

Industry Top Trends 2018

Aerospace and Defense



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Overview

- **Ratings Outlook:** Rating trends across the global aerospace and defense industry have remained stable on increased defense spending in the U.S. and Europe and higher aircraft production rates, which have supported elevated demand for commercial aerospace suppliers. However, some suppliers' credit profiles have become strained because of operational problems and required investments to meet the increased production.
- **Forecasts:** S&P Global Ratings expects that the credit ratios of global aerospace and defense companies will improve in 2018 on moderate revenue growth and higher margins, although this improvement will likely be constrained by the large U.S. defense contractors (which will return most of their cash to their shareholders) and the impact of certain debt-financed acquisitions.
- **Assumptions:** We expect that the volume of commercial aircraft orders will be flat-to-declining in 2018 but anticipate that production will increase modestly at Boeing and Airbus. In the U.S., we expect defense spending to rise moderately next year, though this increase could accelerate if Congress approves higher levels of spending. We also anticipate that defense spending in most European countries will grow somewhat during 2018.
- **Risks:** The largest risk facing the commercial aerospace industry is the ongoing shift in the relationship between aircraft manufacturers and their suppliers, which could negatively affect suppliers' revenue and earnings. For U.S. defense contractors, political concerns and competing fiscal priorities that limit the growth of military spending are the key risks to further growth. In Europe, the key risks facing defense contractors include possible fallout from Brexit negotiations, issues with their program execution, and corruption probes.
- **Industry Trends:** The commercial aerospace market is softening somewhat but remains strong. Increased defense spending in both the U.S. and Europe should continue to support demand in those markets.

