

Airline Industry

October 2024 Outlook



Equity Research

Analysts

Vincent de Naurois

vincent.jacobe@studbocconi.it

Anh Tho Vu

anh.vu2@studbocconi.it

Andrea Pierini

andrea.pierini@studbocconi.it

Supervisors

Rezan Bagcioglu

Co-Head of Equity Research

rezan.bagcioglu@studbocconi.it

Giacomo Pietrosanti

Co-Head of Equity Research

giacomo.pietrosanti@studbocconi.it

Summary

Post-pandemic 'revenge travel' and the expansion of Low-Cost Carrier businesses have reshaped purchasing behaviors and market share dynamics globally, with emerging economies and densely populated regions poised to benefit most from these developments.

Robust air traffic projections provide optimism for investors, who are otherwise wary of lingering cost burdens across the sector. Notable safety incidents in recent times have led to the grounding of aircraft and delays in new deliveries, exacerbating supply constraints in an industry that relies heavily on fleet upgrade and expansion to meet growing consumer demand.

Uncertainty in emission-cutting strategies and the effects of the horrific wars in Ukraine and the Middle East leave airlines grappling with immense challenges moving forward, as fuel prices remain the largest expense in these companies' cost structures.

Key Figures	Key Leaders
+4.3% CAGR Global Air Travel 2023-2042	United Airlines
+23% Global Airline Debt Since Pandemic	American Airlines
0.5% Global Sustainable Air Fuel Consumption	International Airlines Group
Key Tailwinds	Key Headwinds
Consumer Demand	Geopolitical Unrest
Investment	Operational Constraint
Technological Advancement	Carbon Emission Mitigation

Competitive Landscape

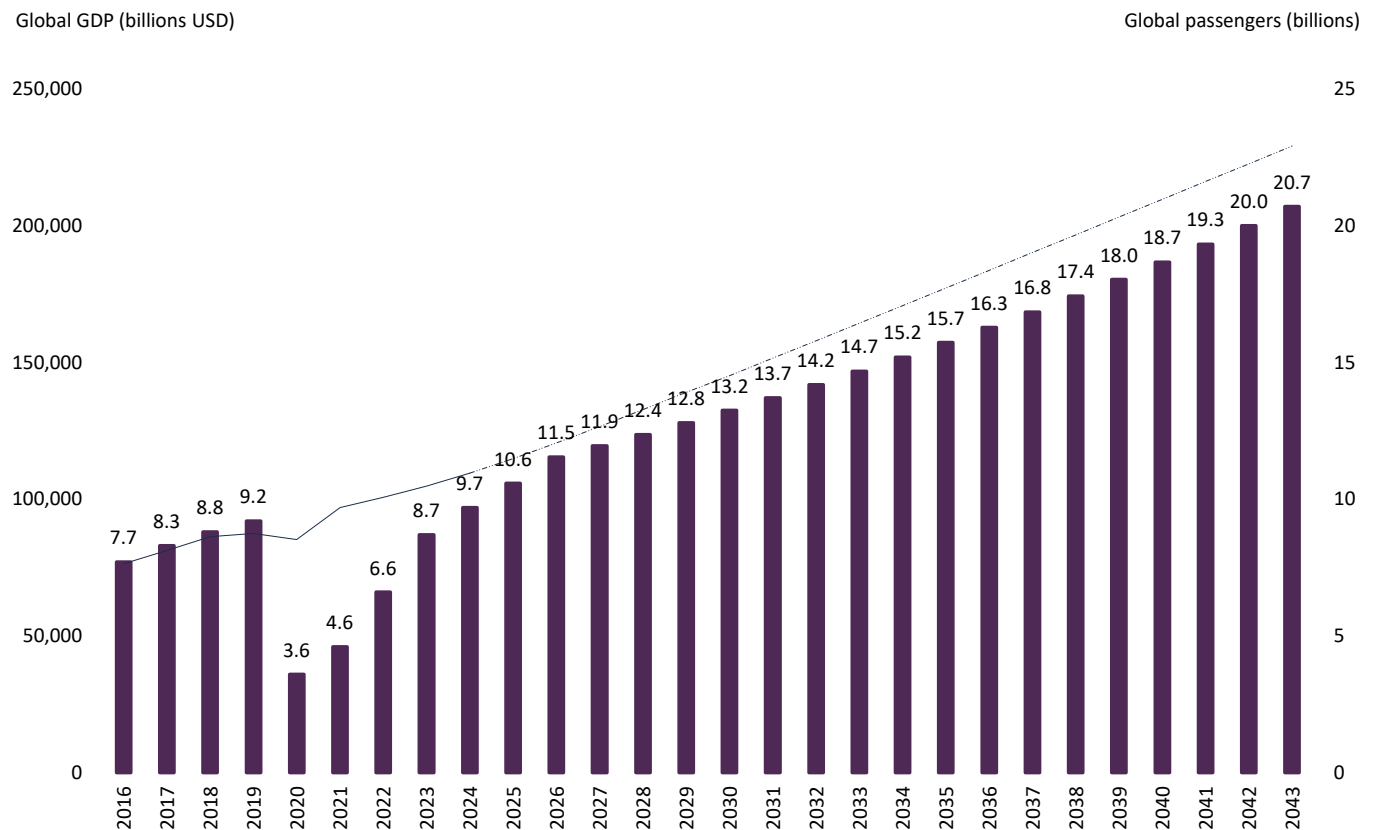
Market Trends

The airline industry is intricately connected to trends in Gross Domestic Product (GDP). Economic growth typically leads to increased demand for air travel and improved profitability, while economic downturns present significant challenges. As GDP rises, disposable income also increases, resulting in higher demand for both leisure and business travel. This economic expansion is also often associated with an uptick in corporate travel for meetings and conferences.

