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**Evaluating the Impacts of
Federal Improvement and Audit Readiness (FIAR)
Compliance**

by

William Lucyshyn and Dylan Hunt



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Abstract

Over the last thirty years, the Department of Defense slowly became compliant with the CFO Act of 1990, which required federal agencies to undergo an annual financial audit. In 2018, the DoD finally completed its first audit and continued this trend in 2019. This paper seeks to understand the benefits of producing auditable financial statements, their costs, and any impacts on DoD's acquisition system. We describe the several forms of accounting and review the academic accounting literature that examines the value of audits. We describe DoD's preparation for, and analyze the results of, the three completed audits to look more broadly at the benefits. These include uncovering previously unaccounted inventory and improvements to internal accounting systems; even as no instances of massive waste or fraud were identified. We review the criticisms of financial accounting and audits and finally, the utility of management cost accounting is discussed.



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About the Authors

William Lucyshyn is the Director of Research and a Research Professor at the Center for Public Policy and Private Enterprise in the School of Public Policy at the University of Maryland. In this position, he directs research on critical policy issues related to the increasingly complex problems associated with improving public-sector management and operations and with how government works with private enterprise.

His current projects include modernizing government supply-chain management, identifying government sourcing and acquisition best practices, and analyzing Department of Defense business modernization and transformation. Previously, Mr. Lucyshyn served as a program manager and the principal technical advisor to the Director of the Defense Advanced Research Projects Agency (DARPA) on the identification, selection, research, development, and prototype production of advanced technology projects.

Prior to joining DARPA, Mr. Lucyshyn completed a 25-year career in the U.S. Air Force. Mr. Lucyshyn received his bachelor's degree in engineering science from the City University of New York and earned his master's degree in nuclear engineering from the Air Force Institute of Technology. He has authored numerous reports, book chapters, and journal articles.

Dylan Hunt is an MPP student ('20) at the University of Maryland specializing in international security and economic policy. His work with CPPPE includes research on the Department of Defense audits and the DoD's application of Modular Open System Architecture. He completed his undergraduate degree in economics and political science also at the University of Maryland. Following graduation, Dylan plans to pursue a career at the intersection of economics, finance, and government consulting.



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Table of Contents

Introduction	1
Report Roadmap	2
Background	3
Types of Accounting	7
Auditors Opinions	9
Literature Review	11
DoD Prepares	15
The Audits	19
FY 2018	19
FY 2019	19
FY 2020	20
Summary of Material Weaknesses & NFRs.....	20
Analysis.....	25
Benefits.....	25
Audit Critics	29
Does auditing the DoD increase costs to the contract acquisition system?	33
Conclusion	35
References.....	37



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Introduction

In September 2018, the Department of Defense (DoD) completed its first full financial audit, which analyzed over \$2.7 trillion in assets, about 70% of the federal government's assets (DoD, 2018a). The audit was the synthesis of 24 separate audits of the DoD's components and monitored by OSD's Financial Improvement and Audit Readiness (FIAR) Directorate, which was established by the DoD comptroller over a decade ago. The FIAR Directorate was created to improve the department's accounting practices and plan for the successful audit of the DoD as a whole. This move was in response to the Chief Financial Officers (CFO) Act of 1990, which required that all executive agencies have their financial statements independently audited. Since 2011, the DoD was the sole agency that continually failed to audit its financial statements in their entirety (Miller, 2011).

The first DoD audit cost taxpayers between \$918 million and \$972 million, accounting for direct costs to independent auditors, indirect costs of government support during the audit process, and remediation costs to improve errors uncovered by the audit (Fine, 2019; Browne and Starr, 2018). Additional costs not accounted for in the \$900+ million are compliance costs associated with changing internal DoD processes, hiring additional labor, and other changes to become ready for a complete audit.

Examining the costs and benefits will provide a fuller understanding of the value of auditing the DoD. FIAR compliance costs are likely made up of fixed and variable costs. Initial costs to hire and change processes will incur large start-up fixed costs during the first few audits. For example, over \$500 million was spent in remediation following the first audit. This number will likely decrease as accounting and cost reporting processes improve, but the number of improvements required is currently growing faster than the DoD can remediate them. The cost of maintaining FIAR compliance will likely fluctuate, requiring a reallocation scare DoD resources.

As the DoD continues to update its financial management practices and alters its cost reporting processes in hopes of receiving an unqualified opinion, this report seeks



to answer the questions – what are impacts associated with FIAR? What are the benefits to taxpayers of government entities producing financial statements? Further, we hope to identify the broader implications of FIAR compliance on the DoD. Other important questions considered relate to the effectiveness of public audits. Do public audits provide valuable information to agency executives to improve processes? More generally, what are the benefits of auditing the DoD?

At large, this report seeks to better understand the value provided to the DoD and its stakeholders. After the completion of the next two annual audits approximately \$2 billion dollars more were spent in hopes of improving the financial management of the DoD. While this amount is a drop in the bucket relative to the DoD budget, it is important to constantly question and improve the way the federal government is spending taxpayer money. Further, we will examine impact may have on DoD's acquisition system.

Report Roadmap

This paper looks to highlight the widespread costs associated with the audit, most importantly the cost of becoming audit ready. While the exact data on the largescale changes implemented will be next to impossible to quantify, it is important to look at the different impacts of the legislation to better understand the effects of long term, broad federal regulation. With a clearer understanding of the effects of this type of legislation, decision makers can be more informed about the long-term effects of their policy responses.

The first sections of this report provide a background on the laws implemented to improve DoD's financial management and require annual audits of financial statements. There is also a description of the different types of accounting used by the DoD. Part III provides a brief review of the academic literature that examines the value of auditing of financial statement in the public sector. The next two parts review the steps taken by the DoD to prepare for the audits and their results. Part VI presents an analysis of the benefits of the audits and highlights the arguments made by the critics of the audit requirement. This is followed by our conclusions.



Background

For the past several decades, Congress has struggled to obtain better visibility into the government's financial position. A GAO Report in 1985 put a spotlight on the problems; it concluded that these were numerous issues that called for an overhaul the governments financial management system. GAO believed that successful reform would require a major initiative with a comprehensive, integrated approach (Bowsher, 1985). As a result, Congress passed a series of laws and mandates designed to improve the accountability and management of appropriated resources in its oversight role of federal agencies and programs and to form the conceptual foundation of a new financial management structure; as well as additional conditions, requirements, and due dates for DoD's efforts to become auditable. These are summarized below.

- **The Chief Financial Officers Act (CFO Act).** The CFO Act of 1990 was signed into law in Nov 1990. The purpose as stated in the CFO Act was to bring more effective general and financial management practices to the Federal Government, provide for improvement, and provide for the production of complete, reliable, timely and consistent financial information for use by both the executive branch of the Government, and the Congress, to manage and evaluate federal programs (CFO Act, 1990).
- **Government Performance and Results Act (GPRA).** The GPRA of 1993 requires agency heads to submit strategic plans for program activities to include a mission statement, goals, and objectives to OMB to implement better accountability (GPRA, 1993).
- **Government Management Reform Act (GMRA).** The GMRA of 1994 was enacted to provide a more effective, efficient, and responsive government and extends the CFO Act to require identified agencies listed to submit an audited annual financial report for the preceding fiscal year to the Director of OMB. (GMRA, 1994).
- **Federal Financial Management Improvement Act (FFMIA).** The FFMIA of 1996 requires federal agencies to establish and maintain financial management

systems that comply with federal requirements so that all assets and liabilities, revenues, and expenditures or expenses, and the full costs of programs and activities can be consistently and accurately recorded, at the transaction level (FFMIA, 1996).

- **OMB Circular A-123.** OMB Circular A-123 provides direction for the CFOs of the federal agencies to comply with both the Sarbanes-Oxley Act of 2002 and the Federal Managers Financial Integrity Act (FMFIA) of 1982. The purpose of the Circular was to improve the internal controls over financial reporting, identify needed improvements, take corrective action, and annually report internal control (OMB, 2004).
- **OMB Circular A-136.** OMB Circular A-136 provides the financial reporting guidance for each federal agency to follow regulation and is updated when major changes in legislation or accounting principles occur (OMB, 2010).
- **National Defense Authorization Act of 2010.** The NDAA of 2010 emphasized the importance of audit readiness and mandates the FIAR plan. the NDAA required the DoD to produce audit ready financial statements not later than 30 September 2017 (NDAA, 2009).
- **National Defense Authorization Act for FY 2014.** The NDAA of 2014 required the Secretary of Defense to ensure that a full-scope audit of the DOD financial statements was performed for fiscal year 2018 (GAO, 2020b).
- **National Defense Authorization Act for FY 2016.** This Act required the DoD OIG to hire independent external auditors to audit the DOD component financial statements. The DoD OIG contracted with five independent public accountant (IPA) firms to perform a total of 21 DOD component financial statement audits for fiscal year 2018 (GAO, 2020b).
- **National Defense Authorization Act for FY 2018.** The NDAA of 2018 replaced the requirement for the semi-annual FIAR Plan and with a new requirement for an annual Financial Improvement and Audit Remediation Plan. This Act also explicitly required that DOD financial statements henceforth undergo annual audit (GAO, 2020b).