Ratings trends and outlook

Global Aerospace and Defense

Chart 1 – Ratings distribution

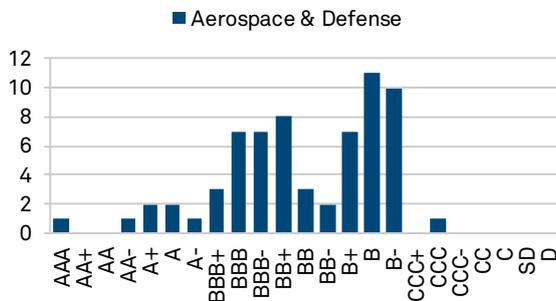


Chart 2 – Ratings distribution by region

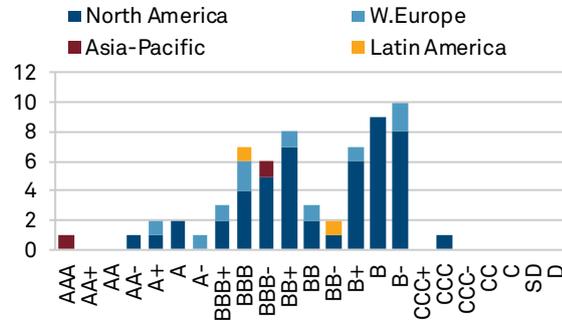


Chart 3 – Rating outlooks

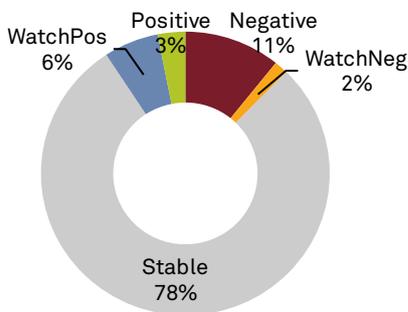


Chart 4 – Rating outlooks by region

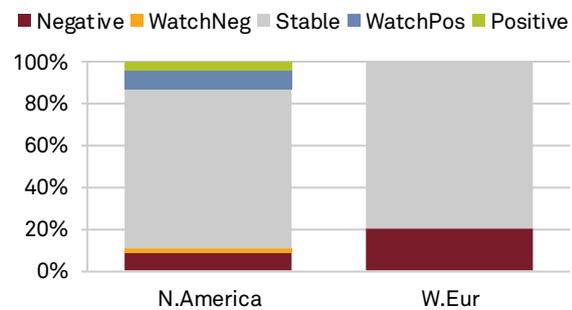


Chart 5 – Rating outlooks net bias

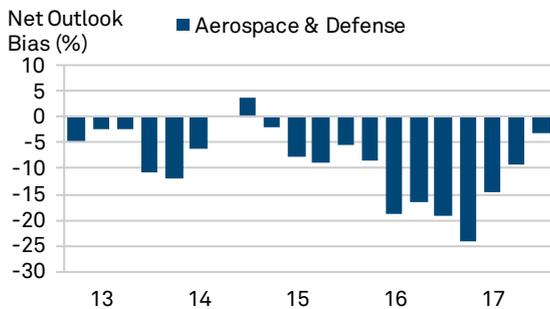
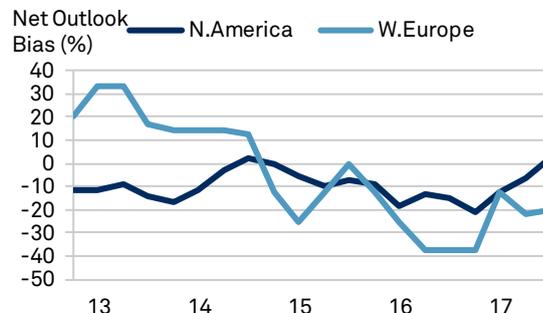


Chart 6 – Ratings net outlook bias by region



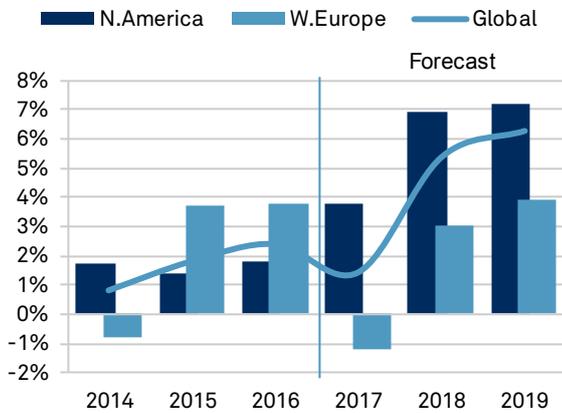
Source: S&P Global Ratings. Ratings data measured quarterly with last shown quarter ended Sept. 30, 2017.

Because we currently have stable outlooks on almost 80% of the aerospace and defense (A&D) companies that we rate, we do not expect that there will be many rating changes in this segment over the next 12 months. However, there is a negative bias among the companies that do not have a stable outlook, thus any rating actions will likely be negative. This negative bias has lessened since earlier in the year because we have downgraded some of the companies that we previously had negative outlooks on and revised our outlooks on others back to stable. The vast majority of our outlooks on North American A&D companies are stable and most of the non-stable outlooks are related to pending acquisitions. European-based A&D companies make up only a small portion of our global portfolio. The negative outlooks that we have on a few European A&D companies mainly reflect company-specific factors.

Industry forecasts

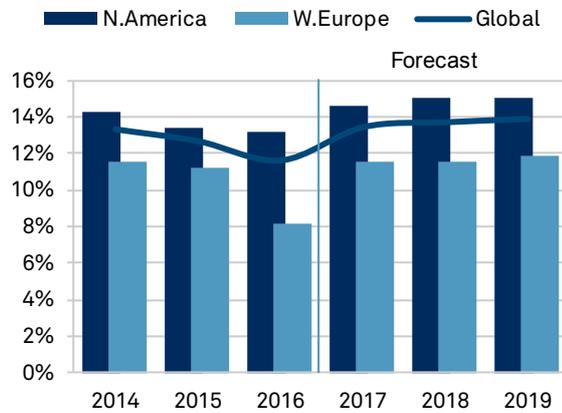
Global Aerospace and Defense

Chart 7 – Revenue growth (local currency)



