



Contents

	-			4
Sector	Focus:	Ind	lustria	Is

Overview	4
Projections	5
Regulatory Landscape	6
Transaction Activity	7
Industry Focus: Passenger Airlines	
Overview	9
Projections	10
Transaction Activity	11
Credit Health	12
Headwinds	13
Tailwinds	14
Macroeconomic Landscape	15
Basic Information	16
Profitability Margin	17
Valuation Multiples	18
Liquidity Analysis	19
Industry Specific Analysis	20



Contents

Equity Research: Southwest Airlines

Valuation Summary	22
Wall Street Perspective	23
Equity Research: Alaska Air Group	
Valuation Summary	25
Wall Street Perspective	26
Team Outlook	27

Industrials Team



Aru Mehta

Dinctor



Nicolas Ras
Associate



Owen Romano Analyst



Andrew Wu Analyst



Trayna Bui Analyst



SECTOR OVERVIEW

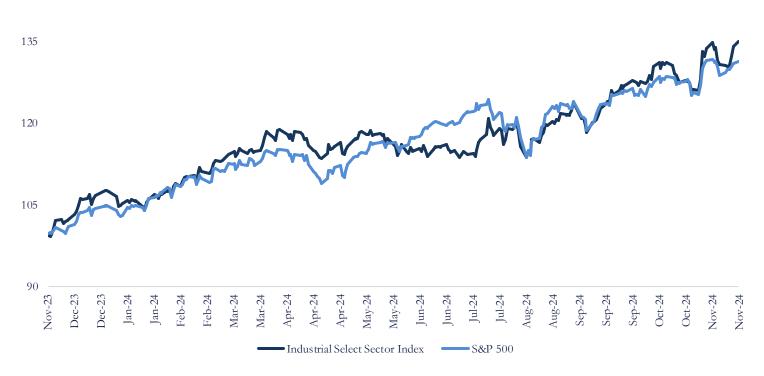
Stability Amid Growth Disparities

In 2024, the industrials sector demonstrated resilience amidst fluctuating economic conditions, achieving a steady 2.53% TTM and YTD gain. While this performance underscores the sector's stability, it lags behind the broader S&P 500, which posted an impressive 38.02% TTM return, driven largely by a small group of mega-cap technology stocks. The divergence became particularly noticeable after June 2024, as the S&P 500's rally accelerated on the back of broad investor confidence and significant gains in growth-oriented sectors like technology and communications. Despite this underperformance, the industrials sector maintained a vital role in supporting economic recovery through its diversified exposure and steady demand across sub-segments. Standout performers like Passenger Airlines, with 26.7% TTM growth, and Passenger Ground Transportation, with 22.57% TTM growth, reflected strong tailwinds from resurging travel demand, expanded route capacity, and significant infrastructure investments, including airport expansions and urban transit upgrades.

Looking ahead, the industrials sector is well-positioned to capitalize on structural growth drivers, such as increased global travel, sustainable transportation advancements, and ongoing infrastructure modernization efforts. The resurgence of air travel is expected to persist, bolstered by investments in fleet upgrades and sustainable aviation fuels, while ground transportation is poised to grow with the expansion of electric and autonomous vehicle adoption. Additionally, government spending on renewable energy projects and logistics improvements will continue to create opportunities for construction and engineering firms, ensuring a steady pipeline of activity. While the sector may not deliver the same explosive growth seen in technology, its stability, coupled with its essential role in the global economy, makes it an appealing choice for long-term investors seeking balanced portfolio diversification.

