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To request Defense Acquisition Research or to become a research sponsor, please contact:

NPS Acquisition Research Program
Attn: James B. Greene, RADM, USN, (Ret.)
Acquisition Chair
Graduate School of Business and Public Policy
Naval Postgraduate School
555 Dyer Road, Room 332
Monterey, CA 93943-5103
Tel: (831) 656-2092
Fax: (831) 656-2253
E-mail: jbgreene@nps.edu

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The Defense Budget and Defense Industry Finance

David Berteau—David J. Berteau is a Senior Adviser and Director of the CSIS Defense-Industrial Initiatives Group, covering defense management, programs, contracting, and acquisition. His group also assesses national security economics and the industrial base supporting defense. Mr. Berteau is an adjunct professor at Georgetown University, a member of the Defense Acquisition University Board of Visitors, a director of the Procurement Round Table, and a fellow of the National Academy of Public Administration. He also serves on the Secretary of the Army's Commission on Army Acquisition and Program Management in Expeditionary Operations.

Roy Levy—Roy Levy is a Consultant with the Defense-Industrial Initiative Group at the Center for Strategic and International Studies (CSIS), where he specializes in financial aspects of the US defense industrial base. Before joining CSIS, Mr. Levy was a Policy Analyst with a New York City-based economic research firm and was a Fellow at the Colin Powell Center for Policy Studies between 2007 and 2009. He is the author and co-author of several published articles on international security issues. Mr. Levy holds a BA in Political Economy from the City University of New York.

Matthew Zlatnik—Matthew Zlatnik is a fellow with the CSIS Defense-Industrial Initiatives Group, where he focuses on how technological, industrial, and budgetary issues affect defense policy. Mr. Zlatnik previously spent 10 years in investment banking, primarily working with corporate clients in the telecommunications industry. He holds an MA in international relations from the Johns Hopkins School of Advanced International Studies (SAIS), an MBA in finance from the Wharton School of the University of Pennsylvania, and a BA in economics from Carleton College.

Abstract

The defense sector's fundamentals in terms of operating margin and cash flow return on investment (CFROI) are stronger today than at any point in the past two decades due to better cash flow management, operating efficiencies, and record US defense spending. However, the economic and business environment for the defense sector moving forward is likely to be more difficult because of the Federal budget deficit and the government's non-defense spending requirements. Likely changes in spending priorities have the potential to change the industry significantly. Assessing the vulnerability of the defense sector to potential market changes—both as a whole and within the various segments it comprises—is of the outmost importance.

Introduction

To evaluate the vulnerability of the industry to potential changes in market conditions, it is important to understand the financial drivers of defense companies and to have insight into why companies enter or exit the industry and why investors choose to fund the sector. In this annotated brief, we examine the defense sector's profitability, both in a historical context and in comparison to commercial peers. We choose to evaluate the profitability of the industry because of its importance to a sector's attractiveness to outside investors. Low profitability relative to other sectors will hinder an industry's ability to finance its operations. In the context of the industrial and technological base supporting defense, to the extent profitability shrinks, the industry may shrink as well, as companies and capital gravitate toward more lucrative sectors.