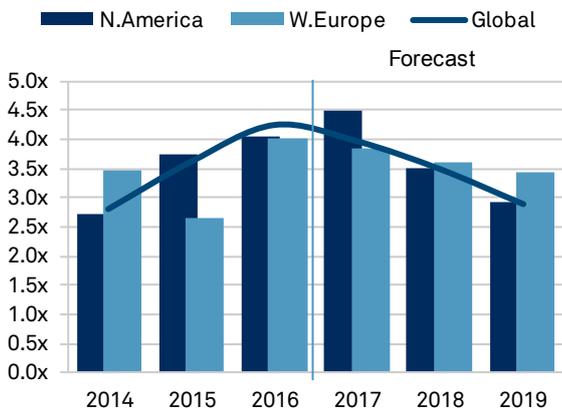
Revenue growth should accelerate somewhat in 2018 and 2019 as the production rates of commercial aircraft increase and defense spending rises in the U.S. and Europe.

Chart 8 – EBITDA margin (adjusted)



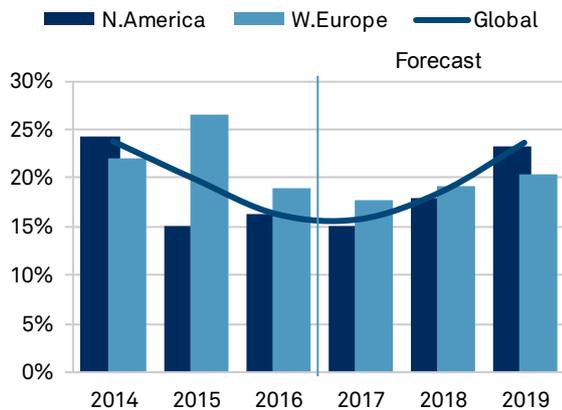
EBITDA margins should improve slightly as aerospace suppliers improve their operating efficiency and their volumes increase. This improvement will be offset by added pressure on defense companies' margins despite their higher sales.

Chart 9 – Debt to EBITDA (median, adjusted)



Leverage should decline as earnings increase, although this decline may be offset if larger U.S. firms choose to allocate more of their cash flow to shareholder rewards or acquisitions.

Chart 10 – Funds from operations to debt (median, adjusted)



Companies in this sector should also see their cash flow improve as their earnings increase.

Source: S&P Global Ratings. Revenue growth shows local currency growth weighted by prior-year common-currency revenue-share. All other figures are converted into U.S. dollars using historical exchange rates. Forecasts are converted at the last financial year-end spot rate.

Key assumptions

Commercial Aerospace

1	<p>Aircraft orders will likely be flat to declining</p> <p>Since peaking at a record of over 3,300 in 2014, the number of large aircraft orders at Boeing and Airbus have declined steadily, which is a trend that we expect to continue over the next few years. The number of orders in 2017 will likely come in at less than the approximately 1,450 aircraft we expect the manufacturers to deliver this year and could even reach the lowest level since 2010. For 2018, we expect that the number of orders will likely remain flat compared with 2017 because most of the near-term demand has been met, the manufacturers' large backlogs are leading to long wait times for popular aircraft, and there are few new models to drive increased sales. Widebody sales have been particularly weak, especially for the largest aircraft such as the Boeing 747 and Airbus A380, although these sales may pick up when the airlines begin to replace their older midsize widebodies, like the Boeing 777 and Airbus A330.</p>
2	<p>Rising revenue on increasing production</p> <p>Despite the lower overall level of aircraft sales, large backlogs (of seven to eight years in some cases) for popular models like the Boeing 737 and 787 and Airbus A320 and A350 are supporting increased production rates for those models. This should lead to increased revenue for most aircraft manufacturers and suppliers in 2018. However, this production growth may not help suppliers that have a large exposure to widebody aircraft, which are seeing production cuts, or other areas of the market that remain weak (like business jets, regional jets, and helicopters).</p>
3	<p>Margins and cash flow should improve</p> <p>The large number of new program launches and significant increases in production rates in recent years have increased the revenue of many firms in the commercial aerospace sector, though these same factors have also weakened some companies' margins and cash flow. In addition, some suppliers have experienced operational problems or program delays that have negatively affected their performance. Now that the increases in their rate of production have slowed and there are fewer new programs being launched, most firms should see their margins and cash flow improve in 2018. However, efforts by the original equipment manufacturers (OEMs) to reduce their costs could limit the improvement in some of their suppliers' margins.</p>