The pandemic and post-pandemic era has changed how economists and the financial industry traditionally correlate airline performance with GDP, decoupling air traffic from broader economic cycles. Air travel demand collapsed while some economies recovered, and the surge in ‘revenge travel,’ where consumers made up for lost travel opportunities by booking more trips post-pandemic, showed that post-pandemic travel behavior deviates from traditional patterns. Economists must now factor in shifting consumer preferences toward low-cost models and supply-side limitations following the pandemic which makes the traditional GDP-airline demand correlation less predictable.

Figure 1: Air Traffic to Exceed Pre-Pandemic Levels this Year

Air Travel and GDP Forecast



Source: IMF, ACI, Minerva Research Estimates

With more air traffic, airlines can achieve fuller flights, boosting revenues without significantly increasing expenses. In response to growing demand, airlines are seeking to invest in new aircraft and expand their routes. Expanding economies are projected to drive further investments in airport infrastructure to accommodate increased passenger volumes.

In periods of weaker air traffic, airlines typically resort to cost-cutting measures and operational adjustments to maintain financial stability. The airline industry is capital-intensive and takes on significant amounts of debt to sustain development, so in sharp recessionary times, such as the pandemic, external financing becomes critical to overcoming fixed costs.

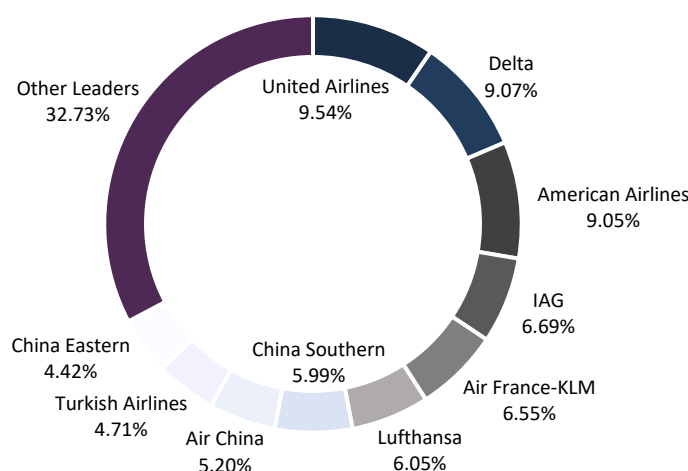
The International Air Transport Association (IATA) estimates airline debt levels rose 23% following the pandemic. Recent inflation is associated with increased costs of labor and airport fees. Airlines may feel pressured to raise ticket prices to remain profitable, however, substantial fare increases may dissuade price-sensitive consumers, which would in turn affect overall demand.

Business Models

Full Service

Full-Service Carriers (FSCs) are typically legacy airlines that emerged as state-owned ‘flag carriers’ in many countries. Historically, these airlines benefited from government protection against competition and were granted exclusive rights to operate on the most lucrative international routes, often determined by bilateral agreements. However, increasing financial pressures on governments, alongside trends toward deregulation, commercialization, and privatization, have led many countries to divest their stakes in these airlines.

Figure 2: Market Power Fragmented Among Full-Service Carriers, United, IAG, China Southern Lead
Peer Group Share of Revenue Passenger Kilometers



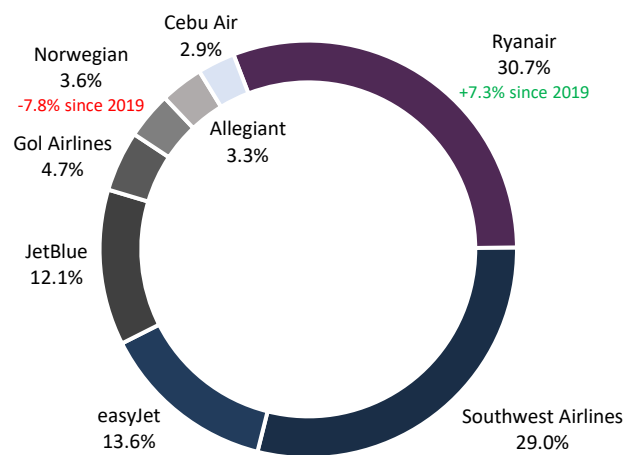
Source: Bloomberg

FSCs typically offer a range of cabin classes, including economy, business, and first class, catering to diverse passenger preferences. These carriers provide extensive services, including in-flight meals, entertainment, and lounge access for premium passengers. FSCs invest in frequent flyer programs to encourage repeat business and build customer loyalty. FSCs must adhere to stringent regulatory standards and safety protocols due to the complexity of their operations.

Low Cost

The emergence of Low-Cost Carriers (LCCs) in the late 20th century was driven by the deregulation and liberalization of the aviation industry. These airlines focus on minimizing operational costs and offering low fares, making air travel more accessible to price-sensitive consumers. LCCs have successfully undercut the prices of traditional carriers, leading to a significant erosion of market share for legacy airlines, particularly in regional and short-haul networks.