S&P 500 vs Industrial Select Index

150



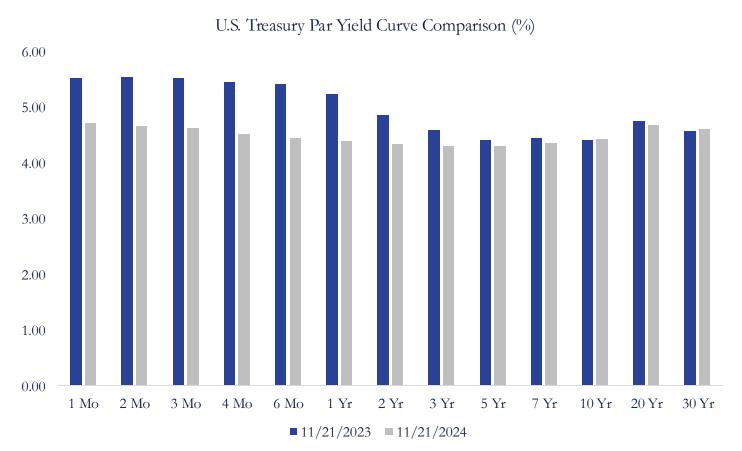


PROJECTIONS

Resilient Growth Amid Uncertainty

As 2024 closes, the industrial sector has shown strong progress that has closely followed trends for the market at large. Year to date, the sector as seen growth of 23.16% with its performance QTD and over the past 12 months reaching 3.59% and 39.05%, respectively. While impressive, the industrial sector's performance still lags that of the broader market, especially when compared to sectors such as communication services and technology. Nonetheless, the industrial sector is holding its ground when compared to the year-to-date return of the S&P 500 of 25.23%. The industrial sector's performance in 2024 is reassuring given the macroeconomic challenges it has faced thus far. Even though the sector lags the overall performance of the S&P 500, the distinction must be made that a majority of the S&P 500's 2024 growth was attributed to a select few stocks.

Bearing in mind the recently positive performance for industrials, recent macroeconomic events could shake up the industry from both a financing and regulatory perspective. Donald Trump has publicly stated a strong stance in favor of tariffs on foreign goods. As it currently stands, the U.S. has a 2% trade-weighted average import tariff rate for non-industrial goods. As part of his campaign, Donald Trump proposed a 10% universal tariff on imports. While tariffs could stimulate domestic manufacturers, particularly in sectors such as semiconductors, batteries, and automotive, it would harm other major subsectors. Maritime shipping and A&D would be adversely impacted. In the financing side of things rate cuts are brightening the uncertain future for industrials. As of 11/21/24, there has been \$310.3 billion in M&A activity in the industrials sector, a 1.4% increase when compared to 2023. Industrials is inherently a capital-intensive industry, and recent cuts allow for increased capital expenditure, expansion, and future efficiency within several subsectors.





REGULATORY LANDSCAPE

Standing Strong Despite Poor Conditions

Potential Changes Going Forward

In recent years, the Biden-Harris administration has focused its efforts to strengthen labor unions. Despite his support for the PRO Act (Protecting the Right to Organize) due to a lack of support from the Senate, he was unable to pass this pro-union legislation. Additionally, he successfully put forth the Infrastructure Investment and Jobs Act (IIJA) of 2021, with the goal of providing federal funding for projects targeting emission reductions and clean energy. Ultimately, the Biden-Harris administration was successful in increasing the number of manufacturing jobs by 800,000 since 2021, and 21,000 in October 2024. Biden also has clearly demonstrated his environmental stance through firm regulation. For example, in November 2024 the Biden Administration announced that oil and gas companies emitting methane above certain thresholds will be handed a hefty federal fee. That said, many expect big regulatory changes heading into Trump's second administration.

Producer Price Index by Industry: Total Manufacturing Industries



Department of Transportation Selection

During Donald Trumps first administration he selected Elaine Chao, who also served in another administration as Secretary of Labor. Chao had a big emphasis on regulation reduction and efficiency in environmental review. Despite Chao resigning prior to the end his administration, it is likely that he will appoint someone with a similar approach to government deregulation. Transportation infrastructure, safety standards, and airport development are all important aspects that the Secretary oversees. Therefore, it will be very interesting to see who Donald Trump selects. Given the Trump administrations stark contrast to the administration, we expect immediate deregulation starting FY2025 which could possibly lower immediate cost and drive revenues higher in the short-term

Environmental Deregulation

Despite President Biden re-entering the Paris Climate Agreement after Trumps first presidency, Trump has pledged to leave it again. Furthermore, the President-elect has pledged to expand fossil fuel production, a decision backed by his selection of Lee Zeldin to lead the EPA. Lee Zeldin is a big supporter of fossil fuels and has expressed a skeptical viewpoint on climate change throughout his career. Despite deregulation being known to improve the industrials sector performance, the CEO of Exxon Mobil has urged Trump to keep the U.S. in the Paris Climate Agreement. He argues that this move would cause global confusion surrounding climate efforts, ultimately negatively impacting business.



