

# Airline Industry

GTSF Investments Committee | February 28, 2023

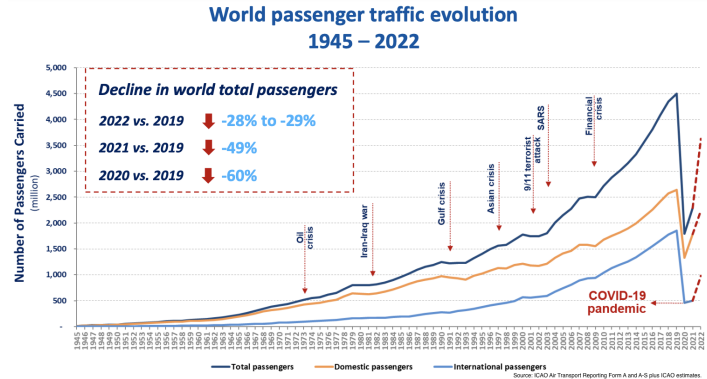


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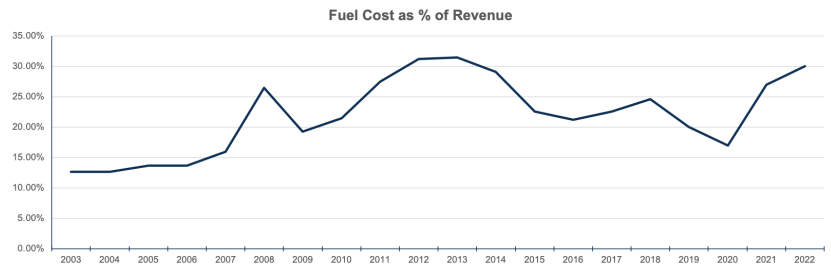
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## Industry Overview

A part of the wider traveler industry, the airline industry offers paying customers and business partners air transport services for both human travelers and cargo. These services may be scheduled and/or chartered services that allow customers to buy flight seats and travel to different parts of the world. According to the International Civil Aviation Organization, the total number of world passengers in the airline industry is still approximately 28-29% lower in 2022 than the total world passengers in 2019. That being said, total world passengers have been on the rise since its sharp overall reduction of 2,703 million passengers in 2020 due to the effects of COVID-19, a 60% decline in passengers compared to 2019.

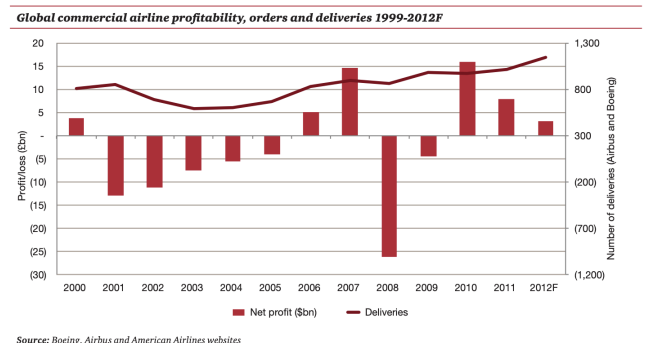


Furthermore, the global airline industry is still grappling with the impact of the COVID-19 pandemic, with the International Air Transport Association (IATA) predicting that passenger traffic will not recover to pre-pandemic levels until 2024. Jets in service, seat capacity, and cargo traffic have all recovered to varying degrees, but revenue passenger kilometers (RPKs) are still at only 75% of 2019 levels. The pandemic has resulted in significant losses for the industry, with a combined net loss of \$187 billion in just three years, effectively wiping out 81% of the accumulated profit of previous years. Additionally, Boeing and Airbus deliveries have been set back 10 years. Fuel costs have also risen, accounting for approximately 30% of revenue in 2022, up from 20% pre-COVID. Despite these challenges, airline alliances have played a crucial role in helping airlines navigate the pandemic and recover to the pre-COVID performance.