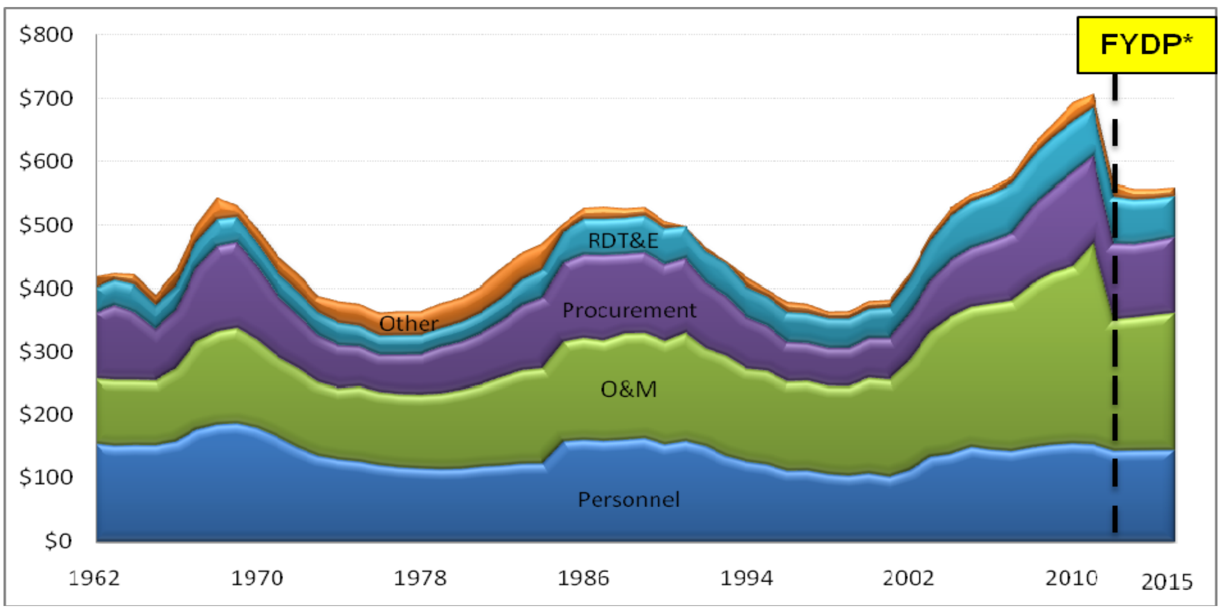
Our analyses show that while the overall fundamentals of the defense sector in terms of operating margin and CFROI are stronger today than at any point in the past two decades, company performance may vary due to size (measured by revenue) and specialization (from products to service, electronics to heavy metal). The main question to consider going forward is how can companies preserve margins and, by extension, maintain their attractiveness to capital markets in an era of flat or declining budgets?

The CSIS Defense Index

To examine and analyze the defense sector, CSIS will utilize existing tools and develop additional methods. To reflect changes and capture the diversity of companies within the sector, we created the CSIS Defense Index. Our index is composed of 23 public companies with revenue ranging from $114 million to $42 billion, representing not only hardware and equipment firms but also the professional services sector. We also include several foreign companies with a significant presence in the US defense market. Our financial analysis takes a bottom-up approach, aggregating data for each of the companies in the CSIS Defense Index to obtain weighted totals or averages. Financial data are obtained from commercial services.

The Defense Budget

Defense spending is at an historic high, surpassing in real terms both the Vietnam War era and the Reagan buildup of the 1980s (Figure 1). Top-line budget today is 85% higher than the top-line budget in 2001 (constant FY2010 US$).



Department of Defense Outlays, 1962-2011 (constant FY2010 US$ billion)**
(Source: DoD Comptroller; analysis by CSIS Defense-Industrial Initiatives Group)

*Excludes projected OCO
* *FY1962-FY2009=Historical Outlays; FY2010=Budget Authority including OCO as of February 2011; FY2011=Budget Request Including OCO

From an industry perspective, while DoD contract action value more than doubled during the period, the relative composition of products and services procured remained largely intact (Figure 2). The one exception is the Professional, Administrative, and Management Support (PAMS), which grew from 26% of total professional services in 2000, to 34% in 2009.