TRANSACTION ACTIVITY

Recent Deal Slowdown and Emerging Trends

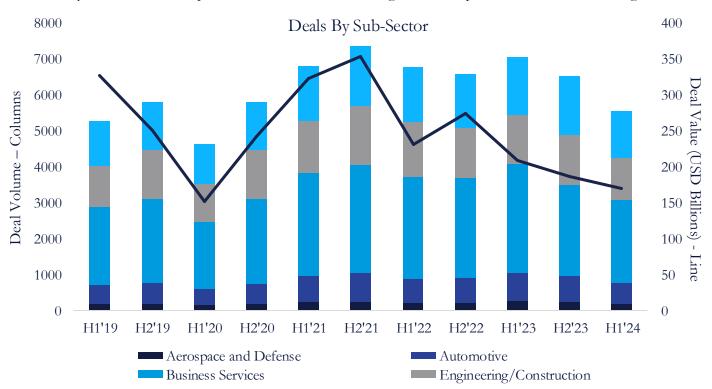


Recent M&A Deals

M&A activity highlights emerging trends and can signal competitive actions in the market during the 2024 year. In a strategic acquisition, Rio Tinto acquired Arcadium Lithium as it attempts to enter the lithium mining industry as demand increases for electric vehicles. Traditionally, Rio Tinto has dominated production in iron ore, copper, and other aluminum. Recently, the data center industry has also experienced some activity. Schneider Electric, a firm specializing in energy solutions and cooling has acquired 75% of Motivair, a data center cooling company. With the increase in data centers globally, Motivair has benefited from the added demand for thermal management systems.

Shifting Dynamics in Global M&A

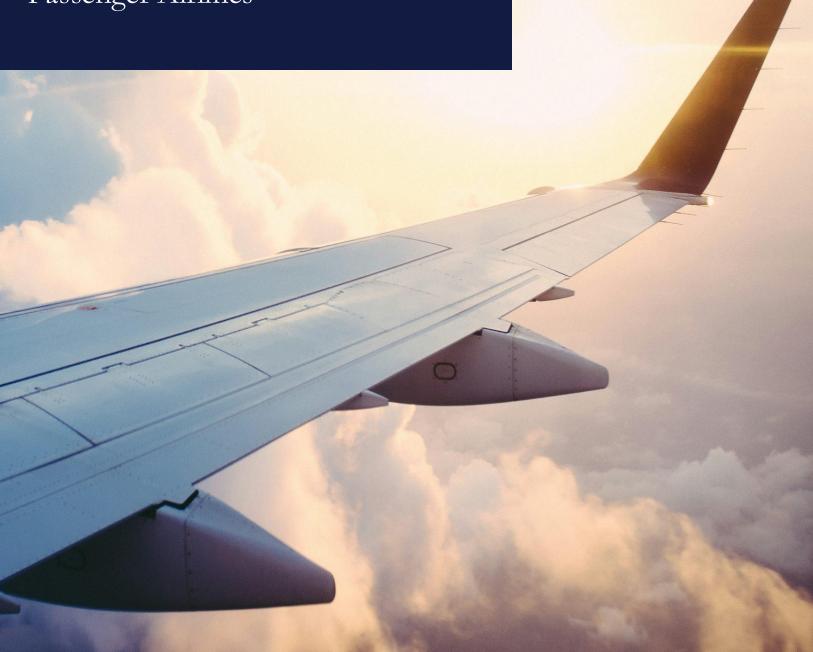
Over the past five years, the global industrials sector has seen a lack of transaction growth with a considerable decrease in the last 18 months. Specifically, a mix of high interest rates and production issues have resulted in a slowed M&A environment. Industrials sector deal values have also experienced a consistent decrease in the second half of 2024. Researchers, however, expect a boost in M&A activity 2025 due to an increase in lending from more-stable interest rates. Several new trends that have been main drivers for the recent transaction activity. The wars in Europe and the Middle East have resulted in global supply chain vulnerabilities which companies have attempted to address through vertical integration, such as acquiring suppliers of raw materials. Additionally, the sectors attempts to increase machine learnings and AI capabilities has been a leading factor.







