

Cruising back to growth in Commercial Aerospace

Commercial Aerospace Insight Report

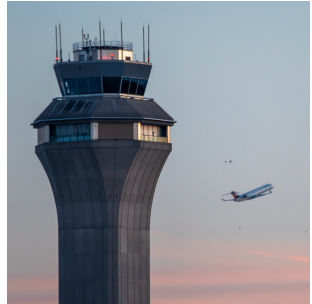


May 2024

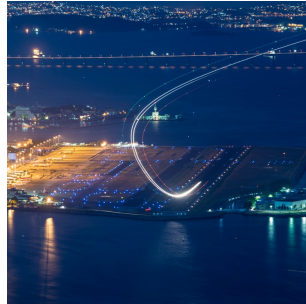
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Accenture's latest overview of the commercial aerospace industry reveals rising optimism and growth alongside persistent supply chain challenges and growing geopolitical concerns.

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Executive summary

This edition of the Commercial Aerospace Insight report reveals a pivotal moment for the aerospace industry: Projections indicate that globally, revenues will return to, and surpass, pre-2019 revenue levels, fueled by a surge in long-term demand for both new aircraft and aftermarket services. Key evidence? The combined net-new orders from Airbus and Boeing in 2023 totaled 3,410, up from 1,594 in 2022 and 986 in 2021.¹ Executives, accordingly, are more optimistic than they have been in recent years, with 97% of the participants in our most recent global study expecting revenue growth or stability in the short term—a significant gain from previous reports. Long-term prospects are also positive, with a majority of executives anticipating continued revenue expansion over the next one to two years.

Asia Pacific is set to grow the fastest among the regions, with a projected 54% increase in revenue in 2024 compared to 2019. This impressive growth is driven by an upswing in maintenance, repair and overhaul (MRO) activities, alongside a ramp-up in China-based production. North America is forecast to see a 10% revenue increase over 2019 levels by 2024, though caution is advised due to production rate caps. And in Europe, thanks to continued healthy growth, 2024 revenue is projected to

be just 1% below 2019 levels, though that figure may be influenced by the continent's continued difficult economic situation.

It's an optimistic forecast, but it's tempered by persistent supply chain challenges. Our comprehensive survey reveals that the industry's slow adaptation to automation and digitalization in supplier communications is creating a critical bottleneck. More than half (55%) of executives said they still rely on time-consuming and often cumbersome manual processes for supply chain monitoring and risk management. Additionally, 58% are still exchanging data and coordinating with suppliers manually.

Key industry leaders, including Airbus's Guillaume Faury and Boeing's Dave L. Calhoun, have both addressed the need for a balancing act between surging demand and supply chain bottlenecks, highlighting efforts to navigate these challenges without compromising on quality. Similarly, Embraer's CEO, Francisco Gomes Neto, expressed confidence in 2024's significant growth potential, but noted the importance of getting supply chains up to speed. As he said: "Both deliveries in executive and commercial could be higher if we had more parts from the market."²



Findings in brief

Global aerospace market to breach pre-pandemic highs

The commercial aerospace industry is poised for a landmark year. In 2024, it is not only expected to rebound to pre-pandemic revenue levels but also surpass the peak of 2019 by almost 11%. Our projections point to a sector on the brink of robust expansion, with expected revenue growth of 11% year-over-year (YoY). This optimistic forecast is echoed by executives, with nearly 80% predicting a rise in their commercial aerospace business revenue over the next year.

This optimism is fueled by the burgeoning maintenance, repair and overhaul (MRO) market, which is facing a scramble to procure parts to meet the growing demand for maintenance amid a resurgence in air travel and fewer aircraft retirements. By 2024, the MRO market is expected to outpace its 2019 performance by 20%, highlighting the sector's vitality and the increasing frequency of global air travel.³

The positive outlook is reinforced by strong expectations for increased aircraft deliveries in 2024. Specifically, 73% of executives anticipate a hike in narrow-body deliveries and 64% expect growth in the wide-body segment.

Airline passenger demand continues to soar

In 2023, driven by sustained demand for air travel, the recovery of passenger markets reached a significant milestone in post-pandemic recovery. The industry's revenue passenger kilometers (RPKs) experienced robust YoY growth of 36.9%, reaching 94.1% of 2019's pre-pandemic levels —up from 68.7% in 2022.⁴ The Asia-Pacific region led this global recovery, recording an unprecedented 126.1% increase in full-year international traffic compared with the previous year, the highest growth rate across all regions.⁵

The forecast for 2024 is similarly bright, with an anticipated 9.8% YoY increase in RPKs. The industry is expected to earn a net profit of \$25.7 billion, up 10% from 2023, which underscores the sector's remarkable resilience and its successful navigation through the turbulence of recent years.

Aviation has now effectively returned to pre-pandemic levels of connectivity, although the industry recognizes that the pandemic delayed its growth by approximately four years.⁶

Supplier delivery improving, but issues dampening potential growth

Supply chain challenges are easing slowly but will still affect the aerospace market through 2024 and likely into 2025. Manufacturers are unable to accelerate production fast enough to meet demand for new jets, leading to delivery delays.⁷

However, there's a positive shift in executives' short-term outlook, with 79% now confident about their supply chains' ability to deliver on time and at the right level of quality in the next six months, up from 72% previously.⁸ As pointed out by RTX CFO Neil Mitchell, despite having some supply areas on the watch, such as microelectronics, the whole supply chain is "broadly" stabilizing and improving.⁹

And looking ahead, optimism remains high, with over 90% of executives confident in the supply chain's ability to meet or exceed delivery expectations within the next two years.

Aftermarket on steady track to growth

The MRO sector is on the cusp of an unprecedented upswing, signaling a period of robust growth. As we advance into 2024, the global commercial aircraft fleet is anticipated to surpass previous records, marking the most significant expansion since 2019.¹⁰ This revival is mirrored in predictions that aftermarket 2024 revenue will outpace 2019 results by 20%.¹¹ Such bullish forecasts stem from robust air travel demand, fewer aircraft retirements and the ongoing supply bottlenecks that are limiting new aircraft production.

Airlines are strategically responding to these market dynamics by extending the lifespan of older fleets, mitigating delays in new aircraft deliveries and addressing challenges such as the Pratt and Whitney engine recalls.¹² Safran projects a 20% surge in civil engine aftermarket revenue for 2024, with a considerable push from rising parts sales.¹³

Amid this burgeoning aftermarket demand, the prospects for long-duration, fixed-price contracts appear less certain, with market players wary of unpredictable price fluctuations. The challenge of parts availability looms large over 2024, compounded by the dwindling supply of serviceable used materials –a direct consequence of decreased retirements as airlines opt to extend service periods for aging aircraft.¹⁴

Need for digitally supported collaboration across supply chains

In the rapidly evolving aerospace manufacturing sector, companies must navigate the complexities of a supply chain critically dependent on a vast network of suppliers for essential parts and systems. But as executives across the industry know too well, the post-COVID landscape exposed significant vulnerabilities within this network, particularly the challenges of maintaining communication and visibility, leading to difficulties in anticipating and responding to disruption.

These difficulties persist. Aerospace executives report an average 93-day recovery period from supply chain disruptions, highlighting the need for better network-management strategies. Despite the importance of tools such as digital twins for supply chain oversight, only 48% of executives report comprehensive implementation. Many still rely on manual processes for operational management and risk management strategies. These organizations need to make the shift to digital solutions at scale to enhance supplier engagement, automate operations and improve resilience. Embracing digitalization and AI will not only address current risk management and inefficiencies but also pave the way for innovation, marking a transformative step toward agility and transparency across the extended aerospace supply chain.

Uncertain economic conditions coupled with geopolitical risks present concerns

Executives are increasingly concerned about geopolitical instability, including political unrest and regional conflicts, as they fear these factors could worsen supply chain disruptions and impact economic conditions. This concern is mirrored in the business aviation sector, where Gulfstream expects fewer G280 deliveries in 2024 due to the Israel-Hamas conflict.¹⁵ Dassault Aviation, while noting strong sales in the US, points to weak demand in Europe, reflecting economic unease and potential recessionary conditions in some European countries.¹⁶

In the coming months, executives anticipate intensifying sustained concerns over geopolitical and economic challenges. They are also keenly observing effects of climate challenges, and are focusing on developing sustainable, eco-friendly solutions to support the global travel industry's recovery.

