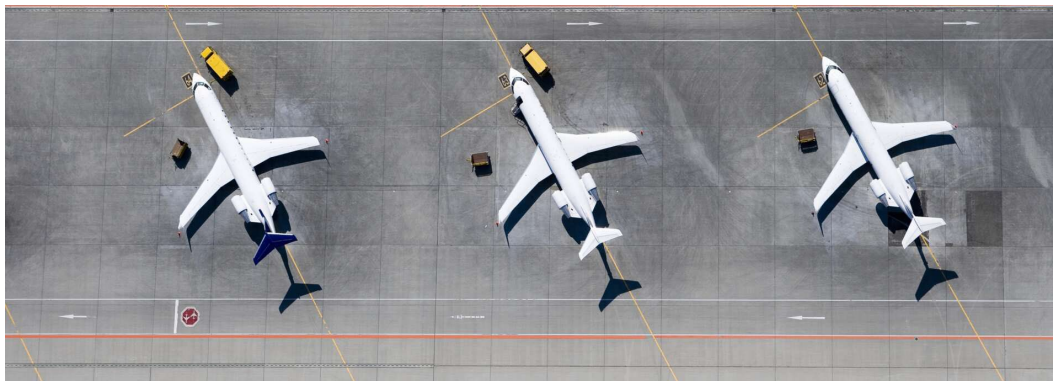


## Aerospace and Defense

### Manufacturing as fast as the supply chain will allow

January 14, 2025

This report does not constitute a rating action.



#### What's changed?

**Boeing's setbacks** delayed its aircraft production recovery and put significant pressure on its finances and ratings.

**Many issuers are building as fast as their supply chain will permit them to.** Soaring demand is still being weighed upon by persistent supply chain/production turbulence.

**Trump 2.0 brings uncertainty to the defense world.** Trump might pursue a defense policy that leaves European countries having to fill a military void.

#### What are the key assumptions for 2025?

**Domestic and international flying hours will continue to hit record highs,** bolstering already high demand for new aircraft and aftermarket services, except perhaps in APAC.

**Airframers boost build rates.** Boeing ramps up 737 MAX production and deliveries, while Airbus increases production of its A320 models.

**Defense demand will remain elevated for some time** as many governments realize that 20-30 years of peacetime has left their armed forces too small and antiquated.

#### What are the key risks around the baseline?

**Delay in Boeing's production recovery** would hurt suppliers and airline customers and leave an opening for Airbus.

**Supply or labor constraints could hinder increased production,** eroding profitability.

**Some problems are expensive to fix, and the next one is always around the corner.** Boeing, for example, is still recovering from widespread quality problems uncovered in the January 2024 blowout.

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# Ratings Trends: Aerospace and Defense