Figure 3: Southwest Retains Market Power in US, Norwegian Loses to Ryanair and easyJet in Europe
Peer Group Share of Revenue Passenger Kilometers

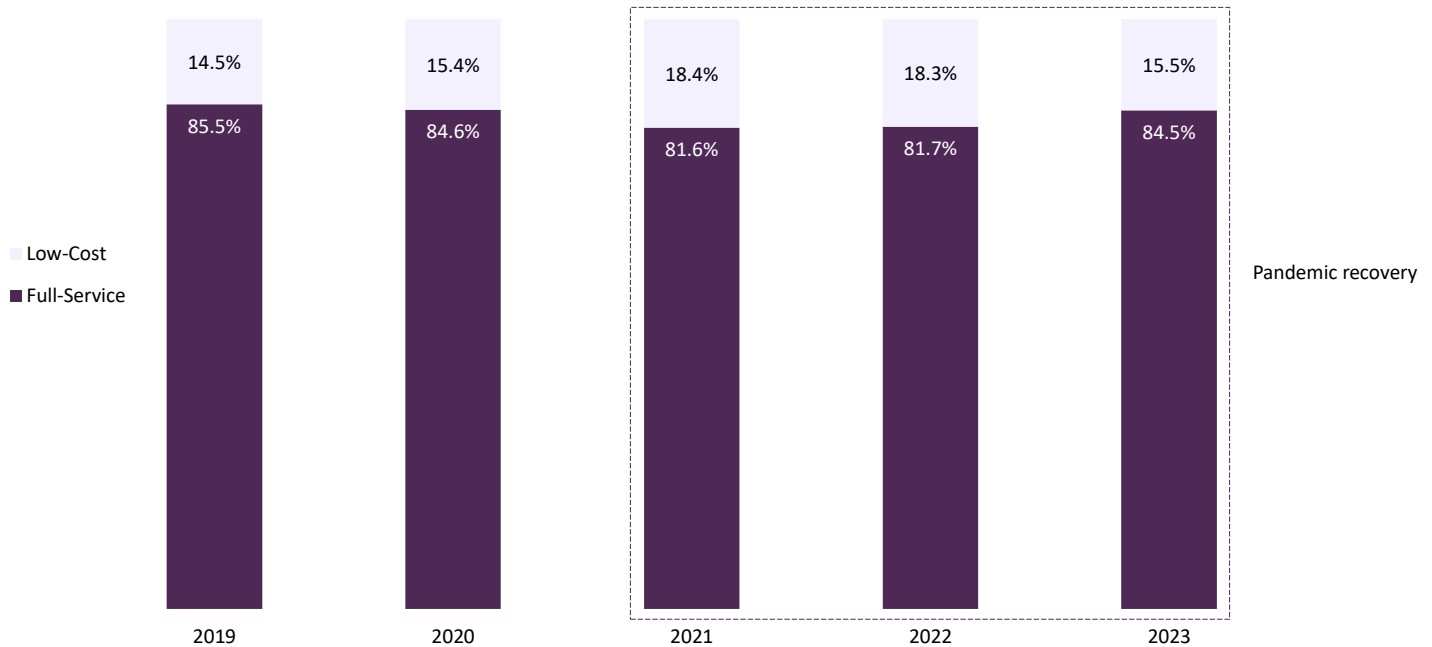


Source: Bloomberg

LCCs typically offer basic travel experience with additional charges for optional services like baggage, seat selection, and in-flight meals. To streamline maintenance and training costs, many LCCs operate a homogeneous fleet, often using just one aircraft type. LCCs frequently utilize dynamic pricing strategies, adjusting fares based on demand and booking patterns to maximize revenue. These airlines aim for quick turnaround times at airports to keep their planes flying and maximize operational efficiency.

Figure 4: Low-Cost Benefits Post-Pandemic

Peer Group Share of Revenue Passenger Kilometers



Source: Bloomberg

Charter

Charter Carriers emerged primarily in Europe, offering a unique service model driven by demand rather than a fixed schedule. These airlines serve tour operators, special interest groups, and private clients, providing tailored travel solutions. They often experience peak during summer and winter seasons, frequently leasing their aircraft to foreign operators during off-peak periods.

Alliances

To retain market power as well as overcome cabotage laws, companies based in different countries typically join airline alliances. Within an alliance, airlines may enter code-share agreements, in which airlines advertise and sell tickets for the same flight under their respective airline and flight codes, extend partner airline routes and layovers, and may even offer the ability to earn and redeem miles through each other's reward programs.

There are three major airline alliances: Star Alliance, which is led by United Airlines, Lufthansa Group, and Singapore Airlines; SkyTeam, which is led by Delta, Air France-KLM, and AeroMexico; and Oneworld, which is led by American Airlines, IAG, and Cathay Pacific. Together, they represent over 60 airlines.

The IATA plays a significant role in global cooperation, representing over 80% of global airlines. While it standardizes practices among its members, they have also been accused of operating as a cartel, influencing pricing strategies and policies across the industry leveraging its significant market power.

Mergers and Acquisitions

In recent years, the industry has witnessed a wave of mergers and acquisitions driven by the need for economies of scale, market presence, and financial performance. This trend is particularly pronounced in regions with intense competition such as the US but is also growing in emerging markets.

The US market results particularly concentrated with Southwest, Delta, United and American Airlines sharing 68.3% of the entire US market, while Ryanair, easyJet, Lufthansa Group, Air France-KLM and IAG share just 45% of the European market. The European market has shown trends of consolidation in recent years, with Lufthansa acquiring a 41% stake in ITA Airways in 2023 and Air France-KLM acquiring a 20% stake in SAS. IAG's acquisition of Air Europa is in progress and is expected to be completed by the end of 2024. Industry observers suggest that Europe may be moving towards a North American-style market structure dominated by few large airline groups, notably IAG, Air France-KLM, and Lufthansa Group, with Ryanair leading the low-cost market.

Several regions instead have fragmented markets. In India and Southeast Asia, competition is fierce among numerous low-cost and national carriers, leading to price wars and operational complexities. India's market, while dominated by few large players, remains otherwise very fragmented, with many smaller carriers fighting for market share. Similarly, Latin America has a diverse array of local carriers, despite the presence of large groups like LATAM Airlines. This fragmentation often results in lower profitability and less pricing power for airlines operating in these markets.