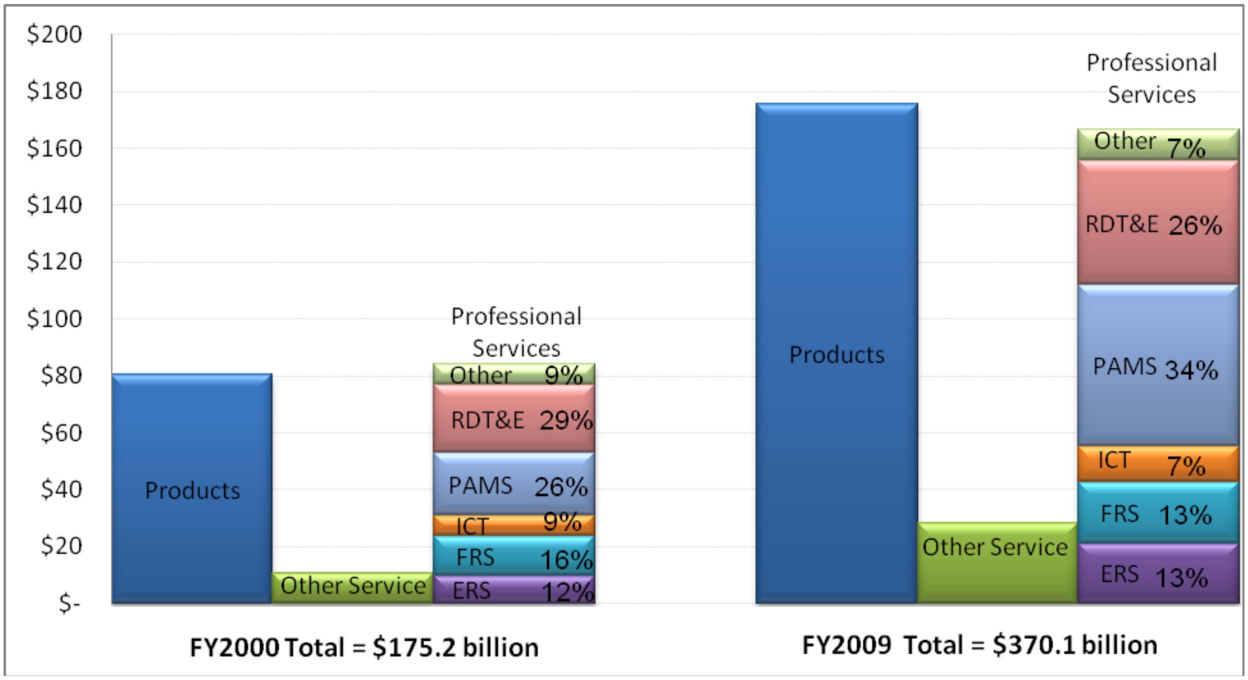


Figure 1. Composition of Total DOD Contracts, 2000 and 2009 (constant FY2009 US$, billion)

(Source: Federal Procurement Data System, analysis by CSIS Defense Industrial-Initiatives Group)

PAMS: Professional, Administrative, & Support	FRS: Facilities Related Services
ICT: Information, Communications, & Technology	ERS: Equipment Related Services

Defense Industry Financial Performance

What does this all mean for the defense industry? From 2001 until the over-all stock-market peak in 2007, the defense index outperformed the S&P 500. This outperformance was especially pronounced from March 2003 until late 2007, the period that saw the most intense fighting in Iraq. From 2007 to 2008, the indices traded closely together. Investors' anticipation of the end of US involvement in Iraq and slower-growing investment budgets could be one explanation.