Chart 1  
Ratings distribution

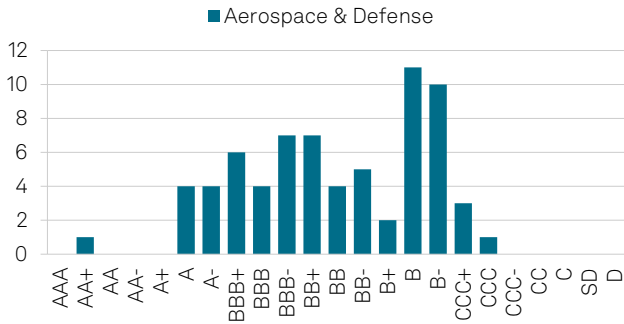


Chart 2  
Ratings distribution by region

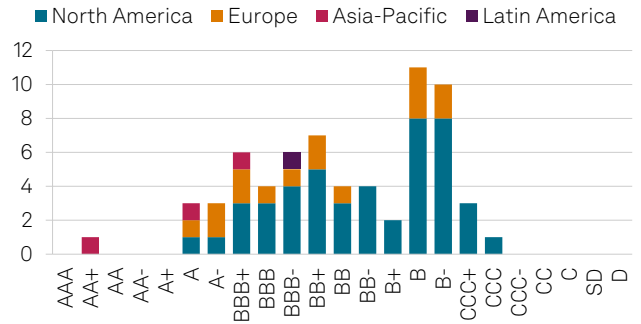


Chart 3  
Ratings outlooks

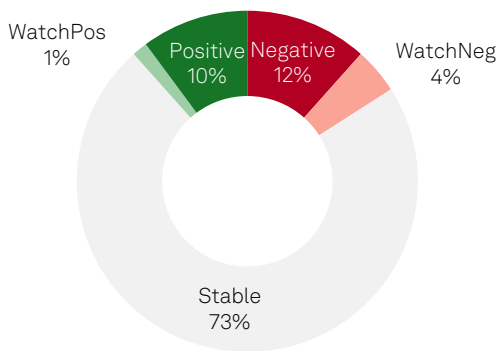


Chart 4  
Ratings outlooks by region

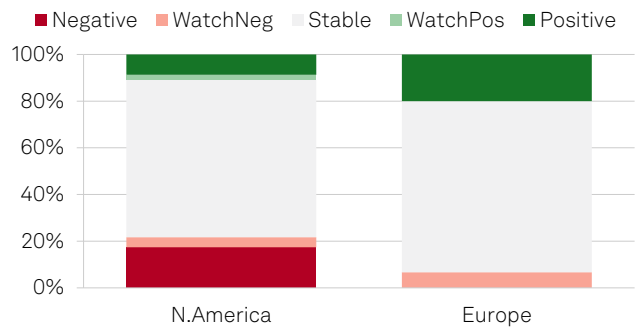


Chart 5  
Ratings outlook net bias

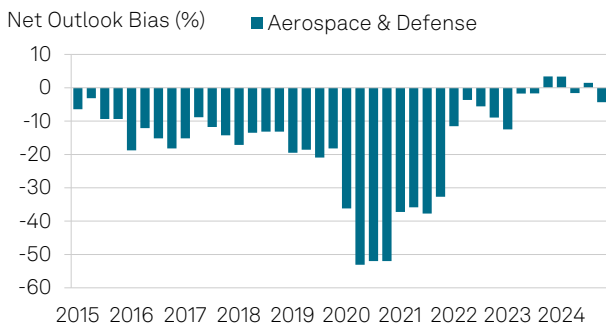
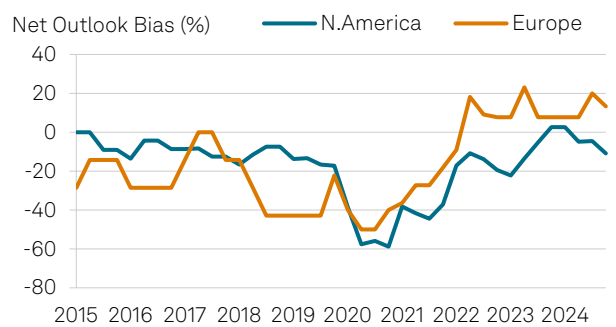


Chart 6  
Ratings net outlook bias by region



Source: S&P Global Ratings. Ratings data measured at quarter-end.

# Industry Outlook: Commercial Aerospace

## Ratings trends and outlook

Ratings are largely stable and globally are balanced between positives and negatives for outlooks that are not stable. The positive outlooks include aircraft component makers benefiting from strong demand for new aircraft and support for in-service planes. They also include companies taking advantage of strong cash flows to reduce debt, especially with higher interest rates making refinancing less attractive. The negative outlooks include aerospace suppliers dealing with the effects of manufacturing flaws, labor disruptions, supply chain inefficiencies, as well as aggressive financial policies. The larger number of negative outlooks in North America, compared with Europe, reflects the prevalence of suppliers to Boeing and financial sponsor-owned U.S. issuers, which typically have high debt levels and are very sensitive to rising interest rates.

## Main assumptions about 2025 and beyond

### 1. New aircraft production remains below demand.

Both Airbus and Boeing are sold out for years and will continue to ramp up production as best they can. Supply chain challenges are likely to persist through 2025 and into 2026.

### 2. Demand for air travel stays strong.

Revenue passenger kilometers (RPKs) are likely to continue hitting record highs, fueling solid demand for aftermarket services.

### 3. Global risks and regional conflicts motivate strong defense spending.

Many manufacturers have both commercial aerospace exposure and defense exposure, so will benefit from robust demand from both sides.

**Boeing aims to recover from quality control problems and a strike by its largest union.** The company reached a contract agreement with its machinists on Nov. 4th, ending a 53-day strike. The work stoppage came as Boeing was poised to raise production and deliveries of its 737 MAX aircraft from subdued levels where the company held them for most of the year. The company had been overhauling its MAX manufacturing process following a mid-air fuselage panel blowout in January. Ramp-up of MAX production has been pushed out more than a year because of it. We expect MAX deliveries of approximately 250 planes in 2024, down from around 500 before the January incident. The company is targeting 38 planes per month by mid-2025, which we view as key to generating positive free cash flow. Output of widebody 787 aircraft, which was not directly affected by the overhaul and strike, is on track to average five planes per month.