Tailwinds

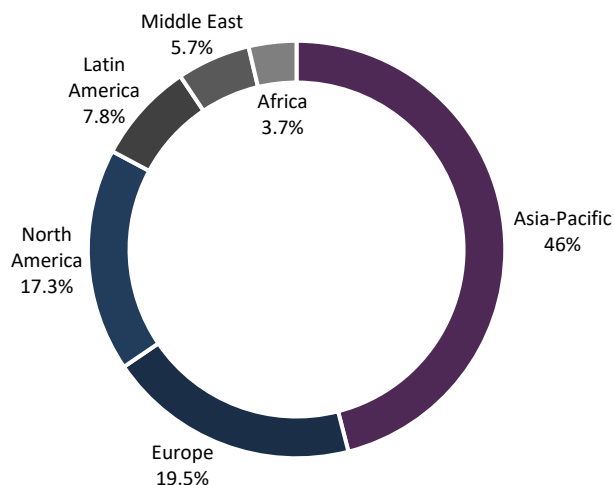
Consumer Demand

The IATA estimates airlines to generate \$30.5 billion in net profits (3.1% margin) in 2024, \$5 billion higher than their previous December 2023 forecast, an increase which is largely due to the rise in demand for air travel worldwide. Airports Council International (ACI), the largest airport authority organization, estimates global air traffic to exceed pre-pandemic levels for the first time in 2024 with an estimated 9.7 billion passengers, otherwise 106% of the 2019 figure. This number is projected to double, reaching 20 billion by 2042.

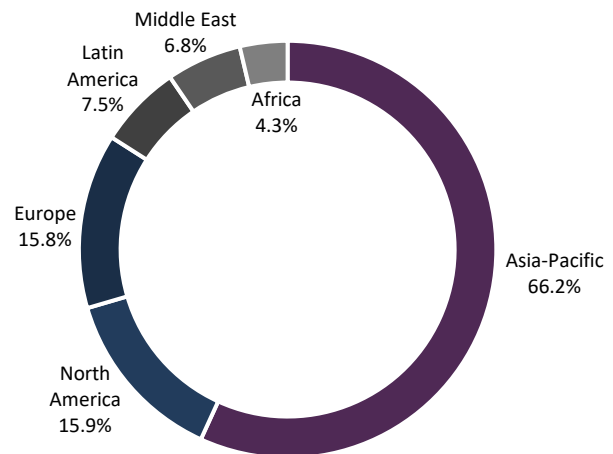
The ACI projects a 4.3% CAGR from 2023-2042, with a steep 9.1% CAGR for the first three years and then converging back to pre-pandemic levels through to 2052 (3.6% from 2023 to 2052), while the IATA forecasts a more modest CAGR of 3.8% over the period 2023-2043, with Asia-Pacific leading regional growth at 5.3% CAGR, followed by the Middle East (3.9%), Africa (3.7%), Latin America & the Caribbean (2.9%), North America (2.7%), and Europe (2.3%).

Figures 5 and 6: Asia-Pacific Dominates Air Travel Projections

Share of Global Air Travel by 2043



Share of Added Passengers by 2043



Source: IATA

Asia-Pacific

The Asia-Pacific (APAC) region accounts for more than half of global Revenue Passenger Kilometers (RPK) growth in 2024 due to higher fares charged by airlines and sharp demand increases in China, India, and Southeast Asia. Chinese passengers have shown great interest in domestic destinations, onboarding more domestic flights now than before the pandemic. The APAC region saw the strongest revenue growth globally in 2023, contributing to half of the 47% global increase in airline revenue. Passenger traffic rose by 98% year-on-year, with domestic routes in Thailand, Malaysia, and Indonesia surpassing pre-pandemic

levels. India is undergoing rapid growth driven by a booming population, middle-class expansion, and rapid development of airport infrastructures. Historic orders of Air India's 570 new aircraft and Indigo's 500 underscore India's trajectory of continued fruition.

United States and Canada

The United States and Canada are facing problems with limited capacity as aircraft manufacturers keep delaying predetermined aircraft deliveries. Due to the relative strength of the USD however, there has been an increased trend of American travelers to Europe. The airline industry in the US and Canada is expected to maintain profitability going forward driven by premium demand. The sector must manage rising costs and changes in consumer preferences to sustain long-term growth.

Europe

After 2 summers of success, airlines find themselves in the middle of economic turbulence, forcing them to go under price-correction. The European airline industry has experienced a strong recovery following the pandemic: airlines posted \$8.6 billion in 2023 net profit, projected to grow to \$9.0 billion in 2024. Passenger revenue growth remains robust, especially for premium services. Legacy carriers such as Lufthansa Group and Air France-KLM have posted strong financial results, driven by leisure travelers booking premium products. Ryanair, Europe's leading low-cost carrier, posted a 95% passenger load factor for the first half of 2023, in other words filling 95% of the airline's available seats with paying passengers, demonstrating a high demand and operational efficiency. However, rising fuel costs and disruptions due to aircraft delivery delays have presented challenges for further growth as observed in the United States and Canada.

Middle East

The Middle East is quickly becoming a major global aviation hub with airlines such as Emirates, Qatar Airways, and Etihad playing pivotal roles in connecting East and West. The region's recovery has been driven by rising demand for long-haul travel, particularly for widebody aircraft. Saudi Arabia, through its Vision 2030 initiative, is rapidly expanding its aviation sector, backed by Riyadh Air and the new aircraft lessor AviLease. These developments highlight the region's ambition to become a major player in the global aviation market.

Africa

The pandemic recovery in Africa has been slower than in other regions. Infrastructure challenges and financial constraints have made it difficult for many African airlines, especially flag carriers, to match the pace of recovery seen elsewhere. However, certain areas, particularly East and South Africa, are showing growth, with Ethiopian Airlines emerging as a leader on the continent. As air travel demand in Africa continues to grow, the region's potential for further expansion is significant, though it will require substantial investment in the region's infrastructures.