Perhaps the most impactful of these was the CFO Act of 1990, described by the GAO as “the most comprehensive and far-reaching financial management improvement legislation...since 1950. [It] will lay a foundation for comprehensive reform of federal financial management” (Bowsher, 1991). The most noteworthy part of the Act was the requirement for every executive agency to be audited annually.

Prior to the CFO Act, “government reports found that agencies lost billions of dollars through fraud, waste, abuse, and mismanagement” (GAO, 2020b p3). These concerns continued to grow as Americans and Congressmen began to doubt the government’s ability to properly manage programs, protect its assets, or wisely use taxpayer dollars in an effective and efficient manner (GAO, 2020b). In 1988, GAO reported numerous internal control problems specifically in the DoD, which resulted in hundreds of millions of dollars unaccounted for. In response to these growing concerns, the CFO Act hoped to introduce some accountability, as well as effectively tracking how the federal government spent money.

The Act enjoyed widespread congressional support. Within two months of its introduction in the House, the Act was amended, voted on by both chambers, and signed into law. Thirty years later, the Senate Committee on the Budget held a hearing looking at the impacts of the CFO Act. In a show of bipartisanship, members complimented the effectiveness of the Act, anticipating continued and improved federal financial management (Dodaro, 2019). Unfortunately, anecdotal evidence was used throughout the hearing to support the Act, while quantitative evidence of its effects was absent.

In 1991, the Federal Accounting Standards Advisory Board (FASAB) was created by the GAO, the Treasury Department, and the OMB to develop the necessary accounting systems. The Government Management Reform Act of 1994 required the FASAB to develop a system that would produce government-wide financial statements and required the first statements to be published for FY 1997 (Anthony, 1996).

As a result, FASAB developed and published its standards in the FASAB Handbook of Accounting Standards (FASAB Handbook). The FASAB Handbook outlines the objectives for producing the federal government’s financial statements and



their audits and is the most authoritative source of generally accepted accounting principles (GAAP)¹ for federal entities (see the inset below). Federal government agencies, contractors working with federal government agencies, and accounting firms auditing federal government agencies all consult the FASAB standards on a regular basis. The Federal Financial Management Improvement Act of 1996 strengthened the requirements of the 1994 act.

By FY 2003, 20 of the 24 federal CFO Act agencies had been able to produce financial statements backed up with unqualified opinions from auditors. However, the DoD was not one of them. There was increasing significant pressure from the President, the Office of Management and Budget, and the Congress, for DoD to achieve auditability (Candreva, 2004).

The CFO Act, and the other associated legislation, ushered in an era of improved financial management of the federal government. Today, however, it may be that the CFO Act of 1990 was too wide-reaching, causing the DoD to spend nearly a billion dollars annually without any fraud, waste, or abuse found. While the exact effects of the largescale changes imposed are next to impossible to quantify, it is important to understand the value of continuing this process.

FASAB objective for auditable financial statements

- Demonstrate budgetary integrity. That is, accountability for monies that government raises, and to ensure it is expended in accordance with the appropriations laws in a particular fiscal year, as well as other and related laws and regulations.
- Assist users in evaluating the performance of service efforts, costs, and accomplishments of the organization reporting; and help determine the efficiency and effectiveness of the government's management of its assets and liabilities.
- Assist users in assessing the impact on the country of the government's operations and investments and how the government's and the nation's financial condition has changed. The report should also help the reader to determine whether the government's financial has position improved or deteriorated, and if the government's operations have contributed to the nation's current and future well-being.
- Assist report users in understanding whether financial management systems and internal accounting and administrative controls are adequate to ensure that transactions are executed in accordance with budgetary and financial laws and other requirements; are recorded in accordance with federal accounting standards; to deter fraud, waste, and abuse; and that

¹ GAAP are a set of rules that encompass the details, complexities, and legalities of business and corporate accounting. The Financial Accounting Standards Board (FASB) uses GAAP as the foundation for its comprehensive set of approved accounting methods and practices.

Types of Accounting

The CFO Act of 1990 requires executive agencies to conduct financial audits, based on financial accounting procedures. The DoD maintains the position that financial auditing is improving their internal business processes and saving money (Cronk(c), 2019). Although the government generally uses budgetary accounting, and in some cases managerial accounting, it is important to understand the differences between the accounting type when considering the value of the DoD audit.

Financial accounting is required to produce the statements needed to comply the CFO Act. Widely used in the private sector, it is type of accounting used to produce a corporation's annual report: balance sheets, income statements, and statements of cash flow and owner's equity. It accounts for assets, liabilities, and cash flows. With financial accounting revenue is recognized when realized, and expenses are recognized when incurred, this is known as accrual basis (Gibson, 2011). For private sector corporations, the audience is potential lenders and investors, i.e., the capital market. On the other hand, the audience for audits of government agencies is legislators and taxpayers, and other stakeholders with a financial interest (Candрева, 2004).

The objective of financial accounting is to capture and accurately present past events, and the statements produced have governmental oversight. Public companies will publish results of their financial audits to comply with regulations, but also to assure the public—beyond managements' own assertions—that a company's financial statements are accurate and can be relied upon. Financial accounting, therefore, looks at the big picture of a company, or organization, over the last year or more. This distinction makes financial accounting backward looking. Finally, financial accounting must follow GAAP which is a combination of standards that are commonly accepted for presenting financial information.

Although financial accounting is required to produce auditable financial statements, government agencies primarily use budgetary accounting to manage their finances. Budgetary accounting is used to justify and account for appropriations; this type of accounting is not used in the private sector. There are rigid rules stipulated in laws and guidance from the Comptroller General. The objective is to ensure that the



government spending complies with the associated restrictions; there is significant oversight to ensure this is the case. The focus is on ensuring that appropriated funds have been spent in accordance with the purpose, time, and amount to meet the terms of the restrictions attached to the appropriation. The results are used by both internal and external audiences (Candrea, 2004).

Finally, there is managerial accounting, sometimes referred to as cost accounting. This type of accounting is used for internal analysis conducted by corporations to evaluate different options, such as whether to lease or buy a facility. Managerial accounting is intended for internal stakeholders. Moreover, the forward-looking nature of managerial accounting makes it attractive to managers looking to make real-time decisions. For example, managerial accounting may have current information on the cost of production for a certain good to determine if continued production is worthwhile, whereas financial counting may have more accurate data, but would only be able to look at the historical cost of production during a past timespan. Finally, since the focus is on internal management decisions about the organization's mission and scope of operations, there are no set rules or government oversight, consequently the management decides what to count and the basis for accounting. This type of accounting is enables DoD's working capital fund activities to set their rates based on unit cost (Candrea, 2004). See Table 1 for a comparison of financial and managerial accounting.

Table 1. Comparison of Financial and Managerial Accounting.

	Financial Accounting	Managerial Accounting
Purpose	Communicate Financial Status to external Stakeholders	Assist Internal Management with decision making
Primary User	Investors, regulators, tax authorities	Management and internal decision makers
Focus	Historical perspective, past fiscal year	Emphasis on future decisions
External Review	Independent Auditors and or Regulators	None required
Regulatory Guidelines	Must follow procedures outlined in GAAP	Need not follow GAAP, can be tailored to needs
Scope	The entire organization	Narrow – single segment of the organization, a program, project, etc.

Auditors Opinions

When an organization's financial statement is audited, a formal report is provided by the auditing entity. This auditor's report is a formal assessment of the financial statement, resulting from their independent examination of the information provided, using a formal set of rules (Gibson, 2011). The audits of federal agencies are conducted using generally accepted government auditing standards (GAGAS) (Comptroller General, 2018). When the audit is complete, the auditors can render one of four opinions, these are summarized below (Gibson, 2011).

