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# An Examination of the Financial Sensitivity of the Defense Industry to Spending Strategies of the United States Government

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**An Examination of the Financial Sensitivity of the Defense Industry to Spending Strategies  
of the United States Government**

An honors thesis presented to the  
School of Business,  
University at Albany, State University of New York  
in partial fulfillment of the requirements  
for graduation with Honors in Accounting  
and  
graduation from The Honors College

Ryan Carr

Research Advisor: Raymond K. Van Ness, Ph.D.  
Second Reader: Mark E. Hughes, CPA, Ph.D.

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## **Abstract**

Knowledge of the relationship between the financial performance of firms within the U.S. defense industry and the defense spending decisions by the United States Government is an important domain of research. Greater understanding can enable investors, communities, and employees to make more informed decisions about investments and/or career choices. In this work, I examined the financial statements of five major American defense contractors from 1993-1995, 2003-2005, and 2011-2013. Financial performance of these firms was then correlated with spending actions by the United States Defense Department. Although the financial sensitivity of these firms on spending decisions by the United States Defense Department is expected, the extreme sensitivity that was discovered suggests these firms could benefit by integrating diversification strategies into environments offering counter cyclical opportunities for revenue and profitability.

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## **Introduction**

Throughout the country's history, the U.S. government has had a significant impact on the economy. Whether it be directly or indirectly, many companies rely on governmental spending. One industry that relies the most on the government is seen in the defense industry, a collection of corporations that provide military equipment to the U.S. government. This industry has experienced significant growth ever since the end of the second world war, through mergers and acquisitions, offering new products and services, and significant competition. Although the industry has changed in significant ways, one factor seems to be an important factor in the industry's growth: Reliance on governmental spending. While it is evident that some level of U.S. defense spending is responsible for the success of the industry, there is ambiguity concerning how reliant the industry is on federal funding. Analysis of the defense industry through company annual reports suggests a moderate reliance on U.S. defense spending. Analyses of the history of company risk factors related to governmental spending, financial data from the largest defense contractors, the structure of the companies, and analysis of financial trends suggest that the industry overall relies moderately on U.S. defense spending, and that there are many other factors to consider when analyzing the defense industry's dependence on the U.S. government as a source of revenue.

### *Size of U.S. Department of Defense*

Before beginning to analyze the industry, it is important to contextualize the size and influence of the Department of Defense, the largest and one of the most important customers for all major American defense contractors. The Department of Defense has an annual budget of approximately \$716 billion, and employs close to three million people, making it the country's largest employer by number of employees (U.S. Department of Defense). This single fact alone reveals the scale of enormity of the U.S. military. Additionally, the department's annual budget underscores how large and influential the governmental organization has become. The size of the

budget the Department of Defense receives each year highlights that there are many opportunities for defense contractors to profit from it. To compare the size of the U.S. military to other countries, it is important to note how much other countries spend on their military. One study found that America spends more money on the military than the next seven largest countries combined (Peter G. Peterson Foundation). This statistic underscores the size of the U.S. military and its budget. Due to the size of the budget, it is difficult to compare to other nations since there is no country with a comparable military budget. Since the American defense industry relies on the U.S. military for funding to some degree, it is also problematic to find a country with a similar defense industry in size. For these reasons, the American defense industry is difficult to compare to others.

#### *Defense Industry Risks*

Analysis of defense contractor's annual reports over time indicate that U.S. defense spending is a major determinant of financial success. The first major factor to analyze is the risk factors that are common within the defense industry. It is typical for companies to list certain risks that are common in the industry as a whole and risks that are more specific to that company. The defense industry is no exception to listing certain risk factors in their annual reports. The five defense contractors to be analyzed include: Lockheed Martin, Boeing, Northrop Grumman, Raytheon, and General Dynamics. These companies are among the largest defense contractors in the nation, and they all specifically list that they are heavily reliant on the U.S. government as a source of revenue. These companies also highlight that any abrupt change to the annual defense budget will hurt them financially. For example, Raytheon's most recent annual report states: "We depend on the U.S. government for a substantial portion of our business, and changes in U.S. government defense spending and priorities could impact our financial position, results of operations and overall business" (Raytheon Company. Form 10-K for Fiscal Year Ended December 31, 2019 13). This example specifically states that the corporation relies on the

government as a source of revenue, but the report even goes on to say that changes in governmental spending patterns have the potential to do serious damage to the company's financial well-being. Another example that indicates the industry's reliance on governmental spending is taken from Lockheed Martin's 1996 annual report: "Accordingly, a significant portion of the Corporation's sales are subject to inherent risks, including uncertainty of economic conditions, changes in government policies and requirements that may reflect rapidly changing military and political developments and the availability of funds" (Lockheed Martin Corporation. Form 10-K for Fiscal Year Ended December 31, 1996 12). Even though this statement was issued more than 20 years ago, it utilizes similar language that other defense contractors are including in their annual reports today. The statement makes a point of saying that the company is heavily reliant on governmental spending and would experience financial losses due to sudden policy changes to defense spending. Despite having been published more than twenty years apart, both reports indicate that reliance on governmental spending has been an important factor. For these reasons, dependence on governmental spending has been a constant issue within the industry.

#### *Discretionary Spending Trends Over Time*

The annual defense budget is an important factor to consider when analyzing the defense industry's dependence on it. Defense spending in the U.S. government falls under the category of discretionary spending. It is important to consider that "The authority for discretionary spending stems from annual appropriation acts, which are under the control of the House and Senate Appropriations Committees" (Congressional Budget Office). The premise of discretionary spending is that there is more flexibility in what programs receive additional funding. The two primary components of discretionary spending include defense and nondefense. While defense concerns all military related activities, "Non-defense spending supports the largest number of federal agencies and programs, including science and technology research, natural resources,

energy, education, and numerous others” (Austin 29). Nondefense spending is a broader category than defense spending and encompasses various governmental organizations. Despite how diverse nondefense spending is, discretionary spending is only broken up between these two categories, indicating the size and significance of the defense budget.

Discretionary spending can be revised through legislative means in the U.S. congress. Analysis of the history of the U.S. government’s discretionary spending reveals surprising trends. Analysis of data from the Congressional Budget Office reveals that since 1962, there have been only 15 instances in which the defense spending in one year was smaller than the previous year (See figure 1). These instances typically occurred in clusters: The early 1970’s, 1990’s and early 2010’s. Interestingly, nondefense spending only experienced a decrease from the previous year eight times (See figure 1). These findings indicate that over time, defense spending has experienced more instances of budgetary cuts than nondefense spending has. This seems to indicate that defense spending overall is more likely to experience individual budgetary cuts, while nondefense spending is overall less likely to have its funding cut.

Another reasonable conclusion to make from this data is seen in the funding allocated to nondefense spending over time. While defense spending has experienced a steady increase in funding, nondefense spending has grown exponentially. In 1962, the first year of data provided by the Congressional Budget Office, defense spending made up 72.91% of the nondiscretionary budget, which was the highest percentage it has ever been to date (See figure 1). In 2019, defense spending made up approximately 50.61% of the discretionary budget (See figure 1). While this statistic alone suggests that defense spending growth has been stifled, it is important to consider that the overall nondiscretionary budget has increased from 72.1 billion in 1962, to 1.3 trillion in

2019 (See figure 1). This shows that the nondiscretionary budget has grown by more than 1800% since 1962. The primary reason for the growth in nondefense spending is explained:

Non-defense discretionary spending rose to 4.6% of GDP in 2010 reflecting a decline in GDP (reducing the denominator of that share) due to the economic recession and policy responses such as the American Recovery and Reinvestment Act of 2009 (ARRA; H.R. 1, P.L. 111-5). Since that year, non-defense discretionary spending has declined in real terms and as a percentage of GDP. According to CBO current-law projections, non-defense discretionary spending will fall to 2.7% in 2023. (Austin 29)

Over time, as the U.S. economy grew, nondefense spending was not increasing proportionately. Although nondefense spending has been increasing, its relation to the country's gross domestic product has decreased over time, suggesting that these governmental programs have been systematically underfunded for a long period of time. One factor that has stayed the same over the past 58 years is the fact that defense spending stands out as the single largest discretionary expenditure. Evidence is seen in the fact that the Congressional Budget Office only differentiates discretionary spending as being defense and nondefense (See figure 1).

*Defense Industry Quantitative Analysis Background: 1990's, 2000's and 2010's*

Two major time periods that experienced consistent decreases in defense spending were the early 2010's and the early 1990's. These two time periods will be analyzed in several ways. First, each period will be analyzed to determine why discretionary spending decreased in these years. Following contextualization of the appropriate time period several quantitative factors will be analyzed in relation to five major defense contractors. The five major defense contractors are: Northrop Grumman, General Dynamics, Lockheed Martin, Boeing, and Raytheon. The first financial factor to be analyzed is the income statement of each defense contractor, followed by the

return on assets of these same companies, and finally the historical stock price of each company. Each of these factors will help to provide an overall analysis of the defense industry to help determine if there were any underlying trends occurring within the industry during these time periods.

Additionally, the 2000's will be analyzed as well but for different reasons. During this time, the defense budget grew substantially for several key reasons. In order to ensure as much consistency as possible, the same five companies will be analyzed during this time, with the same financial figures. Comparison of these three time periods will allow for an accurate analysis of the defense industry

### **Defense Industry Analysis of the 1990's**

#### *Section Introduction*

The first time period to be analyzed is the decreases in defense spending during the early 1990's. In the early to mid-nineties, defense spending decreased consistently from 1992 to 1996 (See figure 2). While there are many factors to consider as to why defense spending decreased, one study suggests that the fall of the Soviet Union had a significant impact on U.S. spending throughout the nineties.

The reduced Soviet threat and increased confidence in American military superiority have led to a substantial rise in sentiment for cutting the defense budget and reducing American military commitments in Europe. In the fall of 1990 a thin majority of the public (53%) wanted to maintain the current level of defense spending, while 12% wanted to expand it and 32% favored reducing it. On the leadership side, 21% preferred to keep it the same, only 2% wanted to expand, and 77% wanted to cut back, a large shift of 40 percentage points over a four-year period. (Rielly et al. 86)

The second half of the 20<sup>th</sup> century featured the cold war, a time when the United States and the Soviet Union were vying for influence all over the world through proxy conflicts in other countries. By the early nineties, America's largest political, economic, and military rival had collapsed. This article suggests that the public sentiment in the nineties was to cut defense spending significantly. As indicated by the data from the Congressional Budget Office, defense spending was cut over a period of five years (See figure 2). The study also suggests that there was overwhelming public and political support to decrease military spending, further indicating why the budget decreased for the Department of Defense. These factors seem to indicate that defense spending was cut voluntarily, as a result of changes in public opinion about the need for the U.S. military.

Below, all five companies are analyzed in various ways to help determine if there are any underlying trends that may have existed within the defense industry that suggest how reliant the companies are on defense spending. The factors that are analyzed concern the earnings of the companies, return on assets of the companies, and the historical stock price of the companies. These three factors are meant to analyze the company's overall financial position and performance during these years.

### *General Dynamics*

The first company to analyze is General Dynamics, whose earnings report is included below. Analysis of the company reveals that the company experienced either a small amount of growth or decreases in profitability during the years analyzed. From 1993 to 1994, the company's net income dropped from 885 million dollars to 238 million dollars, a more than seventy-three percent decrease (See figure 3). This indicates a tremendous loss in profitability for the company during these years. Although, it is important to note that net income increased from 238 million to 321 million from 1994 to 1995(See figure 3). This represents a slight rebound, indicating that

General Dynamics was able to recover from the financial distress. This sudden and abrupt shift in the company's net income over the years suggests this may have been caused by an industry wide trend. The company's annual report stated:

In 1990, U.S. defense budgets, which had been declining since 1985, began falling sharply in response to the end of the Cold War. Management anticipated that the budget declines were structural in that, for the foreseeable future, there would be fewer new weapons systems required which would result in excess capacity in the industry. Accordingly, management believed there would be a necessary contraction and consolidation of the U.S. defense industry. To date, management's analysis of these developments has proved to be true as evidenced by declines, in real terms, in the defense budget and by the number of industry combinations. (General Dynamics Corporation. Form 10-K for Fiscal Year Ended December 31, 1995)

The company's management seemed to suggest that as a result of the defense cuts made after the fall of the Soviet Union, it was necessary for the defense industry to contract accordingly. The company's suggestion from its management that the defense industry would suffer seems to indicate that they were expecting their earnings to be reduced as a result of budgetary constraints on the Department of Defense. Additionally, the management's suggestion that the end of the cold war contributed to the drop in profitability reinforces the conclusion made by Rielly. Furthermore, the company's earnings seemingly reflect management's notion of an industry wide slowdown caused by the lack of funding.

The next major financial statistic to consider for General Dynamics is the company's return on assets during these years. The return on assets for General Dynamics indicates an alarming trend for the company. In the three years analyzed, the company's assets became significantly less



productive than in previous years. This trend is especially evident from 1993 to 1994, the company's assets became sixty-six percent less productive than before, dropping from 28.71% to 8.97% (See figure 4). This significant drop along with only a small increase in the year after ultimately suggests that the company was severely affected by the defense budget being cut. The primary reason for the decrease in the ratio over the years was the significant drop in the company's net income over the years, a trend indicated in the company's income statement. The decreasing net income caused the company's assets to be less productive during the time period. For these reasons, the company's return on assets largely reflected the company's financial struggle during these years.

The final factor to consider is General Dynamics' historical stock price throughout the 1990's. It is important to note that at the onset of 1993, the company's stock price decreased by a significant amount and experienced little to no growth during this time period. The drop in the stock price began in 1993, one year after the cuts to defense spending were put in place. General Dynamics was only able to recover from its high point three years later in 1996 (See figure 5). This is also the time when defense spending increased for the first time in almost four years. This graph underscores the notion that General Dynamics was not adequately growing its shareholder value during these several years, another indication of how the defense budget was influencing the defense industry. The company's assertion that the fall of the Soviet Union caused a necessary contraction in the defense industry seems to be correct for General Dynamics. Over the three years analyzed, the company's net income diminished in size, along with its historical stock price. These ultimately suggest that the company was affected by the cuts to the defense budget.