Latin America

Latin American airlines have demonstrated resilience, with Mexico leading the region's recovery particularly in domestic traffic, however, macroeconomic challenges persist. Brazilian carriers like GOL are renegotiating lease agreements, while Azul has emerged stronger following restructuring efforts. LATAM Airlines, having completed significant restructurings, now appears to be on a positive trajectory. The broader region faces ongoing challenges including currency fluctuations. Despite these obstacles, airlines in South America are adapting to changing market conditions, focusing on balancing financial sustainability with growth. As demand for both domestic and international air travel increases, South American airlines are poised for continued recovery.

Investment

Despite economic uncertainties, investors show a strong appetite in the aviation sector, driven by robust demand, easing global monetary policies, and potential to generate stronger profits.

Leasing remains the primary source of financing for new aircraft deliveries, accounting for an estimated \$40 billion in delivery financing in 2023, along with an additional \$6.5 billion from used aircraft sales and leaseback transactions. However, it is worth noting that 2024 could mark the second consecutive year of decline in the share of leasing, with figures dropping from 62% in 2022 to 56% in 2023, and potentially to 52% in 2024 according to PwC projections.

Investors view commercial aircraft assets and aircraft lessors as resilient and capable of weathering current market challenges and remaining profitable. Most investors already active in the industry are inclined to hold their position or increase their stakes. Traditional aviation lenders have returned to the market with competitive rates, complemented by alternative asset managers tapping into private equity. The field is welcoming a wave of infrastructure investors with substantial resources attracted to airport assets and other air-travel related infrastructures.

Technological Advancement

Artificial Intelligence (AI) and Big Data solutions are increasingly sought after due to their vast potential for increasing efficiency and safety. AI can appear in the form of chatbots or virtual assistants on either private devices or at airports. AI is also powerful in analyzing data such as passenger flow, baggage transportation, or route calculations, and then deriving predictive information to drive decisions.

Preference for contactless biometric identification arose strongly after the pandemic, causing airports to accommodate the demand with new technologies. Customers may find themselves more at ease when going under check-ins or security screening, which reduces the burden on airport personnel. The blockchain lies at the core of these systems which restricts unauthorized access to information, adding a layer of security. Decentralized systems help reduce ticket fraud and protect customer identities by linking customers' information to their luggage for instance.

Headwinds

Geopolitical Unrest

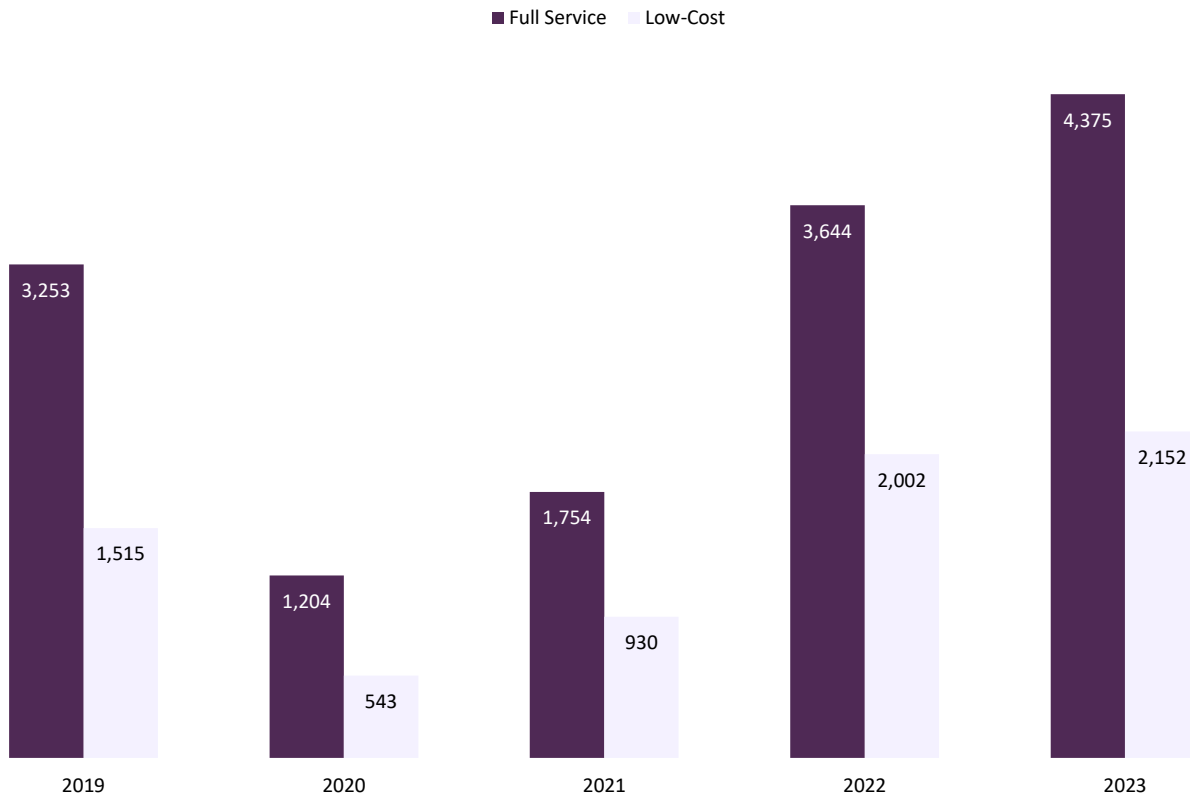
Fuel costs remain the most significant input expense for airlines, typically constituting 20-30% of an airline's cost base, and fluctuations in oil prices pose a serious challenge. While the global economy has seen some stabilization, jet fuel prices remain volatile, driven by geopolitical and supply chain instability.