Passenger Airlines



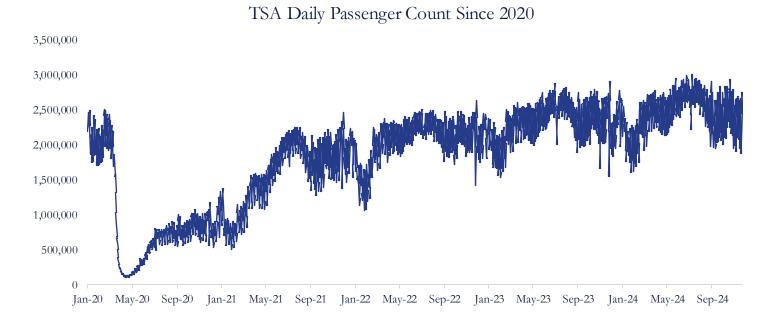


VERTICAL OVERVIEW

Positive Outlook Despite Recent Falters

Passenger Airlines is a vertical within the industrials sector that plays a strong role in employing the most efficient transportation of passengers and cargo, allowing global connectivity and economic growth through trade and tourism. Companies within this vertical engage in business that pertains to operating commercial flights, acquiring and maintaining aircraft, and optimizing routes. Within this larger image of what airlines do, each individual firm fits into one of its own niches whether that be a low-cost carrier, full-service carrier or regional carrier. As of November 2024, there are 73 publicly traded airlines in the vertical with a combined market cap of \$382 billion. The vertical is a large contributor to GDP with forecasted contributions for 2024 in the U.S., China, and India being 2.6%, 0.8% and 7.8%, respectively. Some of the top contributors in all niches to this figure are Delta Air Lines (DAL), United Airlines Holdings (UAL), Ryanair (RYAAY), and Southwest Airlines (LUV). Despite the falter the industry had due to COVID-19 in 2020 and 2021, increasing demand for both leisure and business travel coupled with optimistic outlooks on future fuel pricing has led to generally positive convictions for the vertical for the foreseeable future. With all of this in mind, airlines have a projected CAGR of 4.5% from 2024-2029.

Generally, the airline industry is susceptible to fragilities arising from larger macroeconomic trends. Namely, fuel prices, consumer demand, and global economic conditions contribute to successes and shortfalls. In 2019 prior to the arrival of COVID-19, the industry saw a record number of RPKs (Revenue Passenger Kilometers) of 4.37 Trillion. In the 5 years preceding this figure, RPKs saw average annual growth of 4.16% globally. After a dramatic drop in RPKs from 2019-2020, this figure has rebounded to 4.1 trillion in 2023 after 27.7% growth from 2022 to 2023. COVID-19 imposed major limits on the airline industry and as the world returns to pre-pandemic form, the airline industry is expected to follow suit with its demand. On the headwinds end, ESG and capacity constraints are expected to limit the growth of the airline industry. Boeing, one of the industry's largest producers of aircraft, produced only 83 aircraft in Q1 of 2024, down from 130 aircraft in Q1 of 2023. Airbus also fell short of expectations in Q1, delivering only 142 aircraft. While flight demand may be on par, aircraft deliveries are still far below pre-pandemic levels. Outside of caps on growth, consumer sentiment and regulation has led many large airliners to begin sustainability initiatives. Despite pandemic slows in 2022, aviation still contributed 2% of energy-related global CO2 emissions. This has led major players such as American Airlines and JetBlue to set ambitious net-zero carbon emission goals by 2050 and 2040 respectively.





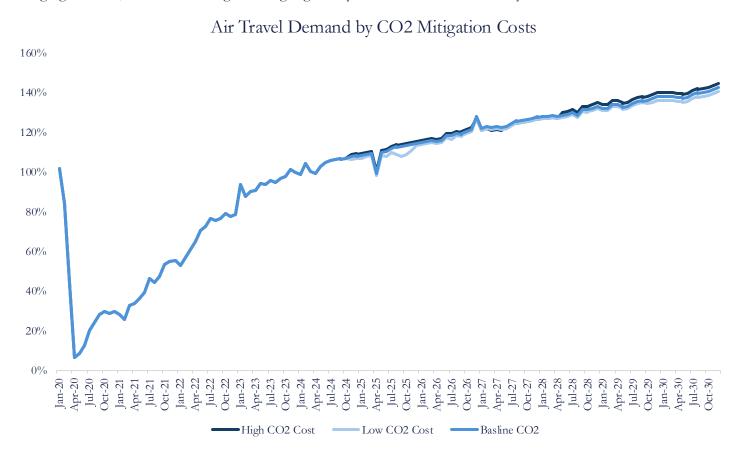
PROJECTIONS

Rising Demand, Rising Returns

The airline industry has shown remarkable resilience amid pandemic-related disruptions, supply chain issues, and fuel price volatility. In 2023, industry demand and financial performance have strengthened, driven by rising global travel, expanding fleets, and strategic growth in high-potential markets. Revenue Passenger Kilometers (RPK) are projected to reach 11.7 trillion by 2030—139% of 2019 levels—showing a sustained upward trend. This projected growth, coupled with a 1-2% annual increase in passenger load factors, translates to an estimated 5% revenue increase annually for major carriers from 2024 to 2025, aligned with post-pandemic recovery and capacity expansion.