In addition to restarting MAX production, the company has a new CEO tackling senior management changes, cutting its workforce by 10%, returning the defense business to profitability, and potentially paring its portfolio. It is seeking FAA approval for two 737 MAX model variations and working to ensure its long-delayed 777X widebody will start deliveries in 2026. Boeing is also scheduled to close the acquisition of Spirit Aerosystems, maker of fuselages for the MAX, in mid-2025. The original equipment manufacturer (OEM) sets the pace for component makers in its supply chain, and they are hesitant to outpace the OEMs until they demonstrate stability.

The new U.S. administration's tariff plans may complicate Boeing's efforts to deliver its remaining inventory of planes built before the pandemic for Chinese airline customers, especially if China

retaliates. Tariffs on imports from Mexico and Canada would also make some components used in new planes significantly more expensive.

**Airbus produces what the supply chain will allow**, and our rated EMEA-based suppliers will continue to reap the upside. Following a flurry of deliveries in Q2 2024 and a record 123 deliveries in December, Airbus finished the year with 766 commercial aircraft deliveries--to 86 customers--in calendar 2024. This means that the group almost met its target of 770 aircraft that it had set itself in June 2024 (at the time revised down by 30 aircraft from 800 for the year, due to continued supply chain disruptions, particularly in engines, cabin, and equipment, and aerostructures). Airbus relies on thousands of suppliers for on-time delivery and, ultimately, revenue growth and cash generation. For large commercial aircraft engines, key suppliers are Pratt & Whitney (PW1500 G for the A220 and PW1000 GTF for the A320 family), Safran's and General Electric's CFM (LEAP-1A for the A320neo [new engine option] family), and Rolls-Royce (Trent 7000 for the A330 and Trent XWB for the A350). We note that engine makers improved delays as 2024 progressed and this helped Airbus towards its delivery target for the year. Despite this, we expect that supply chain challenges will persist in 2025, which might weigh on Airbus's efforts to raise production rates. Airbus targets production rates of 75 A320s per month by 2027, 14 A220s per month by 2026, and 12 A350s per month by 2028.

**Problems with new engine models have extended the reliance on older equipment.** In 2023 RTX subsidiary Pratt & Whitney disclosed a flaw in its new PW1100 Geared Turbofan (GTF) engines that required remediation, and we estimate it is only about a third of the way through the process of fixing it. GTF engines power a significant portion of Airbus A320 and A220 planes that are in high demand. RTX has had to compensate airline customers for the loss of use of grounded aircraft during the remediation process. The pace has been somewhat constrained by limited facility and labor capacity.

GE Aerospace's new LEAP engine has also (albeit to a much lesser extent) faced durability issues that have limited time-on-wing. The company expects to fix these shortcomings with updated components that are currently being introduced.

Engine makers also point to forged metal castings as a limiting factor to ramping up production, though P&W and GE are both reporting double-digit output growth.

New aircraft engine model introductions typically result in losses for the engine makers early in equipment life cycle and long tail of solid profits while the engines are maintained. We now expect planes with the new-generation engines will displace installed engines more slowly than previously expected. And these delays will in turn delay the delivery of new planes, resulting in extended use of older ones and driving demand for aftermarket services and parts. And maintaining in-service equipment has better margins than supplying OEM parts does.

**Rolls-Royce Plc's civil aerospace operating profit should continue growing**, up to 18% in the first half of 2024 (from 12.3% in the first half of 2023), with higher contribution of aftermarket services, with higher margins on long-term service agreements and better business jet performance. The continued increasing engine flying hours support growing cash flow generation and higher maintenance, repair, and overhaul (MRO) activity. However, the group has experienced delays in shop visit servicing times, which impacted cash flow by around £150 million-£200 million in 2024, and the effect could be greater in 2025 if supply chain challenges persist. Nonetheless, we expect Rolls-Royce's credit quality to improve as its balance sheet continues to strengthen.

**Strong business jet sales to continue, with private buyers leading demand.** New aircraft model introductions in 2024, including General Dynamics's Gulfstream G700 and Textron's Citation Ascend, spurred interest across segment classes. We expect demand for larger business jets with longer ranges to remain a key driver of interest in new planes. Preference for advanced

technology and fuel-efficient aircraft reflects a return to pre-pandemic travel patterns for corporate and wealthy fliers, emphasizing the benefits of on-demand flights and unique point-to-point routes. Additionally, access to business jets is broadening, with fractional ownership and jet card programs gaining popularity. Healthy demand bodes well for suppliers. Supply chain bottlenecks, however, continue to challenge production rates and are expected to persist in the near term. As a result, the slower delivery of new aircraft is likely to give a boost to MRO providers in the short term.