### *Northrop Grumman*

Another company to analyze is Northrop Grumman, a company that experienced financial trends similar to General Dynamics. While typically only 1993 to 1995 are being analyzed, an analysis of Northrop Grumman from 1991 to 1995 reveal how severely the company's profitability diminished over time. According to the company's income statement, Northrop Grumman experienced small profit margins for a significant portion of the mid-nineties. From 1991 to 1994, the company's profit dropped from 201 million to 35 million (See figure 6). From 1991 to 1994, Northrop Grumman's profitability dropped by more than eighty percent over time. It is also important to note that the company's profitability rose to 252 million in 1995, indicating that the company was able to recover from the decreases in profitability (See figure 6). The company noted: "As a consequence of the end of the Cold War and pressure to reduce the federal budget deficit, the U.S. defense budget is not expected to increase substantially in the near term. Budget decisions made in this environment will have long-term consequences for the size and structure of Northrop Grumman and the entire defense industry" (Northrop Grumman Corporation. Form 10-K for Fiscal Year Ended December 31, 1995). Similar to General Dynamics, Northrop Grumman noted that the shrinking defense budget caused the industry to change. The long-term consequence of the budget changes referred to by Northrop Grumman is seen in that the company's profits dropped for several years. This further reinforces the notion that the end of the Cold War and the subsequent decrease in defense spending caused widespread harm throughout the defense industry.

Another factor to consider is the return on assets of Northrop Grumman during these years. While the company's return on assets was noticeably low in the early nineties, the ratio continued to decrease as the years progressed and defense funding decreased. One significant decrease is seen in 1993 to 1994 when the ratio decreased from 3.15% to .78% (See figure 7). This drastic decrease ultimately suggests that the company's assets were becoming significantly less

productive over time. From 1993 to 1994, Northrop Grumman more than doubled its assets (See figure 7). One reason the company's assets grew is because of Northrop Corporation's merger with Grumman Corporation. The merger between the two companies highlights that "Faced with drastic cuts in military spending, weapons contractors have adopted a strategy of acquiring businesses in markets they can dominate and selling off the rest" (Sims). This seems to suggest that the company was able to rebound as a result of the company's acquisition of Grumman Corporation. While the acquisition did partially help the company, this notion seems to suggest that the company was severely affected by the drop in defense funding.

Northrop Grumman's historical stock price is an important indicator that the company may have been affected by cuts to the U.S. defense budget. Similar to General Dynamics, Northrop Grumman's stock price experienced little to no growth during the years the defense budget was being cut. Only in late 1995 did the company begin to greatly expand its shareholder value (See figure 8). This stagnant growth is another indicator of a defense contractor struggling financially to maintain its profitability as a result of the change in the U.S. defense budget. Further indication of the company being affected by the drop in defense funding is seen in the second half of the nineties when the company's stock price more than doubled by 1997 (See figure 8). This indicates that Northrop Grumman was able to increase its shareholder value in the years after the cuts to the defense budget.

#### *Lockheed Martin*

Another company to analyze during this period is Lockheed Martin, a company that also experienced significant changes to its profitability during the mid-nineties. Similar to Northrop Grumman, Lockheed Martin's financials will be analyzed from 1991 to 1995 to showcase significant financial trends that occurred within the company. From 1991 to 1995, Lockheed

Martin's profits ranged significantly: a net loss of 361 million in 1992 to a high of 1,018 million in 1994 (See figure 9). Additionally, in the other years analyzed, the company's net income was not stable and varied significantly from year to year. These significant changes in the company's profitability indicate how unstable the company's financials were during this time. One important factor to consider is that Lockheed Martin's earnings from operations decreased by twenty-seven percent from 1994 to 1995, despite the overall upward trend in the years analyzed (See figure 9). This suggests that Lockheed's profit margins decreased significantly during this time period. Lockheed's financial profitability in these years is addressed in the company's annual report. The company stated: "The facts in this case are that major layoffs in this industry are driven by declines in the defense budget and would probably have been much greater if not for restructuring actions that, quite literally, let companies like Lockheed Martin grow while budgets shrink"( Lockheed Martin Corporation. Form 10-K for Fiscal Year Ended December 31, 1996 5). The company specifically stated that the main reason for the company's profitability despite budgetary constraints from the federal government is the major restructuring that occurred during this time. Lockheed noted that it closed numerous facilities down in order to reduce their costs and reorganize themselves during this time, allowing the company to maintain its profit margins. For this reason, the company was able to avoid financial ruin caused by the changes in U.S. defense spending.

Another factor to consider for Lockheed Martin is the company's return on assets during these years. Similar to its profitability, Lockheed Martin experienced significant volatility in the productivity of its assets. In 1992, the company's return on assets was -3.38%, but increased to a more consistent ratio of slightly less than six percent in the years following (See figure 10). One major reason for the company's return on assets being able to recover is seen in that the company's

assets rose from 10,827 to 17,082 in one year (See figure 10). The primary reason for this rapid growth in the company's assets is because of a series of mergers and acquisitions the company entered into during this time. "Since 1993, the Corporation has made several strategic acquisitions and alliances which affect many facets of its business, including tactical military aircraft production, space launch systems and defense and commercial electronics" (Lockheed Martin Corporation. Form 10-K for Fiscal Year Ended December 31, 1996 55). The primary reason for the company being able to partially maintain its return on assets during this time was the numerous mergers and acquisitions that occurred throughout the nineties in response to the decrease in defense funding. It is also important to note that the company was experiencing volatile levels of net income during these years, further contributing to the company's financial instability brought about by the defense budget change.

Lockheed Martin's historical stock price further suggests an underlying trend in the financial performance of the defense industry during the nineties. Lockheed Martin's historical stock price indicates little to no growth during the nineties. From 1993 to 1995, the company's stock price remained largely the same at approximately twenty dollars (See figure 11). The company's stagnant growth during this time further supports the notion that the cutting of the defense budget had some impact on the financial performance of the companies in the defense industry. Another observation that supports this notion is seen in the fact that the company's stock price more than doubled in the second half of the decade (See figure 11). This trend of a rising stock price is seen in the other two defense contractors that have been analyzed so far. This seems to suggest that there were industry trends preventing the company from growing its shareholder value.

### *Boeing*

Another major company to analyze during this time period is Boeing, a major defense contractor in the United States. While five major defense contractors were analyzed, Boeing was the largest in terms of revenue. For this reason, it is important to analyze how the company performed in the 1990's. Analysis of the company reveals that the company's earnings decreased significantly in all three years. From 1993 to 1995 the company's revenues decreased from 25,438 to 19,515, a decrease of twenty-three percent (See figure 12). Another important factor to consider is that from 1993 to 1995, the company's net earnings decreased by approximately sixty-eight percent (See figure 12). These figures ultimately suggest the company's profitability significantly diminished during this time period; a trend prevalent in the companies that have been analyzed.

In agreement with the company's financial performance, Boeing's return on assets indicate that the company was becoming less profitable during this time period. From 1992 to 1995, Boeing's return on assets went from 9.12% to 1.80%, decreasing each year (See figure 13). The primary determinant for the decreasing ratio was the company's rising assets and diminishing profits. This further indicates that the company was severely impacted by the change in U.S. defense spending. Unlike Lockheed Martin and Northrop Grumman, Boeing did not actively seek out any major mergers and acquisitions during this time period. Boeing stated,

Significant restructuring in the form of mergers, acquisitions and strategic alliances are continuing throughout the industry as a result of the reduced opportunities for new programs. Internal consolidations and restructuring of the Company's defense and space operations have helped position the Defense & Space Group to effectively compete in the current market environment. (Boeing Company. Form 10-K for Fiscal Year Ended December 31, 1995 34)

Boeing explained that the trends occurring within the defense industry were causing widespread consolidations. The company also mentioned that one of its own company divisions sought to restructure itself in order to adapt to these industry changes. This indicates that the company was still affected by the changes in federal funding. For this reason, the company's net income and return on assets were decreasing each year analyzed during this time period.

Boeing's historical stock price reveals how drastically the company was affected. From 1992 to 1995, Boeing's stock price either decreased or remained largely the same (See figure 14). The stock was only able to rebound in 1996 and subsequently rise. It is also important to note that this was the final year of the decrease in funding to the defense budget possibly suggesting there was a correlation between the decreased funding and the financial performance of the defense industry. It is also important to note how quickly Boeing's stock recovered in 1996 a trend prevalent in all the companies that have been analyzed so far. This further indicates a broader trend within the industry since other defense contractors' stock prices also began to rise around this time.

### *Raytheon*

The final company to analyze is Raytheon. Unlike all the other corporations analyzed up to this point, Raytheon's financials seem largely unchanged over the years analyzed. Similar to Lockheed Martin, Raytheon decided to restructure itself in order to avoid financial ruin. In the company's annual report, Raytheon stated: "The company recorded in the first quarter of 1994 a restructuring provision of \$249.8 million before tax. The restructuring was driven by the significant reductions in the defense budget and increasing commercial competition" (Raytheon Company. Form 10-K for Fiscal Year Ended December 31, 1995). Raytheon decided to be proactive in adapting to the changing economic conditions that were becoming prevalent in the defense industry as a result of the shrinking defense budget. From 1993 to 1995, Raytheon's net

income rose from 693 million, to 793 million, an increase of more than fourteen percent (See figure 15). Over the three years analyzed, Raytheon was able to grow its revenues and maintain its profitability.

Raytheon's return on assets suggests that the company was struggling to maintain its profit margins. Over the three-year period analyzed, Raytheon's total assets increased by more than thirty-five percent (See figure 16). While the company's net income may have grown, the growth of the company's assets outpaced any increase in profitability. This ultimately indicates that the company's assets were becoming less profitable over time. It is important to note that even though the company took proactive measures to prepare itself for the decreasing defense budget, the company's financials were still affected by the change.

The final factor to consider is Raytheon's historical stock price during this time period. Throughout the nineties, Raytheon experienced a similar trend prevalent in the defense industry during this time. From 1992 to 1995, the company's stock price remained largely the same, remaining at approximately 30 dollars per share (See figure 17). Raytheon's stock price during the years analyzed further reinforces the notion of an underlying trend that occurred within the defense industry during this time. This trend of a stagnant stock price among the defense contractors reveals that even companies that were proactive in adjusting to the industry trends were not able to grow the value of their stock.

#### *Conclusion of 1990's Analysis*

Analysis of the financial performance of these five defense contractors suggests there were underlying trends that caused significant upheaval to their financials. The results from these findings ultimately suggest that the financials of the companies analyzed were adversely affected by cuts to the U.S. defense budget. The end of the cold war brought about legislation that decreased



defense spending over a five-year period. The years in which the U.S. defense budget decreased corresponded with poor financial performance for most defense contractors analyzed. In addition to the company's poor financial performance, the historical stock prices from the time experienced stagnant growth. Furthermore, the stock price of all defense contractors significantly increased around the same time, around late 1995 and 1996, a time when funding for the defense budget began to increase again. This recovery in the stock price, along with analysis of the company's financial performance and return on assets suggest that the defense industry was largely reliant on funding from the government for continued growth and success.

### **Defense Industry Analysis of the 2010's**

#### *Section Introduction*

The second major time period of defense cuts is seen in the early 2010's. A primary difference between these two time periods is seen in the different motives for cutting the defense budget. While the defense cuts in the 1990's were only defense related, the budget cuts from the 2010's were related to all forms of discretionary spending (See figure 1). As indicated by the data provided from the Congressional Budget Office, discretionary spending overall was decreasing. The cuts that were made to the defense budget during this time featured specific cuts to individual projects.

Rather than addressing the yawning gap in resources, the administration moved to "fix" the problem by eliminating planned spending and procurements; rather than increasing budgets to adequately fund requirements, it shrank the requirements. During the administration's first three years, it cut nearly \$500 billion out of current and future budgets. As a result, more than 30 defense programs were canceled, capped, or ended—.

(The Marilyn Ware Center for Security Studies 64-5)

The budget cuts made to defense during this time featured decreased funding to both projects that were currently in progress, and projects that were being planned. This significant and sudden cut to defense spending suggests this may have been an indicator of the financial performance of defense contractors during this time. Additionally, since these defense cuts involved all types of defense projects, from works in progress to planned projects, the effects seemed to have a significant impact on the defense industry.

Before analyzing these five companies, it is important to consider what caused many of the federal budget cuts to occur, and what differentiates these cuts from the cuts made in the 1990's. The piece of legislation that sought to reduce spending during this time period, was the Budget Control Act of 2011. "Very generally, the spending reductions are to be made equally from defense spending and from all other spending (referred to as "nondefense spending"). The reductions required in each of these categories are then divided proportionally between discretionary spending and mandatory spending" (Heniff et al. 3). This is an important factor in the legislation in that all discretionary programs experienced a decrease in funding. This is the factor that is fundamentally different from the defense cuts of the 1990's. The defense cuts in the 1990's only decreased funding to defense related projects, which was caused by the fall of the Soviet Union. The Budget Control Act however, reduced funding to government organizations, defense, and nondefense alike. This seems to suggest that the legislation was implemented to control governmental spending in general, rather than control only military spending. For these reasons, there is a possibility that the financial performance of the five companies will be different from when the same companies were analyzed in the 1990's.

Similar to the analysis of the five major defense contractors during the 1990's, the same five companies will be analyzed, this time from 2011 to 2013. The objective of this analysis is to

determine if the financials of the companies were hindered as a result of the budget cuts from the federal government. The income statement of the companies will be analyzed, along with the return on assets, and the historical stock price of the companies. These key factors will then be compared to see if there are any underlying trends that signify that the financial performance of the companies is related to these proposed budget cuts.