Global outlook

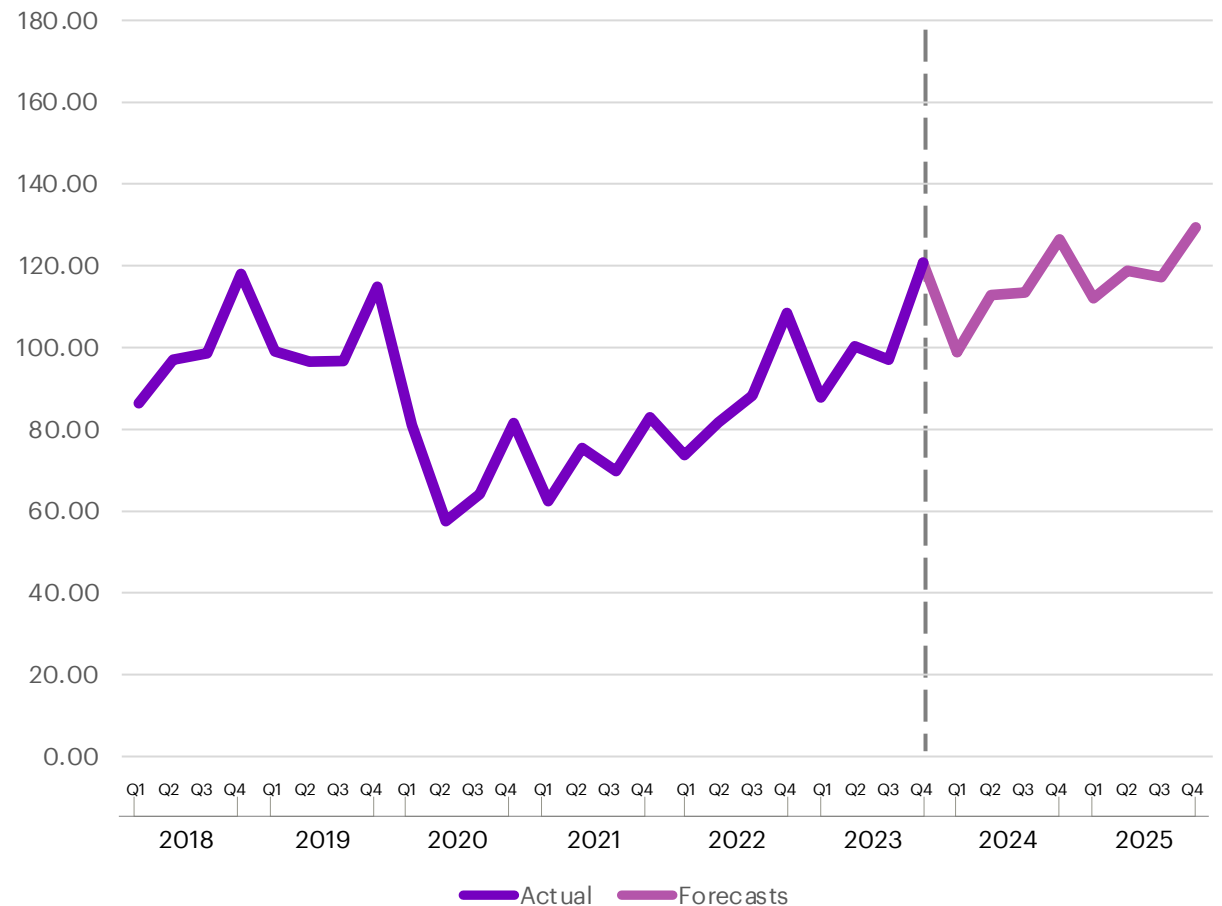
We expect 2024 to be the first year since the pandemic when global commercial aerospace revenue exceeds 2019 levels

2024 global commercial aerospace revenues are estimated to grow by 11% YoY, driven by continued demand from carriers for more efficient jets, an improving supply chain and growing demand for MRO.

Despite ongoing supply chain and quality challenges, the industry is well positioned to continue growing in 2024. Our expectation for commercial aerospace revenue recovery to pre-pandemic levels aligns with the forecast in our December 2023 report. The three main drivers of the recovery are: increased deliveries of narrow- and wide-body segments; higher inventories among original equipment manufacturers (OEMs) helping meet production demand; and growth in commercial flights, leading to increased MRO activity.

OEM revenues are also expected to continue growing, although at a slower pace than last year. In 2023, commercial deliveries rose by 11% compared to the previous year,¹⁷ and we anticipate another 11% increase in 2024.¹⁸ Airbus and Boeing played a significant role in this growth, with their commercial aerospace revenues rising by 15% and 30% YoY, respectively.¹⁹ These factors contributed to a 15% increase in global commercial aerospace revenue in 2023.

Figure 1. Global commercial aerospace index (USD, 2018 = 100)



Airline performance

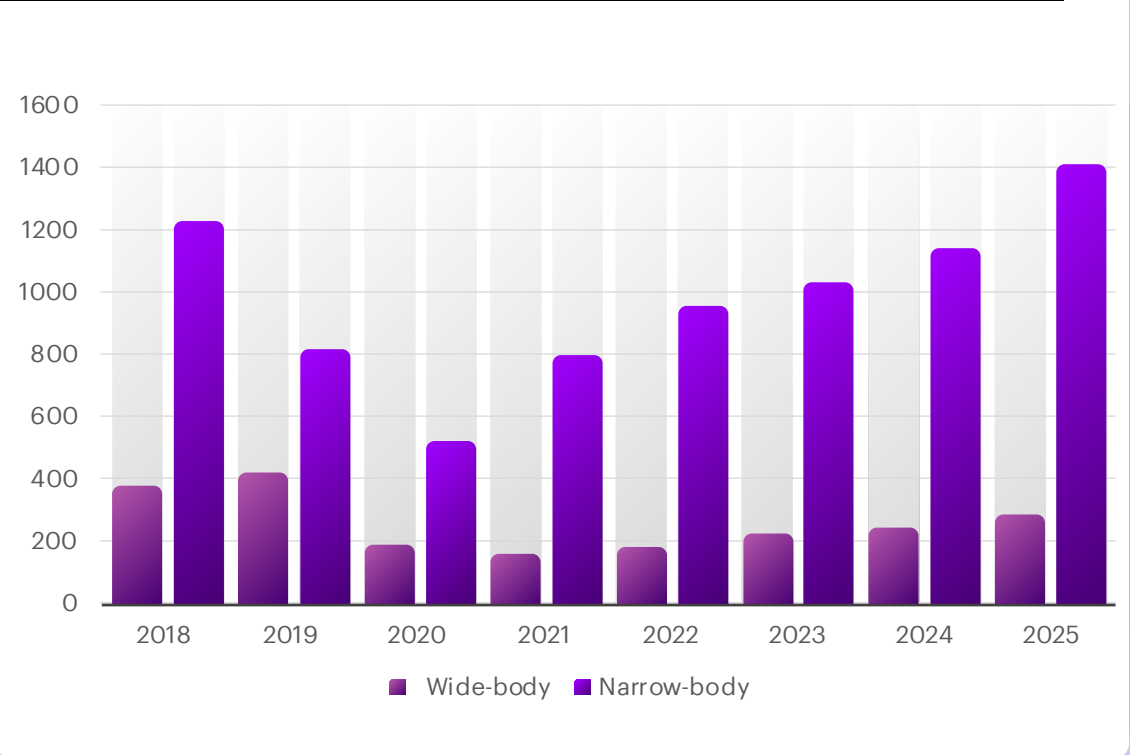
The IATA forecasts that global airline industry net profits will reach \$25.7B in 2024, reflecting a 2.7% net profit margin, compared to \$23.3B in 2023 with a 2.6% net profit margin. This comes after losses of \$7B in 2022 and \$42B in 2021. Total revenues are anticipated to grow by 7.6% YoY to \$964B.²⁰

Airlines' financial performance is expected to improve across all geographies in 2024. North American carriers are expected to achieve profits of \$14.4B; European carriers \$7.9B, and Asia-Pacific airlines are set to return to profitability with expected profits of \$1.1B.²¹

Passenger revenues in 2024 are projected to reach \$717B, a 12% increase from 2023. RPKs are expected to grow by 9.8% YoY, surpassing pre-pandemic growth trends. However, 2024 is expected to signal the conclusion of the remarkable annual increases seen from 2021 to 2023 during the pandemic recovery.²² Strong travel demand and limited capacity are driving passenger-yield growth, with an expected increase of 1.8% in 2024 compared to 2023.²³ Efficiency remains high, with a projected load factor of 82.6%, matching 2019 levels.²⁴

Supporting this airline recovery, we expect Airbus and Boeing will deliver about 1,400 commercial aircraft in 2024,²⁵ a higher total than in recent years (in 2023, they delivered 1,262 commercial aircraft).²⁶ Narrow-body aircraft should account for most deliveries, with an estimated 1,134, while wide-body aircraft deliveries are expected to total 252. In 2024, narrow-body and wide-body deliveries are expected to grow YoY by 10% and 11%, respectively (figure 2). Please refer to the section on customer deliveries for more detailed information.