## Capital Cycle Analysis

The global airline industry is poised for significant growth in the coming years, driven by a growing middle class and increased consumption from developing nations. One of the key drivers of the airline industry is its role in facilitating international trade. Therefore, this makes airlines a cyclical industry because their financial performance is heavily influenced by macroeconomic factors and consumer spending patterns. During the global financial crisis in 2008, airlines saw major revenue declines, with global airline revenue dropping 16.5% from 2008 to 2009, resulting in major losses for airlines. As with many other capital-heavy industries, commercial airspace faces problems with



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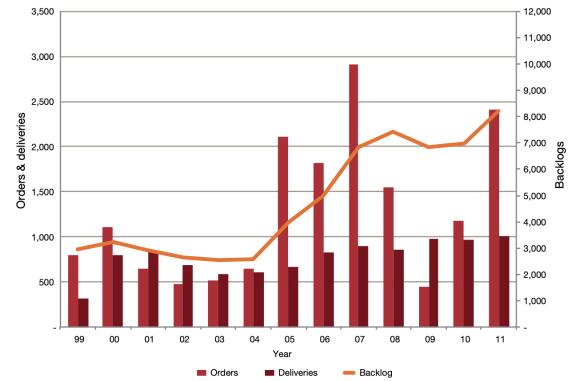
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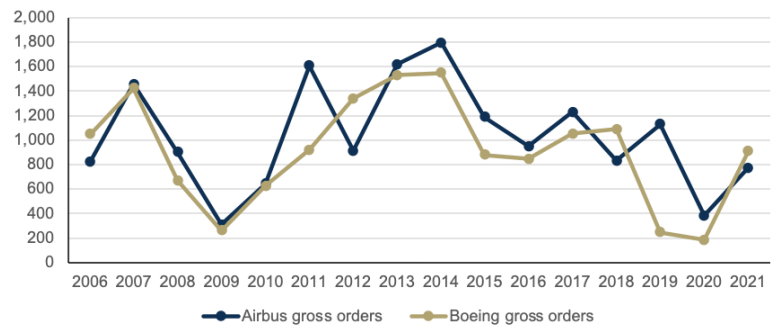
companies ordering new aircrafts when demand is high, rising backlogs, then deliveries when demand has significantly slowed. Investing in airlines with a 5+ year time horizon during the 2008 recession would have seen significant returns as airlines cut CapEx spending, aircraft supply went down, and margins improved. Operational costs were also cut as new technology created more efficient fuel engines. As a result of the increasing profitability of commercial airlines coming out of the recession, companies increased aircraft orders significantly, which led to an oversupply of aircrafts and poor returns for investors in the industry from 2015 onwards.

The landscape coming out of the Covid recession is not quite the same dynamic we saw from 2010-2014. This can be partly attributed to the consolidation in the industry since then, with the four largest commercial airlines growing their market share. Boeing has estimated it will deliver around 500 aircrafts, while Airbus estimates 720 aircrafts, which is above the 480 and 663 aircrafts that were delivered last year, but still much lower than in 2014. We expect positive returns in the industry as long as aircraft deliveries remain below 2013 levels and airlines continue to hold significant control over their pricing strategy. However, a recessionary environment in 2023 with deliveries missing expectations would be the ideal set up for an investment in the airline industry.

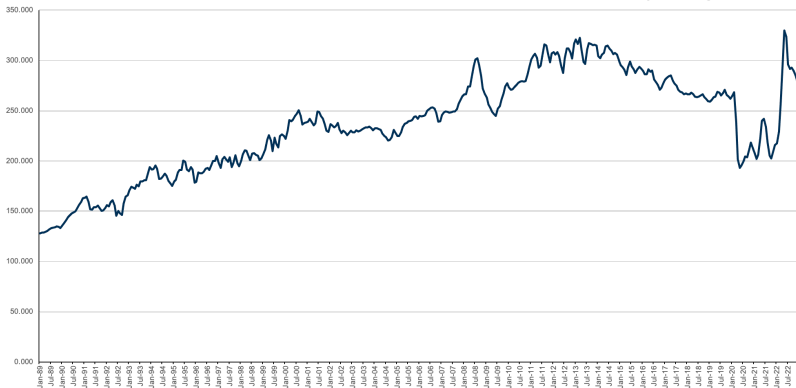
Airbus and Boeing orders, deliveries and backlogs