Chart 11 – Large commercial aircraft orders

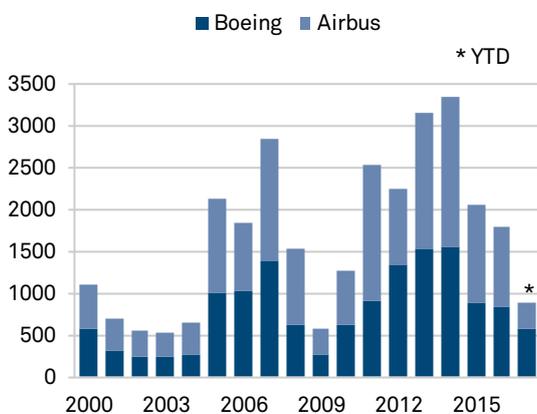
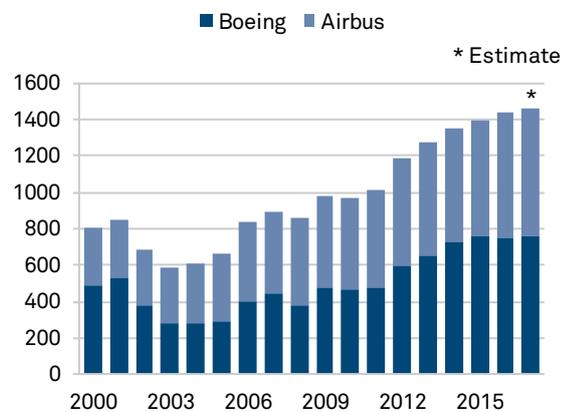


Chart 12 – Large commercial aircraft deliveries



Source: Manufacturers' websites, S&P Global Ratings

U.S. Defense

1	<p>Increased revenue as defense spending rises</p> <p>We expect most U.S. defense contractors to see increased revenue in 2018 as U.S. defense budgets continue to increase and international sales remain strong. However, the pace of growth will vary by company depending on which programs they are on or what parts of the market they address. Government services contractors will likely see flat-to-modestly positive growth in 2018 because this market is only now beginning to recover from significant reductions in demand in recent years. If the U.S. defense budget increases by more than we currently expect, most contractors likely won't see the additional revenue until at least 2019 due to the lag between when money is appropriated by Congress and when it is actually spent by the military.</p>
2	<p>Margins likely to moderate</p> <p>The U.S. government continues to look for the best technology at the most affordable price even though overall defense spending has increased. Therefore, we expect that the elevated pricing pressure in this industry will persist. Most companies have worked to rationalize their cost structures in order to bid more competitively on defense programs, though much of these savings are being passed on to their customers, which has limited any material improvement in their margins.</p>
3	<p>High level of shareholder returns at large firms</p> <p>Most large U.S. defense contractors continue to generate solid cash flow and maintain sizable cash balances, which has led many of them to increase their level of share repurchases and dividends. We do not believe that this trend will lead to a general decline in credit quality for these companies unless their shareholder rewards exceeds their cash flow--which would materially reduce their cash balances or increase their debt--or they increase their acquisition activity without reducing their share repurchases. The improving prospects for organic growth could reduce some of the pressure to maintain such a high level of shareholder returns, which should leave the companies with more cash to spend on internal investments or mergers and acquisitions (M&A).</p>