- **Unqualified** – This opinion states that the financial statements represent fairly in all material respects, the financial position of the organization and are in keeping with the appropriate principles (Gibson, 2011). Within the federal government these are sometimes referred to as unmodified opinions.
- **Qualified** – This opinion states that, except for the effect of matters pertaining to qualifiers, the financial statements represent fairly in all material respects, the financial position of the organization and are in keeping with the appropriate principles (Gibson, 2011).
- **Adverse** – This opinion states that the financial statements **do not** represent fairly the financial position of the organization due to nonconformance with appropriate principles (Gibson, 2011).
- **Disclaimer of opinion** – When the scope of the audit is not sufficient to provide enough information to render an opinion, this opinion is rendered i.e., the auditor does not express an opinion on the examined financial statements (Gibson, 2011).

Audits can also identify weaknesses and inefficiencies in the financial management and control systems based on the severity of the weakness; these classifications include material weakness and significant deficiency (PCAOB, 2004),



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Literature Review

The value of audits within the private sector is long established and well documented. Some of the benefits often cited are increased accountability to stakeholders and investors, feedback to improve business processes, and ensuring compliance with financial regulations. While there are other benefits, these three encapsulate much of the benefit auditing has for public companies. Similarly, private companies can also benefit from auditing.

First, auditing may reduce the likelihood of fraud by management and others because it introduces additional accountability to management. Second, auditing may reduce agency conflict between owners, managers, and banks. Third, audits may be used to evaluate managerial performance, given the lack of market measures to assess the firm's and manager's performance (Vanstraelen and Schelleman, 2017) (Van Tendeloo and Vanstraelen, 2008). Perhaps most importantly, audits may reduce the cost of capital for companies being audited by anywhere between 1 and 3 percent (Elliot, 1994). Other empirical studies suggest this number may be overstated, but the general effect does exist (Hay & Cordero 2016). Additional benefits include reducing the likelihood of fraud by management and others because it introduces additional accountability to management and may be used to evaluate managerial performance (Vanstraelen and Schelleman, 2017).

While there are numerous benefits for public and private businesses, it may be that auditing government organizations includes different calculations between costs and benefits. Research on public sector accounting is now also a well-established field with publications in numerous academic journals (Goddard, 2010; Hay and Cordery, 2018). Even though government bureaucracies are not accountable to investors or stakeholders, audits of government organizations have also been examined by looking at different principal-agent relationships present, i.e., between the legislature, the government, and the electorate. Principal-agent relationships are defined by the "agent's" ability to take actions on behalf of the principal that ultimately affect the principal. In the case of the DoD would be one where the legislature (Congress) is the principal, and the

DoD is the agent (Streim, 1994). Streim argues that auditing can help improve these principal-agent relationships because external accountability is introduced. With this new, external accountability the agent is discouraged from acting in a self-interested way and instead working in a manner more in line with the objectives of the principal i.e., the legislature. Auditing can reduce the associated agency costs. Based on this analysis, requiring an annual DoD audit could incentivize the DoD to be more transparent and communicative with Congress.

Within the private sector, as the complexity of business transactions and accounting standards grows, the potential of audits to add value increases (Defond & Zheng, 2014). It may be that the legislation requiring audits saves money for some agencies but increases costs for others. Accordingly, the DoD's complexity makes it likely that auditing could save money. Its large and multifaceted environment increases "auditing's potential to add value" because it protects against possible financial mistakes that can quickly add up. As the former DoD Comptroller, David Norquist, often commented, the first DoD audit was likely the largest audit in history, making it a prime example for possible cost savings (DoD, 2018b).

Studies also suggest that auditing and other financial reporting requirements help add credibility to the organization. In the case of the DoD, credibility may be valuable to both Congress and the public. With numerous anecdotal cases of high-cost DoD equipment going missing, improved public trust surrounding how the DoD spends taxpayer dollars could be incredibly valuable (Hay & Cordero 2016). Additionally, although regulations may already protect against fraud and mismanagement of money, a recent study finds that US municipalities that conduct audits are associated with fewer internal control problems (Rich and Zheng, 2014).

It is also important to understand the limitations of any audit. Soon after the first DoD audit in 2018, numerous articles claimed the audit was a failure, due to the DoD's disclaimer of opinion. While the DoD quickly refuted this claim, the DoD did have to deal with numerous questions about the benefits of any such audit (Cronk (b), 2019). The public generally has a different expectation for the results of audits. There is a widespread belief that "a person who has any interest in a company ... should be able

to rely on its audited accounts as a guarantee of its solvency, propriety, and business viability” (Koh, 1998 p.147). Consequently, when the public has different beliefs about the auditors’ duties and responsibilities and the what the audit reports really mean, a gap in understanding is created. Koh refers to this gap between the limitations of an audit and the public expectation of auditing the “expectation gap” (Koh, 1998). This gap may still persistent today and it is important to recognize it when contextualizing the usefulness of the DoD audit.

Challenges with financial accounting and DoD’s financial management, and the federal government at large, are not new. Former DoD Comptroller and Harvard Professor Robert N. Anthony reviewed the history of the federal government’s accounting practices, which originally developed with a focus on obligations that aligned with the budgeting and appropriation process, rather than on expenses (used for financial statements), which he believed would provide more useful for both planning and control purposes. (Anthony, 2000). Anthony described the tension between these two approaches since both systems are used to some degree in federal Departments and Agencies. Anthony believed that neither accountants nor managers would pay attention to the information in the expense-based accounts and, consequently, that system would not add any value and simply atrophy (Anthony, 1996; Anthony, 2000).

Finally, others question the benefits of financial accounting. Robert Finally, Kaplan and Robin Cooper, Harvard University professors, have asserted that financial accounting systems are “completely inadequate” for either “estimating the costs of activities and business processes” or for “providing useful feedback to improve business processes” (Kaplan & Cooper, 1998 p.14). Further, they argue that financial statements are used primarily to demonstrate to shareholders that a firm is operating profitably. Since, in the case of a government agency, that is neither a business nor does it earn a profit, one may have to question the value of an audit.



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DoD Prepares

The DoD is significantly different from the other executive agencies. The DoD is a large complex organization with annual budgets exceeding \$700 Billion and it owns the majority of Government assets, things that provide current or future value such as cash, equipment, and investments; the value of total assets exceeded \$3.1 trillion in FY 2020. Additionally, it employs 2.1 million Military Service members and approximately 777,000 civilian employees at approximately 4,600 DoD sites located in all 50 states, 7 U.S. territories, and over 40 countries (House Committee on Appropriations, 2020; O'Donnell, 2021). The complexity of its business operations is also unrivaled; in FY 2010, for example, DoD processed more than 11 million commercial invoices and approximately 198 million payment-related transactions, disbursing over \$578 billion (Khan, 2011).

Throughout its history, DoD has struggled with the issue of financial management reform. While the audit looks at the Department as a whole, DoD is made up of 24 component parts. Most of these had been audited at different times and different frequencies, due to a variety of factors. Therefore, the DoD had not been ignoring the mandate from the CFO Act of 1990 for thirty years. Instead, its component parts made progress toward fulfilling audit requirement, but the sheer size of the organization made progress slow. The DoD audit discussed in this paper refers to the complete DoD audit, or a compilation of all component audits.

As previously stated, the National Defense Authorization Act (NDAA) of FY 2010² required the DoD to have financial statements audit ready not later than 30 September 2017. The minimum requirements for audits of federal financial statements are contained in OMB Bulletin No. 07-04, it implements audit provisions from the CFO Act of 1990, the MRA of 1994, and the FFMIA of 1996. OMB Bulletin No. 07-04 requirements include performing and audit annually (OMB, 2007).

² Section 1003 of the FY 2010 NDAA required the DoD's Chief Management Officer, in consultation with the USD (Comptroller), to develop and maintain a plan to be known as the "Financial Improvement and Audit Readiness Plan" (NDAA, 2010).

Additionally, the NDAA FY 2010 contained a requirement for the DoD to develop a FIAR Plan, the DoD Comptroller established the FIAR Directorate to lead that effort and manage and integrate Department-wide financial improvement efforts and help the DoD get audit ready. The Office of the Undersecretary of Defense (Comptroller) developed and revised the FIAR Guidance. This handbook was intended to serve as a guide for all the organizations involved in the Department's audit readiness initiatives. It was updated periodically to ensure it aligns with all applicable Federal and Departmental financial management requirements. The guide outlined the FIAR strategy, developed to serve as the roadmap for the Department to become audit ready. The guide also defined audit readiness "as having the capabilities in place to allow an auditor to scope and perform a full financial statement audit that results in actionable feedback" (OUSD (Comptroller), 2017).