## Credit metrics and financial policy

### **Credit measures should continue to improve for most commercial aerospace issuers.**

Favorable demand and improving OEM build-rates support revenue growth and margin expansion across the sector. Both major airframers face supply-chain constraints and labor inefficiencies that will likely persist to some extent, but we estimate higher average earnings and cash flow for civil aerospace companies. For higher-rated companies in that segment, we anticipate that financial policy will set the pace of financial measure improvement. Return of capital to shareholders through share repurchases will remain the primary use of free operating cash flow. Merger and acquisition (M&A) activity, while subdued of late in the commercial aerospace supply chain, may be more likely with the change in regulatory orientation under a new administration.

Credit measures for lower-rated companies are sensitive to modest earnings and cash flow growth and likely to benefit from higher build rates. Moderating interest rates should also favor issuers with high debt burdens and are sensitive to liquidity pressures.

## Key risks or opportunities around the baseline

### **1. Further Boeing disruptions.**

These could delay the restart of the 737 MAX and other aircraft model production.

### **2. Unexpected challenges in the A321LXR and A350F.**

Our base case is for a smooth take-off for these two new Airbus models.

### **3. Tariffs and increased obstacles to trade.**

U.S. tariffs could make planes more expensive.

**For Boeing, unforeseen quality control or component supply constraints** could delay restart of the 737 MAX and other aircraft model production.

**Any unexpected challenges with the introduction of the A321LXR and A350F.** The entry of any new aircraft model to service is always important, but our base case is for a smooth take-off for these two Airbus models.

**Trump 2.0 tariffs and increased obstacles to trade.** U.S. tariffs on China, could be met with retaliation, making Boeing planes more expensive in an important market. Tariffs on imports from Canada and Mexico would make certain components more expensive for the OEM.

# Industry Outlook: U.S. Defense

## Ratings trends and outlook

Our ratings on U.S. defense companies should remain mostly stable amid continued robust government spending. While real dollar outlays could decline slightly in 2025, overall spending remains high and far-reaching after years of material growth. Strong earnings and cash flow performance should continue, particularly for the larger, higher-rated issuers. However, these companies tend to prioritize shareholder returns as a use of discretionary cash flows, and we expect this will continue, thereby limiting improvements in credit measures and ratings. While smaller, lower-rated companies could face additional challenges if new programs are delayed, they could benefit from a decline in interest rates.

## Main assumptions about 2025 and beyond

### 1. Defense spending will remain strong, though it could decline in real dollar terms.

We expect budgets will continue to support defense spending in the face of various threats.

### 2. Near-peer threats will drive spending priorities.

Conflicts in the Middle East and Ukraine and continued tensions with China underpin U.S. strategic and defense priorities. As such, we expect limited material downside risk to defense spending in the U.S.

### 3. Companies will emphasize shareholder returns.

Cash flows are likely to remain high, especially for the larger firms, who are likely to prioritize share repurchases or dividends, limiting improvements to credit metrics.

**Defense spending could decline in real dollar terms but will remain strong.** After significant growth in recent years, a flattening is likely, with a small increase in nominal spending potentially resulting in a small decrease in real dollar spending. For example, the proposed 2025 U.S. defense budget of \$850 billion would be up 1% from last year. This amount is down slightly in real dollar terms after adjusting for inflation but is still an increase from where the budget stood a few years ago and signals that the appetite for defense spending remains strong.

**Specific threats drive spending priorities.** The proposed defense budget focuses on enhanced readiness and modernization efforts, space, missiles and missile defense, artificial intelligence research and development (R&D), and nuclear deterrence in response to recent conflicts in the Middle East and Ukraine, as well as continued perceived threats from China. In terms of specific programs, funding is focused on Virginia- and Columbia-class submarines built by Huntington Ingalls and General Dynamics, and aircraft carriers and Arleigh Burke class destroyers built by Huntington Ingalls. Major aircraft programs including F-35 fighter made by Lockheed Martin, the B-21 strategic bomber made by Northrop Grumman, and unmanned aircraft systems are likely to remain well funded, though future block sizes may come under pressure. International sales growth is supported by allies' commitments to increase spending in response to heightened security concerns. Foreign sales comprise less than 20% of the largest defense contractor's revenue but generally contribute higher margins than domestic sales.