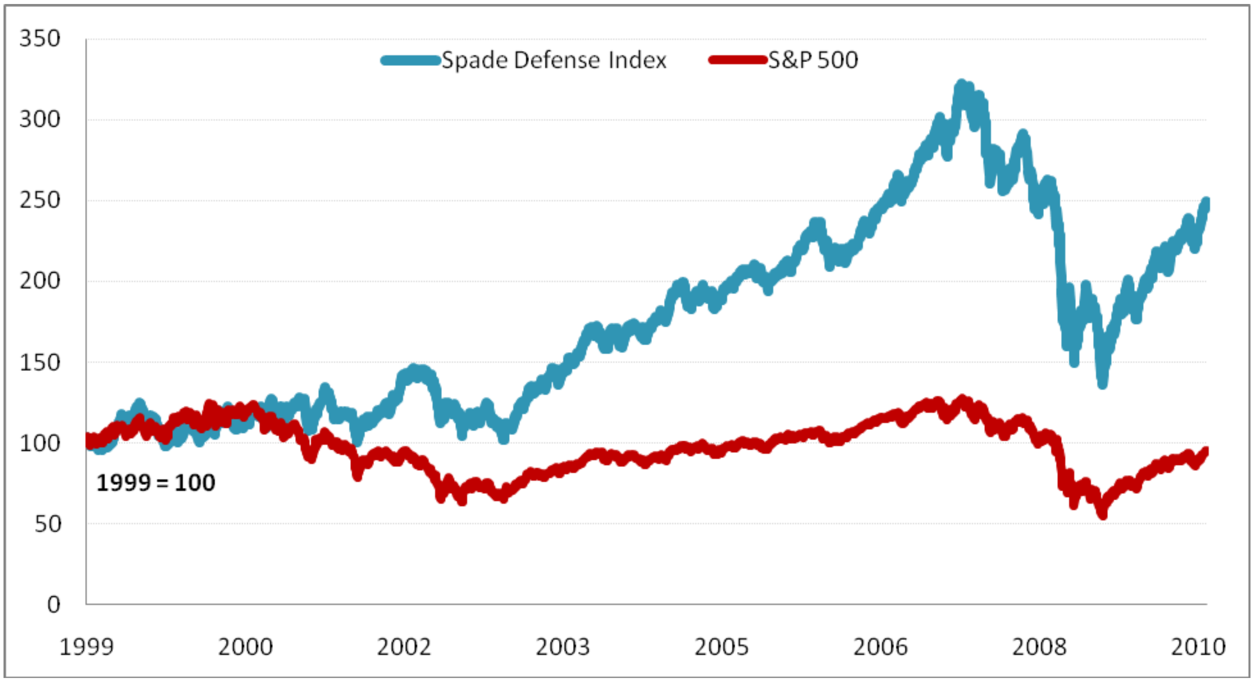


Figure 2. Defense Index Performance, 1999-2010 (1999=100)
(Source: Bloomberg, analysis by CSIS Defense-Industrial Initiatives Group)

The plunge in the Spade Defense Index in 2008 probably reflects broader investor flight from equity more than a fundamental change in the financial health of the defense sector. Since 2009, the defense index has outperformed the S&P 500, possibly reflecting greater investors' insight into the Obama administration's defense priorities, as outlined in the recently-released *Quadrennial Defense Review (QDR)*. It also is a testament to the relative health of the defense industtry.

In the medium and long terms, profitability is critical to a sector's attractiveness to outside investors. Low profitability relative to other sectors will hinder an industry's ability to finance its operations. In the context of the industrial and technological base supporting defense, to the extent profitability shrinks, the industry may shrink as well, as companies and capital gravitate toward more lucrative sectors.