### *General Dynamics*

The first company that will be analyzed during this time is General Dynamics. Over the three years analyzed, General Dynamics experienced decreasing revenues and increasing costs. As a result of these decreasing revenues and increasing expenses, the company experienced a net loss of 332 million in 2012 (See figure 18). Additionally, the company's net income in 2013 was six percent lower than it was in 2011, suggesting a downward trend in the company's profitability (See figure 18). Similar to its financial performance in the 1990's, General Dynamics' financial performance worsened the same time cuts to the defense budget occurred. The company stated in its annual report that part of the reason for the poor financial performance is seen in the budgetary cuts made by the federal government. "Over the past several years, U.S. defense spending has been reduced, due in part to the country's fiscal shortfall. To address this shortfall, the Budget Control Act of 2011 (BCA) mandated a \$487 billion, or 8 percent, reduction to previously planned defense funding over 10 years" (General Dynamics Corporation. Form 10-K for Fiscal Year Ended December 31, 2013 25). The company's management specifically described how the Budget Control Act affected the company. As a result of the Budget Control Act, many defense programs had their funding cut. One consequence of this legislation was General Dynamics' poor performance. This seems to suggest that the policy had a direct impact on the company's financial prospects in the present and in the future, since General Dynamics had many long-term contracts with the Department of Defense.

The second factor to consider is return on assets for General Dynamics. As a result of the company's poor financial performance in 2012, the return on assets was -.96% (See figure 19). In addition to the negative ratio in 2012, from 2011 to 2013, the company's ratio did not fully recover in 2013 (See figure 19). Even though the company became profitable in 2013, the return on assets indicates that the company was not able to financially recover from the previous year and overall decline in net income over time. Overall, the company's return on assets indicates that General Dynamics was affected by the recession.

The final factor to consider is the historical stock price of General Dynamics throughout the 2010's. It is important to note that the company experienced a significant drop in the value of its share price in 2011(See figure 20). The price only recovered its original value approximately two years later in 2013(See figure 20). This reveals that the company's shareholders were affected by the sudden decrease in the company's profitability during this time. It is also important to note that the company's stock price has been able to increase steadily after 2013, suggesting that the lack in federal funding was hindering the company's growth during this time.

#### *Northrop Grumman*

The second company to analyze is Northrop Grumman, a company that experienced a tremendous amount of growth since the 1990's. From 2011 to 2013, the company experienced a steady decline in its net income, dropping from 2,118 million to 1,952 million (See figure 21). One of the primary contributors to this decrease is seen in the company's shrinking revenues. While costs were largely stabilized, the decreasing revenues seemed to damage the company. The company also referred to the economic impact of the Budget Control Act.

While we believe that our business is well-positioned in areas that the Department of Defense (DoD) has indicated are areas of focus for future defense spending, the long-term

impact of the Budget Control Act, other defense spending cuts, and the ongoing fiscal debates remain uncertain and our business and industry could be materially adversely affected. (Northrop Grumman Corporation. Form 10-K for Fiscal Year Ended December 31, 2013 9)

Compared to General Dynamics, Northrop Grumman was not severely affected by the defense cuts. This statement from the company's management suggests there are many consequences from the Budget Control Act that have not yet affected the defense industry. The company also suggested that while Northrop Grumman's financial performance was not drastically affected, businesses that did business with Northrop Grumman could potentially inhibit the company's future success.

The second major financial indicator to analyze is the company's return on assets. As mentioned earlier, Northrop Grumman was not seriously harmed by the defense cuts. Further evidence of this is that the company's return on assets remained largely the same throughout the 3 years analyzed at approximately 7.5% (See figure 22). This is a direct contrast to General Dynamics, who experienced a negative return on assets at one point during the three-year analysis. This further suggests the financial burden was not placed directly on Northrop Grumman, as the company was able to maintain its profitability.

Northrop Grumman's historical stock price indicates how the company reacted to the changes in defense spending from the federal government. Similar to General Dynamics, Northrop Grumman's share price experienced a slight decrease starting in 2011, and only rebounded in 2013 (See figure 23). After 2013, the company's share price more than tripled in the years following (See figure 23). This ultimately suggests the company was not able to maintain its profitability for the shareholders of the company. This also builds on the prior indication from the company's

income statement that Northrop Grumman was not able to maintain its profit margins because of the Budget Control Act of 2011.

#### *Lockheed Martin*

The third company to analyze is Lockheed Martin. This company was largely unaffected by the federal budget cuts during this time. Despite the company's ability to remain profitable, Lockheed Martin mentions the implications of the Budget Control Act of 2011, and stated: "The impacts of sequestration in GFY 2013 were less than originally expected due to congressional actions that reduced the cuts as well as the DoD's ability to allocate a portion of the reductions to prior year unobligated balances and multi-year investment appropriations. Accordingly, we have experienced minimal impacts to date" (Lockheed Martin Corporation. Form 10-K for Fiscal Year Ended December 31, 2013 10). Lockheed was able to avoid financial ruin during this time because of many long-term contracts the company had entered into, ultimately contributing to the company's success. Additionally, the company's financials reveal that Lockheed was largely unaffected by the budget cuts, as the company's profits increased by more than twelve percent during the years analyzed (See figure 24). This ultimately suggests Lockheed was able to maintain its profitability during this time period.

The second financial factor to consider is Lockheed Martin's return on assets during this time period. Building on recent observations from the company, Lockheed Martin's return on assets further indicates that the company's financial performance was largely unaffected by the budgetary cuts on the federal level. From 2011 to 2013, Lockheed Martin's return on assets grew in each subsequent year or remained largely the same (See figure 25). While the company's assets were decreasing each year, profits continued to rise, ultimately suggesting the company was maintaining its profitability margins despite financial burdens.

Lockheed Martin's historical stock price indicates the company did not experience as much loss as General Dynamics and Northrop Grumman did during this time. The company's stock price however remained largely the same from 2011 to 2013 (See figure 26). This ultimately indicates that although Lockheed Martin was able to maintain its profit margins during the three years analyzed, the company's shareholder value remained largely the same. This suggests a trend that the corporations in the defense industry were affected by the changes in the defense industry. This lack of growth seems to indicate the company was still affected by the Budget Control Act.

### *Boeing*

The fourth company to analyze is Boeing. Boeing also experienced only a decrease in profits during these three years. The company's revenues grew during these three years, suggesting that the company was not significantly affected by the federal budget cuts. It is important to note however that profits decreased from 2011 to 2012 but recovered in 2013 (See figure 27). This ultimately suggests that the company was affected by the budget cuts made in 2011. Boeing addressed this in their annual report by stating: "The impact of sequestration cuts was reduced with respect to FY2014 and FY2015 following the enactment of The Bipartisan Budget Act in December 2013" (Boeing Company. Form 10-K for Fiscal Year Ended December 31, 2013 8). This piece of legislation requires further examination demonstrating how influential the government is on the defense industry. Boeing seemed to suggest the company was able to maintain its profitability margin because the government decided to renew its commitments to many of its long-term projects it had entered in the past. The company however mentioned that the Budget Control Act implemented long term changes to the company's future growth potential. For these reasons, the company's annual report suggested this was the reason Boeing did not decrease its profitability over time.

The second financial figure to analyze is the company's return on assets. The only indicator that Boeing was affected by the federal budget cuts is the decrease in the company's return on assets from 2011 to 2012 (See figure 28). The reason for the decrease was that the company's net income growth did not match the growth of the assets during this time period. The company's assets during this time increased by more than fifteen percent, outpacing the growth of Boeing's net income. This ultimately suggests that while Boeing was remaining profitable, its assets were becoming less efficient at generating a profit.

The historical stock price of Boeing indicates a pattern similar to Lockheed. While Boeing's income statement was not significantly affected by the lack in federal funding, the company's share price dropped and did not grow from 2011 to 2013 (See figure 29). This trend is similar to General Dynamics and Northrop Grumman's share price during this time. This further indicates an industry wide trend that occurred in the years following the passage of the Budget Control Act of 2011. This significant lack in growth in the company's share price indicates Boeing was still affected by indirect changes to the defense industry.

### *Raytheon*

The fifth company to analyze is Raytheon. Throughout the three years analyzed, Raytheon was able to maintain its profitability. It is important to note however, that the company did experience a slowdown in 2012 when the company's profits only increased by only one percent from the previous year (See figure 30). This suggests Raytheon may have been affected by the federal cuts to defense by a small marginal amount. Raytheon made no specific mention describing how the Budget Control Act may have affected the company's financial performance. The company did, however, make note of how this piece of legislation affected the Department of Defense and the defense industry. "U.S. Government appropriations have and likely will continue



to be affected by larger U.S. Government budgetary issues and related legislation” (Raytheon Company. Form 10-K for Fiscal Year Ended December 31, 2013 12). Raytheon mentioned how broadly the implications of this legislation affected the industry, and how it had already caused widespread change.

The second financial figure to analyze is the company’s return on assets. Over the three-year period analyzed, Raytheon was largely unaffected, as the company largely maintained its return on assets at approximately 7.5% (See figure 31). In 2012, there was a slight decrease from the previous year, but the ratio recovered in the following year. This ultimately indicates the company was largely unaffected by the changes in policy, and its ability to maintain its profit margins was unchanged. It is important to note that Raytheon was able to maintain its profitability throughout the nineties as well, suggesting that the company has been able to adequately respond to changes throughout the industry over time.

Raytheon’s historical stock price indicates the company was still affected by the federal defense cuts despite its profitability. From 2011 to 2013, Raytheon’s stock price either decreased or remained the same during this time at a price of 50 dollars per share (See figure 32). This seems to indicate that, similar to the other companies analyzed during this time, Raytheon was still indirectly affected by the Budget Control Act of 2011. It is also important to note that the company’s share price not only grew in 2013 but began to rise at an unprecedented rate (See figure 32). This seems to suggest that the company’s growth was restrained as a result of the budget cuts.

#### *Conclusion of 2010’s Analysis*

Although all five companies experienced various degrees of change to their financials as a result of the Budget Control Act of 2011, it is important to address why the companies were able

to recover in 2013. One reason the defense contractors were able to recover was legislation was passed in 2013: The Bipartisan Budget Act of 2013.

Both the American Taxpayer Relief Act (ATRA, P.L. 112-240) and Bipartisan Budget Act (BBA, P.L. 113-67) eased the path of meeting defense spending limits in the near-term. Together, these acts provided defense with an additional \$54 billion for FY2012-FY2015, reducing ten-year savings required from the FY2012 President's Budget plan by 1%. (Belasco 52)

This piece of legislation was meant to reduce the limitations imposed by the Budget Control Act of 2011. This amended many of the restrictions that were in place to limit the growth of the defense budget. By amending the Budget Control Act of 2011, there was potential for defense funding to increase. Passage of this new piece of legislation occurred around the same time all the stock prices for the companies analyzed recovered from 2011 to 2013, when there was little to no growth. This seems to suggest the speculation defense funding would increase would lead to increased revenues and profits for the defense contractors. For this reason, it is important to consider that the Bipartisan Budget Act suggests a possible correlation between increased defense spending and growth in the stock prices of defense contractors.

After carefully analyzing financial data of these five companies from 2011 to 2013, several trends are noticeable. While some companies performed worse than others, there is a constant that has arisen as a result of this. All companies analyzed were, in varying degrees, financially affected by the Budget Control Act of 2011. Three of the five companies analyzed experienced a drop in their net income: Boeing, General Dynamics, and Northrop Grumman at some point during the three years analyzed. All companies at one-point experienced decreasing return on assets, in varying degrees, throughout the three years analyzed. Additionally, the stock price of all five

companies analyzed experienced little to no growth during these three years analyzed. This ultimately reveals the companies were affected by the lack in federal funding. This assertion is supported by the fact that all five companies noted their reliance on federal funding, and all these companies specifically mention the Budget Control act of 2011 in their annual reports. For these reasons, legislation such as the Budget Control Act suggest some correlation with financial performance of the defense industry.

### **Defense Industry Analysis of the 2000's**

#### *Section Introduction*

After analyzing the defense industry during periods of decreased funding, it is important to analyze these same companies during years where defense spending was increasing. One example of this is seen in the 2000's, a decade that had no decreases in defense spending from the previous years (See figure 1). The three specific years to be analyzed are 2003, 2004 and 2005. The same five companies will be analyzed during this time to determine if there is a correlation to subsequent years of increased funding. Similar to the other time periods mentioned, it is relevant to analyze why defense spending increased during this time. One key answer to this is seen in the outbreak of the wars in Afghanistan and Iraq in the early 2000's. "In the aftermath of the attacks on 9/11 and the wars in Iraq and Afghanistan, the defense budget did of course increase. From 2001 to 2009, total spending grew by 73 percent in real terms, but much of that increase was tied to fighting the wars in Iraq and Afghanistan" (The Marilyn Ware Center for Security Studies 64). The United States significantly increased defense spending in response to the terrorist attacks on 9/11, in addition to the country's invasion of Iraq. The U.S. response to the terrorist attacks indicates the leading factor responsible for the increased funding.

In order to ensure consistency, the same five companies that have been analyzed, will be analyzed as well. The primary objective of analyzing these companies is to determine if there is

an underlying trend that suggests increased defense spending will lead to increased profitability within the defense industry. The income statements, the return on assets, and the historical stock prices of the five companies will be analyzed. The years that will be analyzed are 2003 to 2005.

### *General Dynamics*

The first company to be analyzed is General Dynamics. From 2003 to 2005, the defense contractor's profits rose from 1,004 million to 1,461 million, an increase of more than forty-five percent (See figure 33). This was a significant increase in the company's profitability over a short amount of time. This rapid growth in profitability seems to suggest that there were multiple factors that were allowing the company to become so profitable. The company's management made note of the increase to defense spending.

