RESEARCH REPORT

March 26, 2018

U.S. Aerospace & Defense

Subsector Snapshot

On February 12, 2018, the Pentagon unveiled the fiscal 2019 budget proposal outlined by President Trump, intended to strengthen the country's military capabilities. With an emphasis on national security, the proposal involves a significant increase in government purchases of equipment for the Navy, Air Force, and Missile Defense System. The rush to further modernize the force comes amidst increasing tensions between the U.S., North Korea, and other world powers. In this report, the QUIC Industrials group offers a snapshot of the U.S. Aerospace and Defense subsector by examining the following:

1. We analyze the macro drivers of both the commercial aerospace and defense subsectors to determine how the industry dynamics will change as the new budget is implemented.

2. We break down the budget into its fundamental components to determine how each area of defense spending is impacted and which companies are poised to benefit.

3. We further delve into how the changes in spending will impact the companies in QUIC's investable universe, allowing us to draw key conclusions on the implications to our portfolio.

Industrials

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Commercial Aerospace Industry Overview

The U.S. Aerospace and Defense industry serves two main markets: commercial aerospace and defense, which is comprised of the production and sale of military weapons and systems designed to operate in air, on land, and at sea. This industry also includes the production of general aircraft and space vehicles, such as satellites, for both military and commercial use.

Demand Closely Tied to Economic Strength

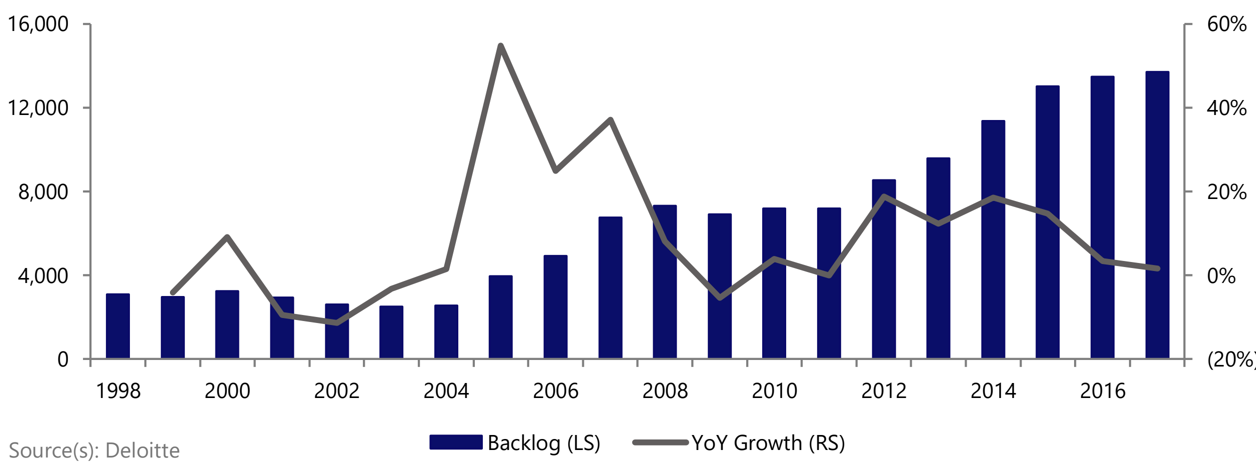
The commercial aerospace sector is increasingly concentrated, after having undergone consolidation in the 1990s. Boeing is the only major supplier of large civil aircraft in the U.S.. The industry is characterized by high barriers to entry due to high costs incurred when developing new products. Thus, it is an industry that supports large companies like Boeing with significant economies of scale, and make it difficult for new entrants to compete. Each new aircraft model requires special tooling needs, which can reach hundreds of millions of dollars. New designs need to be certified "air worthy" by the FAA and EASA, a process that can take 24 months or longer and involves building aircraft for testing. The single most important determinant of demand is the state of the economy. As the economy expands, so does business activity and disposable income. People fly more, either for leisure or business, and this change in air traffic results in a change in airline profits, prompting increased aircraft orders. Other factors that affect demand include fuel prices, airline strategies, and government regulation. On the supply side, capacity is of critical importance. In the U.S., Boeing has taken significant steps to remedy its production process with continuous productivity improvements and better supply management.

Aircraft Backlog at Record Level

By the end of 2017, order backlog for Boeing and Airbus was at almost 10 years, the highest ever recorded. Order volume is expected to decline, as there are backlogs involving waits for most popular models, and most near-term demand has been met. The bull run of delivery growth has endured and is expected to continue, but overall growth in annual deliveries has been slow. Trump's proposed steel tariffs should not have a big impact on A&D costs. However, tariff retaliation by countries like China pose a significant risk.