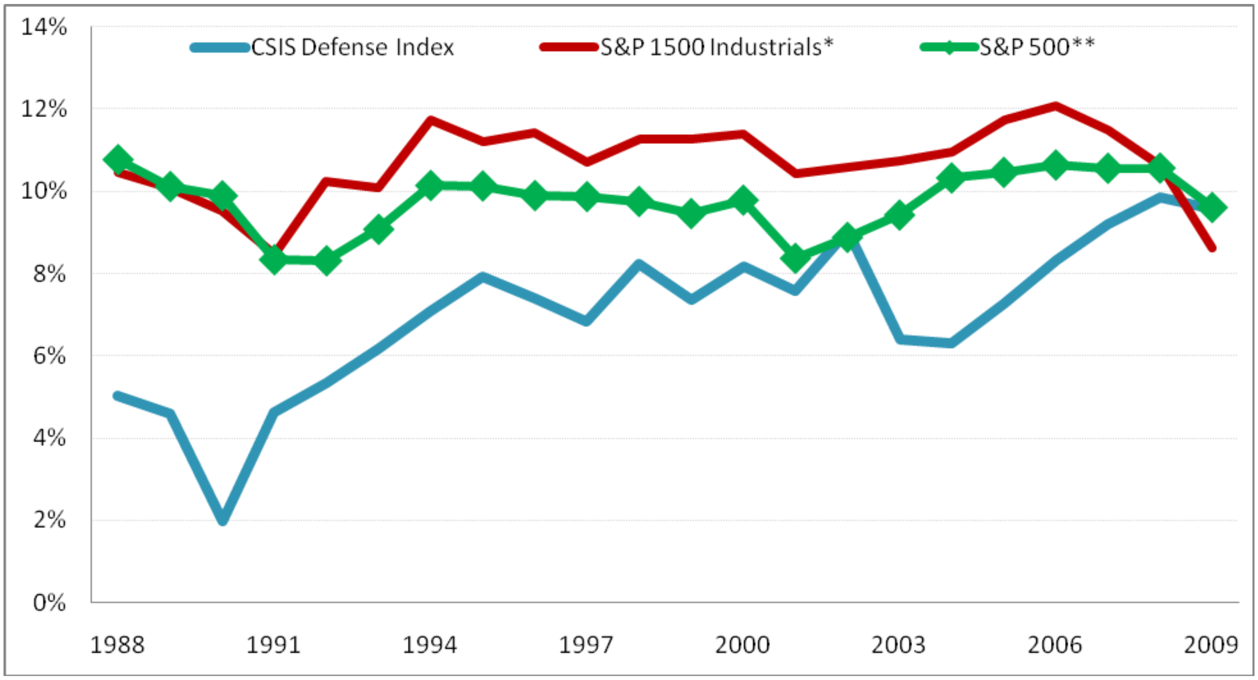


Figure 3. CSIS Defense Index Operating Margin, 1988-2009 (revenue weighted)
(Source: Bloomberg, analysis by CSIS Defense-Industrial Initiatives Group)

Earnings Before Interest and Taxes (EBIT) is a widely used measure of operating profitability. EBIT margin for the defense industry was consistently lower than its commercial peers during the period evaluated. 2009 marked the first year in more than twenty years in which operating margins for the defense sector were higher than that of the S&P 500 index, though this is due to a drop in the S&P 500's operating margin. Still, at nearly 10% for 2008 and 2009, the defense sector's total EBIT margin is at a high since 1988.