For fiscal year 2006, the Congress appropriated \$411 billion for the Department of Defense, a 33 percent increase in funding since 2001. This amount includes \$147 billion for procurement and research and development (R&D) activities, an increase of 43 percent since 2001. Procurement and R&D budgets, also known as investment accounts, provide the majority of the company's revenues and, over the past several years, these budget lines have enjoyed sustained increases that demonstrate continued administration and congressional support. (General Dynamics Corporation. Form 10-K for Fiscal Year Ended December 31, 2005 19)

General Dynamics' management stated that increased funding to the defense budget, and more specifically, increased funding to research and development contributed to the company's recent success. This also reveals that most of the company's profits were attributed to research and development costs from the defense budget. Additionally, the continued political support for the defense budget seems to indicate the company's management expected success over a long period

of time, provided the defense budget continued to increase. These factors seem to suggest increased funding was a determinant of the company's financial success.

The notion that increased defense spending was a determinant of a defense contractors' success is supported by the company's return on assets in these years. In all three years, General Dynamics was able to increase its ratio from 7.19% to 7.87% (See figure 34). Both the company's net income and total assets were increasing proportionately throughout these years, suggesting the company was able to maintain its profitability margins. Additionally, the growing return on assets seems to indicate the company was able to be more profitable than the year prior, further indicating the growth of the company.

The third and final factor to consider for General Dynamics is the historical stock price throughout the decade. The company's historical stock price during this time seems to suggest General Dynamics was able to maintain steady levels of growth in the company's shareholder value. Overall, the stock price steadily rose for most of the decade, more than doubling in value in the three years analyzed (See figure 35). The company's management made an important note to explain that funding for the Department of Defense contributed to the company's profitability. "The current Administration's desire to modernize U.S. military forces coupled with the U.S. military's engagement in the Global War on Terrorism has driven steady Department of Defense funding increases since 2001" (General Dynamics Corporation. Form 10-K for Fiscal Year Ended December 31, 2005 19). This suggests the company's success in recent years was driven by the increased funding to the Department of Defense during these years from the federal government. Additionally, this further reinforces the notion stated earlier that the increased defense funding allowed the company to become significantly more profitable than before.

### *Northrop Grumman*

The second company to analyze during this time period is Northrop Grumman. Similar to General Dynamics, Northrop Grumman also experienced three successive years of increased revenue and profitability, with profits increasing more than sixty percent over the three years analyzed (See figure 36). In each subsequent year, revenues were able to outpace the company's costs, leading to a significant increase in profitability. Northrop Grumman's management stated:

U.S. defense contractors have benefited from the upward trend in overall defense spending over recent years. While the current U.S. defense budget forecast shows a slower rate of growth than in prior years, and certain programs in which the company participates may be subject to potential reductions, the company believes that its portfolio of technologically advanced, innovative products, services, and solutions in systems integration, defense electronics, information technology, advanced aircraft, shipbuilding, and space technology will generate revenue growth in 2006 and beyond. (Northrop Grumman Corporation. Form 10-K for Fiscal Year Ended December 31, 2005 24)

This assertion by the company's management showcases a new trend to consider for the company. Although Northrop Grumman had been relying primarily on the Department of Defense for funding, the company was searching for alternative sources of revenue in order to diversify itself. This is a common trend in the defense industry, as the companies continue to diversify themselves in order to grow their revenue streams and to search for new potential customers and industries to provide products and services to. This could also explain why the company's profits increased in such a short amount of time.

The second financial figure to analyze is the company's return on assets during this time. Analysis of the company's return on assets ratio indicates significant growth for the company.

From 2003 to 2005, the company's ratio increased from 2.3% to 4.10%, an increase of more than eighty percent (See figure 37). The primary contributor to this was that the company's net income grew over the three years analyzed. This observation suggests the company has been able to make its assets more profitable. Additionally, the ratio also indicates that the company's increasing profits reflect that the company became more efficient over time.

The final factor to consider is Northrop Grumman's historical stock price. During the three years analyzed, Northrop Grumman experienced steady growth in its stockholder price. The company's share price increased by approximately 30% during this time (See figure 38). This consistent growth is most similar to General Dynamics, suggesting an industry wide trend that was prevalent during this time. This seems to indicate that the company's continuous profitability reflects growth in the company's shareholder value, a trend that also occurred during this time for General Dynamics.

#### *Lockheed Martin*

The third company to analyze is Lockheed Martin. Similar to the past two companies analyzed during this time period, Lockheed Martin also experienced steady growth in its profitability. Lockheed Martin's revenues grew at steady rates and the company was able to significantly grow its net income throughout the year. Lockheed Martin's net income increased from 1,053 million to 1,825 million, an increase of more than seventy percent (See figure 39). Similar to Northrop Grumman and General Dynamics, Lockheed Martin's management also described the impact of the increased funding.

We and other U.S. defense contractors have benefited from an upward trend in overall defense spending in the last few years. The defense investment budget includes funds for weapons procurement and research and development. The Future Years Defense Plan

submitted with the President's budget request for fiscal year 2007 projects a strong commitment to research and development of transformational capabilities across the military services, while reducing quantities of near-term systems compared to previous projections. (Lockheed Martin Corporation. Form 10-K for Fiscal Year Ended December 31, 2005 24)

The company's management made note that the increased funding to research and development contributed to the increased profitability of the company during this time period. Additionally, the expectation of increased funding in the future was a major indicator of future financial performance for defense contractors such as Lockheed Martin. It is also interesting to note that General Dynamics explained that increased research funding drove profits for the company as well. This seems to indicate a trend that increased funding towards research resulted in increased profits for defense contractors.

Lockheed Martin's return on assets indicates that the company was able to maintain its profitability levels as well. From 2003 to 2005, Lockheed was able to increase its return on assets by a significant margin, from 3.96% to 6.85% (See figure 40). This is a significant indicator of the company's ability to generate a profit since the company's assets were becoming more profitable over time. The company's increasing net income was outpacing the growth of average assets over the years, therefore increasing the ratio. The ratio also suggests that there was a trend within the defense industry of increased profitability.

The final financial figure to analyze is the company's historical stock price. Similar to the past two companies analyzed, Lockheed's stock price grew at a steady rate, further reinforcing the notion that the company was able to maintain its profitability margins over time (See figure 41). Additionally, this also highlights that the company was beneficial to its stockholders, since the



share price was increasing over the time period analyzed. The increasing stock price further suggests an industry trend of growth in stock prices among defense contractors in response to the sudden rise in defense spending.

### *Boeing*

The fourth company to analyze is Boeing Company. Similar to the other companies analyzed, Boeing's net income increased by a significant amount during the three years analyzed. From 2003 to 2005, Boeing more than tripled its net income from 718 million to 2,572 million (See figure 42). The company's growth is most evident in that revenue growth outpaced the growth of the accompanying costs over time. This rapid growth of the company's profits suggests that the company was benefitting from trends within the industry. This trend involves the defense industry growing at unprecedented rates to meet the demand of the U.S. government in response to the wars in Iraq and Afghanistan.

Another example that supports the notion that Boeing's success is a result of the increased defense funding is seen in the company's return on assets. Similar to the company's net income, Boeing's return on assets more than tripled over the three years analyzed (See figure 43). Growth in this ratio came about because the company's net income more than tripled over the three years while the company's assets did not match this level of growth. This seems to suggest that over time, the company's assets were becoming more profitable.

The third factor to consider is Boeing's historical stock price over time. Similar to the other three companies analyzed during this time, Boeing's stock price also increased steadily throughout most of the 2000's, more than doubling in the three years analyzed indicating the stability of the company and the defense industry during this time (See figure 44). Additionally, Boeing's increasing stock price also indicates the company was able to maintain its profit margins for its

investors, raising the shareholder's value in the company. Boeing's management stated: "The DoD budget has grown substantially over the past decade, particularly after the terrorist attacks of September 11, 2001, and we've seen that trend continue in the 2007 Presidential budget submittal, although at a moderated rate compared to the last few years"( Boeing Company. Form 10-K for Fiscal Year Ended December 31, 2005 34). The company's management specifically listed the importance of the annual defense budget. This reveals a trend that all the companies analyzed have acknowledged the importance of the defense budget. This indicates how reliant the entire industry is on the federal government, and how significant an increase in funding is for companies like Boeing.

#### *Raytheon*

The final company to analyze is Raytheon. Similar to all of the companies analyzed during this time, Raytheon's financials experienced significant levels of growth throughout the 2000's. According to the company's financial statements during this time, Raytheon was able to more than double its net income over the three years analyzed (See figure 45). This is similar to the other four companies analyzed during this time. The company's management explained: "Within the DoD budget, the Research, Development, Test and Evaluation budget and the Procurement budget, collectively known as the investment accounts, are a key source of funding for the Company's programs. These investment accounts show continued growth throughout the FYDP" (Raytheon Company. Form 10-K for Fiscal Year Ended December 31, 2005 31). This signifies that the company's future revenue growth potential is high. Additionally, this also explains why the company's profits have been increasing in the past several years, indicating that the increased budget in research has been driving the company's profitability.

The second factor to consider is the company's return on assets over time. The company's return on assets more than doubled over the three years, indicating a trend that exists within all five companies analyzed (See figure 46). The increased profitability of the company caused the ratio to increase significantly in a short amount of time. Since Raytheon's assets only increased in small amounts during the time period analyzed, this suggests that the company was becoming more efficient at being profitable.

The final factor to consider is the historical stock price of the company during this time period. Similar to all companies analyzed, Raytheon's stock price increased over the three years analyzed (See figure 47). This further suggests an overall market trend that the defense industry was significantly profitable as a result of increased defense spending during this time period. Overall, Raytheon's share price growth seems to indicate that the industry overall experienced an upward trend as a result of increased profits over the time period.

#### *Conclusion of 2000's Analysis*

The five companies that were analyzed from 2003 to 2005 reveal several key trends within the defense industry. Over the three years, all five companies increased their net income by a substantial portion, with two companies more than doubling their profits during this time. The return on assets of the five companies analyzed further reveals that companies were able to make their assets more profitable during this time. The ratio also underscores how rapid the growth in profitability was for these companies. The final factor analyzed was the historical stock price of the companies. All of the companies analyzed during this time had rising stock prices that continued to rise for most of the decade. This seems to suggest an underlying trend within the industry that the sudden increase in defense funding helped to grow the shareholder value of the

companies analyzed. The increased funding to defense also seemed to correlate with the increased financial performance of the defense industry.

### **Conclusion**

After analyzing five companies over three decades several patterns have emerged. Defense cuts made in the 1990's were motivated by the fall of the Soviet Union and subsequent end of the Cold War. Therefore, the cuts in discretionary spending made during this time specifically targeted defense spending. The result from this is seen in the financial performance of the five companies analyzed. All companies except for Raytheon experienced declining profits during the three years analyzed in the 1990's. The historical stock prices of these same five companies reveals that the share prices experienced little to no growth during this time. Additionally, the defense cuts made in the 2010's were made in response to the Budget Control Act of 2011, which cut discretionary spending in both defense and nondefense. The results on the defense industry were largely mixed, with only three companies experiencing decreasing profits. The historical stock price of the defense companies analyzed reveal that all companies experienced no growth in their share prices during this time. The final decade analyzed, the 2000's, showed significant increases in the profits of these companies, along with significant growth in their share prices. Overall, it is reasonable to suggest that the increase in funding for defense causes defense contractors to become more profitable and increase their stock prices. Additionally, decreased defense funding for the federal budget has mixed results. Decreases in discretionary funding that specifically target defense seem to have a more significant impact on the financial performance of the defense industry, while cuts to discretionary spending overall seem to have only a marginal impact on the financial performance of the defense industry. For these reasons, increases to defense spending in the discretionary budget are a determinant of the success of the defense industry.

While these trends are seemingly prevalent within the defense industry, there are various methods to mediate the sudden changes to the industry. The first suggestion for defense contractors looking to avoid financial ruin is to diversify what products and services they offer. All of the defense contractors analyzed stated how reliant they are on the U.S. government as a customer. For this reason, if the companies were to offer a more diverse line of products, and branch out into offering commercial products, the industry would not be as volatile. Additionally, another solution to help avoid financial ruin is seen in the companies globalizing into new markets. Defense contractors that have a larger global presence have access to a wider network of potential customers, such as other foreign governments. Diversifying the company's customer base would ease any sudden change in defense spending in one country. These strategies combined would allow defense companies to further their success. Additionally, diversifying would allow the companies to increase their profitability more than they already have in the past three decades.