The atrocious war in Ukraine has significantly disrupted supply chains. The global average price for jet fuel soared by 70% in 2022 and has since remained elevated, compounding the operational costs for airlines globally. Restrictions on airspace over Ukraine and parts of Eastern Europe have increased route lengths for several international flights, leading to further fuel costs and inefficiencies.

Further monstrosities in the Middle East, the largest oil-producing region in the world, have only exacerbated uncertainty across energy markets. Cost fluctuations disrupt airlines' financial forecasts, which directly impacts capital investment decisions and strategic planning. As conflicts have proven to be unpredictable and are unlikely to subside soon, airlines face a continued threat of elevated costs and constrained operational flexibility.

Figure 7: Fuel Costs Soar Following War Outbreaks

Peer Group Average Operating Expenses for Fuel (millions USD)



Source: Bloomberg

Operational Constraint

Fleet Shortcomings

The backlog in aircraft deliveries, caused by both supply chain disruptions and the financial strain on OEMs (Original Equipment Manufacturers) during the pandemic, has left many airlines with outdated fleets that are dangerous and costly to operate. The two dominant commercial aircraft manufacturers, Airbus and Boeing, forecast demand for new aircraft to be roughly 42,000-44,000 over the next 20 years, yet both have warned of the persistence of ongoing delivery delays, both facing challenges beyond supply chain disruptions and input costs.

Boeing is facing public scrutiny following a safety incident in January, and a collection of incidents since regarding its signature Boeing 737 MAX model, leading to an ongoing investigation by the Federal Aviation Administration (FAA) of the United States. Audits concluded in March found non-compliance issues in Boeing's process control, parts and handling storage, and product control. Following the incident, the FAA immediately grounded 171 737-9 MAX aircraft operating in US territory or by US airlines, and later that month halted the production expansion of the 737 MAX model. Production targets for the 737 MAX have been delayed to 42 a month in March 2025 compared to the previous target of September 2024. Public backlash ensued following the company's guilty plea in July regarding conspiracies to defraud the FAA in false representations of its 737 MAX software features related to crashes in 2018 and 2019 which killed 346 people.

In September, 33,000 Boeing workers walked out of plants in Washington state following failed wage negotiations, halting the production of 767 and 777 planes. In October, S&P Global Ratings warned of a potential downgrade of the company's triple B minus credit to junk status, estimating the manufacturer to be losing \$1 billion a month since the strike. On October 11th, Boeing announced that the first deliveries of the 777X, the largest passenger planes in production originally scheduled for 2020, would be delayed again from 2025 to at least 2026. The hold-up leaves a collection of Boeing customers astray, notably Emirates, who placed 205 orders for the model, and Qatar Airways, Singapore Airlines, and Lufthansa, who placed 74, 31, and 27 orders respectively.

In June, Airbus lowered its 2024 guidance for deliveries from 800 aircraft to 770, lowering the ramp for its A320 Family deliveries per month from 2026 to 2027. In September, Hong Kong's Cathay Pacific found 15 planes in need of fuel line repairs following the failure of a Rolls Royce engine which resulted in a fire breaking out in-flight. Another one of Airbus' primary engine manufacturers, Pratt & Whitney, underwent quality control issues in 2023 leading to the grounding and inspection of A320 fleet.