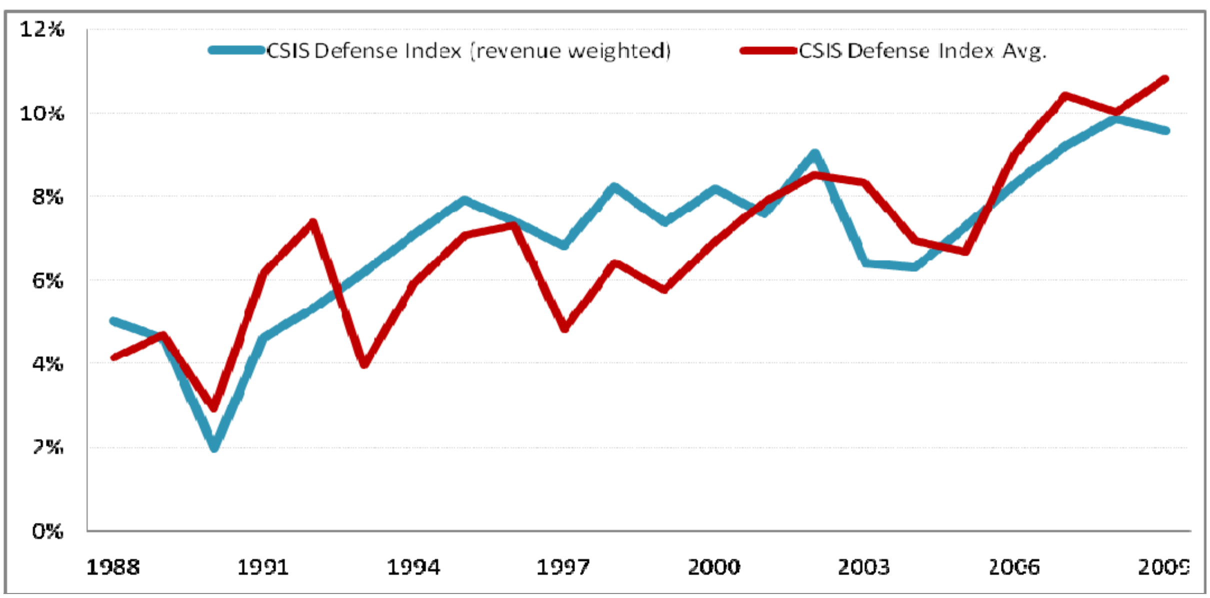


Figure 4. CSIS Defense Index Operating Margin, 1988-2009 Revenue weighted versus Index Average
(Source: Bloomberg, analysis by CSIS Defense-Industrial Initiatives Group)

However, as was mentioned in the introduction, the defense sector is not monolithic, and operating margin performance varies by company size (by revenue) and specialization. Figure 5 above shows that from 1993 to 2000, small and mid-tier companies in the CSIS Defense Index had lower operating margins than larger defense contractors.

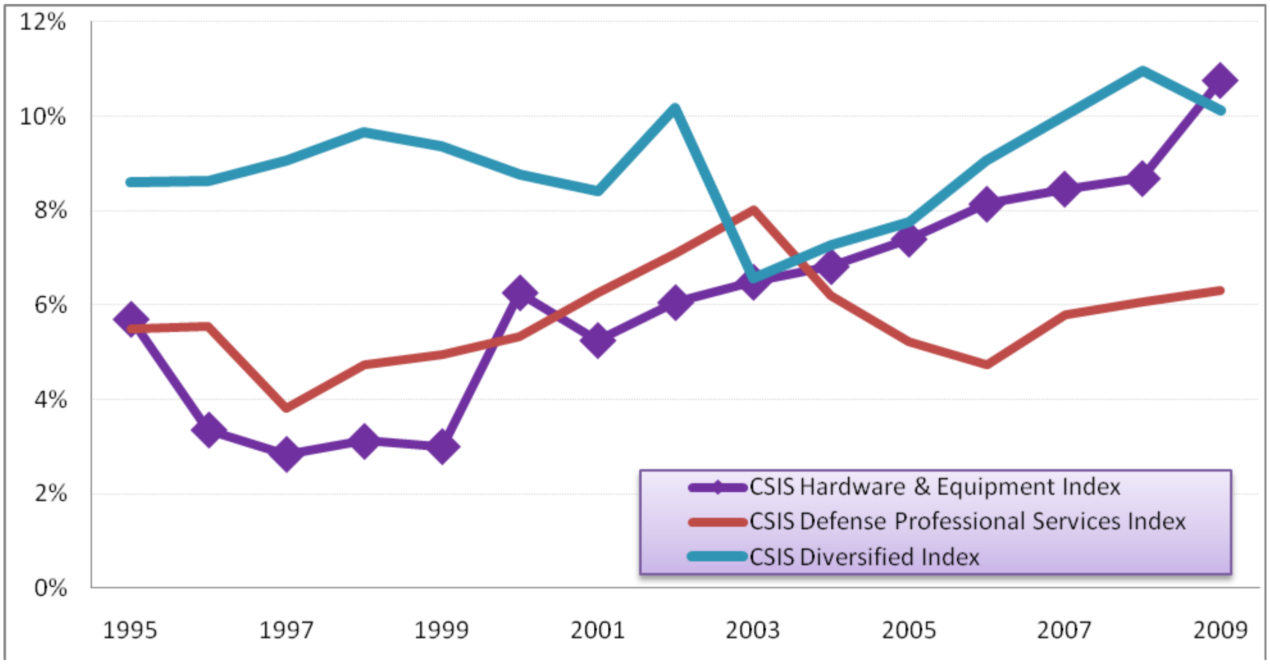


Figure 5. CSIS Defense Indices Operating Margin, 1995-2009 (revenue weighted)
(Source: Bloomberg, analysis by CSIS Defense-Industrial Initiatives Group)

When companies in the CSIS Defense Index are grouped by operating segments (professional services, hardware and equipment, and diversified), there seems to be an advantage for large or diversified companies. The drop in operating margin for professional services companies in 2003 is likely the result of increased competition in the segment.