## Figures

Figure 1: Discretionary Spending Data

Year	Defense	Nondefense	Total	Defense as a % of Total	Defense Decrease from Previous Year	Nondefense Decrease from Previous Year
1962	52.6	19.5	72.1	72.91%		
1963	53.7	21.6	75.3	71.34%		
1964	55.0	24.1	79.1	69.55%		
1965	51.0	26.8	77.8	65.59%	DECREASE	
1966	59.0	31.1	90.1	65.45%		
1967	72.0	34.5	106.5	67.61%		
1968	82.2	35.8	118.0	69.63%		
1969	82.7	34.6	117.3	70.50%		DECREASE
1970	81.9	38.3	120.3	68.12%	DECREASE	
1971	79.0	43.5	122.5	64.48%	DECREASE	
1972	79.3	49.2	128.5	61.72%		
1973	77.1	53.3	130.4	59.12%	DECREASE	
1974	80.7	57.5	138.2	58.41%		
1975	87.6	70.3	158.0	55.46%		
1976	89.9	85.7	175.6	51.19%		
1977	97.5	99.6	197.1	49.48%		
1978	104.6	114.1	218.7	47.85%		
1979	116.8	123.2	240.0	48.66%		
1980	134.6	141.7	276.3	48.72%		
1981	158.0	149.9	307.9	51.30%		
1982	185.9	140.0	326.0	57.04%		DECREASE
1983	209.9	143.4	353.3	59.40%		
1984	228.0	151.4	379.4	60.10%		
1985	253.1	162.7	415.8	60.87%		
1986	273.8	164.7	438.5	62.44%		
1987	282.5	161.6	444.2	63.61%		DECREASE
1988	290.9	173.5	464.4	62.64%		
1989	304.0	184.8	488.8	62.20%		
1990	300.1	200.4	500.6	59.96%	DECREASE	
1991	319.7	213.6	533.3	59.95%		
1992	302.6	231.2	533.8	56.69%	DECREASE	
1993	292.4	247.3	539.8	54.18%	DECREASE	
1994	282.3	259.1	541.3	52.14%	DECREASE	
1995	273.6	271.2	544.8	50.22%	DECREASE	
1996	266.0	266.8	532.7	49.92%	DECREASE	DECREASE
1997	271.7	275.4	547.0	49.66%		
1998	270.3	281.7	552.0	48.96%	DECREASE	
1999	275.5	296.7	572.1	48.15%		
2000	295.0	319.7	614.6	47.99%		
2001	306.1	343.0	649.0	47.16%		
2002	349.0	385.0	734.0	47.54%		
2003	404.9	419.4	824.3	49.12%		
2004	454.1	441.0	895.1	50.73%		
2005	493.6	474.9	968.5	50.96%		
2006	520.0	496.7	1,016.6	51.15%		
2007	547.9	493.7	1,041.6	52.60%		DECREASE
2008	612.4	522.5	1,134.9	53.96%		
2009	656.7	580.8	1,237.5	53.07%		
2010	688.9	658.3	1,347.2	51.13%		
2011	699.4	647.7	1,347.1	51.92%		DECREASE
2012	670.5	605.2	1,275.7	52.56%	DECREASE	DECREASE
2013	625.8	576.6	1,202.4	52.04%	DECREASE	DECREASE
2014	596.4	582.4	1,178.9	50.60%	DECREASE	
2015	583.4	588.8	1,172.1	49.77%	DECREASE	
2016	584.8	600.4	1,185.2	49.34%		
2017	590.2	610.1	1,200.3	49.17%		
2018	622.7	638.9	1,261.6	49.36%		
2019	676.4	660.0	1,336.4	50.61%		

Figure 1

Figure 2: Discretionary Spending Data During 1990's

<b>Figure 2</b>				
Year	Defense	Nondefense	Total	Defense Decrease from Previous Year
1991	319.7	213.6	533.3	
1992	302.6	231.2	533.8	DECREASE
1993	292.4	247.3	539.8	DECREASE
1994	282.3	259.1	541.3	DECREASE
1995	273.6	271.2	544.8	DECREASE
1996	266.0	266.8	532.7	DECREASE
1997	271.7	275.4	547.0	

Figure 3: General Dynamics Income Statement 1990's

<b>Figure 3</b>			
General Dynamics	1995	1994	1993
Net Sales	3,067	3,058	3,187
OPERATING COSTS AND EXPENSES	2,752	2,737	2,878
OPERATING EARNINGS	315	321	309
Interest, net	55	22	36
Other income, net	5	-	68
EARNINGS FROM CONTINUING OPERATIONS BEFORE INCOME TAXES	375	343	413
Provision for income taxes	128	120	143
EARNINGS FROM CONTINUING OPERATIONS	247	223	270
DISCONTINUED OPERATIONS, NET OF INCOME TAXES:			
Earnings (loss) from operations	55	-	(30)
Gain on disposal	19	15	645
NET EARNINGS	321	238	885

Figure 4: General Dynamics Return on Assets 1990's

<b>Figure 4</b>			
General Dynamics	1995	1994	1993
Total Assets	3164	2673	2635
Net Income	321	238	885
Return on Assets	11.00%	8.97%	28.71%

Figure 5: General Dynamics Historical Stock Price 1990's

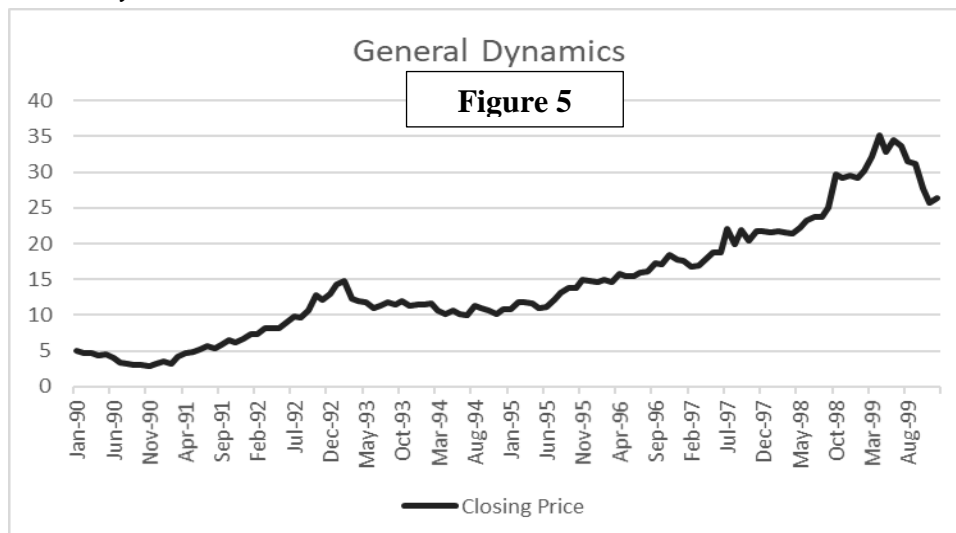


Figure 6: Northrop Grumman Income Statement 1990's

Northrop Grumman	Figure 6	1995	1994	1993	1992	1991
Sales		6,818	6,711	5,063	5,550	5,694
Operating Costs		5,319	5,477	4,385	4,877	4,817
Administrative and General Expenses		963	753	485	455	531
Special termination benefits		-	282	-	-	-
Operating Margin		536	199	193	218	346
Interest Income		1	6	2	4	11
Other, net		9	(31)	13	5	-
Interest Expense		(137)	(109)	(38)	(47)	(80)
Income before income taxes and cumulative effect of accounting principle changes		409	65	170	180	277
Federal and Foreign Income taxes		157	30	74	59	9
Income before cumulative effect of accounting principle changes		252	35	96	121	268
Changes in Accounting Principles		-	-	-	-	21
Retiree and Health Care Benefits		-	-	-	-	88
Net Income		252	35	96	121	201

Figure 7: Northrop Grumman Return on Assets 1990's

Northrop Grumman	Figure 7	1995	1994	1993	1992
Net Income		252	35	96	121
Total Assets		5,455	6,047	2,939	3,162
Return on Assets		4.38%	0.78%	3.15%	3.85%

Figure 8: Northrop Grumman Historical Stock Price 1990's

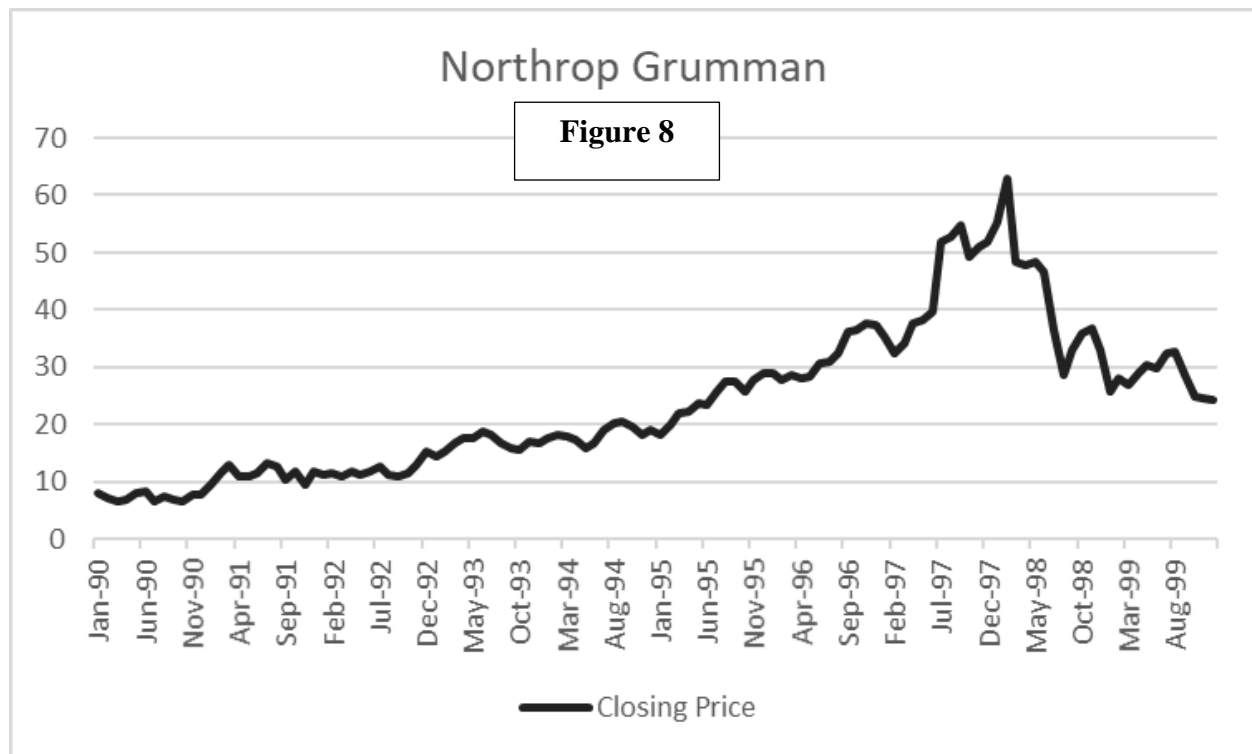




Figure 9: Lockheed Martin Income Statement 1990's

Lockheed Martin	Figure 9	1995	1994	1993	1992	1991
Net sales		22,853	22,906	22,397	16,030	15,871
Costs and expenses:						
Cost of sales		20,881	21,127	20,857	14,891	14,767
Merger related and consolidation expenses		690	-	-		
Earnings from operations		1,282	1,779	1,540	1,139	1,104
Other income and expenses, net		95	200	44	42	(49)
		1,377	1,979	1,584	1,181	1,055
Interest expense		288	304	278	177	176
Earnings before income taxes and cumulative effect of change in accounting		1,089	1,675	1,306	1,004	879
Income tax expense		407	620	477	355	261
Earnings before cumulative effect of change in accounting		682	1,055	829	649	618
Cumulative effect of change in accounting		-	(37)	-	(1,010)	-
Net earnings		682	1,018	829	(361)	618

Figure 10: Lockheed Martin Return on Assets 1990's

Lockheed Martin	Figure 10	1995	1994	1993	1992
Net Income		682	1,018	829	(361)
Total Assets		17,558	17,979	17,082	10,827
Return on Assets		3.84%	5.81%	5.94%	-3.38%

Figure 11: Lockheed Martin Historical Stock Price 1990's

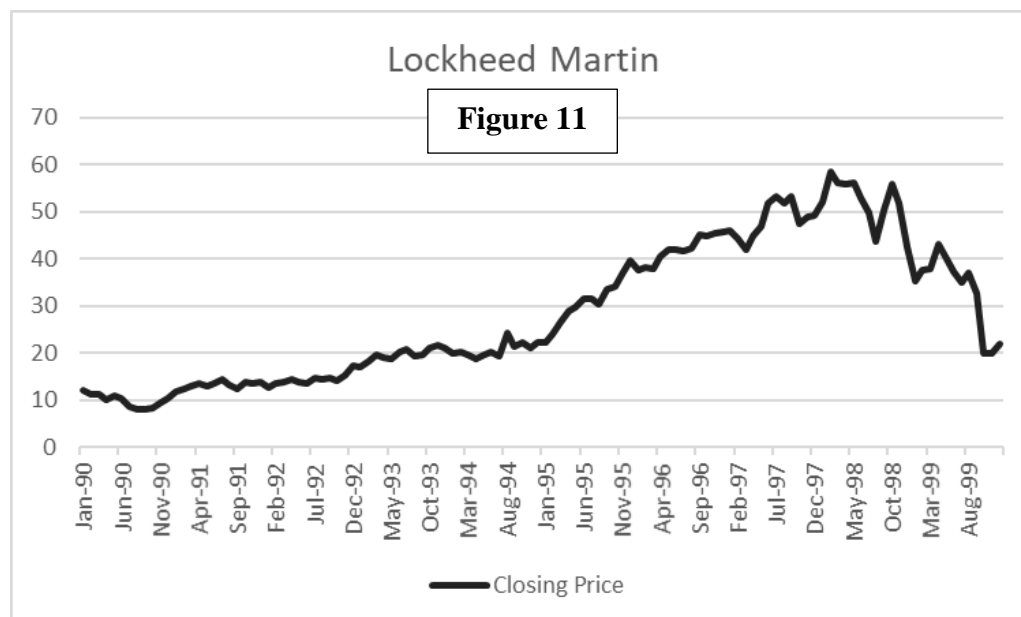


Figure 12: Boeing Income Statement 1990's

<b>Boeing</b>	<b>Figure 12</b>	<b>1995</b>	<b>1994</b>	<b>1993</b>
Sales and other operating revenues		19,515	21,924	25,438
Costs and expenses		18,613	20,773	23,747
Special retirement program expense		600	0	0
Earnings from operations		302	1,151	1,691
Other income, principally interest		209	122	169
Interest and debt expense		-151	-130	-39
Earnings before federal taxes on income		360	1,143	1,821
Federal taxes on income		-33	287	577
Net earnings		393	856	1,244

Figure 13: Boeing Return on Assets 1990's

<b>Boeing</b>	<b>Figure 13</b>	<b>1995</b>	<b>1994</b>	<b>1993</b>	<b>1992</b>
Net Income		393	856	1,244	1,554
Total Assets		22,098	21,463	20,450	18,147
Return on Assets		1.80%	4.08%	6.45%	9.12%