European Defense

1	<p>European defense spending moving up, a little</p> <p>Against a backdrop of heightened regional and global security threats and increased political pressure--especially from the Trump administration--we expect that European defense spending will increase slightly in the years ahead. The North Atlantic Treaty Organization (NATO) estimates that its members (excluding the U.S.) will increase their defense spending by 4% to about \$300 billion in 2017. We have also seen renewed interest in defense cooperation in Europe, which could spur the creation of new defense and security programs. In addition, the conditions in the traditional export markets for European defense companies, such as the Middle East, are driving increased defense spending, which could further support demand. However, government budgets in certain key countries, such as the U.K., will remain constrained. And any increase in defense spending will take time to appear in contractors' financial results because there is a time lag between when governments increase their defense budgets and when the money is actually spent by their militaries.</p>
2	<p>Margins to remain below those of U.S. peers</p> <p>Defense companies based in Europe, the Middle East, and Africa (EMEA) continue to exhibit weaker margins than their U.S. peers because government contracts in Europe remain highly regulated and competitive and are constrained by fixed prices and budgetary pressures that limit spending levels on new programs, which we expect to continue. Cost reductions, efficiency gains, and the disposal of underperforming segments will be the main opportunities for EMEA-based companies in this industry to improve their margins.</p>
3	<p>Continued moderate financial policies</p> <p>We do not expect there to be major changes in the financial policies of the main European defense players. We anticipate that these companies will remain focused on securing new orders while executing efficiently on their existing programs. Industry indicators suggest that conditions will support improved cash flow generation, though we do not expect there to be any major mergers or acquisitions in this segment (although there may be some midsize bolt-on deals to strengthen their market positions). Additionally, we anticipate that the level of shareholders returns will remain generally stable.</p>

Key risks and opportunities

Commercial Aerospace

1	<p>Evolving relationship between OEMs and suppliers</p> <p>We expect that the relationship between aircraft manufacturers and their suppliers will evolve over the next few years as the OEMs try to reduce their costs and increase their control over aircraft development and production. Boeing has been particularly aggressive in attempting to reduce costs through its “partnering for success program” and has increased its presence in the lucrative aftermarket, brought the production of certain components back in-house, and is developing the capability to produce components that it hasn’t historically made, like avionics. This trend could lead to reduced demand and lower margins for aerospace suppliers, though we expect that this shift will likely take a long time to develop. The threat, however, has prompted some suppliers to increase their negotiating leverage by expanding the scope of their operations through acquisitions. The largest example of this response being United Technologies’ plan to acquire avionics maker Rockwell Collins, which itself just acquired aircraft interiors specialist B/E Aerospace. We expect this trend of consolidation to continue in 2018.</p>
2	<p>Possible changes to international trade rules</p> <p>The commercial aerospace industry involves a complex global supply chain that could be disrupted by possible changes to trade agreements, especially in the U.S. and U.K. The Trump administration has proposed changes to the North American Free Trade Agreement (NAFTA), and has suggested pulling out of the agreement altogether, which could increase costs for the U.S. suppliers that moved their operations to Mexico to take advantage of the lower wage rates there. The U.K. is currently negotiating its exit from the European Union, which could eliminate its tariff-free access to the EU market. The country will also have to negotiate new trade agreements with non-EU countries, which could possibly make it a less attractive place for suppliers to locate their operations. If these negotiations have not been completed by the time the U.K. must officially leave the EU, trade between the U.K. and Europe could also be disrupted. Aircraft manufacturers have often used trade rules to try and stifle their competitors, such as the long-running World Trade Organization dispute over subsidies between Boeing and Airbus on large aircraft and between Bombardier and Embraer on regional jets. Most recently, Boeing won a preliminary 300% tariff on U.S. imports of Bombardier’s C-Series aircraft from the U.S. Commerce Department after it alleged that an order from Delta Air Lines was priced below cost. However, Bombardier may be able to avoid this tariff thanks to Airbus’ recent investment in the C-Series and the company’s plans to move production to the U.S.</p>
3	<p>Delivering on a huge backlog</p> <p>Both Boeing and Airbus have huge order backlogs and the waiting lists for some popular models stretch out seven to eight years. These backlogs represents a large amount of potential earnings and cash flow for the OEMs and their suppliers if they are able to increase their production efficiently. However, some suppliers have struggled to increase their production fast enough to keep up with the OEMs. Most notably, deliveries of the Airbus A320neo and Bombardier C-Series have been slowed by issues with Pratt & Whitney’s ramp-up of the production of its PW1000G family of engines. Research and development (R&D) costs will also likely decline because almost all of the new aircraft in development will enter production over the next few years, boosting the OEMs’ profitability.</p>