Figure 2: Historic and expected deliveries by year (Boeing and Airbus)

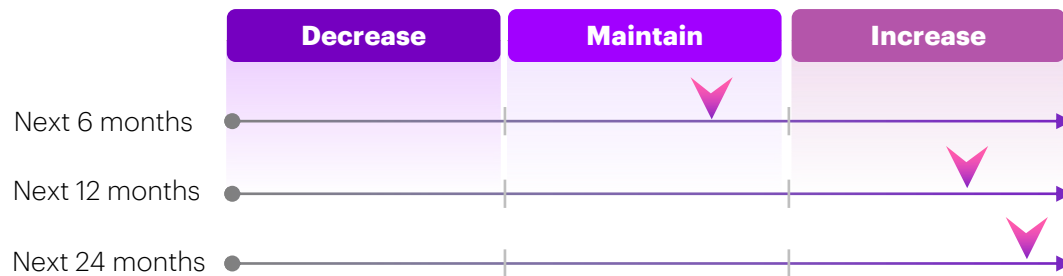


Business-cycle stance

Major aerospace firms saw significant revenue increases in 2023 by hitting or surpassing their delivery goals. However, the outlook for 2024 is mixed, with anticipated revenue gains but no increase in product deliveries due to quality problems at some manufacturers.

Among our surveyed executives, a large majority—79%—expect their revenues to increase over the next 12 months, and an even greater number—94%—anticipate revenue growth over the next 24 months (figure 3).

Figure 3: Business-cycle stance (commercial aerospace revenues) outlook



OEMs recorded improved results in 2023, with commercial aircraft business YoY revenue growth of 15% and 30% for Airbus and Boeing, respectively. Airbus' commercial aircraft business remained profitable (though profitability decreased by 25% vs 2022), and Boeing Commercial Airplanes cut its YoY loss by 30% for the same period.²⁷

2023 was also successful for Tier 1 companies, especially engine manufacturers. The commercial engine businesses of GE Aerospace, Safran and Rolls-Royce all recorded 25%+ YoY revenue growth.²⁸ Only Pratt & Whitney experienced a decline, with sales dropping by 18% due to problems with powder metal used to additively manufacture engine parts.²⁹ Tier 1 suppliers, such as Thales and Collins Aerospace, also experienced double-digit revenue growth in commercial aerospace segments, with 11% and 23% YoY revenue growth, respectively.³⁰

In 2023, OEMs saw an increase in commercial deliveries YoY, with Airbus delivering 735 planes, an 11% increase, and Boeing delivering 528 planes, up 10%.³¹ Airbus exceeded its 2023 delivery target of 720 aircraft and set a new goal of 800 jets for 2024, focusing on ramping up production.³² Boeing achieved its revised targets, delivering 396 narrow-body and 73 Dreamliner jets.³³ Although Boeing did not set a 2024 target, they hinted that 737 deliveries could reach 500 jets.³⁴ However, this goal may be overoptimistic as manufacturing quality problems could lower production rates and deliveries. United Airlines CEO Scott Kirby commented, "Boeing deliveries are going to be way behind this year," —a sentiment echoed by other major US carriers.³⁵

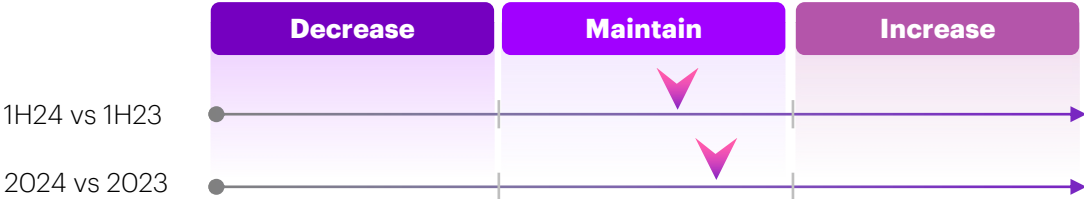
2023 net-new orders soared for both companies. Airbus reached 2,094 net orders, representing YoY growth of 155%. Boeing reported 1,314 net-new orders, a 70% YoY increase.³⁶

Customer deliveries

Strong delivery growth in 2023 is expected to continue this year, but Boeing’s difficulties in ramping up narrow-body production might affect overall commercial deliveries in 2024.

While 70% of executives expect commercial aerospace product deliveries to remain unchanged in the first half of 2024 compared to the same period in 2023, there is a more positive outlook for the entire year. According to our survey, 58% of executives expect the same number of deliveries in 2024 compared with 2023, while 36% expect an increase (figure 4).

Figure 4: Commercial aerospace products delivery outlook



All survey respondents expect narrow-body deliveries to be at the same or higher levels in the first half of 2024 versus the same period in 2023. And 88% of respondents expect wide-body deliveries to be at the same or higher levels in the first half of 2024 versus the first half of 2023 (figures 5 and 6).

This positive outlook improves further for the full year, with 73% and 64% of executives predicting a greater number of deliveries for narrow- and wide-bodies, respectively, in 2024 versus 2023 (figures 5 and 6).

Figure 5: Narrow-body aircraft delivery outlook (unit deliveries shipped to customers)

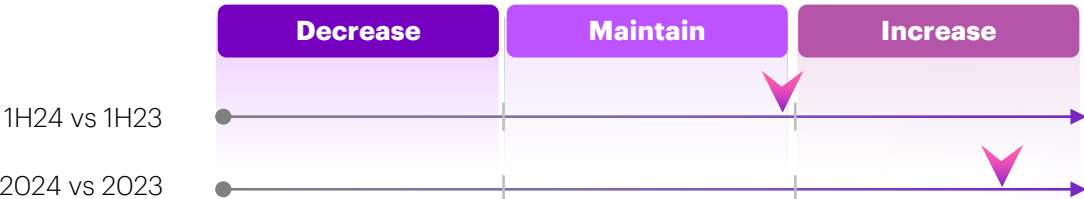
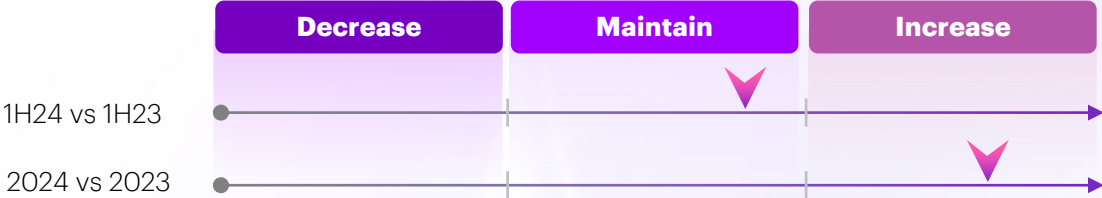


Figure 6: Wide-body aircraft delivery outlook (unit deliveries shipped to customers)



OEMs increased customer deliveries in 2023. Airbus and Boeing, for example, delivered 735 and 528 planes, an increase of 11% and 10%, respectively. This increase was supported by a ramp-up in production of both narrow-body and wide-body aircraft. The world’s third biggest jet maker —Embraer—with 13% higher YoY deliveries, had an even better 2023 than its European and US counterparts.³⁷

In 2024, Boeing and Airbus are expected to deliver close to 1,400 commercial aircraft,³⁸ a higher total than in recent years (in 2023, the companies delivered 1,262 commercial aircraft; in 2022, the total was 1,141; in 2021, it was 951).³⁹

Airbus aims to deliver 800 aircraft in 2024 but did not disclose the expected composition of these deliveries. Taking the production ramp-up focus on narrow-bodies into consideration, approximately 90% of the company’s commercial deliveries should be narrow-bodies.⁴⁰ Boeing has not set a target for 2024 due to challenges in ramping up production of its 737 MAX jets, affected by quality issues with fuselages made by Spirit AeroSystems.⁴¹ Despite these setbacks, Boeing plans to bolster its deliveries by releasing 60 to 120 jets from its inventory, according to CFO Brian West.⁴²

Beyond the major manufacturers, smaller players are also projecting growth in 2024. Embraer, for example, anticipates a 22% YoY revenue increase despite ongoing supply issues.⁴³ ITP Aero expects significant production and revenue growth, driven mainly by a continued boom in the commercial engine business.⁴⁴

Aftermarket

MRO demand is expected to trend upward, empowering MRO players to negotiate higher prices.

Among our survey respondents, 24% anticipate an increase in MRO spend over the next six months, while 67% expect it to remain stable. However, the outlook improves for the longer term, with 52% expecting higher MRO spend in the next 12 months and 48% in the next 24 months (figure 7).