Figure 14: Boeing Historical Stock Price 1990's

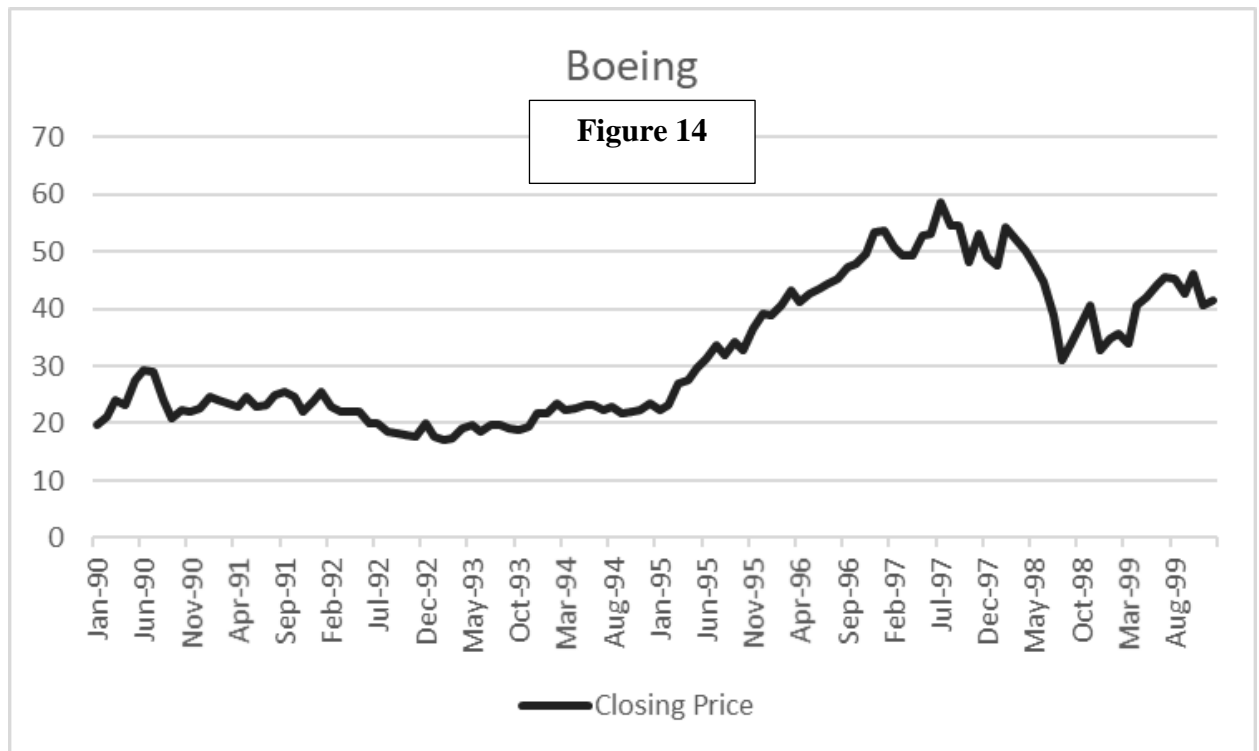


Figure 15: Raytheon Income Statement 1990's

Raytheon	Figure 15	1995	1994	1993
Net sales		11,716	10,013	9,201
Cost of sales		9,102	7,753	7,174
Administrative and selling expenses (note A)		1,211	912	828
Research and development expenses		316	270	279
Total operating expenses		10,628	8,935	8,281
Operating income		1,087	1,078	920
Interest expense		197	49	32
Interest and dividend income		(46)	(48)	(57)
Other (income) expense, net		(255)	(72)	(103)
Non-operating income, net		(104)	(71)	(127)
Income before taxes		1,192	1,150	1,047
Federal and foreign income taxes		399	391	354
Net Income		793	759	693

Figure 16: Raytheon Return on Assets 1990's

Raytheon	Figure 16	1995	1994	1993
Net Income		793	759	693
Total Assets		9,841	7,395	7,258
Return on Assets		9.20%	10.36%	10.44%

Figure 17: Raytheon Historical Stock Price 1990's

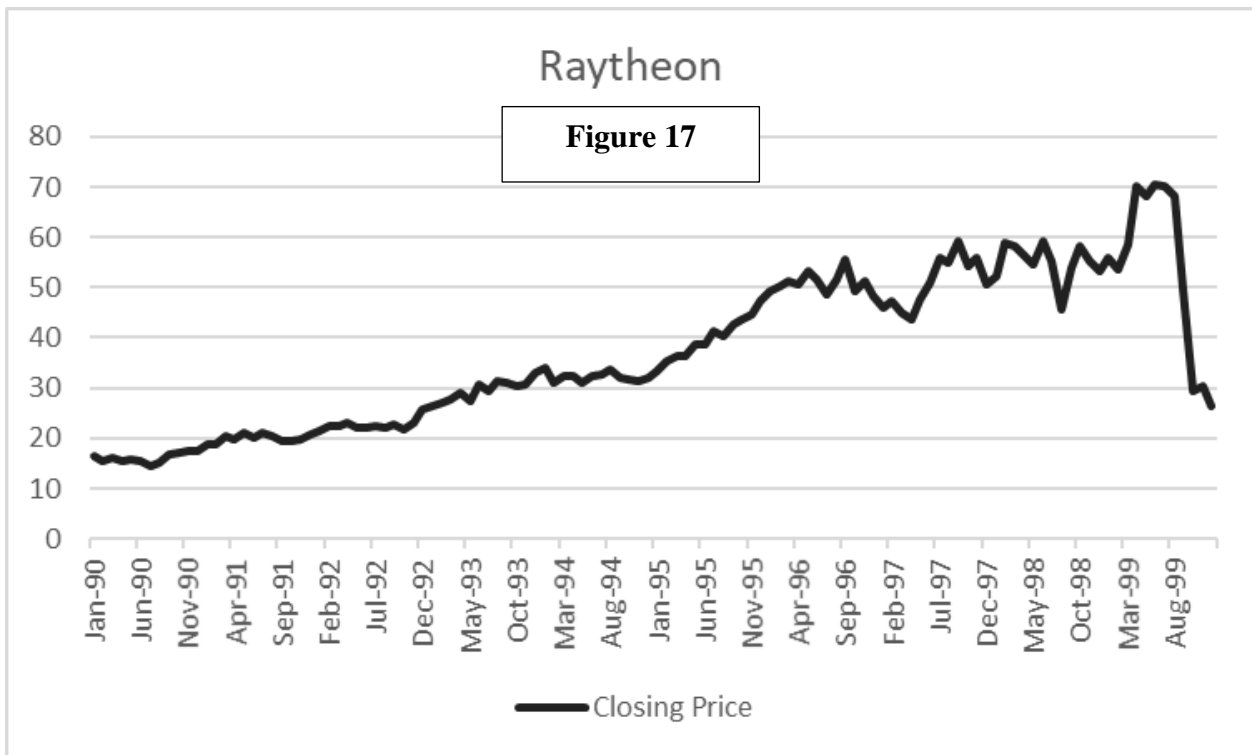


Figure 18: General Dynamics Income Statement 2010's

General Dynamics	Figure 18	2013	2012	2011
Products		\$ 19,371	\$ 19,784	\$ 21,440
Services		11,847	11,729	11,237
		31,218	31,513	32,677
Operating costs and expenses:				
Products		15,296	16,228	17,230
Services		10,158	10,182	9,591
Goodwill impairment		-	1,994	-
General and administrative (G&A)		2,079	2,276	2,030
		27,533	30,680	28,851
Operating earnings		3,685	833	3,826
Interest, net		(86)	(156)	(141)
Other, net		8	(136)	33
Earnings from continuing operations before income taxes		3,607	541	3,718
Provision for income taxes, net		1,121	873	1,166
Earnings (loss) from continuing operations		2,486	(332)	2,552
Discontinued operations, net of tax		(129)	-	(26)
Net earnings (loss)		\$ 2,357	\$ (332)	\$ 2,526

Figure 19: General Dynamics Return on Assets 2010's

General Dynamics	Figure 19	2013	2012	2011
Net Income		2,357	(332)	2,526
Total Assets		35,448	34,309	34,883
Return on Assets		6.76%	-0.96%	7.49%

Figure 20: General Dynamics Historical Stock Price 2010's

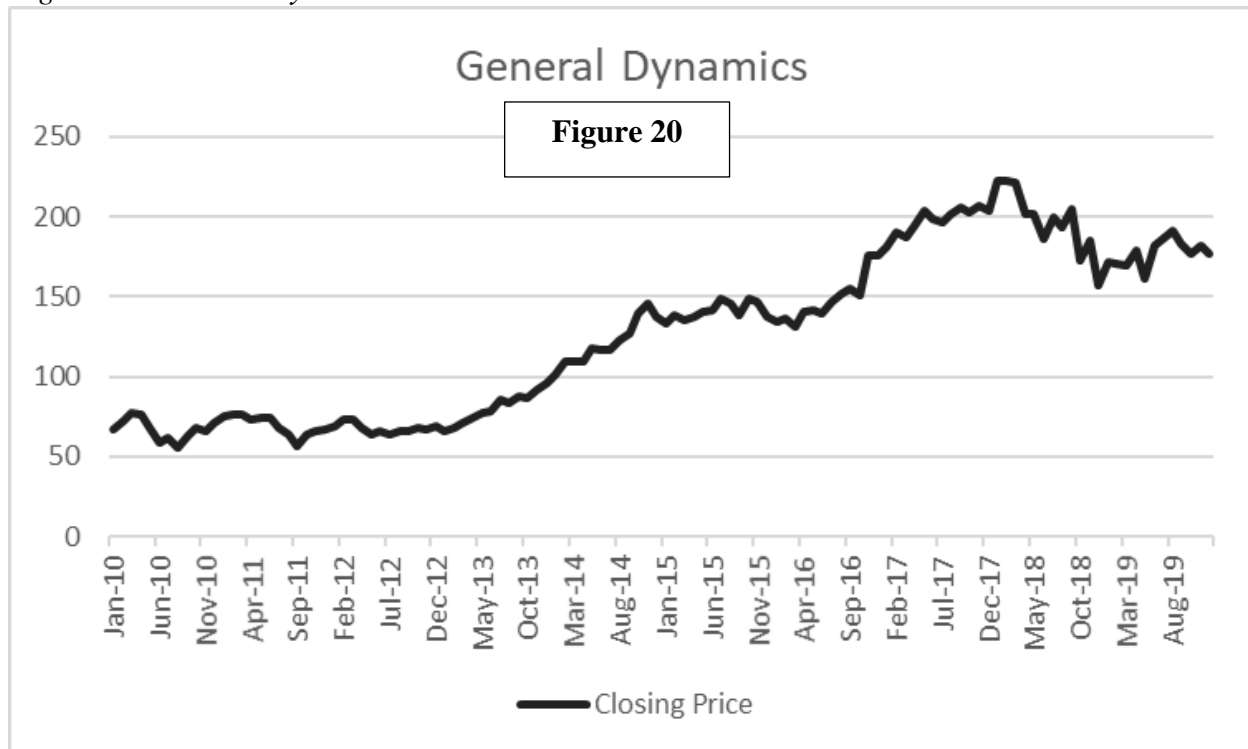


Figure 21: Northrop Grumman Income Statement 2010's

Northrop Grumman	Figure 21	2013	2012	2011
Sales				
Product		14,033	13,838	15,073
Service		10,628	11,380	11,339
<b>Total sales</b>		<b>24,661</b>	<b>25,218</b>	<b>26,412</b>
Operating costs and expenses				
Product		10,623	10,415	11,491
Service		8,659	9,223	9,295
General and administrative expenses		2,256	2,450	2,350
Operating income		3,123	3,130	3,276
Other (expense) income				
Interest expense		(257)	(212)	(221)
Other, net		(3)	47	28
Earnings from continuing operations before income taxes		2,863	2,965	3,083
Federal and foreign income tax expense		911	987	997
Earnings from continuing operations		1,952	1,978	2,086
Earnings from discontinued operations, net of tax		-	-	32
Net earnings		1,952	1,978	2,118

Figure 22: Northrop Grumman Return on Assets 2010's

Northrop Grumman	Figure 22	2013	2012	2011
Net Income		1,952	1,978	2,118
Total Assets		26,381	26,543	25,411
Return on Assets		7.38%	7.61%	7.45%

Figure 23: Northrop Grumman Historical Stock Price 2010's

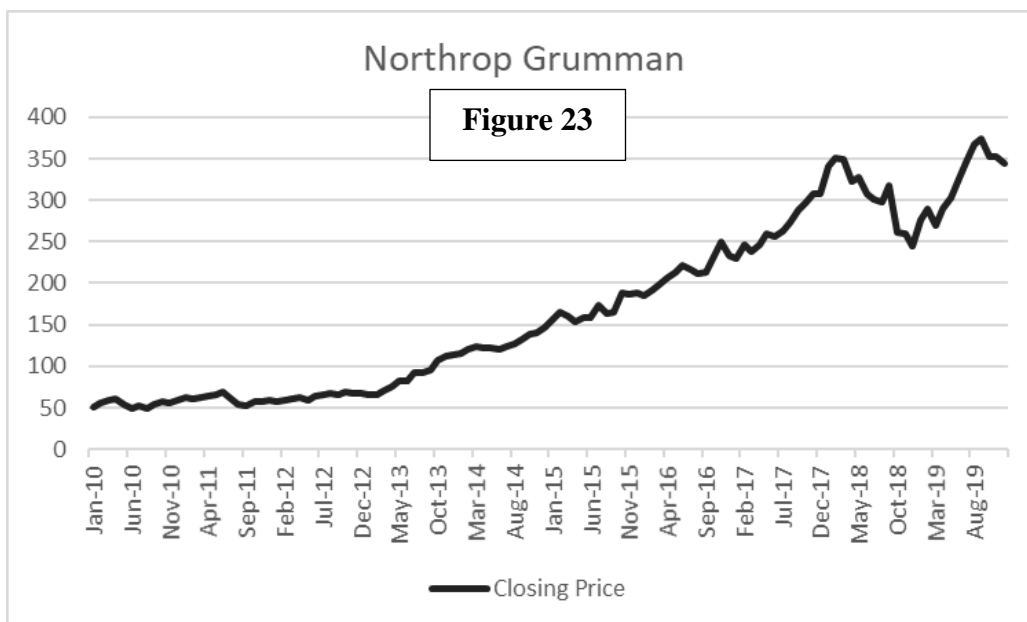


Figure 24: Lockheed Martin Income Statement 2010's

Lockheed Martin	Figure 24	2013	2012	2011
Net sales		45,358	47,182	46,499
Cost of sales		(41,171)	(42,986)	(42,755)
Other income, net		318	238	276
Operating profit		4,505	4,434	4,020
Interest expense		(350)	(383)	(354)
Other non-operating income (expense), net		-	21	(35)
Income tax expense		(1,205)	(1,327)	(964)
Net earnings from continuing operations		2,950	2,745	2,667
Net earnings (loss) from discontinued operations		31	-	(12)
Net earnings		2,981	2,745	2,655