EXHIBIT I

Global Airline Industry Backlog



Source(s): Deloitte

Defense Sector Outlook

Driven by U.S. Department of Defense Budget

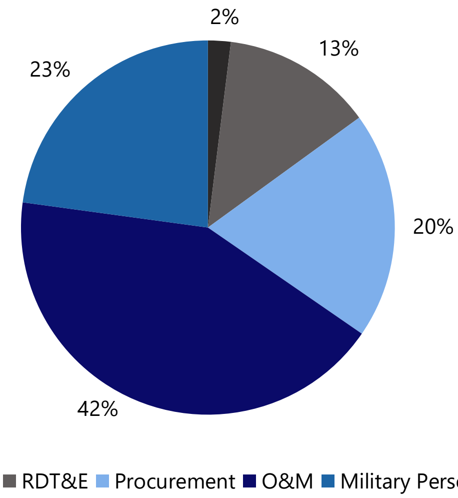
Unlike the cyclical ebb and flow of supply and demand in many commercial sectors, the defense sector is influenced by government spending. Customers are far fewer in number than other markets, which poses a risk as the sector is dependent on the budget set by the party in power. However, U.S. government's unique requirements make it difficult for new entrants to compete. Often, defense stocks are seen as hedges against economic downturns because revenue is not directly driven by changes in economic activity. Defense contracts also include price escalators that allow companies to pass on changes in inflation. However, there can be links between defense and the broader economy. The defense sector is also characterized by long product cycles and stable pricing, which are attractive from an investor's standpoint. Long product cycles allow manufacturers to benefit from learning curve advancements, resulting in higher margins. Once the Department of Defense has decided on a manufacturer, pricing tends to be fairly stable. Bidding on defense contracts is less common than other government contracts, such as agricultural supplies. Large companies with clear cost advantages and proven track records tend to win contracts easily. The uniqueness of the defense sector can also be highlighted from the fact that Congress and senior military leadership are very influential in determining what or how much is purchased.

Industry Analysis

Defense sales should be bolstered by international demand, and a notable increase in the U.S. defense budget in the era of President Trump. Deal activity has been strong and is expected to accelerate further as visibility surrounding government spending increases. Trump included an increase in defense spending for 2018 of about $25 billion to $686 billion, the largest ever if enacted. These increases will not be effective until years ahead. Investors should view geopolitical tension and the the administration's reprioritization of defense as indicators of health in the sector.

EXHIBIT II

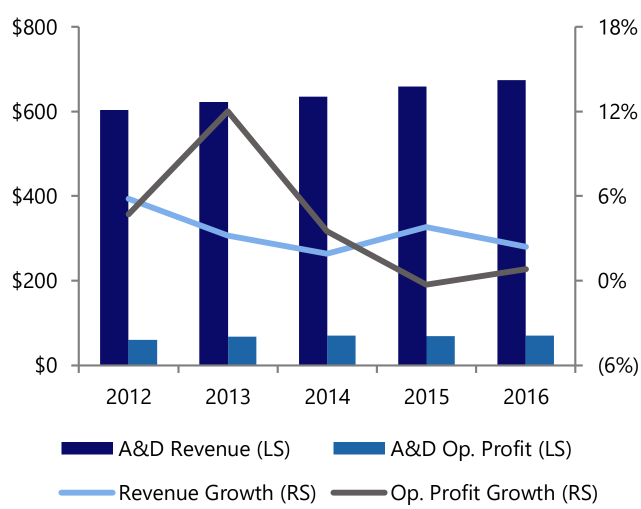
Proposed FY 2018 Base Defense Budget Plan



Source(s): U.S. Department of Defense

EXHIBIT III

Subsector Revenue & Operating Profit (B)



Source(s): Deloitte

Pentagon Budget Breakdown

The U.S. defense spending budget submitted to Congress for the fiscal year 2019 is estimated to total $716 billion. The budget is composed of three key components. First, the base budget, used to keep the department functioning and to secure multi-year contracts, is set at $617 billion, up 7.2% year over year. Second, $69 billion will be allocated to Overseas Contingency Operations to fund the requirements of ongoing wars. Third, $30 billion is allocated to nuclear development programs at the Department of Energy and defense-related activities with the FBI. The budget represents 3.50% of U.S. GDP and grows the force by 26,000 troops. Adjusted for inflation, the 2019 defense spending budget is 9.67% higher than that of the last year of the Obama Administration. According to Defense Secretary Jim Mattis, the aim of the increase is to modernize arsenals of the force to address the changing forms of warfare.

Missile Defense

Over fears arising from North Korea's ballistic missile and nuclear programs, the budget allots $9.92 billion to missile defense, up 25% from the Obama Administration's budget. Missile defense contractors that are expected to benefit from increased spending include Boeing, Raytheon, and Lockheed Martin.

Navy

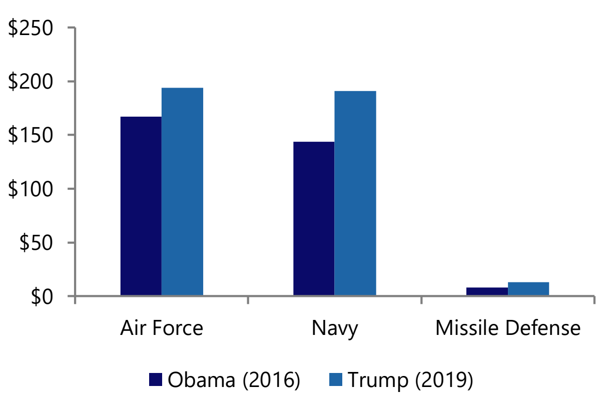
The budget proposes a $191 billion capital allocation to the Navy, calling for the acquisition of 111 vessels over next 5 years. The budget allocates $59 billion to procurement to purchase 10 new ships, including 3 Arleigh-Burke Destroyers in fiscal 2019 and 54 more ships throughout the forward 5-year period. The procurement budget will likely benefit shipbuilders, namely General Dynamics, who was awarded a $696 million contract to build the ships by the Pentagon. Due to the budget's call for onboard missile system upgrades, combat suppliers including Lockheed and Raytheon are also expected to benefit.