The guide presented a phased methodology for the DoD to become audit ready by FY 2018 (see Figure 1). The initial three waves were performed concurrently focused on OUSD(C)'s initial priorities, that is, budgetary information and mission critical asset information. For Wave 4, the DoD's components incorporated the expanded priorities, proprietary information, and valuation, into their audit readiness efforts and focused on full financial statement audits. This methodology defined the key tasks, underlying activities and the work products required from reporting organizations to become audit ready. It considered the methods financial statement auditors use to assess financial statement accuracy in accordance with auditing standards, in order to maximize the potential for successful financial statement audits (OUSD (Comptroller), 2017).

The FIAR Plan also described specific corrective actions to achieve reliable, accurate, and complete financial data for use in key management decisions. It focused on problems such as weak internal controls, incomplete or inaccurate information, and systems that could not properly process data and information. By establishing and monitoring critical milestones for resolving these problems, the FIAR Plan gave decision makers better information and more options. Implementing this plan, after decades long changes to internal processes, the DoD became compliant with the requirement of CFO

Act in September of 2018, had become audit ready. The audit, however, returned a disclaimer of opinion.

On November 14, 2018, DoD released its audit ready Agency Financial Report for FY 2018, which presented the consolidated financial information for 63 DoD entities. The DoD Report contained the following major sections:

- **Management's Discussion and Analysis.** This section summarized DoD's mission and structure and the current state of financial management systems. This section also included a discussion regarding the DoD's compliance with certain laws and regulations. There was also a short discussion of improvements to internal controls that resulted in cost savings and increases in efficiency and effectiveness.
- **Financial Statements.** This section provided consolidated financial information on the DoD's financial operations, condition, and position, for all DoD entities. Note 1 acknowledged that, due to the limitations of financial and non-financial processes and systems, the Department was unable to fully comply with all of the required elements of U.S. GAAP and OMB Circular No. A-136. Many of the reported values for major asset and liability categories were derived from largely from non-financial systems, such as inventory and logistics systems.
- **Required Supplementary Stewardship Information.** This section identified significant DoD investments that have long-term benefits to the public, such as investments in research and development may include the development and testing of prototypes for weapon systems.
- **Required Supplementary Information.** This section provided information on other topics to improve the understanding of the DoD's financial operations, condition, and position, such as delayed or deferred maintenance on real property.
- **DoD OIG Audit Report.** This report includes the DoD OIG's overall audit opinion on the basic financial statements.



The next two years Agency Financial Reports were also released on schedule, the FY 2019 on November 14, 2019, and the FY 2020 Report on November 16, 2020.



The Audits

FY 2018

The audit of the DoD Financial Statement for FY2018 identified \$2.8 trillion in total assets is almost certainly one of the largest and most complex financial statement audits ever undertaken. The comprehensive audit included 24 standalone audits that were conducted by independent public accounting firms; the DoD IG performed the overarching consolidated audit. More than 1200 auditors were involved in the effort. The results were mixed; 6 of DoD's organizations received the highest grade, unmodified audit opinions, and 2 received qualified opinions. All of the other organizations received a disclaimer of opinion. Perhaps the most reassuring finding was that no fraud was identified, and no organization received an adverse opinion (Fine, 2019).

For the issues identified, the auditors issued more than 2,300 Notices of Findings and Recommendations (NFRs) and identified 20 material weaknesses. Almost half of these addressed findings with Department's financial management systems and information technology. To track and respond to the identified NFRs, DoD established a NFR database to capture, prioritize, assign responsibility for, and develop corrective action plans for the audit findings (OUSD (C), 2019).

The direct audit-related costs exceeded \$973 million, which included supporting the audits and responding to auditor requests; achieving an auditable systems environment; and the cost of remediating audit findings. The remediation cost, approximately \$559 million of the total, included government and contractor costs for correcting findings and the costs of achieving and sustaining an auditable systems environment. (OUSD (C), 2019).

FY 2019

The audit of the DoD's FY 2019 Financial statement was completed in November 2019, the second full financial audit. Although some progress was made, no audit opinions changed from FY 2018 for the 24 DoD reporting entities that received audits

overseen by the DoD OIG. The overall result, a disclaimer of opinion on the Agency-Wide Basic Financial Statement, also remained unchanged (Fine, 2020). The cost of the FY 2019 DoD audit once again approached \$1 billion, which included the costs of the DoD personnel who prepared for the audit and remediated deficiencies identified during the previous audit (about \$770 million), and about \$190 million for the 5 independent public accounting firms that performed standalone audits of DoD Components (CSPAN, 2020). Between 2018 and 2019, the DoD made progress in many areas, even while auditors found additional issues elsewhere.

FY 2020

For the third year, the DoD OIG oversaw the audit of the DoD and the 24 DoD reporting entities. Once again, they issued a disclaimer of opinion on the Agency–Wide Basic Financial Statement, since 14 of the supporting major DoD Components³ received disclaimers of opinion because they continued to have unresolved accounting issues and material weaknesses that prevented them from providing evidence to support the balances presented on the financial statements (O’Donnell, 2021). Once again, auditors found no evidence of fraud. The cost of the FY 2020 DoD audit exceeded \$1 billion, \$203 million in fees to independent auditors and approximately \$1 billion in remediation costs to fix identified problems.

Summary of Material Weaknesses & NFRs

Material weaknesses are the largest issues that need to be addressed, defined as “weaknesses in internal controls that result in a reasonable possibility that management will not prevent, detect or correct, a material misstatement in the financial statements in a timely manner” (Fine, 2020).

³ These included the general fund accounts of all the services and accounted for the majority of the balances consolidated into the Agency–Wide Financial Statements.

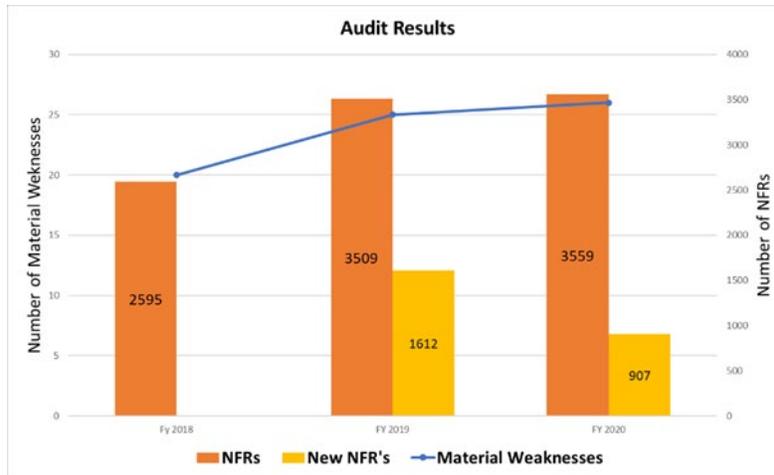


Figure 1. Summary of DoD Audit Results.

In 2018, auditors identified 20 material weaknesses which subsequent increased to 25 in the 2019 audit, and 26 in the 2020 audit (see Figure 1). This uptick is mostly due to the auditors being able to conduct a deeper financial analysis of the DoD during subsequent audits. Hopefully, uncovering these issues will help improve long-term financial management within the DoD.

The DoD approach for resolving identified material weaknesses was to prioritize only a few to resolve annually (Fine, 2020). In 2018, the DoD prioritized six different material weaknesses. Of the six, all saw significant progress and only two of them were reissued during the 2019 audit. Moreover, reissuing of any material weakness does not mean progress was not made. Any reissuing or the addition of new material weaknesses simply means that additional progress is needed before it is at a satisfactory level for the auditors.

Of the material weaknesses identified in 2020, 22 material weaknesses were repeated from FY 2019; 1 of these that addressed Financial Management Systems and Information Technology (Fine, 2020) was presented at a more granular level as 4 new material weaknesses (Legacy Systems, Configuration Management, and Security Management, Access Control and Segregation of Duties) in FY 2020 (O'Donnell, 2021).

The DoD identified eight priority areas to improve during FY 2020. The following seven areas directly related to material weaknesses identified in FY 2019: information

technology, inventory real property, government property in the possession of contracts, joint strike fighter, program fund balance with treasury, and oversight and monitoring. For example, one of DoD's goals in FY 2020 was to conduct a 100% count of all working capital fund inventory and all general fund munitions, ordnance, and uninstalled engines in its possession. The DoD was not able to meet this goal, as well as their other goals. The following are some other examples of material weaknesses that were identified in the FY 2020 (O'Donnell, 2021).

- The policies, procedures, controls, and supporting documentation necessary to verify the completeness of Inventory and Related Property that was reported on the financial statements were inadequate.
- The DoD's ineffective processes and controls for reconciling its Funds Balance with Treasury prevented DoD from being able to ensure the completeness and accuracy of its this account.
- The DoD had many legacy systems that did not comply with Federal financial management system requirements, and their continued use inhibited their ability to produce auditable financial statements.