Figure 25: Lockheed Martin Return on Assets 2010's

Lockheed Martin	Figure 25	2013	2012	2011
Net Income		2,981	2,745	2,655
Total Assets		13,329	13,855	14,094
Return on Assets		21.93%	19.64%	19.68%

Figure 26: Lockheed Martin Historical Stock Price 2010's

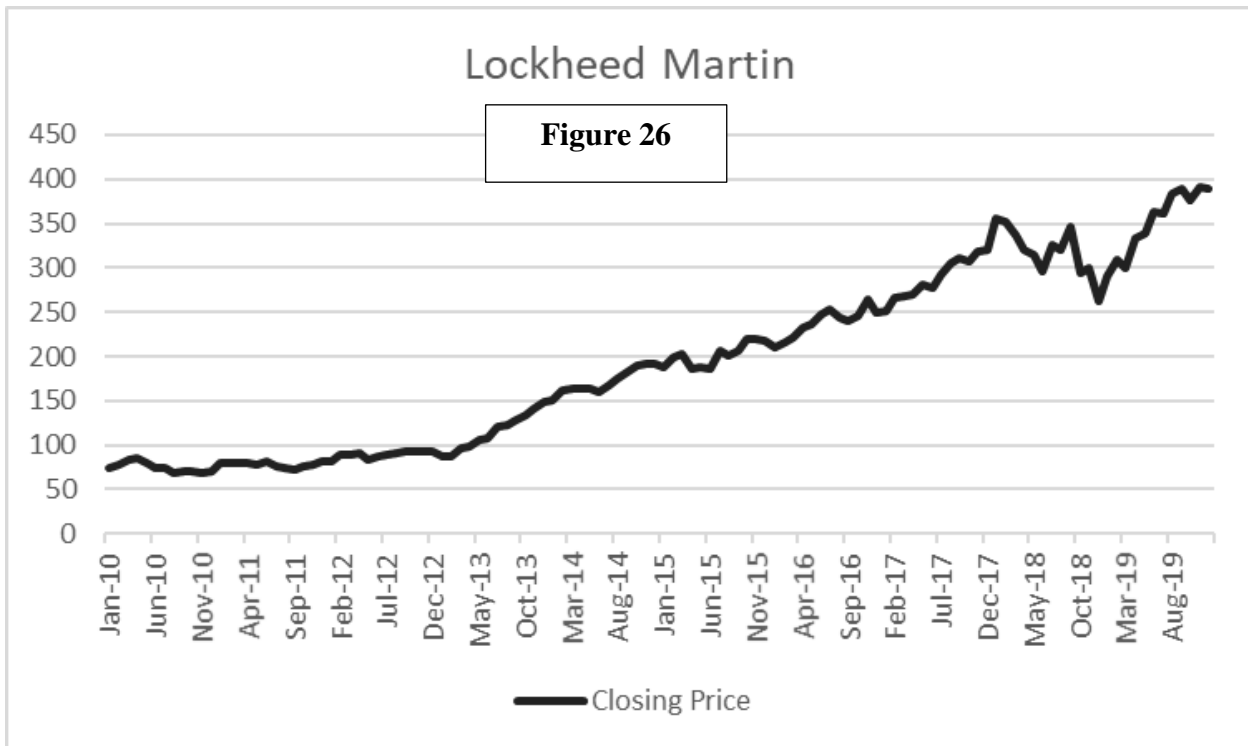


Figure 27: Boeing Income Statement 2010's

<b>Boeing</b>	<b>Figure 27</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
Sales of products		\$ 76,792	\$ 71,234	\$ 57,401
Sales of services		9,831	10,464	11,334
Total revenues		86,623	81,698	68,735
Cost of products		(65,640)	(60,309)	(46,642)
Cost of services		(7,553)	(8,247)	(9,097)
Boeing Capital interest expense		(75)	(109)	(149)
Total costs and expenses		(73,268)	(68,665)	(55,888)
		13,355	13,033	12,847
Income from operating investments, net		214	268	278
General and administrative expense		(3,956)	(3,717)	(3,408)
Research and development expense, net		(3,071)	(3,298)	(3,918)
Gain on dispositions, net		20	4	24
Earnings from operations		6,562	6,290	5,823
Other income, net		56	62	47
Interest and debt expense		(386)	(442)	(477)
Earnings before income taxes		6,232	5,910	5,393
Income tax expense		(1,646)	(2,007)	(1,382)
Net earnings from continuing operations		4,586	3,903	4,011
Net (loss)/gain on disposal of discontinued operations, net of taxes of \$0, \$2, (\$4)		(1)	(3)	7
Net earnings		\$ 4,585	\$ 3,900	\$ 4,018

Figure 28: Boeing Return on Assets 2010's

<b>Boeing</b>	<b>Figure 28</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
Net Income		4,585	3,900	4,018
Total Assets		92,663	88,896	79,986
Return on Assets		5.05%	4.62%	5.41%

Figure 29: Boeing Historical Stock Price 2010's

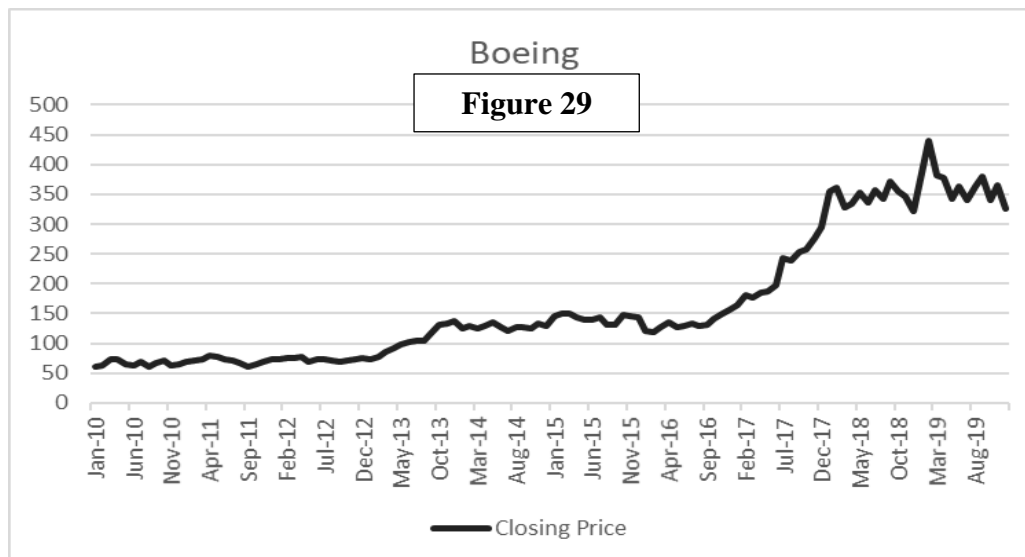


Figure 30: Raytheon Income Statement 2010's

Raytheon	Figure	2013	2012	2011
Net sales				
Products		19,855	20,380	20,725
Services		3,851	4,034	4,066
<b>Total net sales</b>		<b>23,706</b>	<b>24,414</b>	<b>24,791</b>
Operating expenses				
Cost of sales-products		15,292	15,712	16,245
Cost of sales-services		3,240	3,380	3,419
General and administrative expenses		2,236	2,333	2,297
<b>Total operating expenses</b>		<b>20,768</b>	<b>21,425</b>	<b>21,961</b>
Operating income		2,938	2,989	2,830
Non-operating (income) expense, net				
Interest expense		210	201	172
Interest income		(12)	(9)	(14)
Other (income) expense, net		(17)	18	12
<b>Total non-operating (income) expense, net</b>		<b>181</b>	<b>210</b>	<b>170</b>
Income from continuing operations before taxes		2,757	2,779	2,660
Federal and foreign income taxes		808	878	782
Income from continuing operations		1,949	1,901	1,878
Income (loss) from discontinued operations, net of tax		64	(1)	18
Net income		2,013	1,900	1,896
Less: Net income attributable to noncontrolling interests in sub		17	12	30
Net income attributable to Raytheon Company		1,996	1,888	1,866

Figure 31: Raytheon Return on Assets 2010's

Raytheon	Figure 31	2013	2012	2011
Net Income		1,996	1,888	1,866
Total Assets		25,967	26,686	25,854
Return on Assets		7.58%	7.19%	7.42%

Figure 32: Raytheon Historical Stock Price 2010's

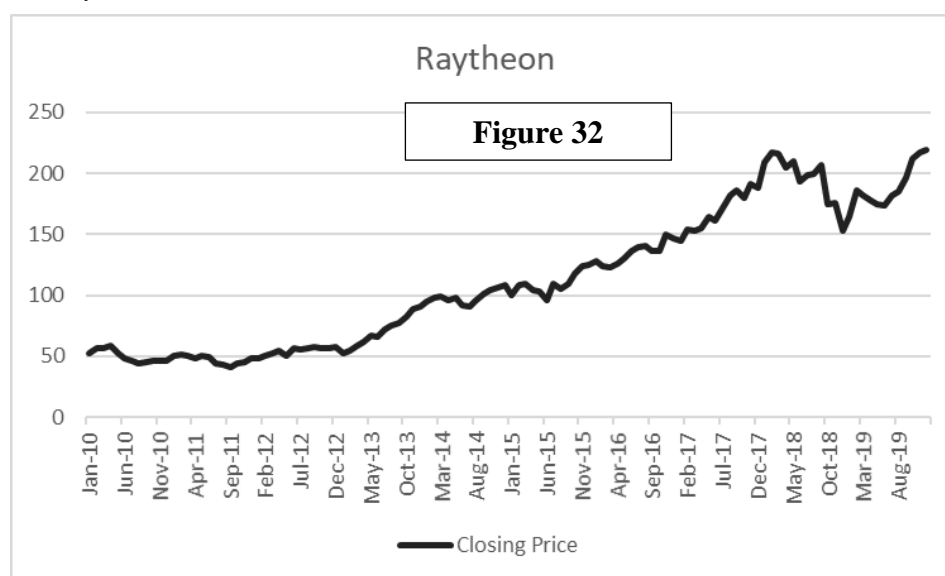




Figure 33: General Dynamics Income Statement 2000's

General Dynamics	Figure 33	2005	2004	2003
Net Sales		21,244	19,119	16,328
Operating costs and expenses		19,047	17,175	14,886
Operating Earnings		2,197	1,944	1,442
Interest expense, net		(118)	(148)	(98)
Other income (expense), net		21	(8)	3
Earnings from Continuing Operations before Income Taxes		2,100	1,788	1,347
Provision for income taxes, net		632	583	368
Earnings from Continuing Operations		1,468	1,205	979
Discontinued operations, net of tax		(7)	22	25
Net Earnings		1,461	1,227	1,004

Figure 34: General Dynamics Return on Assets 2000's

General Dynamics	Figure 34	2005	2004	2003
Total Assets		19,591	17,544	16,183
Net Income		1,461	1,227	1,004
Return on Assets		7.87%	7.28%	7.19%

Figure 35: General Dynamics Historical Stock Price 2000's

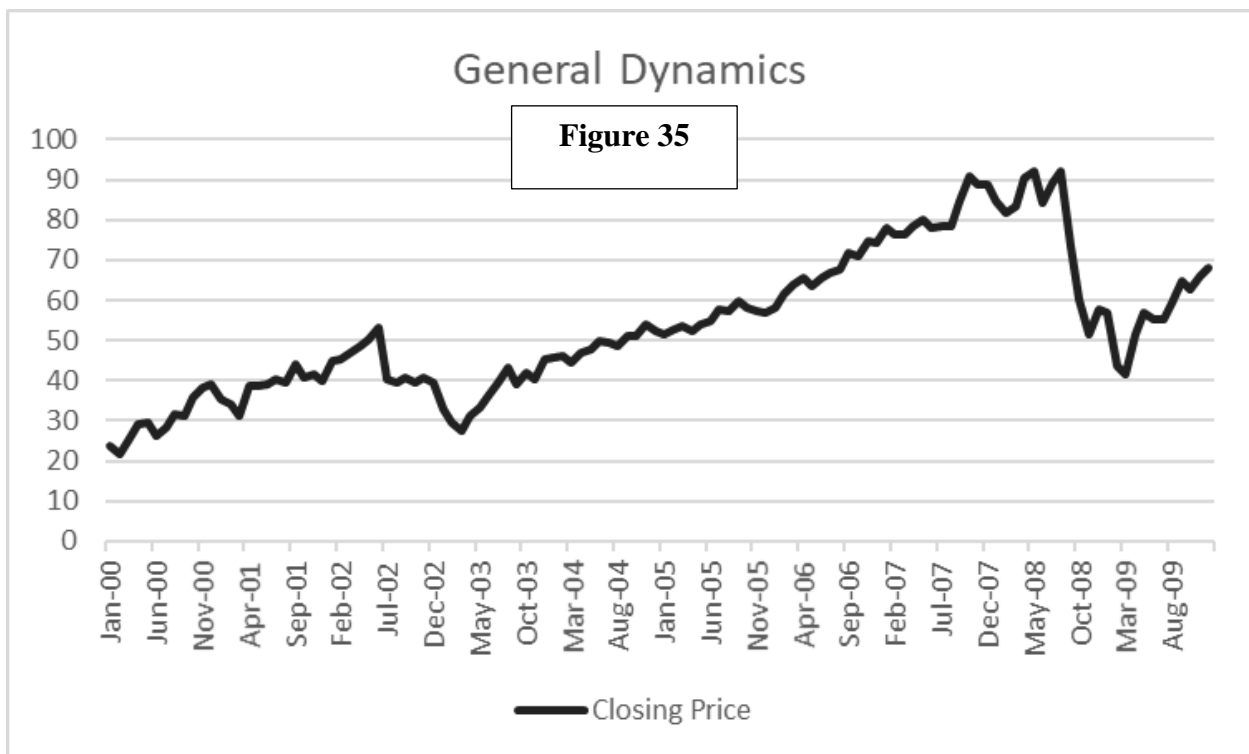


Figure 36: Northrop Grumman Income Statement 2000's

Northrop Grumman	Figure 36	2005	2004	2003
Sales and Service Revenues				
Product Sales		20,150	20,106	18,540
Service Revenues		10,571	9,747	7,856
Total Sales and Service Revenues		30,721	29,853	26,396
Costs of Sales and Service Revenues				
Cost of Product Sales		16,250	16,417	14,854
Cost of service revenues		9,340	8,718	7,681
General and Administrative Expenses		2,953	2,712	2,393
Operating Margin		2,178	2,006	1,468
Other Income (Expense)				
Interest Income		54	58	60
Interest Expense		(388)	(431)	(497)
Other, net		200	(18)	24
Income from Continuing Operations Before Income Taxes		2,044	1,615	1,055
Federal and Foreign Income Taxes		661	522	297
Income from Continuing Operations		1,383	1,093	758
Income from Discontinued Operations, net of tax		-	3	64
Gain (Loss) on Disposal of Discontinued Operations, net of tax		17	(12)	44
Net Income		1,400	1,084	866