**Companies will emphasize shareholder returns.** Cash flows are likely to remain high, especially for the larger firms, despite the variety of factors creating uncertainty. Large firms may perceive greater opportunities for M&A under the new administration but are likely to continue to prioritize share repurchases or dividends, limiting improvements to credit metrics.

## Credit metrics and financial policy

While U.S. defense budget growth has flattened in recent years, spending remains robust and we expect most companies in the sector to generate ample free cash flow. Large strategic acquisitions that increase industry consolidation are unlikely, though the change in administration could open the door somewhat after the Biden administration's active stance regarding maintaining competition.

Prioritization of cash flow, whether for debt reduction or shareholder returns through dividends and share repurchases, will drive the direction of credit ratios for larger U.S. defense companies. Smaller companies with higher debt burdens will focus on rebuilding financial strength as they face likely declining, but still high borrowing costs and upcoming debt maturities.

## Key risks or opportunities around the baseline

### 1. Profitability risks.

Supply chain and labor inefficiencies, among other things, could pressure margins and cash flows, particularly on legacy fixed-price contracts.

### 2. The new administration's investment priorities.

Uncertainty regarding the new administration's spending priorities, timing, and DOGE add risk, particularly around the award of new contracts.

### 3. M&A activity may increase.

A more accommodating approach under the new administration could make deals more likely to pass regulatory review.

### Supply chain and labor inefficiencies and fixed-price contracts pose risks to profitability.

Fixed-price contracts were generally agreed to in a period of low inflation and higher labor productivity and do not accommodate current conditions. For example, Northrop Grumman took a sizable charge against its B-21 program, and Huntington Ingalls reduced expectations for Virginia-class submarine profitability as a result of these pressures. We anticipate that performance will improve as companies invest in workforce efficiency and supply chain capacity and older contracts roll off and are replaced with agreements that reflect current conditions.

**The next defense budget.** The industry is currently operating under a budget continuing resolution (CR) and the change in administration raises the likelihood that it will extend further, given the new administration will not take over until more than halfway through the current fiscal year and opt for a full-year CR and push to achieve its goals in the next year's budget. The inability to pass the 2025 budget in a timely manner will create delays for new contract awards. In addition, the new administration's advisory Department of Government Efficiency (DOGE) creates uncertainty that may cause companies to delay investment decisions.

It is not clear how much spending the administration can cut within the existing political and legal framework, and on what timeline. At this stage, wholesale spending cuts seem unlikely, especially in the defense space. However, we see the risk that the procurement process might be affected with new awards potentially delayed as a result. This could push some spending into the future, creating cash flow volatility, particularly for smaller firms.



# Industry Outlook: European Defense

## Ratings trends and outlook

For many European defense manufacturers, the trends for 2025 will be similar to those in 2024, but with added tailwinds. The wars between Russia and Ukraine and between Israel and its neighbors, coupled with uncertainty about the incoming Trump administration's approach to these conflicts and to the U.S.'s role in NATO continue to sharpen political minds and drive rising defense budgets in Europe. We note reports that European NATO members are currently discussing a potential 3% target (of defense spending versus GDP) and also the potential formation of a joint project fund of EUR500 billion or more for shared defense projects.

Backlogs, revenues, and EBITDA continue to rise for our rated issuers, and robust cash flows are almost a given through 2025. Our rated issuers will continue to benefit from solid industry prospects over the medium to long term, with high demand for their products and services. We expect few rating actions in 2025 as issuers will maintain strong balance sheets despite tolerance for opportunistic M&A and share buybacks.

## Main assumptions about 2025 and beyond

### 1. Defensive urgency continues to fuel strong operating performance.

Demand for some battlefield products and services remains at a record high, and our issuers have been winning some very large orders, specifically in the air defense segment.

### 2. Rated issuers seem well placed for the next Trump administration.

Many of our rated issuers, especially the primes, are well diversified with good exposure to the U.S. defense industry. Were Trump to step back from NATO, our issuers are also well placed to capture higher demand from European governments were they to hike spending to fill the void.

### 3. Demand will remain focused on short term battlefield needs.

We expect any issuers with exposure to munitions, radar, communication equipment and air defense technologies will benefit from current the geopolitical climate.

**European NATO members' defense budgets will increase** and defense expenditure as a percentage of national GDP will continue rising for many members. The Russia-Ukraine and Israel-Hamas wars have added further momentum to many European governments' appetite for such spending. NATO's European members are reportedly discussing a 3% target (of defense spending to GDP). The existing target is 2% and we expect 23 of NATO's 32 members to meet that target in 2024. However, several European members continue to lag and some face a challenge in hiking their defense spending at such a rate, given the state of their economies and existing budget pressures.