The recent \$1.9 billion acquisition of Hawaiian Airlines by Alaska Airlines opens new opportunities for growth in the Pacific region. With Hawaiian's wide-body fleet joining Alaska's, the merger is anticipated to deliver \$235 million in synergies by the third year, and the U.S. Department of Transportation has approved the merger with protections for essential routes and frequent-flyer benefits. This strategic move strengthens Alaska's position in both domestic and international markets, expanding its service network and enhancing competitiveness.

Globally, passenger airlines are increasingly focused on international markets, with Asia expected to account for about 40% of new demand over the next 20 years. This surge, fueled by a growing middle class and improved connectivity, is pushing manufacturers like Airbus and Boeing to increase production to meet airline needs. The global passenger airline market, valued at approximately \$270 billion in 2022, is projected to exceed \$450 billion by 2030. Together, these trends underscore the industry's commitment to fleet modernization, fuel efficiency, and capturing growth in emerging markets, all while meeting evolving regulatory standards for sustainability and emissions.





TRANSACTION ACTIVITY

Turbulence in the 2024 Deal Landscape

Major Airline Deals and Challenges of 2024

To date, 2024 has been a slow year for M&A with limited activity. The proposed \$3.8 billion JetBlue and Spirit merger was officially cancelled due to opposition from the Department of Justice who argued that the deal would result in higher air fares for consumers. However, Air France-KLM was successful in its 19.9% minority acquisition of Scandinavian Airlines as they look to expand their offerings worldwide. Alaska Airlines, meanwhile, has expanded its market reach by successfully acquiring Hawaiian Airlines in September 2024. This move ultimately enhances Alaska Airlines route network, giving them better positioning in the Pacific. This is very similar to their decision to acquire Virgin Airlines in 2013.



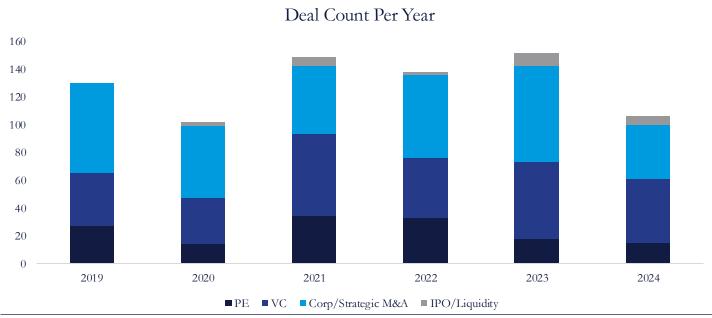




Key Trends: M&A, LBO, M&A

The Passenger Airline industry has seen a decrease in PE involvement within the deal ecosystem. PE deals made up 56% and 68% of total deal value in 2022 and 2023 respectively, while only making up 3% of deal value in 2024. Many attribute these trends to the current interest rate environment making LBOs less attractive and volatile equity markets making IPO exits riskier. While private equity deal participation has greatly fluctuated, venture capital deal volume has remained relatively stable, accounting for 5% and 3% in 2024 and 2023.

Mergers and acquisitions have dominated the total deal value percentage, accounting for 91% of total deal value in 2024 despite the number of deals not being materially greater than historical averages. A handful of highly valuable acquisitions have caused this trend, resulting in the M&A's highest share of total deal value in the past 10 years. The markets share of IPO's has remained relatively stable, the industry has had a yearly average of 4.8 IPOs, mainly due to the industries high barriers to entry and mix of high fixed costs and low profit margins.





CREDIT HEALTH

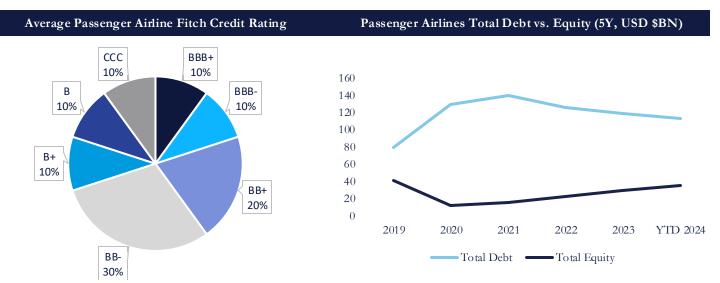
Cleared for Takeoff? Evaluating the Credit Health of Passenger Airlines

Liquidity Balances to Trend Down

Certain carriers continue to carry substantial amounts of liquidity. United, Air Canada, and Southwest are key examples where cash balances remain substantially above pre-pandemic levels. Our team expects airlines to pare down liquidity going forward now that the industry has more or less reached a steady state. We expect to see cash deployed primarily towards aircraft deliveries and debt repayment, but we may also see returns to shareholders as illustrated by recent repurchase authorizations from Southwest and United Airlines.