These examples are given to describe the scope and seriousness of different material weaknesses. It will take the DoD many years to improve and eliminate the existing material weaknesses, and that is not accounting for additional findings by auditors. Given all this information, material weaknesses will likely be a helpful metric for defining the success or failure of the audits in the long-term.

Looking at a more granular level, an important metric for improvement of DoD's financial management is the "Notices of Findings and Recommendations" (NFRs) published in each audit. NFRs outline problem areas within accounting, internal controls, IT systems, and business processes. In 2018, auditors found a total of 2,595 NFRs, of these 23 percent were closed by the FY19 audit. The Acting DoD Comptroller, Elaine McCusker, remarked that this was "solid progress for our first year," and that the NFR number will grow as the auditors continue to delve into DoD's systems and processes (Mehta, 2019). In 2019 a total of 3,509 NFRs were identified (1300 were new), showing a significant uptick (Fine, 2020). McCusker believed that this increase

was not all bad news. With each audit, auditors can better understand and analyze the DoD which is reflected through the uptick in NFRs (Mehta, 2020). In 2020, 530 findings identified in the previous year's efforts were resolved.

The issues the NFRs identified were generally limited to problems of financial management and reporting issues. Fixing these problems shows movement toward improved financial management but are significantly smaller in nature compared to material weaknesses. Therefore, positive movement in both material weaknesses and NFRs will be a good predictor of the progress of DoD's financial management. In a larger context, this improvement and constantly uncovering of problems has little to do with improving programmatic and management decisions.



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Analysis

All business systems have a balance sheet; therefore, the government should have one. I think this assumption is unfortunate. (Anthony, 1996, p.9)

It took thirty years after the enactment of the CFO Act of 1990 for the DoD to finally become compliant. As previously stated, all three audits to date received disclaimers of opinion, i.e., no opinion could be given due to the financial statements not providing adequate information. Elaine McCusker, the Pentagon's former acting comptroller, reassured reporters that the overall disclaimer of opinion was expected (Mehta and Judson, 2019), and she expected that the DoD will likely continue to receive disclaimers of opinion for some time to come.

If the completed audits are any signal for what lays ahead, then the DoD will spend billions within the next decade for a very slow, steady movement progress toward achieving an unqualified opinion on its audit. While many of the identified NFRs and material weaknesses from the first audit were improved, with the subsequent audits the auditors found far more issues, often dwarfing the improvements. There is no sign that this trend will slow down; the next few years will help give a clearer idea of the depth of financial management problems within the department.

Supporters of the CFO Act of 1990 anticipated numerous benefits would result from the audits. First, since the CFO Act was in response to numerous wasteful spending problems that were uncovered in the 80's, auditing promised a way for the DoD to reduce waste, fraud, and abuse of taxpayer dollars. Another anticipated benefit was improved taxpayer transparency for how their money was being spent. Finally, many supporters argued the information gained from the audit would help inform decisions made by managers in the DoD to improve processes (Hanks, 2009).

Benefits

The principal supporter within the government of the CFO Act of 1990, is the Government Accountability Office. The GAO cites five areas that have improved since its enactment, including: leadership, financial reporting, federal workforce, internal



control, and financial management systems (GAO, 2020b). All these benefits were realized as executive agencies became audit ready. Further, the GAO often uses issues within the DoD to highlight the problems that can be, in part, attributed with not being able to be successfully audited. While the GAO discusses the benefits of the CFO Act broadly, the implication is that similar benefits are likely to be realized by the DoD.

Despite the failure to receive an unqualified opinion, the supporters of the financial audits believe that the effort and expense will, in the end, be beneficial. David Norquist, former DoD Comptroller, who oversaw the initial audit emphasized numerous benefits associated with improving the financial management of the DoD at-large. He believed the most important was accountability to the taxpayer, to ensure that their money was spent appropriately, without any going missing. While the audits finally meant the DoD was compliant, the work was far from finished. During multiple trips to congressional committees, Norquist defended the value of the audits and gave examples of different benefits and cost-savings the DoD already recognized. However, even with these savings, there is no clear evidence that the recognized benefits of the audit have outweighed the annual costs. The audits have provided insight into areas where processes and procedures are working well, as well as areas that need to be improved. As these improvements are made, it is expected that the cost of the audits will decrease. Norquist testified that “we don’t have to wait for a clean opinion to see the benefits of the audit. The financial statement audit helps drive enterprise-wide improvements to standardize our business processes and improve the quality of our data” (Norquist, 2018). The anticipated benefits include improved internal control, financial management, and inventory control. These are summarized below.

Improved Internal control

Internal control is a policy, or procedure, put in place by management to safeguard assets, stop fraudulent behavior, promote accountability, and increase efficiency. One of the key objectives is to put in place a process to prevent employees from misappropriating assets or committing fraud. Effective internal controls also provide reasonable assurance that an organization can perform its mission efficiently, report its finances reliably (this also requires effective cybersecurity), and is complying with all the applicable laws and regulations.

During the FY 2019 audit 20 agency-wide material weaknesses in internal controls were identified. These errors created the potential for errors in the financial statement to not be detected (Fine, 2020). As a result of the audits, DoD initiated remediations efforts that have resulted in significant improvements. For example, enhanced internal controls in the U.S. Pacific Fleet resulted in freeing up enough purchasing power to fund the \$4.4 million repair costs of the USS Paul Hamilton (DoD, 2019).

Moreover, a significant part of the audit involves reviewing information technology and cyber security. Since many of the same systems used for financial management are also used for operational purposes, identifying vulnerabilities in these systems will result in recommendations that improve the DoD's overall cybersecurity posture across different networks and systems (Fine, 2019). Mitigation for these shortfalls is underway with the transition to cloud architecture with the ongoing Joint Enterprise Defense Infrastructure procurement, as well as updating cybersecurity policies (Williams, 2018).

The audits also identified five instances of non-compliance with laws and regulations across the DoD. However, as previously stated, the three audits found no indications of fraud or abuse.

Improved Financial Management

Within the DoD's complex structure, financial transactions often involve several IT reporting systems to go from the initial transaction to the point where they are captured in the component's financial statement; often the components do not own and operate all of the IT systems that are used to process these transactions. In 2016, 400 separate IT systems were used to process DoD's accounting data. The audits identified wide-ranging weaknesses in these systems that prevented the accurate, reliable, and timely reporting of financial data (Fine 2019). Some of these were identified years prior (Williams, 2018).

A significant benefit is the savings generated from improved efficiencies and better financial operations since real time improvements were made. For example, in response to the FY 2018 audit, the Army implemented a new automated solution for

data entry into the U.S. Standard General Ledger, saving 15,500 labor Hours (Mehta, 2019).

Another benefit from the audit requirement is the initiation of financial management improvements that would otherwise take longer, or not occur at all. The subsequent public reporting enables the tracking by both management and oversight agencies (Brook, 2011). As a result of the audits, several initiatives are being pursued by DoD to address the weaknesses related to the IT systems. For example, DoD has plans to eliminate 26 legacy IT systems by FY 2022. Additionally, DoD has established a database to identify IT applications that impact DoD financial statement audits and to track the auditor feedback regarding the system controls (Fine, 2019). During the FY 2019 financial statement audits, additional improvements were made by DoD's components that enabled auditors to expand testing to new areas (Fine, 2020).

For example, for the first time the Army was able to provide auditors transactions for Army Working Capital Fund inventory work in progress, which consists of raw materials that are used to make a finished product, valued at \$952 million. Auditors were able to reconcile these transactions to the balances in the accounting system and will also be able to test these in the FY 2020 audit. Auditors also found that the Army's IT controls over its Logistics Modernization Program system to be effective, no exceptions were identified by the auditors during testing (Buble, 2019). In another case, the Army created a computer application to store and analyze its transactional data for audit, increasing its visibility into its cost drivers and enabling its leadership to commit resources to the highest priority programs (Fine, 2020).

In response to the other issues identified, improvements are planned. DoD will develop and implement a plan for an integrated pay and personnel system to report financial management data, capture and store key documentation and determine pay and benefits (Williams, 2019).

Improved Inventory and Property Management

The Military Services and other DoD Components own \$291.5 billion in Inventory and Related Property Inventory, which must be reported on their financial statements. The auditors identified material weakness related to Inventory and Related Property in

all three completed audits. Auditors found that numerous DoD Components were unable to provide assurance over the existence, completeness, and valuation of inventory. For example, items may have been moved or used, but were still in the inventory records; other items were found in the warehouse but not listed in the inventory records; and some items were recorded as in good condition but were unserviceable (Fine, 2020; O'Donnell, 2021). An accurate accounting is necessary to ensure, for example, that the number of spare parts are in inventory is accurate, to ensure the ability to support operational requirements, as well as to preclude the ordering of unnecessary inventory.