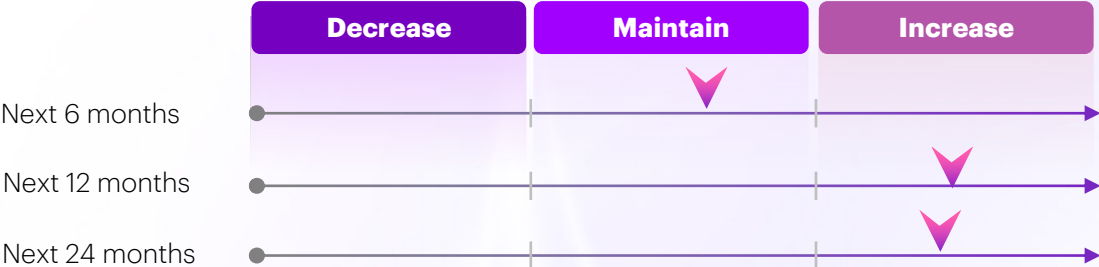
In 2024, the aviation industry anticipates a surge in flight numbers, surpassing both 2023 and pre-pandemic 2019 levels. This increased activity is projected to boost aftermarket revenue in 2024 to 120% of 2019 levels and 127% in 2025. These optimistic forecasts are fueled by robust air travel demand, slowing aircraft retirements and ongoing supply constraints.⁴⁵

Airlines are extending the service life of older aircraft due to delays in new deliveries and issues with Pratt and Whitney engines, with one-third of jets equipped with its GTF engines recalled.⁴⁶ As airlines manage their fleets to meet rising demand, fewer aircraft are expected to retire from 2024 to 2026, with projected retirements of 2,205, 9% fewer than previously expected.⁴⁷

During a recent earnings call, Safran announced it expects a 20% increase in civil engine aftermarket revenue in 2024 compared with 2023. A significant part of this growth will be propelled by the increase in spare-parts revenue. Price hikes and more frequent shop visits will also contribute to this growth.⁴⁸

As MRO demand grows, the industry may see more consolidation. Lufthansa Technik's Aviator digital platform, which collects data from 3,300 aircraft, is enhancing predictive maintenance and reinforcing its market lead. Lufthansa's CEO, Carsten Spohr, believes digitalization will further consolidate the MRO industry by leveraging extensive data.⁴⁹ Similarly, AAR Corp. has strategically acquired Trax USA Corp., a leading provider of advanced MRO and fleet management software. This acquisition not only enhances AAR's repair capabilities but also extends its APAC presence, allowing AAR to better meet the growing demand in the industry.⁵⁰

Figure 7: Maintenance, repair and overhaul (MRO) activity outlook



Production outlook

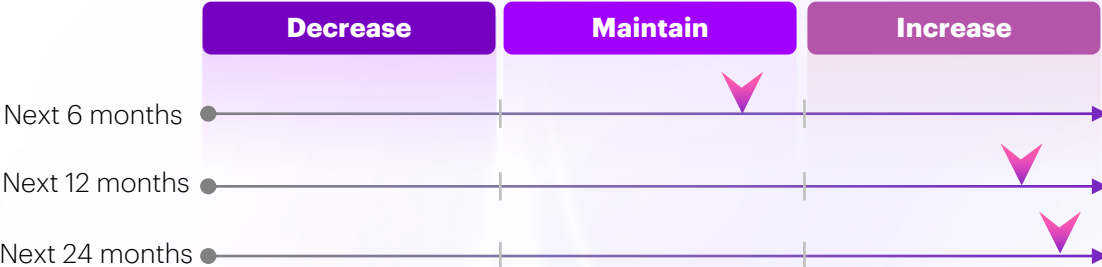
In 2023, commercial aerospace companies saw production improvements compared to the same period in 2022, buoyed by robust demand. In 2024, the production outlook is positive despite continued supply chain issues.

In the near-term, production capacity looks stable, with 70% of executives expecting no change over the next six months. However, the longer-term outlook is more positive, with 80% and 88% of executives expecting capacity to increase over the next 12 and 24 months, respectively (figure 8).

Boeing is confronting supplier delays, internal performance issues and regulatory hurdles, potentially causing additional production setbacks and higher costs. Supply chain disruptions, labor instability and inflation complicate the situation as Boeing works to regain trust after the 737 MAX incidents.⁵¹ CEO Dave Calhoun emphasizes quality over forecasts for 2024 and is confident in achieving a production target of 50 737s per month by 2026. As the company struggles with 737 MAX production, it plans steady production rates for 787s and resumed production for 777X.⁵² While maintaining longer-term ramp-up targets, Boeing is signaling a more cautious, safety-focused approach to production increases in the near-term.

Airbus has set ambitious production targets across its models, aiming for 75 A320s and 14 A220s per month by 2026. In 2023, construction began on the second A320 Final Assembly facilities in China and the US. As Airbus grapples with supply chain challenges, they are collaborating with suppliers and partners to manage impacts and sustain production growth. Airbus plans to increase A330 production to four aircraft per month in 2024 and A350 production to 10 aircraft per month by 2026.⁵³

Figure 8: Production capacity outlook



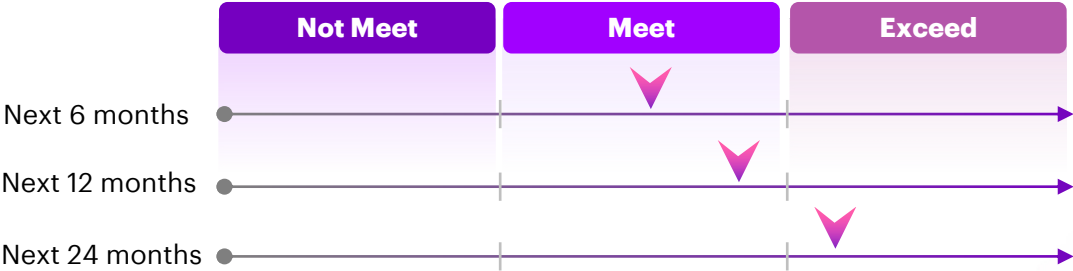
Supplier delivery outlook

Despite modest improvement in supply, aerospace companies are trying to find a balance between increased demand and persistent bottlenecks, while lower-tier suppliers receive support from big players and governments alike.

The survey records improving sentiments about suppliers, with 79% of executives confident in their supply chain’s delivery timeliness and quality over the next six months. This is an increase compared with our previous survey, when only 72% expressed short-term confidence.⁵⁴

There is even greater optimism for the medium and long term—91% of executives express confidence about suppliers’ ability to meet or exceed delivery expectations in both 12-month and 24-month timeframes (figure 9).

Figure 9: Supplier delivery outlook



It seems clear that the supply chain situation is gradually improving. This sentiment is shared by Scott Donnelly, CEO of Textron, who recognizes improvement in supply, but has noted: “It’s still a problem . . . As you get towards the end of a quarter, if you’re missing parts for aircraft, you still can’t deliver that aircraft. It is, I guess, getting better from a context of how many parts are late to PO [purchase order], but parts are still late to PO.”⁵⁵

Information about the improving situation comes not only from OEMs and Tier 1 companies, but also from their extended supply networks. CEO of Figaec Aero, Jean-Claude Maillard, highlights that “compared to one year ago, raw materials are less of an issue. We are progressively solving our problems, such as titanium and stainless-steel alloy procurement. Aluminum was never an issue.” The company reduced its dependence on Russian titanium by finding sources in France and the US.⁵⁶

Efforts to improve supply chain stability are ongoing across the industry. ATR has expanded its collaboration with Tarmac Aerosave, increasing the number of aircraft recycled annually and boosting the reuse of parts and materials, thereby easing demand for new components.⁵⁷ Meanwhile, Dassault Aviation has addressed persistent supplier issues by deploying staff or providing direct financial support, eliminating delivery problems with engines.⁵⁸

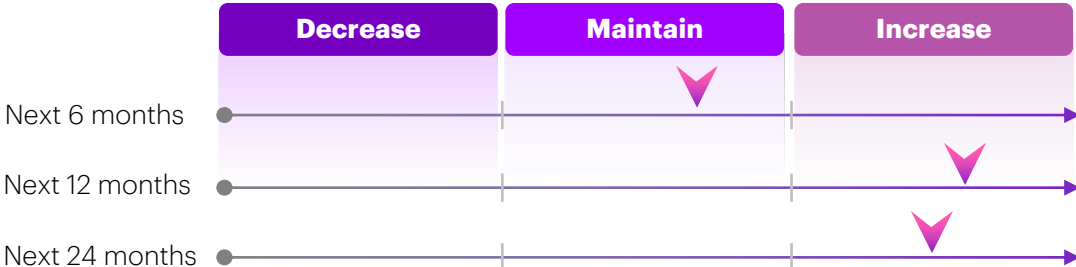
Governments are also supporting lower-tier suppliers. France, for example, has announced the renewal of the supply chain support scheme “Ace Aero Partenaires 2,” which aims to help small and medium-sized companies with growth, modernization, transfer of ownership, investment and decarbonization.⁵⁹

Production input cost outlook

The aerospace industry continues to face production cost increases owing to shortages in raw materials, rising costs of subsystems and the search for skilled resources amid heightened demand.