**Continued benefit from soaring demand and uncertainties around Trump.** European defense manufacturers, who tend to be more globally oriented than U.S. peers, are winning large contracts and several of our issuers have revised up their financial guidance (e.g. BAE Systems, Babcock, Israel Aerospace, Leonardo, Rafael, SAAB, and Thales). We also see benefits for Rolls-Royce and Safran.

The immediate need for battlefield equipment—radar, communications, and munitions—has resulted in large spikes in demand for certain products and services for some issuers. And many of our rated issuers, especially the primes, are well diversified, so were the incoming Trump



administration to step back from NATO, our issuers would be well placed to capture higher demand from European governments to fill the void.

Defense contracts tend to be long term and so are likely to provide support for revenues and profitability for many years to come. Any previously anticipated pressure on defense budgets due to post-pandemic bean-counting has abated.

## Credit metrics and financial policy

Pure-play defense issuers should continue to experience good backlog, revenue, and cash flow visibility, with stable credit metrics. Gradually improving credit metrics will likely be at least partly offset by increased M&A, dividends, and share buybacks, particularly among large defense contractors. Smaller, weaker contractors will continue to focus on rebuilding financial strength, although many are owned by private equity, which tends to emphasize immediate returns.

## Key risks or opportunities around the baseline

### 1. Trump takes an unexpected approach to existing conflicts or alliances.

Trump has promised changes in course toward certain geographies. This could also involve platforms and contracts.

### 2. Conflicts escalating/spilling over and impacting production.

Escalating conflicts or the spilling over of wars to pull countries like Iran into an all-out confrontation could mean some production facilities having more chance of being damaged. This is especially germane for rated issuers based in Israel.

### 3. Adventurous financial policies.

Investment-grade issuers that already pay for dividends and share buybacks could venture into opportunistic M&A.

### **The Trump administration takes an unexpected approach to existing conflicts or alliances.**

Following several years of stable defense policy, the U.S. could change tack once Trump takes office, ultimately changing course toward certain geographies, platforms, and contracts. However, in our view many rated defense issuers—the primes especially—are well diversified in their exposure to both the U.S. and Europe, meaning they should be able to capture new/changing demand regardless of political developments.

**Conflicts escalating/spilling over and impacting production.** Especially for our rated issuers based in Israel, escalating conflicts or the spilling over of wars to pull countries like Iran into an all-out confrontation could mean some production facilities having a heightened chance of being damaged. However, this is not currently in our base case.

**Adventurous financial policies.** Some investment-grade issuers that are already paying for dividends and share buybacks could venture into opportunistic M&A. However, we don't think opportunistic M&A or shifts in financial policy will lead to material ratings downside, as many players have healthy balance sheets and cash to deploy. Instead, any downside might come from financial underperformance or operational challenges.

## Related Research

- [Boeing Co. Ratings Affirmed On Greater-Than-Expected Equity Issuance; Remains On CreditWatch](#), Nov 1, 2024
- [Thales](#), Oct. 10, 2024
- [End Of Boeing Dispute Is Credit Neutral For Embraer](#), Sept. 16, 2024
- [Aerospace And Defense Company Thales Affirmed At 'A-' On Solid Operating Performance; Outlook Stable](#), Aug. 30, 2024
- [Leonardo SpA Outlook Revised To Positive On Deleveraging Prospects And Business Momentum; 'BBB-/A-3' Ratings Affirmed](#), Aug. 16, 2024
- [Airbus Can Accommodate Announced Operating Setbacks](#), June 26, 2024
- [Aernnova's Proposed Upsize And Extension Of Its Term Loan B Is Leverage Neutral](#), June 11, 2024

# Industry Forecasts: Aerospace and Defense

Chart 7  
Revenue growth (local currency)

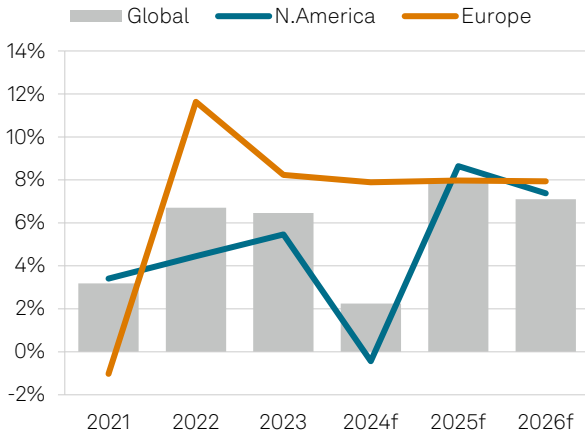


Chart 8  
EBITDA margin (adjusted)