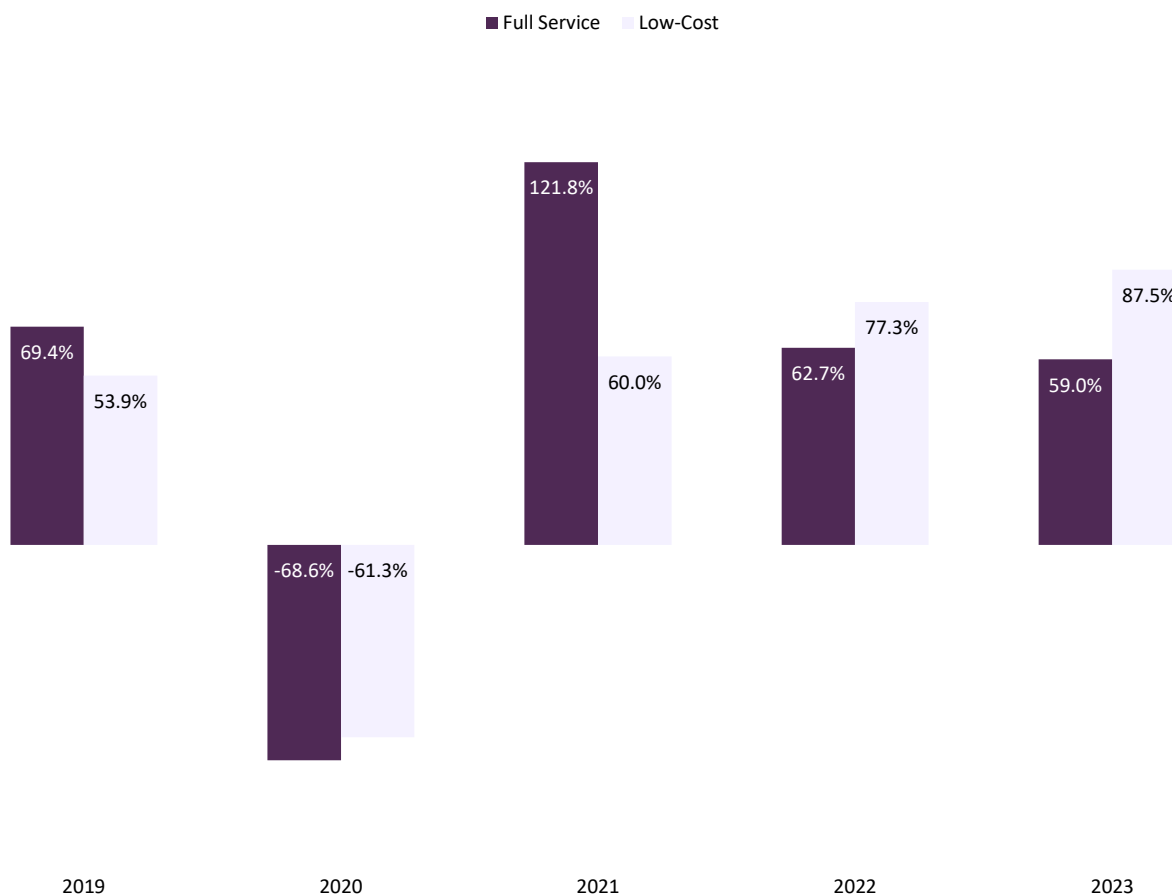
Financing and Inflation

The financial burden from the pandemic remains one of the most pressing issues for airlines; many took on significant debt to survive the unprecedented drop in demand during 2020 and 2021, and total debt levels in the industry have risen approximately 23% since the crisis. Servicing this debt has become even more challenging in a high-interest rate environment. Central banks are forecasted to gradually ease

interest rates into 2024 and beyond, but debt issuers remain cautious as many airlines still need to balance repayment with the need for meeting consumer demand and capital investment to remain competitive over the long-term.

Figure 8: Low-Cost Carriers Re-Invest Post-Pandemic Profits, Full-Service Capex Dampens

Peer Group Average Capital Expenditures to Operating Cash Flow



Source: Bloomberg

The average cost of financing new aircraft has risen by approximately 3% since 2020 due to the rising cost of capital. These costs are projected to decline as central banks begin easing monetary policy, but servicing pandemic debt and sacrificing future growth remains a headwind in an industry where capital expenditures are critical for survival. This also limits the industry's ability to make investments in technology as carriers are looking to modernize their fleets by implementing AI.

Inflationary pressures on essential services such as ground handling, catering, and airport fees are further eroding profit margins. Airlines must either pass these costs on to consumers through higher ticket prices, risking demand suppression, or absorb them, which weakens their already precarious post-pandemic financial positions.

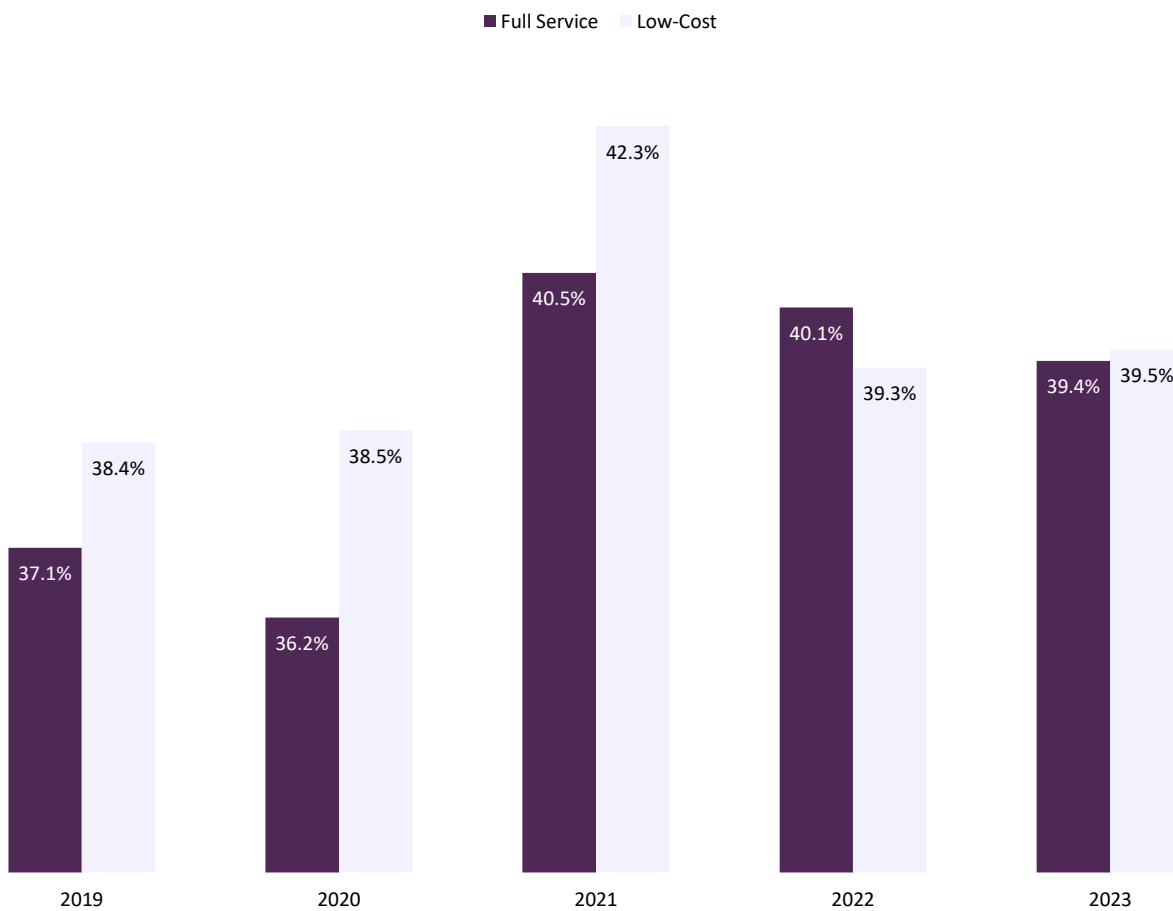
Labor

The airline industry is grappling with labor shortages across all major markets, particularly with pilots, ground crew, and maintenance staff. Airlines are struggling to match staffing levels to the surge in travel demand. The IATA estimates the global airline workforce shrunk by 5% between 2020 and 2021, and while rehiring has been swift in certain professions, critical shortages remain in high-skill roles such as pilots and aircraft engineers.