In the short term, 42% of executives expect raw material costs to remain stable over the next six months. Longer term, however, they predict that raw material costs will once again increase. Specifically, 61% said they think raw materials costs will increase over the next 12 months and 55% believe they will increase over the next 24 months (figure 10). The industry is currently experiencing shortages of raw materials such as titanium, Inconel, and steel. Procuring certain metals has become challenging and expensive due to increased demand from countries strengthening their defense capabilities.⁶⁰

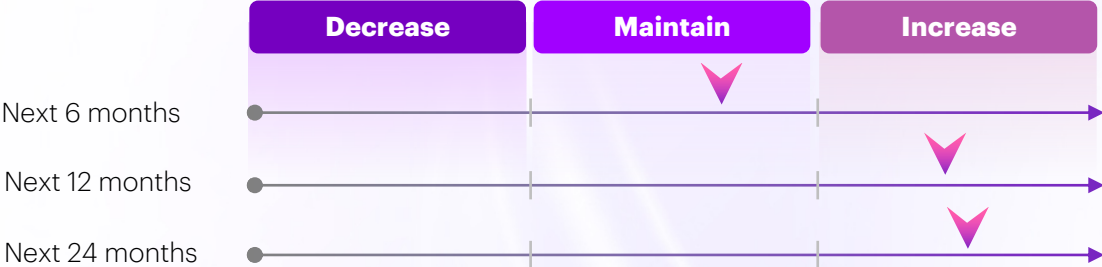
Figure 10: Raw materials cost outlook



Executives’ views on the cost of sub-systems and parts are similar to their views on raw materials. In the next six months, 55% expect cost stability while 52% expect price increases over the coming 12 months. Looking ahead, 58% of executives predict cost increases over the next 24 months (figure 11).

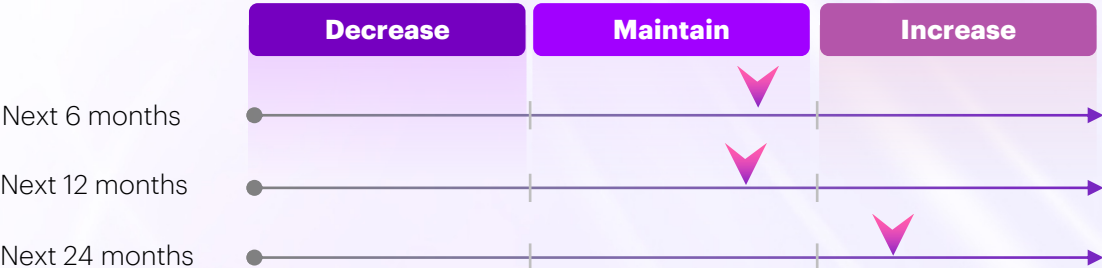
The pricing trends for overhauled parts are now nearly indistinguishable from those for new OEM kit. The ongoing concern of price escalation has been a major issue for airlines and MRO providers, and it has become more severe due to significant increases in energy costs.⁶¹ New engine spare-parts prices are rising by about 10% annually due to high demand and supply-chain constraints.⁶² The price for airframes is also expected to rise more than 6%, indicating price rises across aircraft sub-systems.⁶³

Figure 11: Subsystem or parts cost outlook



Executives expect labor costs to be stable in the short-to-mid-term, with 67% and 55% expecting labor-related production costs to be stable over the next six months and 12 months, respectively. However, 45% expect labor-related production costs to increase in the next 24 months (figure 12).

Figure 12: Production labor cost outlook

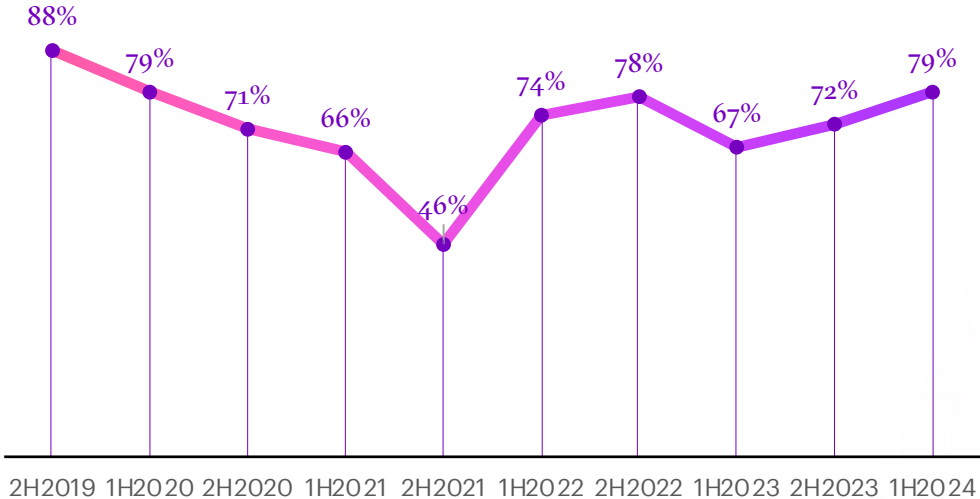


Collaboration across the supply chain

Disruptions drive multi-month production machinations. Companies are still cracking the code to mitigate them.

In the fast-evolving landscape of aerospace manufacturing, companies stand at the precipice of innovation and the traditional complexities of an intricate supply chain. The aerospace sector, characterized by its reliance on a multifaceted network of suppliers for critical parts, components and systems, faces a pivotal challenge: the need for enhanced communication and visibility across this vast supplier network. The post-COVID era has shone a spotlight on a fragmented supplier network as a crucial vulnerability. This hampers companies' ability to anticipate and adapt to disruptions and fluctuating demand, with many still not confident in their supply network's ability to deliver (figure 13).

Figure 13. Short-term confidence in supplier ability to deliver on time and at quality



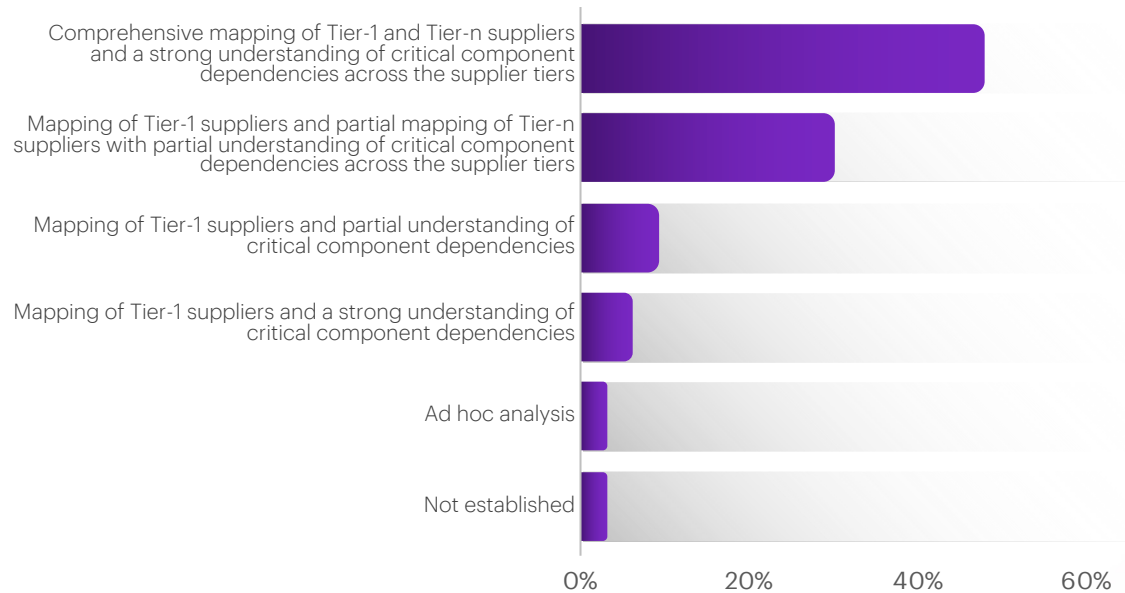
The aerospace industry's resilience is being tested not just by disruptions but also by the significant time and resources required to navigate recovery, which can strain customer trust. Our survey revealed an average recovery time of 93 days from supply chain disruptions, with even longer timelines for critical parts. These findings underscore a pressing need for a strategic overhaul in managing network relationships, dependencies and collaborative efforts.

While our findings indicate a promising trend toward a deeper understanding of network relationships, there is still work to be done in achieving operational efficiency and resilience through improved supply network insights and collaboration with both direct and Tier-n suppliers. To navigate this path, we recommend the following strategic imperatives:



1. Digital twin of the supplier ecosystem: Despite the criticality of mapping supply networks and critical part dependencies encompassing Tier-1 and Tier-n suppliers, less than half (48%) of executives report having completed this assessment (figure 14). The remainder revealed a mixed range of partial network mapping or a low understanding of critical component dependencies. The gap between this and a full understanding of critical dependencies is notable. Furthermore, the mapping and dependencies should be developed into a digital twin. This will serve not only as a visualization tool but as a strategic asset for anticipating and managing supply chain dynamics.