U.S. Defense

1	<p>Pace and size of defense budget increases</p> <p>Although we expect U.S. defense spending to increase over the next few years, the pace and size of the increase is still uncertain due to competing political and fiscal concerns. President Trump’s \$574 billion base defense budget proposal for fiscal-year 2018 calls for a 10% increase in spending from fiscal-year 2017 levels. In addition, some members of Congress have called for even higher levels of spending as there is added pressure on the government to increase military spending to offset previous cuts and address growing geopolitical instability (e.g., ISIS, North Korea, Russia, etc.). However, U.S. defense spending is still limited by sequestration and Congress faces competing fiscal priorities, like health care and tax reform, which could cause defense spending to increase at a slower pace than requested. Although we expect that Congress will either eliminate or temporarily waive sequestration to allow the government to increase the defense budget at a faster rate, nothing is certain in the current political environment.</p>
2	<p>International sales</p> <p>Sales to allies have offset the lower demand from the U.S. government for many domestic defense contractors in recent years. Many countries have been increasing their defense spending to address the resurgent threat posed by hostile states and international terrorism, a trend we expect to continue in 2018. The greatest increase in demand has been for missile defense systems, which countries use to defend themselves against missile attacks by Iran or North Korea. International sales typically carry higher margins than sales to the U.S. government, though they tend to be more difficult to predict and most countries have much smaller defense budgets than the U.S. Shifts in U.S. foreign policy under the Trump administration could be a mixed blessing for weapons exports. While the president has indicated that he would like allies to spend more on defense, they may not be inclined to buy weapons from U.S. defense companies.</p>
3	<p>M&A</p> <p>The pace of M&A in the U.S. defense sector has been increasing over the past few years and could accelerate further in 2018 as the visibility surrounding the government’s future spending improves. The recent announcement that Northrop Grumman plans to buy Orbital ATK could prompt other companies to pursue acquisitions that broaden their offerings to address high-priority areas of defense spending. In the government services space, there has been a significant amount of consolidation and intense price competition due to the lack of available work, which has favored companies with greater scale. We expect this trend to continue. Specifically, we anticipate that larger prime contractors will look to buy small- to mid-size companies to acquire new technologies or gain access to certain markets. However, we do not expect that any of the large prime contractors will attempt to merge with each other because the U.S. government has expressed concerns about the level of competition in its industrial base.</p>

Chart 13 – U.S. defense spending

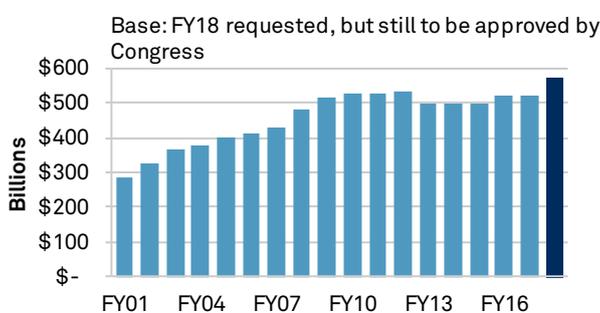
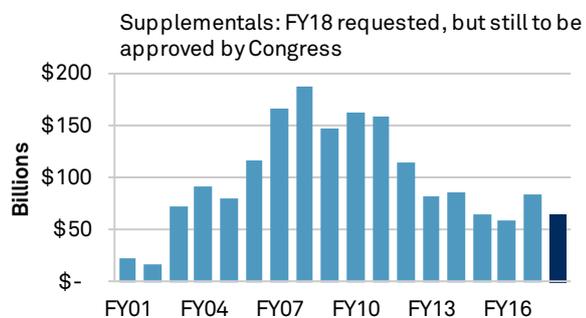