As a result of the FY2018 audit, the Air Force redesigned the process for validating the condition of assets in property systems at Hill Air Force Base in Utah, enabling the accurate capture of approximately \$53 million in assets that would have otherwise been misstated. In another example, \$280 million of items that were not properly tracked were identified at Naval Air Station Jacksonville. As a result, \$81 million of material, that the service had no idea it had on hand, was identified as available for immediate use. Additionally, the inefficient use of assets was identified; getting rid of old, unusable material freed up approximately 200,000 square feet of storage space (Mehta, 2019). With the FY 2020 audit the Navy was able to complete a full inventory of real property assets resulting in a 98% accuracy rate; and the Air Force completed floor-to-book and book-to-floor inventories of over 96% of its buildings (Buble, 2019). These improvements helped to ensure the efficient use of existing assets.

Audit Critics

However, this effort is not without its detractors. Challengers of the benefits of auditing DoD's financial statements contest the value of financial statements and the audits, citing numerous issues. Some have argued that that the DoD's financial accounting processes have been flawed from their inception. Others argue that financial audits will incur significant costs but have not identified any fraud. Additionally, the DoD is already subject to a significant amount of financial oversight. Moreover, the audits do not provide the information necessary to effectively make better managerial

decisions. They believe DoD would be better served with an increased emphasis on managerial-cost accounting. These positions are reviewed below.

Once the Financial Accounting Standards Advisory Board (FASAB) developed the federal governments accounting processes and standards, Professor Anthony was one of the earliest critics. He assessed that “Unfortunately, however, few managers in the executive branch and few legislators or their staffs will use the accounting information developed in the new system,” since there is little evidence, they used information provided by previous systems (Anthony, 1996).

As discussed previously, the accounting system, as developed by FASAB, was composed of two "separate, uncoordinated systems" for budgeting and accounting in the federal government. The House Appropriations Committee makes its appropriations on an obligation basis, and most other committees also accept the obligation format. The Senate Governmental Affairs Committee, on the other hand, mandated an expense-based format; however, this is in addition to, rather than instead of, the obligation basis. Anthony believed the obligation system could be easily manipulated. When an obligation authority exists, contracts can be charged to it, even if the goods or services are not actually needed. Since funds continued to be appropriated on an obligation basis, government leaders and managers would not pay much attention to the expense based financial information. He concluded that since the FASAB system continued this separation, the financial management systems would not assist managers and other decision makers in making decisions the way a good accounting system should (Anthony, 2000).

Additionally, DoD spending already receives a significant amount of scrutiny. Unlike private organizations, when enacted by Congress DoD’s budget becomes a legally binding document. If organizations fail to implement this budget, legal action can be taken, and penalties imposed, under the Anti-Deficiency Act. Furthermore, DoD contracts are already subject to routine audits by the Defense Contract Audit Agency (DCAA) to ensure spending is in compliance with legal requirements (Cancian, 2018).

A 2011 IDA assessment of DoD’s Enterprise Resource Planning Business Systems judged that making the Department an auditable enterprise was a “wicked



problem”⁴. When it comes to financial statements, IDA highlighted the differences between DoD and those of commercial businesses, the principal users of audited financial statements. The DoD’s primary stakeholders are not shareholders, but taxpayers. Moreover, DoD objective is not concerned with making a profit, remaining solvent, limiting risk/liability, and developing tax incentive-based strategies involving the valuation and depreciation of assets, since these have minimal operational value. IDA concluded that DoD should discontinue their attempt to achieve comprehensive financial statement audits and the operational value of audit readiness activities should be assessed before additional resources were expended. IDA believed that a much more meaningful accounting of the DoD would be a managerial-cost accounting approach (Ketrick et al., 2012).

Other critics of the DoD’s financial statement audit also believe that managerial-cost accounting would better provide many of the benefits promised by the supporters of the auditing of DoD financial statements. Consequently, the differences between financial and managerial accounting are important for understanding the value of the DoD audit and the CFO Act of 1990.

As described above, financial accounting is concerned with income statements, balance sheets, and journal entries. Critics of financial accounting argue that the backward-looking nature of financial accounting makes it inadequate to inform future decisions. Managerial-cost accounting, on the other hand, is intended for internal stakeholders. Additionally, the forward-looking nature of managerial accounting makes it attractive to managers looking to make real-time decisions. The forward-looking nature of managerial accounting would greatly help the DoD plan for the future, rather than recounting the past, as is the case with financial accounting. It is important to note that many experts consider managerial cost accounting the best way to improve businesses practices. While both play an important role, managerial accounting provides the information necessary to create the change that is one of the key objectives intended to

⁴ In planning and policy, a wicked problem has been defined as a problem that is difficult or impossible to solve because of incomplete, contradictory, and changing requirements that are often difficult to recognize, first used by Rittel and Webber in 1973.

result from auditing the DoD, and financial audits will have little on making future business decisions.

Consequently, improving financial accounting practices within the DoD may not achieve the management improvements that the Congress envisioned with the CFO Act of 1990 and the DoD audit. Given their rhetoric, it seems that managerial accounting may be more in line with their objectives, since managerial-cost accounting is better suited to inform internal managerial decisions and improve business practices. If Congress is concerned with the wastefulness of the DoD at-large, shifting the emphasis to managerial-cost accounting may provide senior leader managers with information needed to make better decisions.

Resolving this conflict will be central to understanding the costs and impacts of financially auditing the DoD. In October 2019, the GAO released a report discussing the progress in financial management for the federal government (GAO, 2020b). One of the recommendations moving forward was for the executive agencies to “better link performance and cost information for decision-making”. This recommendation suggests that the DoD may be improving internal financial management systems, along with other executive agencies, but struggling to monitor program performance and implement appropriate changes.

Finally, the cost to achieve DoD auditability may be understated. A major part of DoD’s strategy to achieve auditability has been its effort to modernize business systems. The GAO has designated the department’s business systems modernization efforts as high-risk since 1995 and continues to find weaknesses in the DoD’s implementation of business systems. Since 2005, GAO issued 12 reports and has made 29 recommendations, and as of June 2019, only 15 of the 29 recommendations contained in the 12 reports have been implemented by the DoD (GAO, 2020a).

As part of its business modernization efforts, the DoD has fully implemented several new ERP systems, while others have been cancelled by the DoD or the military service⁵ after multibillion dollar investments, and other projects have been plagued with

⁵ For example, the USAF’s Expeditionary Combat Support System (ECSS) was a failed enterprise resource planning software project undertaken between 2005 and 2012, after spending \$1.1 billion.

delays and cost overruns. In FY 2012 DoD invested almost \$18 billion to operate and modernize its business systems (Crawford, 2015). DoD continues to make investment in its business systems, in FY 2019 the figure was almost \$9 billion (GAO, 2020a). It may not be unreasonable to question if these investments have produced the envisioned value.

Does auditing the DoD increase costs to the contract acquisition system?

There was also some concern that FIAR requirements would increase the cost of goods and services DoD procures. By default, these financial management requirements flow down to vendors selling to the DoD. To adequately support the DoD requirements, the vendor must have a system of record in place capable of maintaining appropriate controls and processes and be able to produce the necessary supporting documentation to validate the cost charged to the DoD. However, DoD already had an extensive financial management regulation regime imposed on its contractors, in place, prior to the CFO Act of 1990 that already imposed a significant additional cost on contractors.

In 1994, the accounting firm Coopers & Lybrand (now PriceWaterhouseCoopers) completed the most authoritative study of the costs associated with the DoD regulatory burden contractors' costs. They analyzed over 100 different regulations that increased costs to contractors. Out of the 100 regulations analyzed and concluded that three of the top ten that drive costs were related to finance and accounting (see the inset). Specifically, these three accounted for a 2.9 percent increase in costs for DoD contractors. Property and equipment management added another 1.2 percent for a total of 3.4 percent of the total 23 percent cost burden, or approximately a fourth of total compliance costs. These costs may have a type of spillover effect and mask any small cost that may come from providing any additional financial data, not already required, to comply with FIAR.

Financial Regulation driving regulatory cost

Cost Accounting Standards (CAS). Directs the establishment of cost accounting standards to achieve uniformity and consistency in the cost accounting principles followed by defense contractors and subcontractors. Audits to ensure compliance are conducted by the Defense Contract Audit Agency.