Figure 14. Mapping supplier network and critical component dependencies



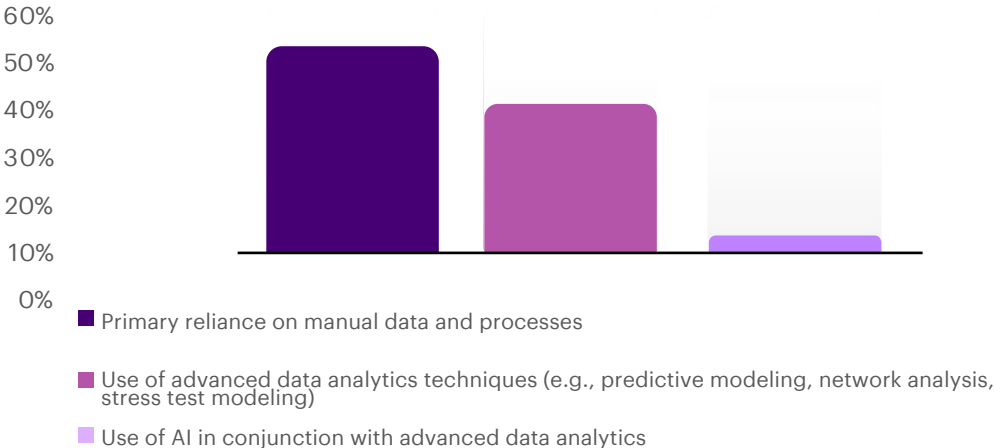
2. Proactive supplier engagement through digital platforms: Traditional engagement methods, such as portals and joint planning sessions, while prevalent, signal an opportunity for advancement (figure 15). Embracing digital solutions, from procurement management systems to AI-driven tools, can significantly enhance engagement efficiency and responsiveness.

Figure 15. Communication methods for addressing issue and risks



3. Enhanced network performance and responsiveness: Our analysis suggests a correlation between prolonged recovery times and a reliance on manual processes. Over half (55%) of aerospace organizations continue to rely heavily on manual methodologies for the operational management and oversight of their supply networks, as well as for executing risk management strategies (figure 16). Transitioning to automated and digitalized operations for supply network monitoring and risk management is imperative. This new approach cannot be a static exercise. Data needs to continuously flow from the extended network into the supply chain digital twin so that there is full traceability and risks can be preempted, thereby minimizing or even eliminating disruptions.

Figure 16. Approach to operationalizing Tier-n network monitoring and risk management



Traditional collaboration approaches are not keeping up with new challenges in terms of raising and mitigating risks. Insights shared by industry leaders at the 2024 Pacific Northwestern Aerospace Alliance (PNAA) conference highlight the need to address manual inefficiencies and leverage digital transformations to effectively mitigate emerging risks. For instance, Doug Ackerman, vice president for supplier quality at Boeing Commercial Airplanes, emphasized how staff turnover at suppliers or changes in contracting arrangements can lead to defects that were previously uncommon.⁶⁴

The lack of visibility and understanding of changes creates a perfect storm of realized risks. Moving away from manual monitoring and risk assessment is a journey that takes time. Aerospace companies are now embracing greater automation and digitalization in their interactions with suppliers. As pointed out by Nicolas Lemoine, vice president for procurement at Airbus Americas, the company is driving toward more digital solutions, including AI, for better communication, tracking and auditing of supplier work for new aircraft programs.⁶⁵

The path forward for aerospace companies is marked by the strategic adoption of digital solutions. These should encompass the digital twin concept, enhanced digital engagement with suppliers and the automation of supply network operations. These initiatives go beyond technological investment; they represent a shift towards increased agility, real-time transparency, and resilience in the aerospace supply chain.

The journey toward digitalization, as exemplified by forward-thinking executives, is not only about overcoming current challenges but setting the stage for future innovation and success.



What keeps aerospace executives up at night?

Challenges may keep executives up at night, but planning is preparing them to handle whatever the future holds

Executives express heightened concerns that geopolitical instability, especially political instability, and regional armed conflicts will exacerbate their companies' vulnerability to supply chain disruptions. They also have similar concerns about worsening economic conditions.

The business aircraft market is representative of these broader commercial aerospace executive concerns. Gulfstream expects a reduction of Gulfstream G280 aircraft 2024 deliveries (assembled in Israel) due to the impact of the Israel-Hamas conflict.⁶⁶ Dassault Aviation reports robust business jet sales in the US, in contrast to sluggish demand in Europe. These dynamics may indicate economic concerns within Europe, with some countries already experiencing recessionary conditions and others on the brink.⁶⁷

Executives' concerns about geopolitical instability and economic conditions remain steady over the next six months. For the mid-term (12 months) executives have greater concern about political instability and weather volatility. These concerns persist over the next two years, with an added focus on worsening economic conditions. The aerospace and aviation industries are currently at a critical juncture, grappling with the challenges of climate change and post-COVID-19 global travel recovery. Aerospace manufacturers, airlines and airports are seeking economically viable and environment friendly solutions to reduce environmental impact.

Compared to our survey conducted six months ago, executives expressed similar heightened concerns about political instability; however, the current survey reveals that they are now equally worried about regional armed conflicts. Regarding climate change, executives consistently reported medium concern in both the current and previous surveys, with expectations that this concern will grow over the next one to two years. In terms of economic conditions, their apprehensions have shifted from interest rates to worsening economic conditions as the major concern.

Figure 17: Executive geopolitical risk concern levels (versus last year)

Broader categories	Geopolitical factors	Current impact	Next 6 months	Next 12 months	Next 2 years
Political conditions	Terrorism	Medium	Similar	Similar	Similar
	Political instability	High	Similar	Greater	Greater
	Regional armed conflicts	High/Medium	Similar	Similar	Similar
Economic conditions	Worsening economic conditions	High	Similar	Similar	Greater
	Interest rate changes	Medium	Similar	Similar	Similar
	Exchange rate changes	Medium	Similar	Similar	Similar
Climate change	Weather volatility	Medium	Similar	Greater	Greater

Regional outlooks



North America: Ongoing quality and supply chain issues hamper growth outlook

Overall, 2024 growth for the industry in North America is expected to be 11% higher compared with 2023 and 10% higher compared with 2019 (figures 18 and 19).

Boeing has not revealed its target for 2024 and is encountering challenges in scaling up production of narrow-body aircraft. The company is grappling with manufacturing quality problems related to its 737 MAX jets.⁶⁸ However, the decrease in 737 deliveries due to a reduced production rate is expected to be partially offset by additional deliveries from the company's inventory. Boeing CFO Brian West has stated that between 60 to 120 inventory jets are scheduled for delivery in 2024.⁶⁹

Boeing delivered 528 aircraft in 2023, a 10% YoY increase. Also, the company secured a net total of 1,314 orders, a 70% increase versus 2022. This achievement marked the fourth-best result in Boeing's history.⁷⁰

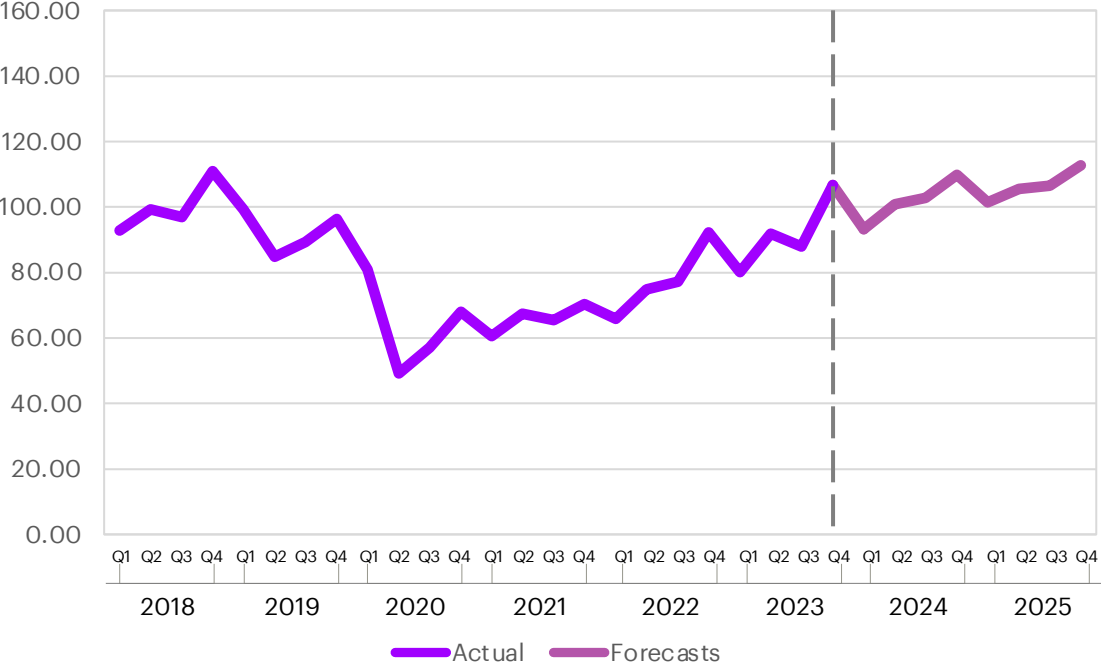
On the production side, CEO Dave Calhoun has emphasized quality over forecasts for 2024, while CFO Brian West remains confident in achieving 50/month 737 production by 2026. Boeing anticipates a current production rate of 38 jets per month for the 737.⁷¹

Growth across North American aerospace companies can also be seen in terms of new investments. GE Aerospace announced its intention to invest more than \$650 million into its manufacturing plants and supply chain this year.⁷²

Figure 18: Outlook for North America



Figure 19: North America commercial aerospace index (USD, 2018 = 100)



Europe: Deliveries ramp up amid record orders

Despite a challenging economic climate, the European commercial aerospace sector is expected to fully recover to pre-pandemic performance in the first half of 2025. Despite ongoing supply chain challenges and the overall difficult economic situation in the region, the European market continues to experience solid growth. With 10% YoY growth anticipated in 2024, European commercial aerospace revenues will be only 1% lower than in 2019 (Figures 20 and 21).