Sizeable but Manageable Maturities

We consider the maturity schedules for Most North American airlines to be manageable. American and Southwest have sizeable principal payments coming due in 2025 but maintain sufficient liquidity and resources to tap the markets to address these. Likewise, Air Canada has more than CAD \$2 billion due in 2026 but has significant liquidity on hand to address any obligations. Spirit Airlines pending 2025 note maturity is a standout in terms of repayment risk as the airline continues to negotiate with bondholders and cash flows remain sharply negative. Furthermore, Spirit Airlines has negotiated with bond & note holders to turn \$795 million of their debt into stock in the restructured company.



Rating Agency Select Commentary

Southwest Airlines Co.

Rating Agency: Standard & Poor's Credit Rating: BBB (Negative Outlook)

- Southwest's adjusted debt to EBITDA is estimated at ~1x in 2024 and ~1.5x in 2025, with FFO at 60%-80%, but core credit measures remain sensitive to potential earnings and cash flow downside.
- A 150 bps (1.5%) decline in PRASM in 2024 leads to a 0.5x increase in Adj. Debt/EBITDA

Credit Research Team

Jarrett Bilous Geoffrey Wilson

Alaska Air Group Inc.

Rating Agency: Moody's

Credit Rating: Ba1 (Negative Outlook)

- Strong Liquidity position reflected in Alaska Air's standalone cash of approx. \$2.5bn as of June 2024.
- \$2.0 bn of new debt will be used to repay Hawaiian's 11% secured loyalty program financing due in 2029, citing short-term leverage concerns as Debt/EBITDA will peak at around 3x at YE'24

Credit Research Team

Jonathan Root, CFA Jonathan Kanarek, CFA



INDUSTRY HEADWINDS

Cost Pressures Ahead: Navigating Higher Expenses

Labor Costs

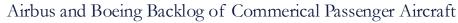
Labor costs are a major expense in the airline industry. These high costs are attributed to a few factors, many of which are growing concerns. For starters, airlines require a large workforce to operate, which 80% are unionized. Unionized workforces lead to more benefits and higher salaries, and it is not infrequent for workers to demand double digit pay increases. Second, safety regulations. Pilots – who must have thousands of hours of experience to fly commercially – are in short supply and are very expensive to train. Additionally, when capacity is fluctuating and pilots need to be let go, they must retrain for weeks to reenter the workforce making it very costly if business stagnates. Third, the cost of labor is outpacing revenue growth. For instance, Southwest's labor cost per seat mile increased 25.5% since 2019, revenue per seat mile only increased 6.4%. Some of these costs are even more drastic for low-cost carriers. Take Spirit whose labor cost per seat mile increased 43.7% since 2019 compared to a decrease of 0.3% of revenue per seat mile.

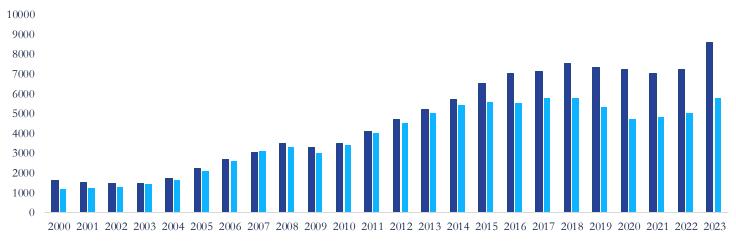
Supply Chain Issues

Long lead times, regulation, and highly specialized parts of aircrafts create stressed supply chains for commercial airlines and its suppliers. These factors make switching suppliers in times of bottlenecks financially and operationally nonviable. Additionally, only two manufacturers, Airbus and Boeing, control the market, giving airlines little flexibility with supplier diversification. Recently, constrained capacity has led airlines to offer less routes, limited seat availability, and lowered passengers estimates. Safety concerns have been rippling through the industry. Cracks are being found in Airbus engines, Boeing panels and wheels are failing, worker strikes, and various other problems are severely pushing back plane deliveries. For instance, Southwest expects only 20 aircrafts of their expected 46 in 2024. Deliveries of planes are still below pre-pandemic levels and backlogs of orders are at an all-time high.