Cost/Schedule Control Systems. DoD established use of EVM as a requirement for periodically measuring linear programs with firm baselines established prior to starting development.

The Truthful Cost or Pricing Data Act. Commonly referred to by its historical name, the Truth in Negotiations Act or (TINA) requires contractors to submit certified cost or pricing data if a procurement's value exceeds the specified threshold and no exceptions apply.

A non-financial requirement imposed on contractors, in part to improve the DoD's audit readiness was imposed by DoD that trickles down costs is the DoD's Item Unique Identification (IUID) system, requiring businesses to provide a unique identification of all delivered end items with a unit acquisition cost is \$5,000 or more (see 252.211-7003 Item Unique Identification and Valuation). Although this policy increased the cost for contractors, OEMs have presented data to show that identification technology helped to reduce costs through improved data quality and enhanced quality control during product planning, development, life cycle, and inventory control. The Aerospace Industry Association developed a common supplier flow-down requirement to further expand IUID use as the single identification across the industry and DoD for supply-chain management. IUID was identified as the single best practice for item management across the corporate spectrum for both commercial and government business by industry groups (Bradford, 2012).

In conclusion, there is no evidence directly linking the nearly \$1 billion annual investment in the financial audits to increased costs to contractors. based on the data collection and reporting requirements already in place, it is unlikely that auditing the DoD increases costs to the contract acquisition system. Further, while there does not seem to be any direct connection between FIAR compliance and increased acquisition costs to the contract system, there is, however, an opportunity cost. Any monies devoted to audit readiness and compliance are not available to fund other initiatives.

Conclusion

The DoD has spent billions in meeting the Congressional mandate to have audit ready financial statements by September 30, 2017, and must now continue to produce annual financial statement and undergo audits as required by law. With three audits completed, DoD has identified many problems and shortcomings in its process and has corrected some of these. It will take some time to tell if an unqualified opinion can ever be achieved and at what expense, since capturing all the indirect audit related costs is challenging. In the interim, DoD's interest and commitment may fade, since within the department financial management will always cede priority, as it should, to the operational mission.

The DoD has recognized some benefits as a result of the audits, primarily uncovering inventory that was previously unaccounted for, including helicopters, buildings, and munitions (Cronk, 2019a). Uncovering this additional inventory can help managers be better informed about resources on hand, but it is unlikely these discoveries will continue beyond the first few audits. More importantly, the DoD is also improving internal accounting systems so that they will represent the state of their finances more accurately, as well as strengthening these systems against cyber-attacks. These improved accounting and financial management systems will be able to provide better financial information to decision makers and may reduce the cost of future audits. Even though no instances of massive waste or fraud have been identified, the audits will potentially provide a political benefit, since the audits can help provide the desired financial transparency and demonstrate that the DoD is exercising sound financial management.

Finally, although one of the objectives for the audits is to improve management decisions, the financial accounting and auditing literature rarely, if ever, mentions a connection to these. As could be expected, the information derived from the audits has not impacted the rational for, or the management of, any major DoD program. Since financial accounting and auditing has demonstrated little practical value for making future decisions, it is unlikely that the DoD will be able to improve its decision making

concerning its programs with financial accounting and audits alone; one of the key objectives. Greater emphasis on improved managerial-cost accounting would provide longer term benefits in this regard, by better informing future decisions.

As DoD continues along the path to achieve an unqualified opinion in the anticipated constrained budgetary environment, Congress and DoD's leaders should evaluate the costs and benefits of the audits. At some point the marginal gains may not be worth the additional costs. The nation and its leaders need to ensure that DoD does the right things, and not only does things right.



References

- Anthony, R. N. (1996, Spring). The FASAB's dilemma. *The Government Accountant's Journal*, 32–39. Article reproduced in *Journal of government financial management: Journal author award articles 1996–2006, Supplement, Fall 2005*. Retrieved May 2009 from <http://www.agacgfm.org/publications/downloads/AuthorAward96-2006.pdf>
- Anthony, R. N. (2000, Winter). The Fatal Defect in the Federal Accounting System. *Public Budgeting and Finance*. Winter 2000.
- Bowsher, C. A. 1985. *Managing the Cost of Government Building an Effective Financial Management Structure*. GAO/AFMD-85-35. February 1985.
- Bowsher, C. A. 1991. *The Chief Financial Officers Act: A Mandate for Federal Financial Management Reform*. GAO/AFMD-12.19.4: Sep 1, 1991.
- Bradford, N. J. 2012. *History & Implementation of Item Unique Identification (IUID)—Has it Improved Asset Visibility?* Army War College Civilian Research Project. Mar 23, 2012. Available at: <https://apps.dtic.mil/dtic/tr/fulltext/u2/a568454.pdf>
- Brook, D. A. 2011. *Exploring the value of Financial Statement Audits*. *Journal of Government Financial Audits*. Spring 2011.
- Browne, R., and B. Starr. 2018. Pentagon spends \$500 million to fix problems found in audit. *CNN*. November 16, 2018. Available at: <https://www.cnn.com/2018/11/16/politics/pentagon-audit-500-million/index.html>.
- Buble, C. 2019. *Defense Department Fails its Second Audit, Yet is Making Progress*. *Government Executive*. November 18, 2019. Available at: <https://www.govexec.com/defense/2019/11/defense-department-failed-its-second-audit-yet-making-progress/161367/>
- Cancian, M. 2018. *Why Auditing the Pentagon Isn't Turning Up a Windfall Of Waste*. *Forbes*. Nov 19, 2018. Available at: <https://www.forbes.com/sites/markcancian/2018/11/19/the-dod-audit-no-pot-of-gold-at-the-end-of-that-rainbow/?sh=74e1d8513230>.
- Candrea, P. J. 2004. *Accounting for Transformation*. *The Armed Forces Comptroller*. Fall 2004.
- Chief Financial Officers Act of 1990. 1990. House - Government Operations; Post Office and Civil Service. Committee Reports: H. Rept. 101-818 Part 1. 1990. Became Public Law No: 101-576. Available at: <https://www.congress.gov/bill/101st-congress/house-bill/5687>.



Comptroller General. 2018. Government Auditing Standards 2018 Revision. July 2018. Available at: <https://www.gao.gov/assets/700/693136.pdf>

Cooper, Robin, and Robert S. Kaplan. "The promise - and peril - of integrated cost systems." Harvard Business Review, vol. 76, no. 4, 1998, p. 109+.

Coopers and Lybrand. 1994. The DoD Regulatory Cost Premium: A quantitative Assessment. Prepared for Dr. William J. Perry, Secretary of Defense. December 1994.

Crawford, L.M. 2015. Audit Readiness: The Costs and Culture. United States Army War College Report. January 4, 2015.

Cronk, T. M.(a) 2019. The Pentagon completed its second audit. What did it find? News Release. Nov. 16, 2019. Available at: <https://www.defensenews.com/pentagon/2019/11/16/the-pentagon-completed-its-second-audit-what-did-it-find/>

Cronk, T. M.(b) 2019. Audit for 2019 Shows DOD's Progress. News Release. Nov. 18, 2019. Available at: <https://www.defense.gov/Explore/Features/story/Article/2018453/audit-for-2019-shows-dods-progress/source/GovDelivery/>

Cronk, T. M.(c) 2019. Norquist: With 2 Audits Done, DOD Still Has Work to Do News Release. Nov. 20, 2019. Available at: <https://www.defense.gov/Explore/News/Article/Article/2022270/norquist-with-2-audits-done-dod-still-has-work-to-do/>

CSPAN. 2019. Senate Hearing on Department of Defense Audit. CSPAN. November 22, 2019 Available at: https://archive.org/details/CSPAN2_20191122_130400_Senate_Hearing_on_Department_of_Defense_Audit/start/960/end/1020.

DeFond, M. and Zhang J. 2014. A review of archival auditing research. Journal of Accounting and Economics 58 (2014) 275–326.