In 2023, Airbus set a record of 2,094 net new orders and delivered 735 jets, marking increases of 155% and 11% over 2022, respectively. This was its best year for orders since inception with a 15% rise in commercial revenues thanks to higher deliveries.⁷³

The year's highlight was massive orders from Air India and notably IndiGo's A320 family jets, contributing to strong demand seen across the sector.⁷⁴ While the second half of the year did not record such a single massive deal, it remained positive with noteworthy orders, including Turkish Airlines' order for 220 aircraft (150 A321 and 70 A350),⁷⁵ EasyJet's order for 157 A320 family jets,⁷⁶ and Irish lessor Avolon's order for 100 A321.⁷⁷

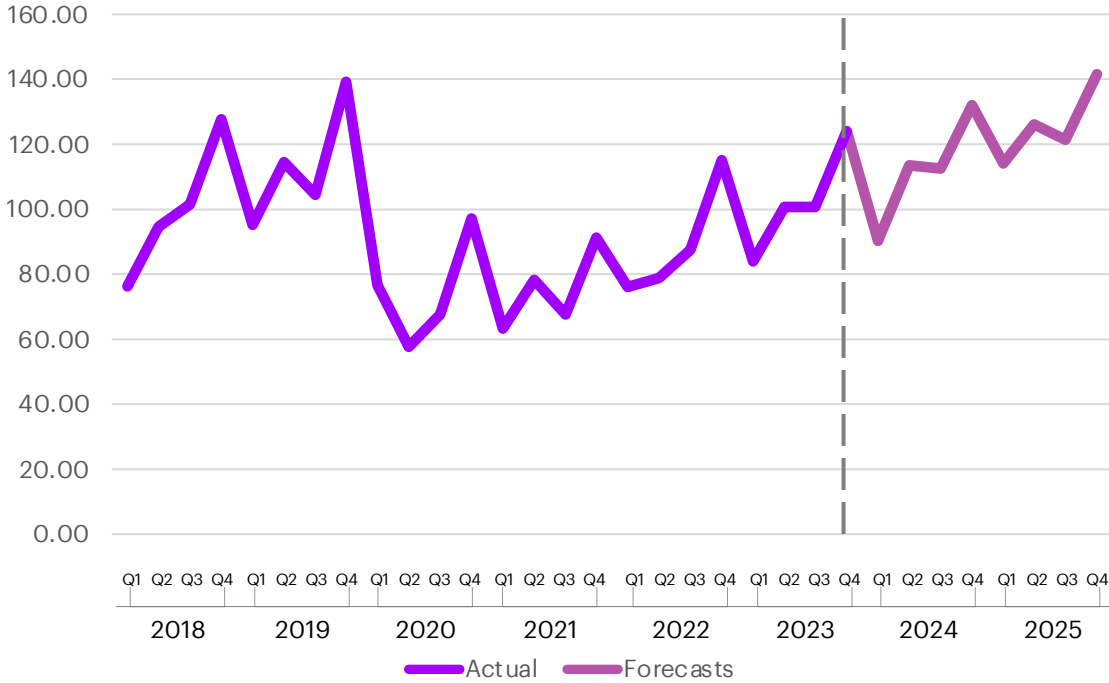
Despite supply challenges, Airbus plans to increase its narrow-body production to 14 A220s and 75 A320s per month by 2026. And it aims for higher wide-body production rates for the A330 and A350.⁷⁸

In line with the growth in the European aerospace industry, Rolls-Royce and GKN Aerospace are investing in capacity and technology to meet the rising demand. Rolls-Royce confirmed its plans to make additional investment in engine assembly, test and shop-visit capacity at its UK and German sites to meet growing demand for Trent engine services.⁷⁹ GKN Aerospace announced an investment to build additive manufacturing capabilities in its Trollhattan facility.⁸⁰

Figure 20: Outlook for Europe



Figure 21: Europe's commercial aerospace index (USD, 2018 = 100)



Asia Pacific: Record growth and surge in new orders

Overall, 2024 commercial aerospace revenue for the Asia Pacific region is expected to increase 12% YoY, driving the overall market 54% higher than in 2019 (Figures 22 and 23). This growth will be fueled by the MRO businesses and aerospace suppliers primarily located in China.

Airbus and Boeing received a total of 1,365 orders from Asia Pacific customers in 2023, with a majority coming from IndiGo and Air India. This represents a 133% YoY growth in orders.⁸¹

The Asia Pacific region saw air traffic surge by 96% YoY in 2023—growth that has also bolstered MRO activities.⁸² Representative of this trend, ST Engineering recorded 31% YoY growth in commercial aerospace revenue in 2023.⁸³ Overall, Asia Pacific commercial aerospace market experienced 21% YoY growth in 2023.

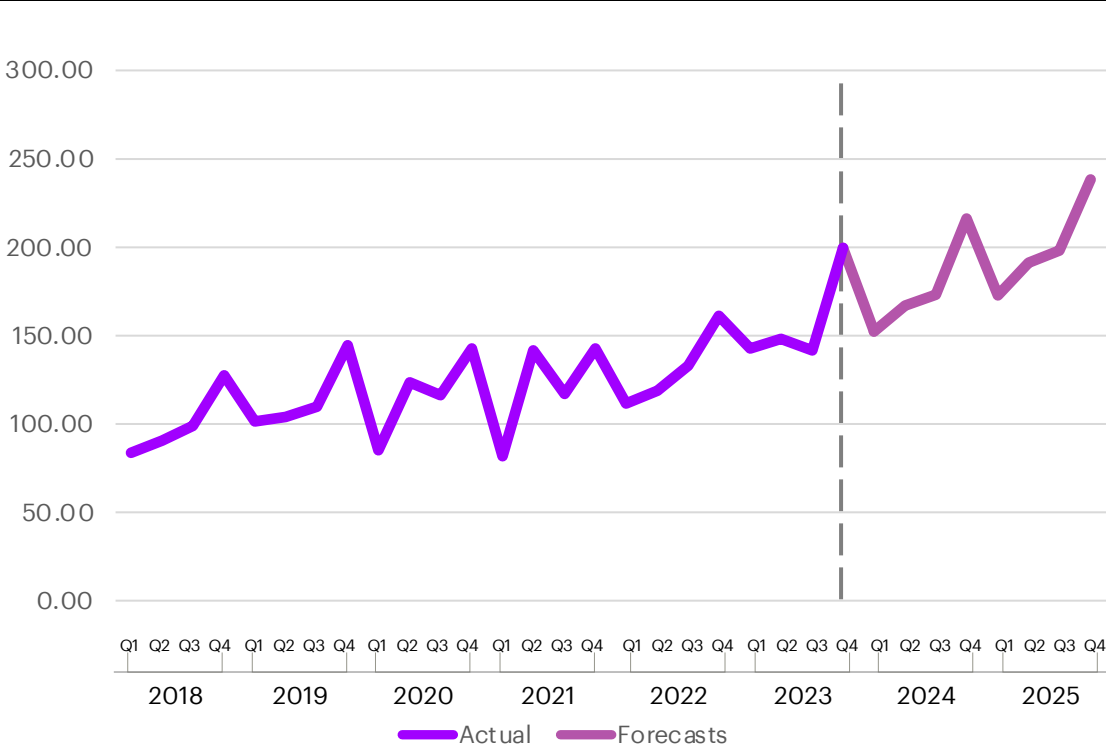
Both US and European aerospace manufacturers consider Asia Pacific a good place for investment. For example, Airbus announced the opening of an aircraft lifecycle management center in China.⁸⁴ Singapore is becoming a magnet for aerospace investment, with Pratt & Whitney opening an engine center at its Eagle Services Asia facility,⁸⁵ and Safran is investing in a dedicated MRO facility for aeronautical electrical equipment.⁸⁶

Asian companies are also investing in their home region. For example, Korean Air is building a new engine-maintenance cluster near Incheon International Airport in South Korea, which, when finished, will become Asia’s largest engine MRO facility.⁸⁷