Airbus and Boeing: aircraft orders 2006-2021



Consumer Price Index for All Urban Consumers: Airline Fares in U.S. City Average



Company	Net Loss	2008 Performance	Recovery
LUV	\$825M	\$178M	Implementing deep domestic network cuts, carrier planning to implement strategic capacity increases in fast-growing markets.
DAL	\$503M	\$6.1B	Delta's merger with Northwest Airlines led to an increase revenue of \$6.7B by the end of December.
AAL	\$1.45B	\$19.92B	Merger with US Airways helped create a larger network. Restructuring costs and job
UAL	\$2.7B	\$16.34B	N/A
SAVE	\$144M	\$787M	Cut operational costs, implemented new technologies for fuel saving and increasing carrier capacity.

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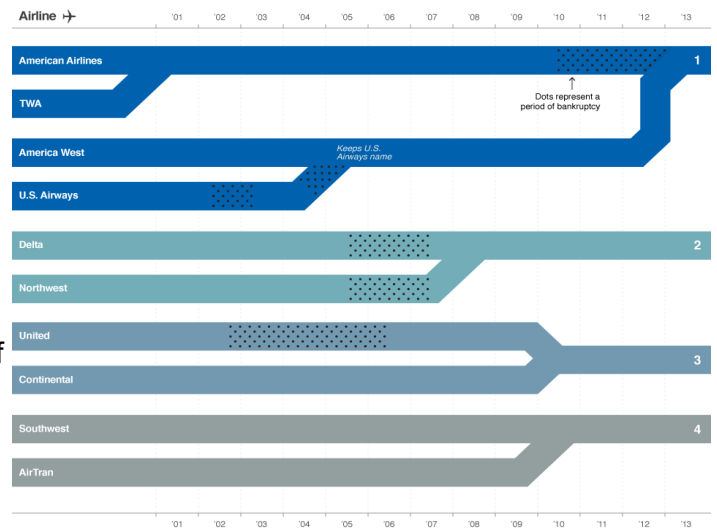
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## Relative Valuation

Company	Market Cap	EV/EBITDA	Forward PE	ROA	Load Factor	30-Day IV
LUV	\$19.9B	7.19x	11.11x	1.91%	83.4%	30.1%
DAL	\$24.26B	9.47x	6.73x	3.33%	84.0%	29.9%
AAL	\$10.18B	20.86x	6.08x	2.12%	85.3%	38.2%
UAL	\$16.0B	7.03x	4.60x	2.37%	83.4%	35.4%
SAVE	\$2.0B	-23.84x	11.20x	-0.93%	81.9%	55.5%
JETS (ETF)	x	x	22.32x	x	x	x

## Name of the Game: Merger and Acquisition

The 21st century has brought many changes to the airline industry, but the name of the game was merger and acquisition. Due to the industry's capital-intensive nature, M&A was the most efficient expansion method, aiming to capture market share or accumulate assets. Moreover, several M&As were necessitated by bankruptcy filings. In the past two decades, economic recessions, geopolitical conflicts, rising fuel prices, and other negative factors have impacted the business environment and caused many airlines to file for bankruptcy, which includes Delta, American Airlines, US Airways, and United Airlines. The current oligarchic industry landscape is precisely the result of this series of bankruptcy-caused M&As shown in the graph.



Nonetheless, debt obligations built after the pandemic have forced the restructuring of some airlines, which strongly resembled the industry conditions in the early 2000s. As a result, another wave of M&As may be primed. Currently, JetBlue and Spirit are pushing for their merger after the termination of Frontier and Spirit's merger.