DoD(a). 2018. United States Department of Defense Agency Financial Report, Fiscal Year 2018. November 14, 2018. Available at: https://comptroller.defense.gov/Portals/45/Documents/afr/fy2018/1-Foreword_About_the_DoD_Agency_Financial_Report_and_Table_of_Contents.pdf

DoD(b). 2018. The Largest Audit in History ... Really? DoD Press Release. Nov. 16, 2018. Available at: <https://www.defense.gov/Explore/Features/story/Article/1690550/the-largest-audit-in-history-really/>



- DoD. 2019. United States Department of Defense Agency Financial Report, Fiscal Year 2019. November 14, 2019. Available at:
[https://comptroller.defense.gov/Portals/45/Documents/afr/fy2019/1-Foreword About the DoD Agency Financial Report and Table of Contents.pdf](https://comptroller.defense.gov/Portals/45/Documents/afr/fy2019/1-Foreword%20About%20the%20DoD%20Agency%20Financial%20Report%20and%20Table%20of%20Contents.pdf)
- Dodaro, G. L. 2019. Hearing on the Chief Financial Officers Act of 1990: Achieving the Vision. Senate Budget Committee. October 30, 2019. Available at:
<https://www.budget.senate.gov/chief-financial-officers-act-of-1990-achieving-the-vision>.
- Elliot, R.K. 1994. The Future of Audits. Journal of Accountancy. September 1994. 178(3) 74-82.
- Federal Financial Management Improvement Act (FFMIA) of 1996, Pub. L. 104-208. 110 Stat. 3009 (1996). Retrieved from:
<https://www.congress.gov/104/plaws/publ208/PLAW-104publ208.pdf>.
- Fine, G. 2019. Understanding the Results of the Audit of the DoD FY 2018 Financial Statements. DoD Inspector General Report. Jan. 8, 2019.
- Fine, G. 2020. Understanding the Results of the Audit of the DoD FY 2019 Financial Statements. DoD Inspector General Report. Jan. 28, 2020.
- GAOa. 2020. Substantial Progress Made since Enactment of the 1990 CFO Act; Refinements Would Yield Added Benefits. GAO Report. GAO-20-566. August 2020. Available at: <https://www.gao.gov/assets/710/708666.pdf>.
- GAOb. 2020. DOD Needs to Implement Comprehensive Plans to Improve Its Systems Environment. GAO Report. GAO-20-252. September 2020. Available at: <https://www.gao.gov/assets/710/709884.pdf>
- Gibson C. H. 2011. Financial Reporting Analysis: Using Financial Accounting Information, 12th Ed. Thomson South-Western: 2007. 17
- Goddard, A. 2010. Contemporary public sector accounting research –An international comparison of journal papers. The British Accounting Review, 42(2), 75–87.
- Government Management Reform Act (GMRA) of 1994, Pub. L. No. 103-356. 108 Stat. 3410. (1994). Retrieved from:
<http://govinfo.library.unt.edu/npr/library/misc/s2170.html>.
- Government Performance and Results Act (GPRA) of 1993, Pub. L. No. 103-62. 107 Stat. 285. (1993). Retrieved from:
<http://govinfo.library.unt.edu/npr/library/misc/s20.html>
- Hanks, C. H. 2009. Financial Accountability at the DoD: Reviewing the Bidding. Defense Acquisition Research Journal. July 2009. Vol. 16 No. 2 |ISSUE 51.

- Hay, D., and Cordery C. 2018. The value of public sector audit: Literature and history. *Journal of Accounting Literature*. Volume 40, June 2018, Pages 1-15.
- Hevesi, D. 2006. Robert N. Anthony Dies at 90; Made Accounting Easier to Learn. *New York Times*. Dec. 18, 2006.
- House Committee on Appropriations. 2020. Press Release. Appropriations Committee Approves Fiscal Year 2021 Defense Funding Bill. July 14, 2020. Available at: <https://appropriations.house.gov/news/press-releases/appropriations-committee-approves-fiscal-year-2021-defense-funding-bill>.
- Kaplan, R. S., & Cooper, R. 1998. *Cost and effect—Using integrated cost systems to drive profitability and performance*. Boston: Harvard Business School Press.
1998. Browne, R., and B. Starr. 2018. Pentagon spends \$500 million to fix problems found in audit. *CNN*. November 16, 2018. Available at: <https://www.cnn.com/2018/11/16/politics/pentagon-audit-500-million/index.html>
- Khan, A. A. 2011. *Improved Controls, Processes, and Systems Are Needed for Accurate and Reliable Financial Information*. GAO-11-933T. Testimony Before the Subcommittee on Government Organization, Efficiency and Financial Management, Committee on Oversight and Government Reform, House of Representatives. September 23, 2011.
- Koh, H. C. and Woo, E. 1998. The expectation gap in auditing. *Managerial Auditing Journal*. 13/3 [1998] 147–154.
- Mehta, A. and Judson, J. 2019. The Pentagon completed its second audit. What did it find? *Defense News*. November 16, 2019. Available at: <https://www.defensenews.com/pentagon/2019/11/16/the-pentagon-completed-its-second-audit-what-did-it-find/>
- Miller, J. 2011. 23 of 24 agencies get financial audit opinions. *Federal News Network*. Nov. 21, 2011. Available at: <https://federalnewsnetwork.com/all-news/2011/11/23-of-24-agencies-get-financial-audit-opinions/>.
- National Defense Authorization Act (NDAA) For Fiscal Year 2008, Pub. L. No. 110-181. 122 Stat. 3 (2008). Retrieved from: <https://www.congress.gov/bill/110th-congress/house-bill/4986>
- National Defense Authorization Act (NDAA) For Fiscal Year 2010, Pub. L. No. 111-84. 123 Stat. 2190 (2009). Retrieved from: <https://www.congress.gov/111/crpt/hrpt288/CRPT-111hrpt288.pdf>.
- Norquist, D.L. 2018. Testimony before the House Armed Services Committee Department of Defense Update on the Financial Improvement and Audit Remediation (FIAR) Plan of Defense, January 10, 2018. Available at: <https://docs.house.gov/meetings/AS/AS00/20180110/106760/HHRG-115-AS00-Wstate-NorquistD-20180110.pdf>

- O'Donnell, S. 2021. Understanding the Results of the Audit of the DoD FY 2020 Financial Statements. Feb. 23, 2021. Available at:
<https://media.defense.gov/2021/Feb/25/2002588406/-1/-1/1/UNDERSTANDING%20RESULTS%20OF%20AUDIT%20OF%20FY%202020%20FINANCIAL%20STATEMENTS.PDF>
- Office of Management and Budget. 2004. *OMB Circular No. A-123 Revisions to OMB Circular A-123, management's responsibility for internal control*. Retrieved from:
http://www.whitehouse.gov/sites/default/files/omb/assets/omb/circulars/a123/a123_rev.pdf
- Office of Management and Budget. 2007. *OMB Bulletin No. 07-04. Audit requirements for federal financial statements*. Retrieved from:
<http://www.whitehouse.gov/sites/default/files/omb/bulletins/fy2007/b07-04.pdf>.
- Office of Management and Budget. 2010. *OMB Circular No. A-136 revised September 29, 2010: Financial reporting requirements*. Retrieved from:
http://www.whitehouse.gov/sites/default/files/omb/circulars/a136/a136_revised_2010.pdf
- OUSD (Comptroller). 2017. Financial Improvement and Audit Remediation (FIAR) Guidance. April 2017. Available at:
https://comptroller.defense.gov/Portals/45/documents/fiar/FIAR_Guidance.pdf.
- OUSD (Comptroller). 2019. Financial Improvement and Audit Remediation (FIAR) Report. June 2019. Available at:
https://comptroller.defense.gov/Portals/45/documents/fiar/FIAR_Report_June_2019.pdf.
- PCAOB. 2004. Auditing Standard No. 5. An Audit of Internal Control Over Financial Reporting that is Integrated with an Audit of Financial Statements. APPENDIX A – Definitions. PCAOB Release No. 2003-025 Available at:
https://pcaobus.org/Standards/Archived/PreReorgStandards/Pages/Auditing_Standard_5_Appendix_A.aspx
- Rich, K. T., & Zhang, J. X. (2014). Does audit committee monitoring matter in the government sector? Evidence from municipal internal control quality. *Journal of Governmental & Nonprofit Accounting*, 3(1), 58–80. Available at:
<http://aaajournals.org/doi/10.2308/ogna-50832>.
- Rittel, Horst and Melvin Webber. 1973. Dilemmas in a General Theory of Planning. *Policy Sciences*, Vol. 4, pp. 155-169. 1973.
- Streim, H. (1994). Agency problems in the legal political system and supreme auditing institutions. *European Journal of Law and Economics*, 1(3), 177–191. Available at: <http://link.springer.com/10.1007/BF01552469>.

Van Tendeloo, B and Vanstraelen, A. 2011. Earnings Management and Audit Quality in Europe: Evidence from the Private Client Segment Market. *European Accounting Review*. Pages 447-469. Published Online. 11 Oct 2011.

Vanstraelen, A. and Schelleman, C. 2017 Auditing private companies: what do we know? *Accounting and Business Research*, 47:5, 565-584, 08 Jun 2017.

William, L.C. 2018. DoD's failed audit shines a light on IT woes. *Federal Computer Week*. November 16, 2018.