Figure 22: Outlook for Asia Pacific



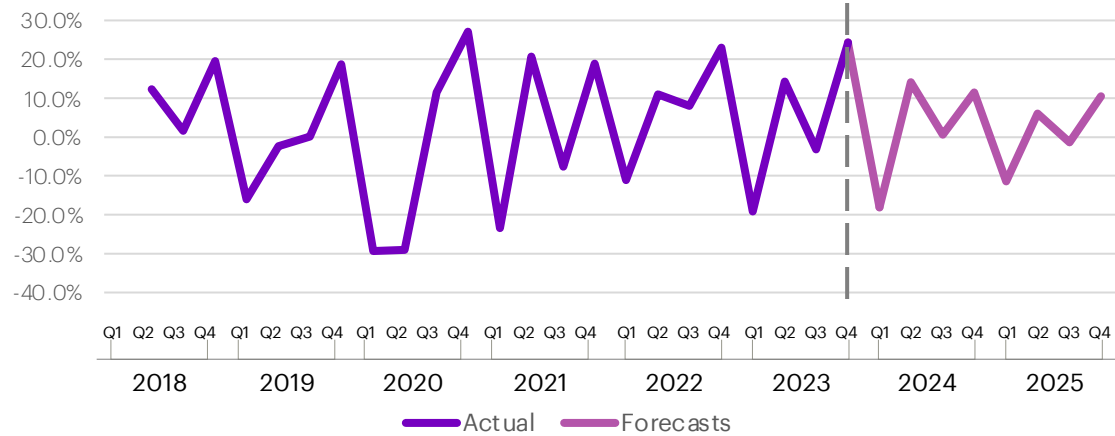
Figure 23: Asia Pacific commercial aerospace index (USD, 2018 = 100)



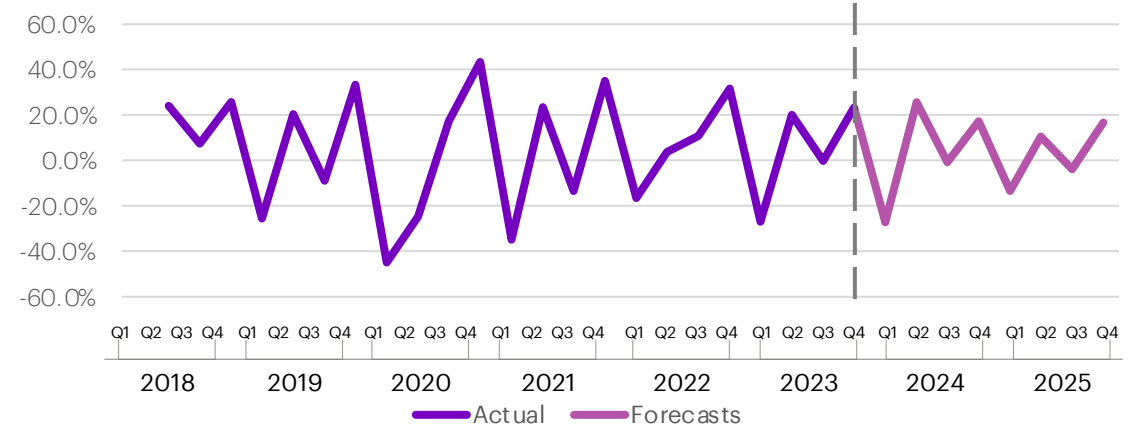
Appendix

Global and regional and commercial aerospace index performance (quarter on quarter percentage change)

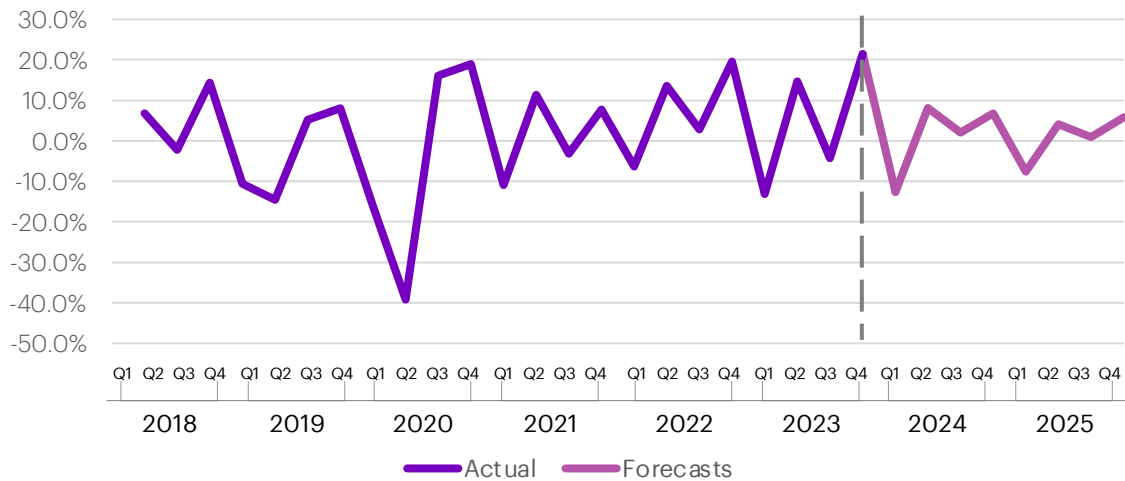
Global



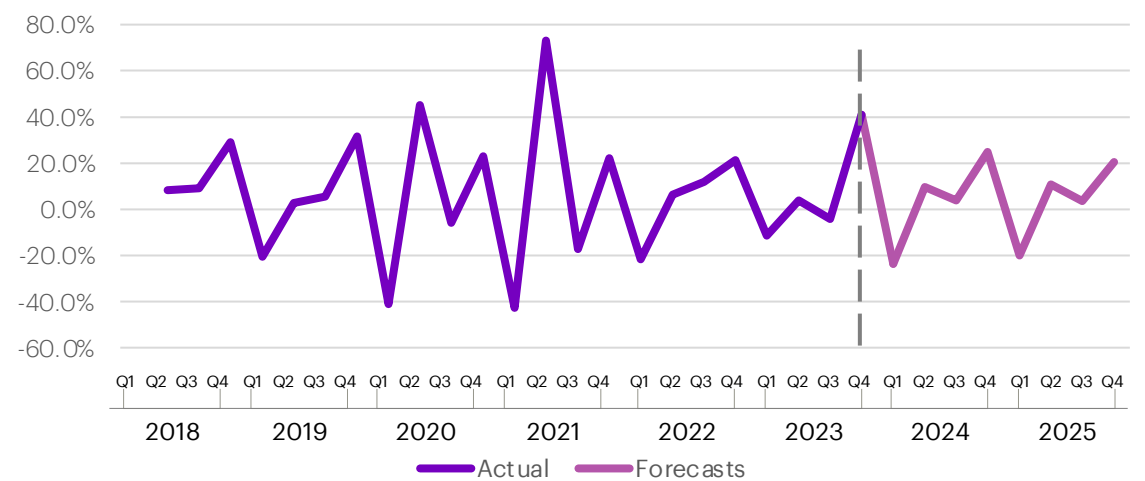
Europe



North America

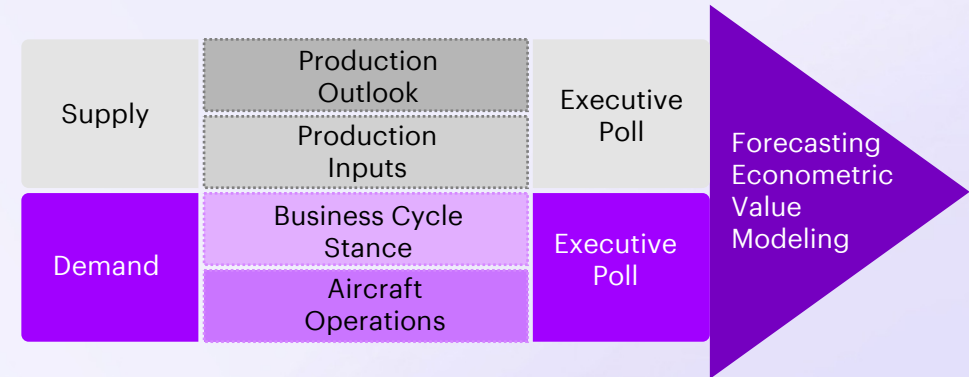


Asia Pacific



About the Accenture Commercial Aerospace Market Insight Report

The Accenture Commercial Aerospace Insight Report combines sophisticated econometric modeling methodologies to drive quantitative quarterly forecasts on the health of the commercial aviation market with insights from leading aerospace executives worldwide. It provides a unique perspective on short- and medium-term trends and drivers in this market, covering a wide range of activities, from suppliers to MROs.



Regional forecasts are in the highest-impact regional currency, with the global index aggregated in US dollars, using current exchange rates (at the time of writing). The index baseline year is 2018, and both regional and global indices are based on this year.

To complement econometric modeling, we polled executives at major commercial aerospace companies. The outlook indicators in this report are based on a combination of Accenture's econometric modeling and that of global commercial aerospace executive poll. We conducted our poll in March–April 2024; views are subject to considerable change as conditions can rapidly evolve.

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