Struggling Low-Cost Carriers

Financially, low-cost carriers have been struggling to maintain altitude this year as they compete against the bigger legacy carriers. Their main value proposition, offering cheap airfare, has been challenged this year with soft ticket prices due to more supply in the market. Low-cost carriers are also primarily domestic airlines. Combined with rising expenses these airlines are not profitable with some in bankruptcy, namely Spirit Airlines. Legacy carriers like Delta, United, and American Airlines have been appreciating from international growth. For instance, in 2023 Delta Airlines saw revenue growth of 49%, 31%, and 101% from their Atlantic, Latin America, and Pacific markets respectively. Domestic revenues only grew by 12%. Domestic airlines simply cannot capitalize on this growth.







INDUSTRY TAILWINDS

Positive Market Trends Brighten Outlook

Jet Fuel

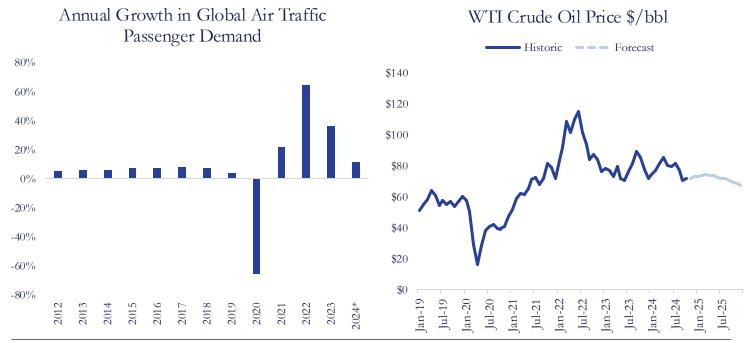
The price of jet fuel, or more broadly oil, play a large role in the profitability of airlines. Due to the nature of plane tickets being sold in advance, it is hard for airlines to pass on the cost of fuel to their customers. Representing one of the largest operational expenses of flying, jet fuel prices remain the center of attention for many airlines. For 2025, forecasts remain relatively cool with reasonable production levels and lingering oil demand. In early October, the US Energy Information Administration forecasted 2025 Brent crude oil spot prices to be \$78/bbl., a 7.7% decrease from forecasts a month prior. The drop in forecasts represent lingering crude oil demand growth and continued production. Although relative to historic prices \$78/bbl. is in the middle of the past 52W range of \$68-\$92/bbl., it remains a reasonable price compared to higher levels that could negatively impact profitability.

Demand

The International Air Transport Association forecasts a record breaking 5 billion travelers forecasted for 2024. Many US airport checkpoints are screening record numbers of travelers. Accordingly, many airlines are seeing record revenue yet are still seeing profits dwindle. Higher capacity and bigger schedules are pushing down ticket prices. Last July saw year-overyear capacity increases of 8%, yet 6% decreases in airfare prices. Many have pointed out the struggling performance of low-cost carriers despite healthy demand, issuing warnings about unstainable business models. Additionally, airlines are seeing higher international demand, notably in areas like the Pacific and Middle East. International flights also tend to be longer than domestic flights. This remains a tailwind for the industry as longer flights are more profitable than shorter flights, which allow fixed costs to be spread over more miles.

Business Travel

Although business travel represents a small portion of total flyers, they can represent up to 75% of revenues on a given flight. Due to the pandemic back in 2020, business travel was put to a sudden halt. Subsequent pushes for remote work and zoom also stifled demand. But business travel is reported to be up to 95% of its 2019 levels and growing. Global Business Travel estimates 2027 business travel spending to \$1.8T, compared to \$1.4T today. A complete recovery and further growth of the business travel sector would be a major tailwind for the airline industry.





MACROECONOMIC LANDSCAPE

Shifting Movements Bound For Change

Interest Rate Environment

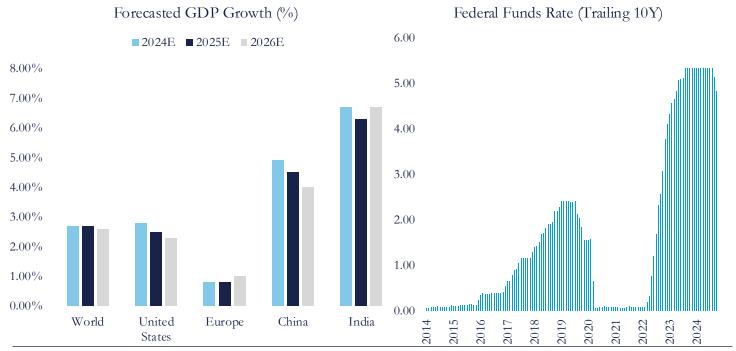
The Federal Reserve's planned rate cuts over the next two cycles, with forecasts indicating a 25-bp reduction, are expected to create optimism in the debt and deal space. Analysts anticipate rates to decline from the current 4.50-4.75% range to 2.50-3.25%, aligning with easing policies from other central banks, including the European Central Bank and Bank of Japan, which are expected to take a more aggressive approach. Domestic carriers, in particular, are set to benefit as lower borrowing costs and improved consumer sentiment boost travel activity. This environment is expected to create favorable conditions for growth across cyclical sectors, including transportation which will see a 5-7% CAGR in the coming years.

