that the DoD would be ramping up efforts in the Middle East. By the time Congress needed to appropriate money for FY2003, Congress and the DoD were invested in responding to 9/11 and War on Terror. The projections were likely lower because most of the projections were also done before 9/11. While much of the initial funding for the War on Terror was done through supplemental appropriations that were not subject to the caps, 9/11 and efforts for the War on Terror shifted the government's approach to national security to one of increasing the size and capacity of the military overall. Additionally, FY2002 was the last year the caps were in place. Caps did not exist for FY2003 and FY2004, so Congress was able to increase spending without fear of sequestration. With the events and fallout of 9/11 and a majority Republican Congress, these increases in spending went to the military.

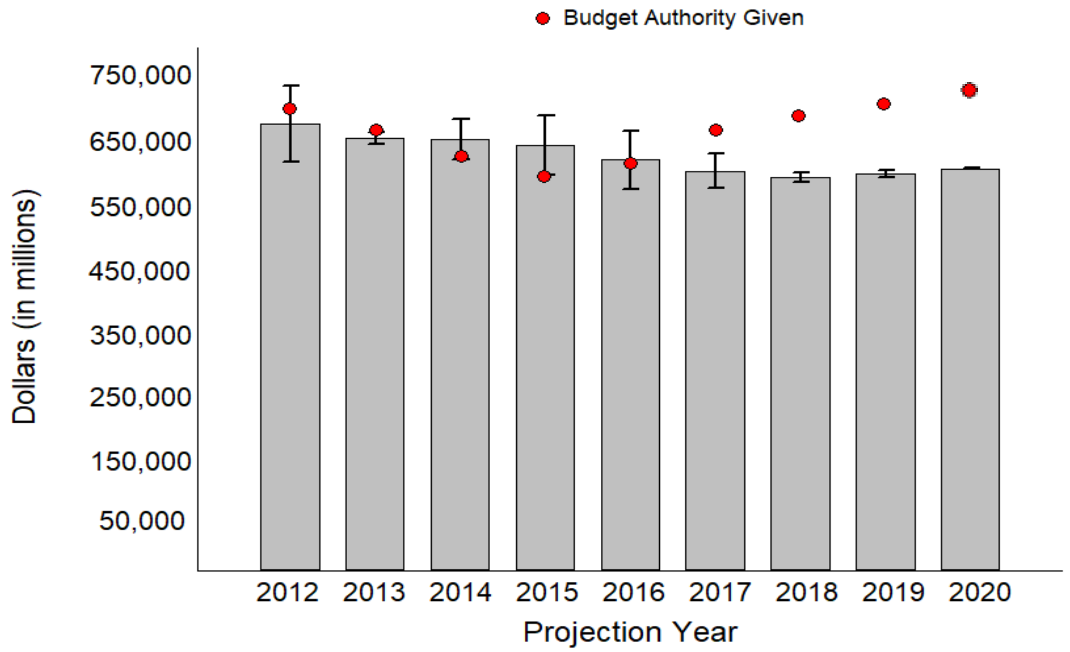
The BCA Era

I then looked at the five-year projections under the BCA from FY2011–FY2017. The data for FY2010 and FY2018 projections were not incorporated because the DoD uncharacteristically did not make projections during these years. I expected that projections under the BCA would have been less stable than under the BEA because of the 2013 sequestration and various BBAs that occurred in 2013, 2015, 2018, and 2019.

Figure 8 shows the variance of the DoD's projections under the BCA. Like in Figure 7, the bars show the average amount projected for that FY. The confidence intervals (CI) on top of the bars allow me to show the variance in the projections for each FY. I also plotted the budget authority that was given to DoD for each FY.

There was general stability in the average projections made for each FY over time. There is a slight decrease each year in the average, but nothing to suggest the averages were volatile. When looking at the CIs for each FY, there is some variance for a couple of FYs. The CIs are the widest for projections in FY2012, FY2015, and FY2016, suggesting lower budget predictability for those FYs. While the CIs do not look very wide compared to others in Figure 8, the CI for FY2012 has a width of about $150 billion. When compared to the variance of projections under the BEA in Figure 7, the largest CI for a projection year under the BEA had a width less than $100 billion.