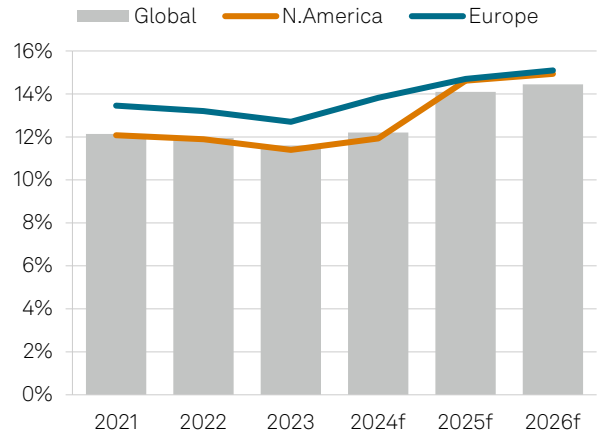


Chart 9  
Debt / EBITDA (median, adjusted)

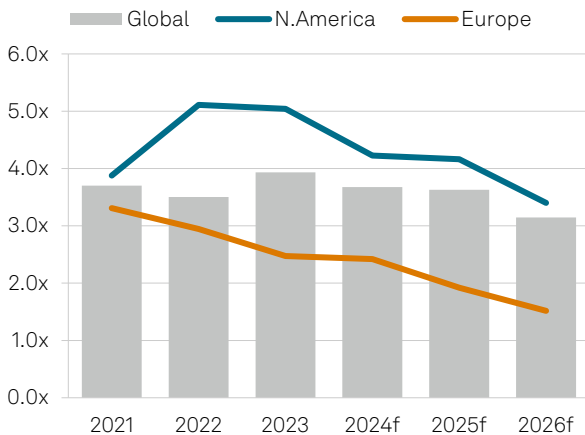
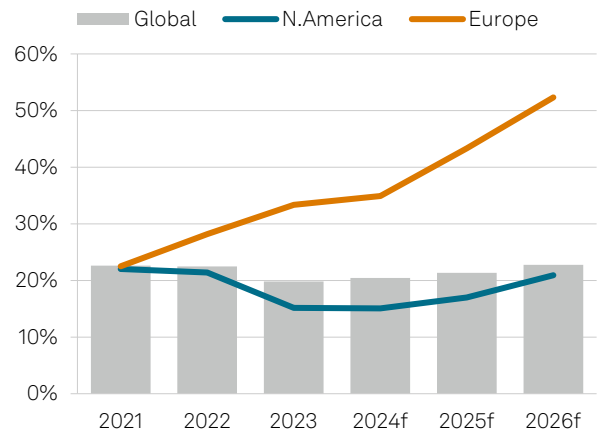


Chart 10  
FFO / Debt (median, adjusted)