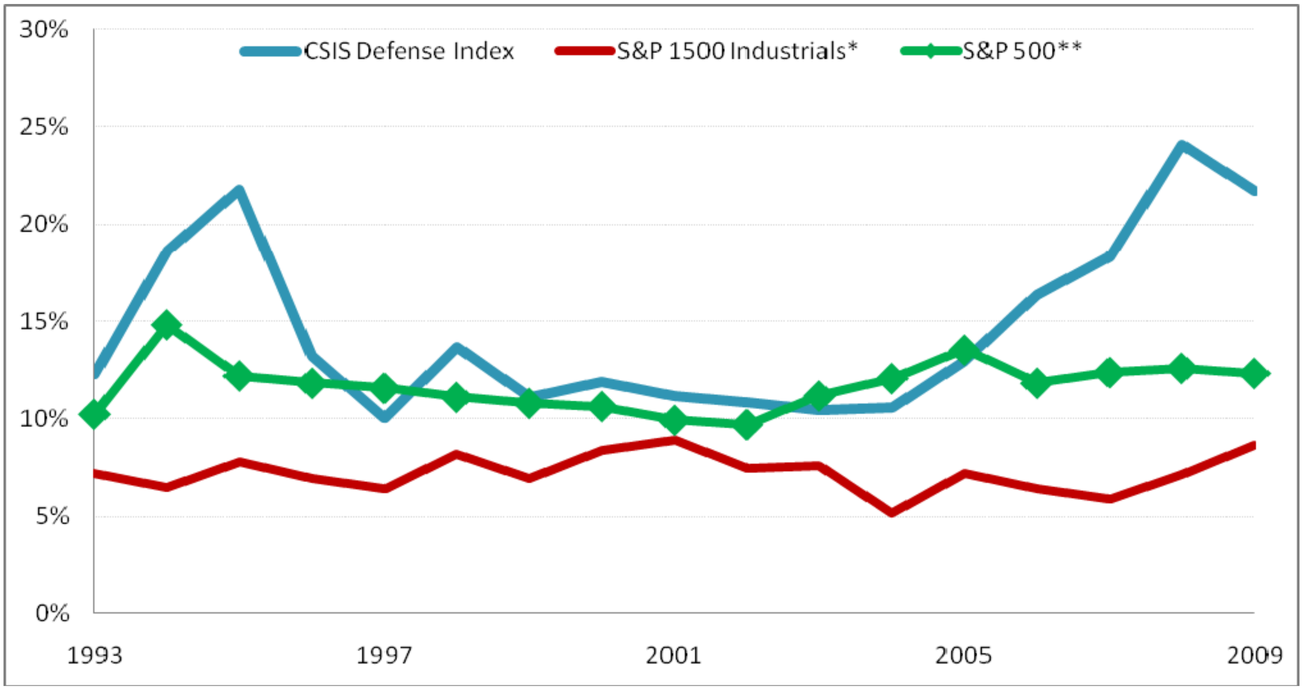


Figure 6. CSIS Defense Index Cash Flow Return on Investment (CFROI), 1993-2009 (revenue weighted)

(Source: Bloomberg, analysis by CSIS Defense-Industrial Initiatives Group)

A second, widely used profitability metric is Cash Flow Return on Investment (CFROI), which is a measurement of the cash flow available after expenses have been paid and sufficient investment has been made to continue current operations. CFROI is an important profitability measure to understand. Return on investment often drives decisions to enter or exit an industry, meaning it can ultimately shape the breadth and depth of the defense industry and the capabilities it offers. CFROI for the CSIS Defense Index has been higher than that for the indices of both the S&P 500 and S&P 1500 Industrial. The steep increase in CFROI, starting in 2004, can be partially explained by strong operating-income growth combined with stock buybacks that reduced total investment.

