Wall Street and the Pentagon: Analyzing Defense Finance (01/12/10)

After a decade of robust growth in defense spending that saw record high defense budgets during the past five years\(^1\), the defense industry faces a new reality. While the absence of the Future Years Defense Program (FYDP) in the National Defense Budget Estimates for FY2010 makes prediction difficult, likely changes in spending priorities have the potential to change the industry significantly. Indeed, in a recent interview, Undersecretary of Defense for Acquisitions, Technology, and Logistics (AT&L) Ashton Carter said he would “like to know what the circumstances now emerging in the defense marketplace are going to do to the structure of the defense industry.”\(^2\)

Carter’s point is that defense-policy decisions – and the budgetary actions that result – will ultimately affect the ability of the defense industry to provide future U.S. military capabilities. To begin to consider how to address this challenge, policymakers need a sound understanding of the financial drivers of defense companies, to have insight into why companies enter or exit the industry and why investors choose to fund the sector. Industry executives could also benefit from a broader view of the trends now emerging at the nexus between policy and the defense industrial base. Clearly, the need for analysis of the financial state of the defense sector is paramount. CSIS will attempt to satisfy this need in a series of papers and reports devoted to defense finance.

Methodology

The defense market has changed significantly in the past two decades, with services accounting for an increasing share of Department of Defense (DoD) spending. 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 U.S. 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 Financial Health of the Defense Sector: a Bird’s-Eye View

Figure 1: Index Performance

![Figure 1: Index Performance](image)

Source: Yahoo Finance

Figure 1 depicts the ten-year change in index value for the S&P 500 and the Spade Defense Index, which includes 58 public companies operating in the space, homeland security, and defense markets. From the beginning of 2001 until the overall stock-market peak in the third quarter of 2007, the defense index outperformed the S&P 500. The outperformance was especially pronounced from March 2003 until late 2007, the

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\(^1\) Measured in constant FY2010 dollars, Department of Defense (DoD) outlays have been at historic highs since 2005.

period that saw the most intense fighting in Iraq. Since the fourth quarter of 2007, the indices have traded closely together as analysts have anticipated the end of U.S. military involvement in Iraq and slower-growing procurement budgets.

The plunge in the Spade Index in fall 2008 probably reflects broader investor flight from equity, rather than representing a fundamental change in the financial health of the defense sector. The industry’s financial health is relatively good.

Earnings Before Interest and Taxes (EBIT) is a widely used measure of operating profitability. Figure 2 shows EBIT margins for the CSIS Defense and S&P 1500 Industrials indices between 1987 and 2008. EBIT margin for the Defense Index was consistently lower during the period. Still, at 10 percent for 2008, the defense sector’s total EBIT margin is at a high since 1987.3

![Figure 2: CSIS Defense Index EBIT Margin](image)

*Excluding Defense
Source: Bloomberg, CSIS analysis

A look at defense spending provides insight on why the industry’s EBIT margin changed over time. Figure 3 shows DoD outlays in real terms between 1987 and 2014 (estimated). As DoD spending fell during the 1990s, companies focused on financial efficiencies. The consolidation in the industry after 1993 resulted in better operating margins. When defense spending jumped in 2002 and 2003, margins suffered slightly as the industry expanded and management focused on growing revenue. In 2005 margins returned to their upward trend.

![Figure 3: Defense Department Outlays (constant FY2010 dollars)](image)

Source: National Defense Budget Estimates for FY2010, (Green Book), Table 1-6, National Defense Outlays (FY2010 Constant Dollars), and Table 6-11, DoD Outlays by Appropriation Title-FY 1948 to FY2010 (FY2010 Constant Dollars). FY2011-FY2014 figures are taken from the Office of Management and Budget; Budget Authority, Table 26-1.

A second widely used profitability metric is Cash Flow Return on Investment (CFROI),5 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.

As Figure 4 shows, CFROI for the CSIS Defense Index has been higher than that for the S&P 1500 Industrials. 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.

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3 Full-year 2009 data will be available in Spring 2010.
4 We used bottom-up calculations for the S&P 1500 Industrials and the CSIS Defense Indices. For the S&P 1500 Industrials – 186 companies varying widely in size and sector – we obtained historical data for the period 1987-2008 for the constituents as of September 2009.
5 To arrive at Cash Flow we used EBIT plus depreciation and amortization minus capital expenditures minus the increase in net working capital, which in turn is the sum of accounts receivable and inventory, minus accounts payable. Investment is the sum of long and short term debt and shareholders’ equity (including preferred stock).
Conclusions

The defense sector’s fundamentals in terms of operating margins and CFROI are stronger today than at any point in the past two decades. Existing contracts are likely to carry the sector through the next few years. However, the economic and business environment for the defense sector will become more difficult because of the Federal budget deficit and the pressure on defense spending from the government’s non-defense priorities. To the extent DoD faces resource constraints, the industry that supplies it will as well. These downward budgetary pressures could have far-reaching and long-lasting consequences for the Defense Department’s future capabilities. Policy choices will affect the defense industry, and how the industry reacts will in turn affect what choices are available to future policy makers.

CSIS is developing its financial analysis capabilities to monitor the economic well-being of the defense industry. This is the first in a series of papers, Wall Street and the Pentagon, on issues relevant to the profitability, return on investment, capital structure, and other financial metrics indicating the financial health of the U.S. and European defense industrial and technological base.

– Matthew Zlatnik and Roy Levy

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