This labor scarcity has also fueled wage inflation. Pilot wages in North America have risen by an estimated 15-20% since 2021, and similar trends have persisted in Europe and in Asia. Protracted labor negotiations, particularly with pilot unions, have also led to operational disruptions and flight cancellations, further straining profitability. Wage inflation is expected to persist as unions push for better working conditions and higher wages, making workforce management a key challenge for the industry moving forward.

Figure 9: Slow Recovery of High Labor Costs Following the Pandemic

Peer Group Average Share of Labor Costs in Operating Expenses (Ex-Fuel)



Source: Bloomberg

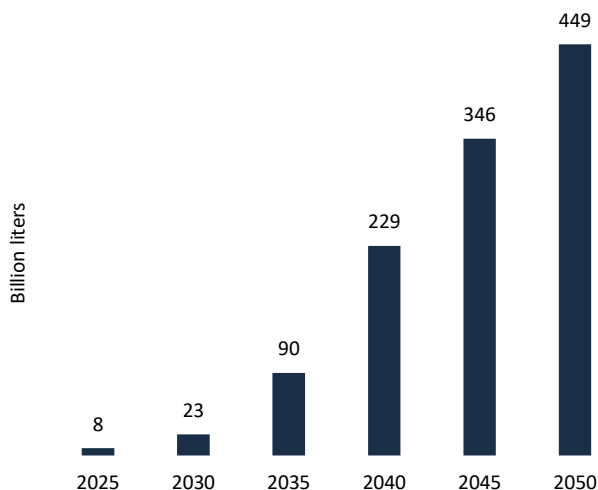
Carbon Emission Mitigation

The airline industry is under pressure to meet environmental standards and the financial burden of this is immense. The United Nations' Intergovernmental Panel on Climate Change aims to contain global warming to +1.5°C meaning global emissions need to be reduced by 45% by 2030 and reach net zero by 2050. The International Energy Agency maintains that the sector is not on track to meet this target.

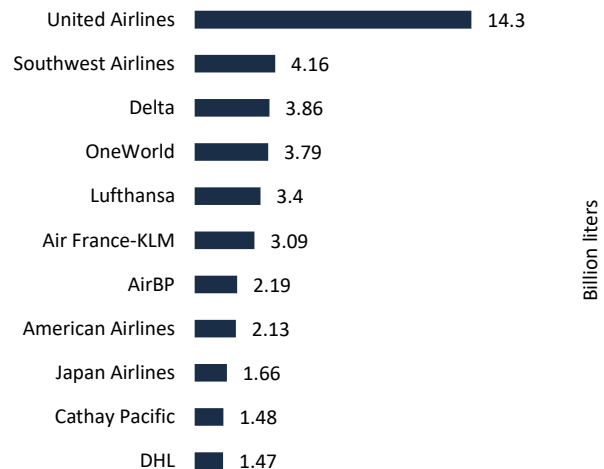
The adoption of Sustainable Aviation Fuel (SAF) is at the heart of these efforts, but currently SAF accounts for less than 0.5% of total aviation fuel usage. SAF prices are 2-3 times higher than traditional fuel, and scaling production to match customer demand requires significant investment in infrastructure paired with efficient and sustainable supply chains. Boeing and Airbus have voiced commitments to deliver aircraft capable of flying on 100% SAF by 2030; both have declared SAF can be already blended with regular jet fuel up to 50% with no necessary changes in their fueling infrastructure, yet Airbus guidance estimates a mere 15% of global SAF mix in their aircraft by the end of the year.

Figures 10 and 11: Sustainable Fuel Efforts Bleak, United Leads Global Investment

SAF Required to Achieve Net Zero by 2050



Lending Purchasers of SAF Since 2013



Sources: IATA, ICAO

Airlines are also exploring other decarbonization strategies such as fleet modernization with more fuel-efficient aircraft and investments in electric or hydrogen-powered aviation. However, these capital-intensive projects come at a time when many carriers are still burdened by debt. The cost of non-compliance with emission reduction targets could be severe, with potential penalties or regulatory sanctions for failing to meet emission reduction milestones. The EU Emissions Trading Scheme may light the way for a more widespread penalty for failing to achieve targets and sanctioning of corporate greenwashing practices.

With the US at the core of the aviation market and overall global economy, the 2024 elections loom as a pivotal moment in surmounting the emissions reduction conundrum. The current administration has

emphasized sustainability measures and infrastructure development, overseeing the passage of the Infrastructure Investment and Jobs Act, which included \$25 billion in provisions for airport and air traffic management systems, as well as the Inflation Reduction Act, which introduced a \$1.25 per-gallon tax credit for qualified sustainable air fuels. If the elections result in a significant shift in political priorities, there could be disruptions in the continuity of these projects, and regulatory delays would make inevitable changes more costly in the future.

Elections in other major economies also influence global cooperation on carbon emissions reduction measures. Failure to secure a coordinated international approach will result in fragmented policies leading to higher compliance costs for airlines operating across multiple jurisdictions. The outcomes of political elections in coming years will have a direct bearing on airlines' strategic initiatives and cost structures, and as the industry is intricately connected to general economic growth, radical policies which reflect increasingly polarized electorates worldwide (as recently observed in Argentina) furthers uncertainty within the sector.

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