Figure 37: Northrop Grumman Return on Assets 2000's

Northrop Grumman	Figure 37	2005	2004	2003
Total Assets		34,214	33,303	33,022
Net Income		1,400	1,084	866
Return on Assets		4.15%	3.27%	2.30%

Figure 38: Northrop Grumman Historical Stock Price 2000's

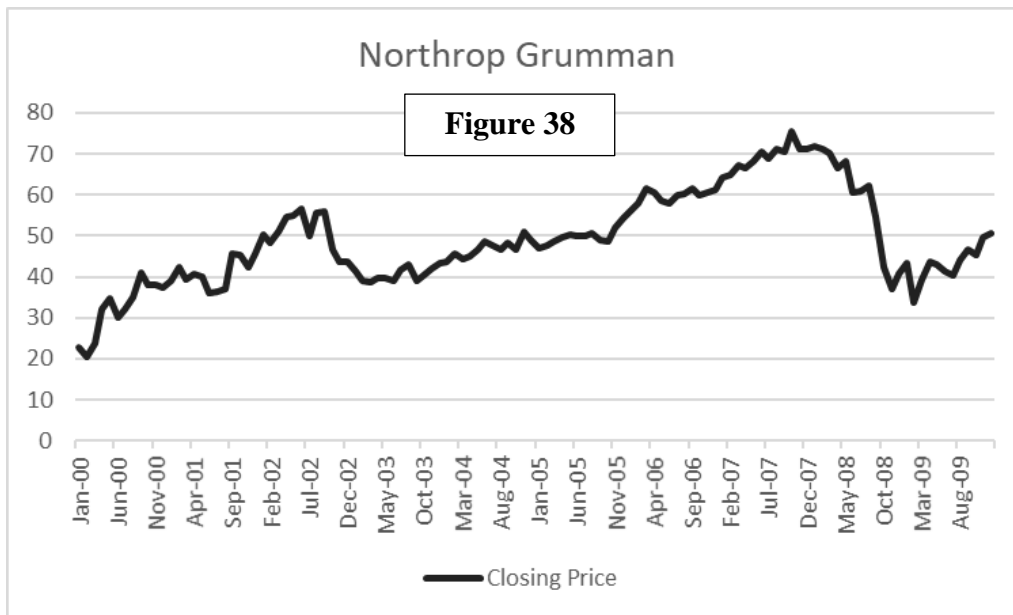


Figure 39: Lockheed Martin Income Statement 2000's

Lockheed Martin	Figure 39	2005	2004	2003
Net sales				
Products		31,518	30,202	27,290
Services		5,695	5,324	4,534
Total Sales		37,213	35,526	31,824
Cost of sales				
Products		28,800	27,879	25,306
Services		5,073	4,765	4,099
Unallocated Corporate costs		803	914	443
Total Costs		34,676	33,558	29,848
		2,537	1,968	1,976
Other income and expenses, net		449	121	43
Operating profit		2,986	2,089	2,019
Interest expense		370	425	487
Earnings before taxes		2,616	1,664	1,532
Income tax expense		791	398	479
Net earnings		1,825	1,266	1,053

Figure 40: Lockheed Martin Return on Assets 2000's

Lockheed Martin	Figure 40	2005	2004	2003
Total Assets		27,744	25,554	26,175
Net Income		1,825	1,266	1,053
Return on Assets		6.85%	4.89%	3.96%

Figure 41: Lockheed Martin Historical Stock Price 2000's

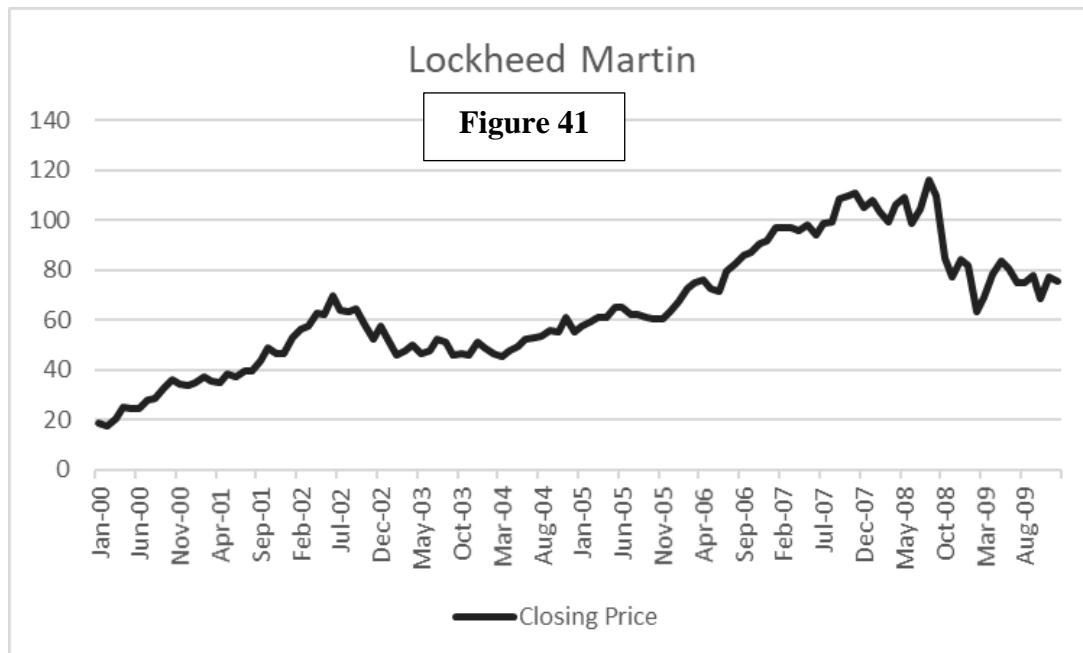


Figure 42: Boeing Income Statement 2000's

Boeing	Figure 42	2005	2004	2003
Sales of products		45,398	43,979	41,493
Sales of services		9,447	8,478	8,763
Total revenues		54,845	52,457	50,256
Cost of products		(38,082)	(37,921)	(35,562)
Cost of services		(7,767)	(6,754)	(8,230)
Boeing Capital Corporation interest expense		(359)	(350)	(358)
Total costs and expenses		(46,208)	(45,025)	(44,150)
		8,637	7,432	6,106
Income from operating investments, net		88	91	28
General and administrative expense		(4,228)	(3,657)	(3,200)
Research and development expense		(2,205)	(1,879)	(1,651)
Gain on dispositions, net		520	23	7
Goodwill impairment		-	(3)	(913)
Impact of September 11, 2001, recoveries		-	-	21
Earnings from continuing operations		2,812	2,007	398
Other income, net		301	288	460
Interest and debt expense		(294)	(335)	(358)
Earnings before income taxes		2,819	1,960	500
Income tax (expense)/benefit		(257)	(140)	185
Net earnings from continuing operations		2,562	1,820	685
Income from discontinued operations, net of taxes		-	10	33
Net (loss) gain on disposal of discontinued operations, net of taxes		(7)	42	-
Cumulative effect of accounting change, net of taxes		17	-	-
Net earnings		2,572	1,872	718

Figure 43: Boeing Return on Assets 2000's

Boeing	Figure 43	2005	2004	2003
Total Assets		60,058	56,224	55,171
Net Income		2,572	1,872	718
Return on Assets		4.42%	3.36%	1.31%

Figure 44: Boeing Historical Stock Price 2000's

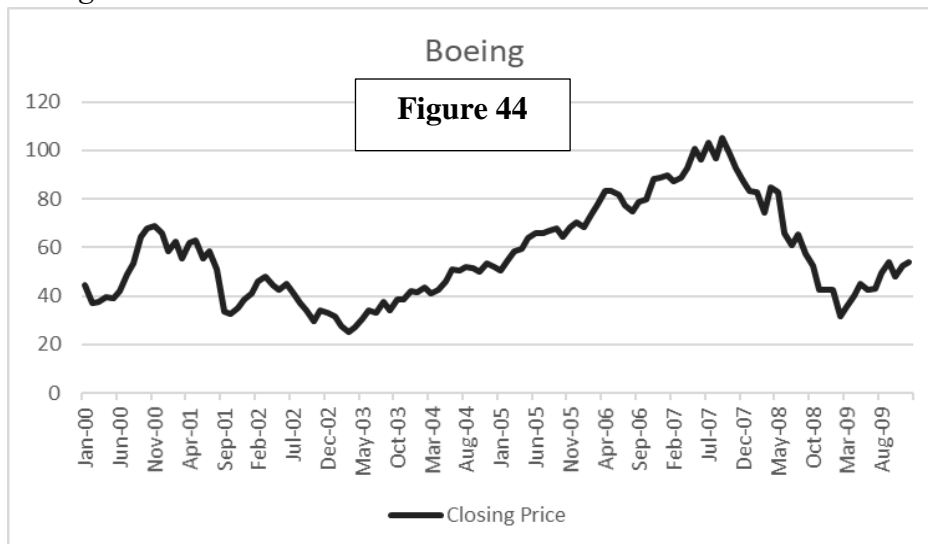


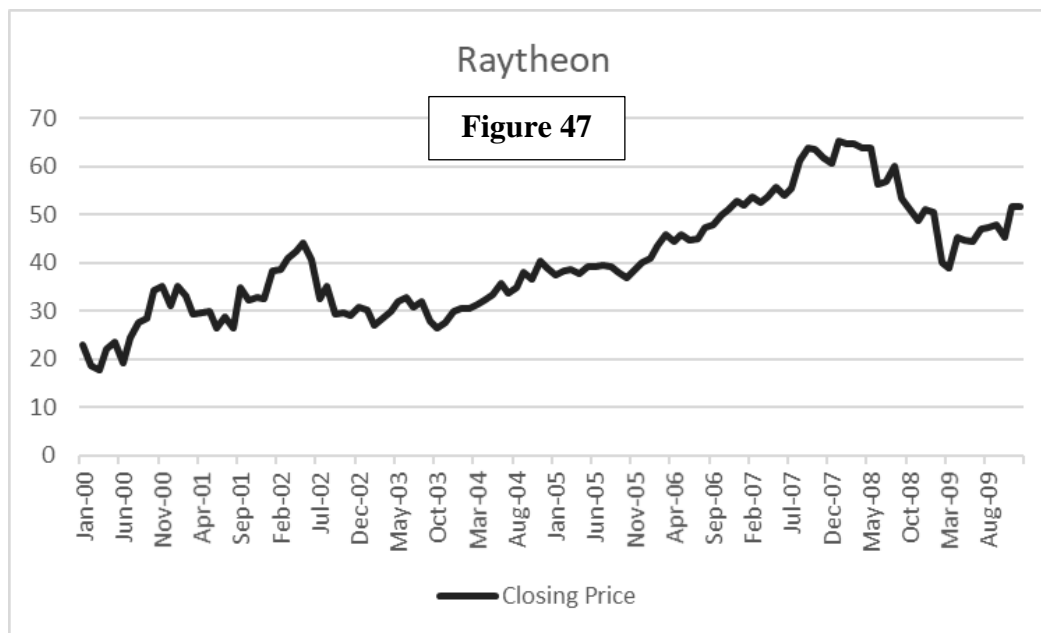
Figure 45: Raytheon Income Statement 2000's

Raytheon	Figure 45	2005	2004	2003
Net sales		21,894	20,245	18,109
Cost of sales		18,230	16,981	15,045
Administrative and selling expenses		1,474	1,385	1,261
Research and development expenses		503	491	487
Total operating expenses		20,207	18,857	16,793
Operating income		1,687	1,388	1,316
Interest expense		312	418	537
Interest income		(52)	(45)	(50)
Other (income) expense, net		(13)	436	67
Non-operating expense, net		247	809	554
Income from continuing operations before taxes		1,440	579	762
Federal and foreign income taxes		498	140	227
Income from continuing operations		942	439	535
Loss from discontinued operations, net of tax		(71)	(63)	(170)
Income before accounting change		871	376	365
Cumulative effect of change in accounting principle, net of tax		-	41	-
Net income		871	417	365

Figure 46: Raytheon Return on Assets 2000's

Raytheon	Figure 46	2005	2004	2003
Total Assets		24,381	24,153	24,208
Net Income		871	417	365
Return on Assets		3.59%	1.72%	1.49%

Figure 47: Raytheon Historical Stock Price 2000's



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