Chart 14 – U.S. supplemental war funding



Source: U.S. Department of Defense, S&P Global Ratings

European Defense

1	<p>Brexit risks disrupting supply chains and trade flows</p> <p>The U.K. is Europe's second-largest aerospace manufacturing nation (by turnover) after France and U.K.-based A&D companies provide a critical link in the high-value, high-tech global supply chain, either as prime contractors or suppliers. The U.K.'s departure from the European Union in March 2019 has the potential to create new trade barriers and disrupt supply chains and trade flows depending on the outcome of the negotiations. Specifically, U.K. defense contractors generated over £31 billion of revenue in 2016, of which over 90% came from exports.</p>
2	<p>Maintaining order backlogs and smooth project execution</p> <p>We expect European A&D companies to remain focused on winning new orders, to maintain their order books, and ensuring the smooth execution of their existing contracts, so that their production facilities remain fully utilized. Their backlogs provide a degree of revenue visibility over the next two to four years, depending on the business segment and lifetime of the underlying contracts, but additional costs can emerge if contracts are not won or renewed due to excess capacity.</p>
3	<p>Legacy issues of bribery and corruption</p> <p>Certain A&D companies in Europe have been the subject of ongoing legal investigations into cases of historic bribery and corruption. These cases are related to illegal payments that were made to suppliers, government officials, and intermediaries by the defense contractors. While we believe that such practices are no longer taking place, the risk from these legacy practices remains and could lead to fines and reputational damage, which could magnify any deficiencies in the companies' management and governance.</p>

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Related research

- Credit FAQ: Airbus' Investment Adds Lift to Bombardier's C-Series Aircraft, Turbulence to Narrow-Body Market, Oct. 20, 2017
- Credit FAQ: Behind M&A Activity, Economic Growth, And Other Key Issues Affecting Capital Goods, Aerospace and Defense, Oct. 16, 2017
- Credit FAQ: United Technologies' Acquisition of Rockwell Collins Is Changing The Aerospace Industry Competitive Landscape, Sept. 18, 2017
- Few Surprises And Mostly Positive For Contractors In Fiscal-Year 2018 Defense Budget Proposal, May 25, 2017
- President Trump's Call For Increased Military Spending Should Support U.S. Defense Contractors Credit Quality, March 16, 2017