Air Force

The plan calls for the purchase of 24 Boeing F/A-18 Super Hornet jets and 77 Lockheed Martin F-35 jets in fiscal 2019. Trump has criticized the costs of Lockheed's F-35 jets, noted as the most expensive U.S. weapon systems. Despite Obama's plan to halt purchases of the F/A-18s, the low cost is likely why Trump has reversed the decision and plans to buy an additional 110 jets over the next 5 years. According to experts, Lockheed notably outperforms Boeing with respect to jet quality, yet lacks price competitiveness.

EXHIBIT IV

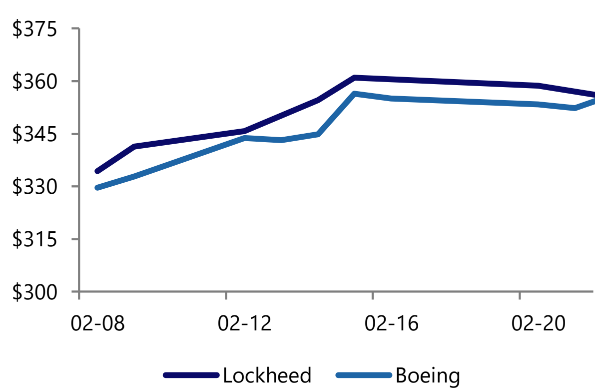
Relative U.S. Defense Budgets (B)



Source(s): U.S. Department of Defense

EXHIBIT V

Market Reaction Share Price Impact



Source(s): Capital IQ

Exhibit VI

QUIC Investable Universe

U.S. Aerospace & Defense			EV / EBITDA			Price / Earnings			
Company Name	Market Cap ($MM)	Enterprise Value ($MM)	LTM	2018E	2019E	2018E	2019E	FCF Yield	Dividend Yield
The Boeing Company	$188,499	$189,624	15.6x	14.0x	13.0x	22.7x	19.2x	5.2%	2.1%
Lockheed Martin Corporation	$96,126	$107,528	16.3x	13.3x	12.3x	21.9x	18.9x	1.3%	2.4%
General Dynamics Corporation	$65,222	$66,221	14.3x	14.0x	12.9x	19.6x	17.8x	3.2%	1.7%
Raytheon Company	$61,905	$63,555	nmf	12.8x	12.0x	22.2x	19.3x	3.4%	1.6%
Mean	$102,938	$106,732	15.4x	13.5x	12.6x	21.6x	18.8x	3.3%	2.0%
Median	$80,674	$86,874	15.6x	13.6x	12.6x	22.0x	19.1x	3.3%	1.9%

Source(s): Capital IQ

Portfolio Implications

With ongoing concerns relating to terrorist threats, civil wars, and border security, the U.S. Aerospace and Defense sector will likely continue to be the direct beneficiary of widespread geopolitical tensions. As U.S. defense budgets continue to increase and international sales remain strong, the QUIC Industrials team expects that most of the U.S. defense contractors will see demand increases in 2018. However, with stocks in the sector up over 60% relative to the 25% appreciation of the broader S&P 500 index since the election, the QUIC Industrials sector believes that most of the gains in the space have already been made. Even if the government is able to increase the defense budget by more than is currently expected given the limitations of sequestration and competing fiscal priorities, such as health care, most of the U.S. defense contractors will likely not see incremental revenue until at least 2019, as a result of the lag between when capital is appropriated by Congress and when money is actually spent by the military. Additionally, although the new administration has promised increased spending on national security, the government will continue to look for the best technology at the most affordable price. Extending beyond President Trump's personal negotiations to lower the price for a few big-ticket programs, such as the Boeing 747 replacements, this also means the transition away from cost-plus deals to fixed-price contracts for domestic suppliers. Looking ahead, elevated pricing pressure in the sector will likely cause U.S. defense contractors to experience margin compression. While companies will be able to leverage cost structure rationalizations to bid more competitively on defense programs, the majority of these savings will be transferred to the customer. Furthermore, any attempts to generate cost synergies through acquisitions will have to fall within the mid to small end of the deal range given the Pentagon's view of mergers between primes. Ultimately, the QUIC Industrials team currently sees the industry economics as relatively unfavourable compared to the other sectors within our coverage universe and will continue to monitor the space for a change in market dynamics.

References

1. Bloomberg
2. Capital IQ
3. Deloitte
4. Fidelity
5. PwC
6. S&P Global