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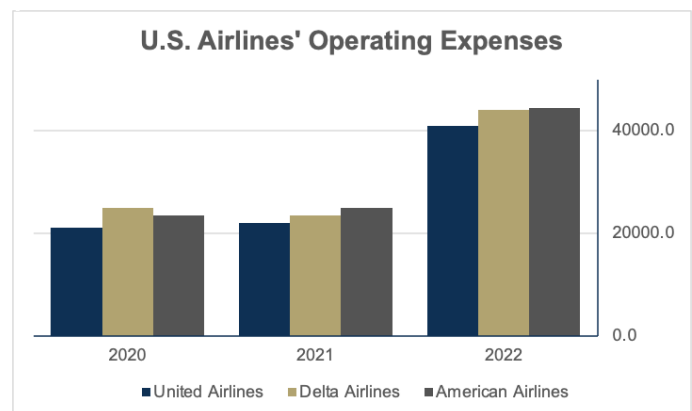
## 2023 Expectations

According to the International Air Transport Association (IATA), airlines are expected to have a small net profit of \$4.7 billion, with a 0.6% net profit margin, in 2023. This would be the first year of profit since 2019, when the airline industry had net profits of \$26.4 billion with a net profit margin of 3.1%, and a significantly better result than the realized losses of \$137.7 billion in 2020 and \$42.0 billion in 2021. The 2023 small net profit expectation is backed by expected lower oil price inflation and continuing pent-up demand that should help to keep airline costs in check. That being said, the thin profit margins mean that any insignificant shift in one of these expectations can flip the final result back into negative territory.

The main drivers of the airline industry are passenger demand, the cargo market, and airline costs. According to IATA, "Passenger demand is expected to reach 85.5% of 2019 levels over the course of 2023." Furthermore, while the cargo market is expected to bring revenues of \$149.4 billion, IATA expects a fall of 22.6% in cargo yields, mainly in the latter part of the year, due to the impact of the U.S. Federal Reserve implementing inflation-reducing measures. Combined with the IATA expected growth of overall costs by 5.3%, to total \$776 billion due to cost pressures from labor, skill, and capacity shortages, the airline industry is not expected to have large profits in 2023.

Another challenge that airlines face is the potential impact on their ability to increase their capacity by adding new aircraft to their fleets. The past year has seen significant disruptions in the global supply chain, which may hinder aircraft manufacturers' production rates, just as it did last year when they faced shortages of engines and other parts. This means that aircraft manufacturers may struggle to meet delivery expectations, leaving airlines with limited capacity. Additionally, aircraft lease rates are expected to increase in 2023. During the pandemic, airlines reduced their owned fleets by about 4%, while aircraft lessors increased theirs by more than 15%, managing more than 50% of the worldwide passenger aircraft fleet by value. Airlines have learned that leased aircraft have shorter lead times than new aircraft from manufacturers. As a result, demand for leased aircraft is expected to be high, giving aircraft lessors the flexibility to increase their rates. This is particularly important given that inflation is affecting the aircraft leasing industry, and lessors will need to cover their capital funding.

Lastly, major U.S. airlines such as American Airlines, JetBlue, and Alaska Air Group are anticipating record earnings for the full year of 2023, thanks to a significant surge in ticket sales as travel demand bounce back from the pandemic. For example, American Airlines has issued a projection of adjusted earnings of \$2.50 to \$3.50 per share for the year 2023, surpassing the forecast of analysts, which stood at \$1.77 per share. In addition, United Airlines has predicted a substantial increase in profits, with an expected surge of at least four times its current earnings for 2023, while Delta Air Lines is anticipating nearly double-digit growth in its full-year earnings. But, while higher fares have contributed to profits, airlines could face setbacks from issues like pilot pay and negotiations. JetBlue, for instance, has forecasted an increase in its expenses, excluding fuel, for 2023, ranging between 1.5% and 4.5%, which aligns with the projections made by Citi analysts. Nonetheless, airlines remain a rare bright spot amid economic uncertainty, inflation, and rising interest rates.



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