Cash, debt, and returns

Global Aerospace and Defense

Chart 15 – Cash flow and primary uses

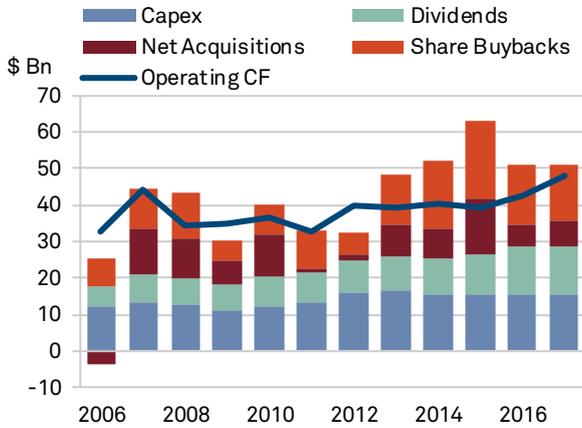


Chart 16 – Return on capital employed

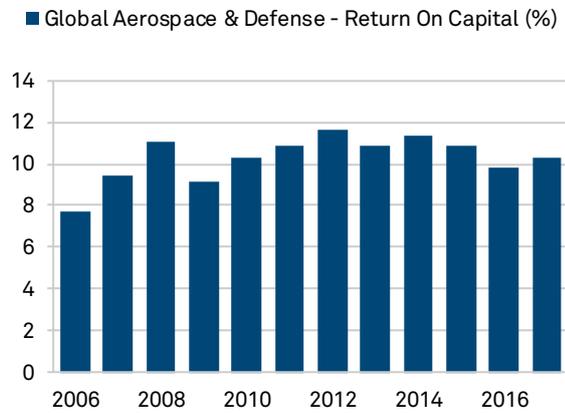


Chart 17 – Cash and equivalents to total assets

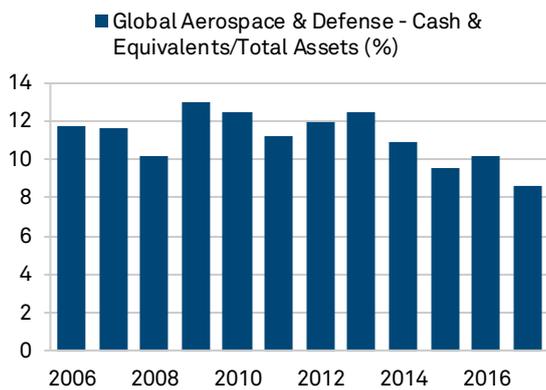


Chart 18 – Total debt to total assets

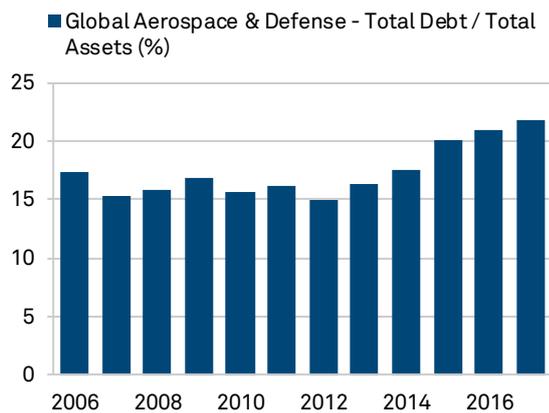


Chart 19 – Fixed versus variable rate exposure

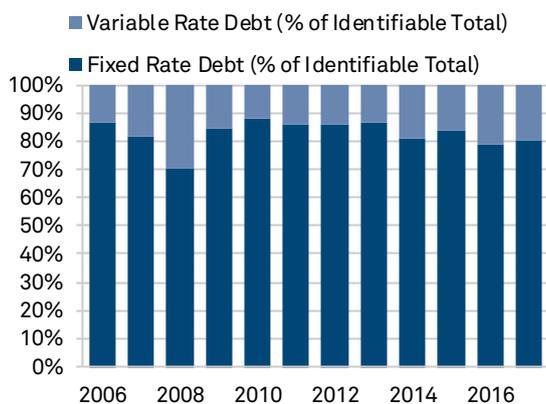
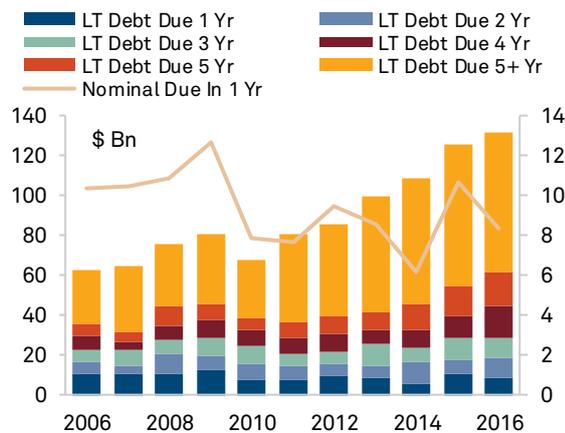


Chart 20 – Long-term debt term structure



Source: S&P Global Market Intelligence, S&P Global Ratings calculations

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