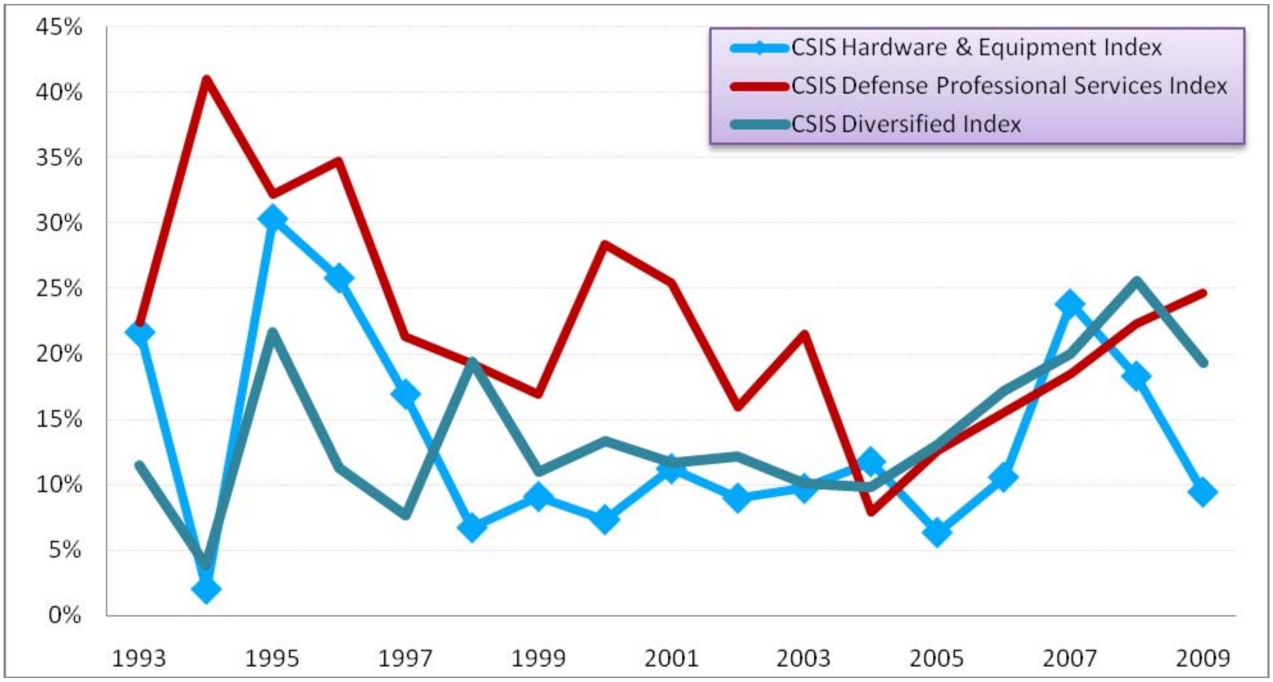


Figure 7. CSIS Defense Indices CFROI, 1993-2009 (revenue weighted)
(Source: Bloomberg, analysis by CSIS Defense-Industrial Initiatives Group)

Among the different segments, professional services companies have averaged higher CFROI than hardware & equipment and diversified companies, mainly due to generally lower net working capital. Beginning in 2003, CFROI for all three segments has tracked relatively closely together.

Summary

The overall defense sector's financial fundamentals are as stronger today than as they have been at any point in the past two decades. While operating margin has been lower for the defense sector than that of its commercial peers for the period, by 2009 operating margin for defense and commercial companies equalized. Within the defense sector, there appears to be an advantage for large or diversified companies. The defense industry had higher cash flows compared to its commercial peers for the period. Among defense companies, while professional services enjoyed relatively higher CFROI than hardware and equipment, or diversified companies, by 2005 CFROI for the different segments tracked closely together.

At this point, there are some key questions for industry and DoD policy-makers to consider. How can companies preserve margins (and by extension their attractiveness to capital markets) when their main customer is fiscally constrained? How can companies position themselves for an era of flat or declining investment? Where can companies find growth? What should the government rules and policies be with regard to industrial financial health?

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