Figure 8: Variance in DoD Budget Authority Projections Under the BCA



Under the BEA, the CIs were either consistently wide or consistently narrow for consecutive FYs, but this is not the case for the CIs under the BCA. The CIs for FY2013 and FY2018–FY2020 are narrower and suggest some degree of budget predictability for those FYs. It is unclear as to why the DoD might have been able to make more stable projections for those two FYs over time instead of the others, especially since FY2013 and FY2018 are not consecutive years. Perhaps this is another indication that the DoD was not able to make consistent projections, and when DoD was consistent it was only for one FY, not for multiple in consecutive years. While the CI for FY2020 looks extremely narrow, there were only two projections that were incorporated. With only two projections, I cannot say that the data for FY2020 suggests high budget predictability at this point in time.

While sequestration and the cap limits might have impacted the budget predictability during this time period for the FYs with wider CIs, the use of OCO could have impacted stability as well. Since this data displayed in Figure 8 is the 050 budget function, OCO is included. It is hard to know how much OCO could be impacting the predictability relative to other factors. The OCO account is not subject to caps, and we have seen instances where the government tried to fund operations that typically go under the base budget with OCO funding. Moreover, definitions about what should go into OCO funding are not entirely clear. The unclear definitions and fluid nature between OCO and the base budget can impact what budget predictability looks like for the DoD's budget even if the numeric changes in OCO do not appear to have any impact in Figure 10.

When looking at the money appropriated compared to the average projections for each FY, the money given is relatively similar to the average projections for the majority of the years, and often falls within the CIs. The money given in FY2017–FY2020 does not do this. This might suggest slightly lower budget predictability or that the DoD was not entirely able to predict what Congress would give for those FYs. However, these are all appropriations given during the Trump administration. The increase in funding above the average projections is likely reflecting the Trump administration's policies to increase the funding and size of the military overall. The DoD ended up getting more funding than they had planned for.

Additionally, it was unclear to what extent CRs impacted budget predictability for the DoD under the BCA. Generally, CRs impact budget execution more than budget planning and development. They extend funding limits from the previous FY's budget and do not allow for new projects or activities to start until a full appropriation is made. This impacts the agency's ability to create a spending plan for the execution year, which typically would be created at the beginning of the given execution year. CRs force the agency to spend money on what they can under these restraints instead of having the certainty afforded when given a full appropriation. While CRs tend to impact budget execution more than budget formulation, there are some ways in which CRs impact how the DoD plans for future budgets. When the DoD functions under a CR, it does not have any current base number to create budget estimates from. Without a base number for the current FY, it is hard to budget incrementally within programs and create future estimates without any starting point to build off of. Further research should also look into how CRs impacted five-year projections to determine to what extent low budget predictability was caused by the BCA caps versus CRs.

Conclusion

Was the DoD's budget more stable and predictable under the BEA than the BCA? I found that there was a general sense of year-to-year stability under the BEA for both budget requests and budget authority given. While there were declining trends throughout the BEA time period, these trends reflected the "peace dividend" that took place after the end of the Cold War and the intended spending reduction imposed by the cap limits of the BEA. Findings for the BCA era suggested more year-to-year stability than expected. However, there are a variety of outside factors that could have contributed to the DoD's fiscal stress. For example, the DoD's fiscal stress under the BCA could be related to cap raises under the BBAs, off-budget fluctuation in the OCO account, or uncertainty due to CRs.

I also analyzed the budget predictability for the DoD's budget under both the BEA and the BCA. This lent insight into how the BEA and BCA impacted the DoD's budget planning with regard to "small p" planning, formulating budget estimates and future projections. In looking at the five-year projections under the BEA and BCA, I analyzed how predictable budgets and appropriations would be for the DoD during both time periods. The 2013 sequestration and changes in cap limits during the BCA era could have impacted budget predictability of the DOD.

The budget predictability data suggests there was not consistent budget predictability throughout both time periods. Both the BEA and BCA experienced some years with high budget predictability and some years with low budget predictability. I also found that there was slightly less budget predictability under the BCA than the BEA. While both had fairly stable average projections for each FY, the variance of the projections under the BCA were bigger for certain years than under the BEA. Both had around four or five projection years with wide CIs to suggest low budget predictability, but the width of the CIs under the BCA was greater. For example, the CI for FY1994 was about $100 billion while the CI for FY2012 was about $150 billion.

Incorporating the money appropriated into my analysis revealed that the projections did not always fall in line with what was eventually given under both the BEA and BCA. The money appropriated aligned with average projections or fell within the CIs under the BCA for five FYs in a row, showing that the DoD was still able to plan for the money Congress eventually gave it the majority of the time. Under the BEA, there were seven years when the average projections, CIs, and the money Congress appropriated lined up, suggesting the DoD's estimates fell in line with the money it later received.