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

# Cash, Debt, And Returns: Aerospace and Defense

Chart 11

## Cash flow and primary uses

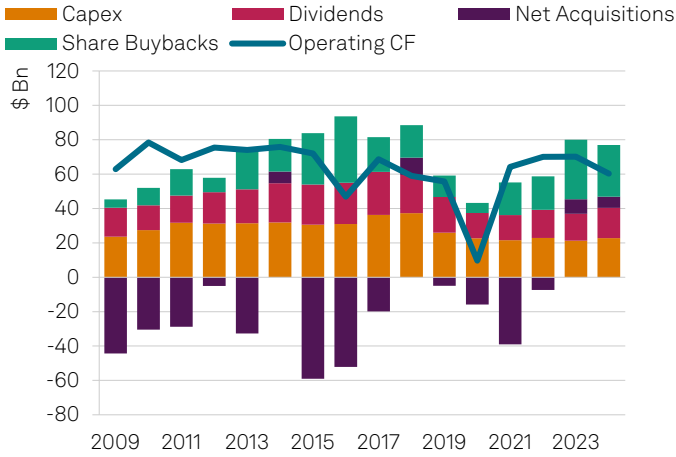


Chart 12

## Return on capital employed

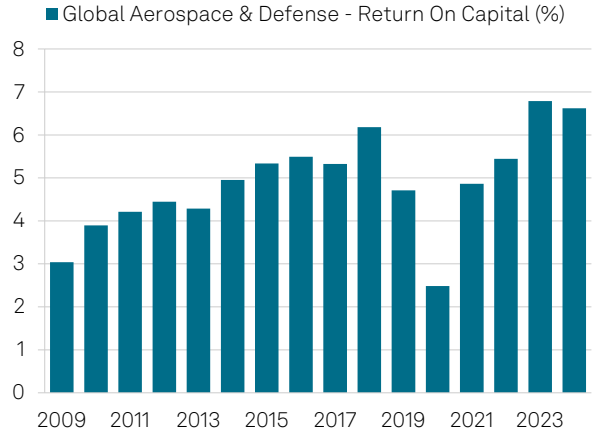


Chart 13

## Fixed- versus variable-rate exposure

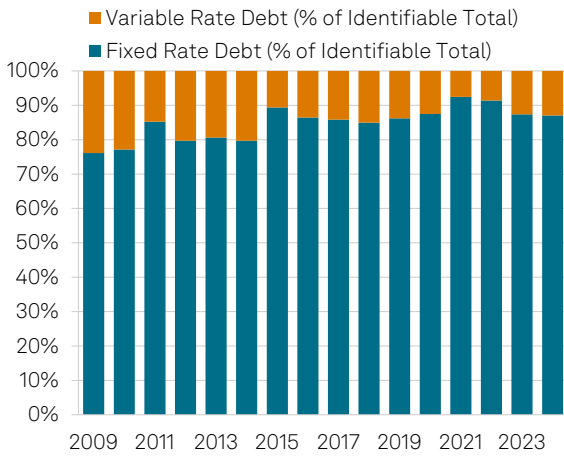


Chart 14

## Long-term debt term structure

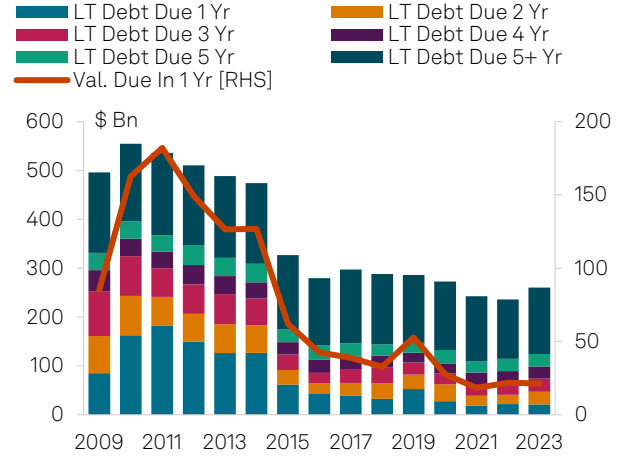


Chart 15

## Cash and equivalents / Total assets

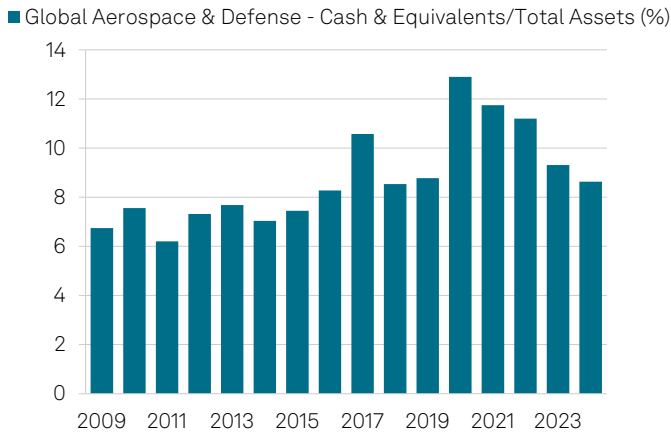
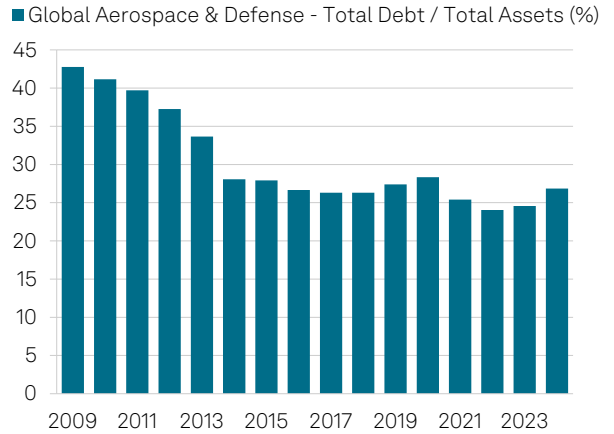


Chart 16

## Total debt / Total assets



Source: S&P Capital IQ, S&P Global Ratings calculations. Most recent (2024) figures use the last 12 months' data.

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