It is hard to know what the true impact of the BCA would have been on the DoD because Congress changed the cap limits for every FY since the BCA was enacted. However, the structure of a budget enforcement mechanism appears not to have been dispositive to the fiscal stress that the DoD has faced in recent years. My greater research question is confounded by a variety of other factors related to the use of OCO, uncertainty caused by CRs, and difficulties in budget execution and planning that stem from that uncertainty. If Congress wants to continue using statutory caps as a tool to rein in spending and reduce deficits, it should not be overly concerned with how those limits will impact the stability of the DoD's budget.

The 2013 sequestration did result in large cuts of $41 billion for that year that were distributed across a variety of accounts. There is a “defense opportunity cost” at play here. What would the DoD have spent if the caps were not in place? While this is an important idea to consider, this study only looks at budget stability and predictability over time. While the cuts occurred, they were not the main source of instability for the DoD. I cannot make any claims about the impact of the cuts on readiness or lethality, but I can argue that the use of statutory caps is not causing any instability for the DoD’s top lines. Since this study compares capped funding to capped funding, future research needs to be done to evaluate the differences between uncapped funding and capped funding for the DoD.

Moreover, this study takes a macro-level approach and only looks at defense-wide top lines, so there might have been instability and uncertainty felt at the service branch level or lower that I was not able to discern from the data used in this research. Future research should analyze micro-level changes at the service level or lower to determine whether there was instability below the defense-wide level.

The complaints from the defense community are likely symptoms of other problems associated with the budgeting process and changes to the cap limits under BBAs throughout the BCA era. My findings do not suggest that having statutory limits alone impacted the stability of DoD’s budget. The defense budget is a living document that is conditioned by many externalities. It is hard to be completely sure about anything in the defense budget since it is large, complex, and dynamic. It is an ongoing process that, at any time, is the net sum of the effects of all prior decisions (Candreva, 2017).

References

Barrett, T. (2018, June 20). Senate rejects spending cuts package, a White House priority. CNN.

Blom, B. (2018, April 19). CBO’s projections of deficits and debt for the 2018–2028 period. Congressional Budget Office.

Candreva, P. J. (2017). *National defense budgeting and financial management: Policy and practice.* Information Age Publishing.

Congressional Research Service. (2017, March 17). *Defense primer: The national defense budget function* (050). Congressional Research Service.

Crippen, D. (2001, June 27). *CBO testimony: Extending the Budget Enforcement Act*. Congressional Budget Office.

Driessen, G., & Lynch, M. (2018, February 23). *The Budget Control Act: Frequently asked questions*. Congressional Research Service.

Good, C. (2013, February 18). Sequestration: DC’s weird idea of cuts. ABC News.

House Budget Committee. (2018, March 12). Understanding the sequester: An update for 2018.

Keith, R. (2000, September 22). *The sequestration process and across-the-board spending cuts for FY2000*. Congressional Research Service.

Lynch, M. (2011, July 1). Statutory budget controls in effect between 1985–2002. Congressional Research Service.

Mehta, A. (2018, October 26). It's official: DoD told to take cut with FY20 budget. *Defense News*.

McGarry, B. W. (2018, July 13). *The defense budget and the Budget Control Act: Frequently asked questions*. Congressional Research Service.

The National Defense Strategy Commission. (2018). *Providing for the common defense*. Author.

Office of Management and Budget. (2000, January 25). *OMB final sequestration report to the president and Congress for fiscal year 2000*. Author.

Office of the Under Secretary of Defense (Comptroller)/Chief Financial Officer. (2019, March). *Defense budget overview: United States Department of Defense fiscal year 2020 budget request*. 1-3. Retrieved from https://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2020/fy2020_Budget_Request_Overview_Book.pdf

Spar, K. (2013, June 13). *Budget "sequestration" and selected program exemptions and special rules*. Congressional Research Service.

Treasury Direct. (n.d.). *The debt to the penny and who holds it*. U.S. Treasury Department. Retrieved on February 25, 2019, from https://www.treasurydirect.gov/govt/reports/pd/pd_debttothepenny.htm

U.S. Senate. (n.d.). *Legislation, laws, and acts*. Retrieved November 1, 2018, from https://www.senate.gov/legislative/common/briefing/leg_laws_acts.htm

Woodward, F. M. (2018, October). *Funding for overseas contingency operations and its impact on defense spending*. Congressional Budget Office.

Acquisition Research Program
Graduate School of Defense Management
Naval Postgraduate School
555 Dyer Road, Ingersoll Hall
Monterey, CA 93943

www.acquisitionresearch.net