Forecasted GDP Growth

With another strong year of economic growth on the back of technological innovation and increased demand in the semiconductor space the United States is heading for a 2.8% YoY GDP growth with the worldwide estimate lagging slightly behind at 2.7%. Analyst forecast another solid year of economic growth into 2025, with the United States slightly outperforming again with the anticipated fresh tariffs from the Trump Administration. With the re-election of Donald Trump, we aim to see higher tariffs on Chinese Imports, lower migration, increased corporate tax cuts and regulatory easing that could help accelerate growth in certain industries such as financial services.

Tariff Increases & Impact on Airline Supplies

With another Trump administration on the horizon, tariffs and stricter global trade policies seem inevitable. The International Air Transport Association (IATA) warns that such restrictions could reduce passenger growth by 4.1% in the worst-case scenario. Trump's plan to impose tariffs on all non-US-made products could raise the cost of Airbus A220s and A320neos by 15-20%, adding further strain to an already fragile airline industry. However, these tariffs may offer relief to Boeing, which has been grappling with supply chain shocks, cash constraints, worker strikes, and FAA shutdowns. By boosting Boeing's competitiveness, the tariffs could help offset some of its recent market losses.



Sources: Goldman Sachs, International Air Transport Association, Morningstar



BASIC INFORMATION

			Basic Infor	mation (TTM)				
Company Name	Ticker	Market Cap. (\$Bn)	USD Stock Price (11/07/24)	Revenue (TTM \$BN)	Revenue per Employee (\$ MM)	Revenue Growth (YoY)	Adj EPS (TTM)	Beta (3Y)
Delta Air Lines	DAL	38.99	\$60.43	60.31	0.60	5.30%	\$5.37	1.28
United Airlines Holdings, Inc.	UAL	28.09	\$85.43	55.99	0.54	6.70%	\$9.30	1.41
Southwest Airlines Co.	LUV	18.75	\$31.26	27.38	0.37	7.60%	\$0.09	0.98
American Airlines Group Inc.	AAL	8.95	\$13.62	53.61	0.41	1.30%	\$1.34	1.51
Frontier Group Holdings, Inc.	ULCC	1.45	\$6.43	3.66	0.51	1.70%	(\$0.18)	1.57
Alaska Air Group, Inc.	ALK	6.43	\$50.99	10.75	0.41	3.90%	\$4.13	1.16
Deutsche Lufthansa AG	LHA.DE	8.11	\$6.75	40.01	0.41	6.90%	\$0.98	1.16
Air France-KLM SA	AF.PA	2.25	\$8.56	33.60	0.41	5.80%	\$0.98	1.21
JetBlue Airways Corporation	JBLU	2.10	\$6.05	9.33	0.39	(3.90%)	(\$0.77)	1.39
LATAM Airlines Group S.A.	LTM	8.41	\$27.86	12.71	0.36	14.10%	\$2.38	1.15
Lower		2.21	\$6.67	10.40	0.38	0.02	0.02	1.16
Median		8.26	\$20.74	30.49	0.41	0.06	1.16	1.25
Mean		12.35	\$29.74	30.74	0.44	0.05	2.36	1.28
Upper		21.09	\$53.35	54.21	0.52	0.07	4.44	1.44

Airlines are categorized by their need for efficiency in every facet. With high operating costs associated with the price of jet fuel, it is essential that airlines maximize efficiency within their workforce. Legacy carriers like DAL and UAL lead the way in revenue per employee with an average of \$0.57 MM while lower cost carriers such as JBLU and LUV fall below the average with figures of \$0.39 MM and \$0.37 MM respectively. The average revenue growth rate of 5% reflects the idea that the vertical is recovering from its pandemic downturn but is limited in its ability to expand due to supply chain bottlenecks. Generally, there is not much deviation in the revenue growth figures, suggesting that no individual airline is exempt to these larger economic factors.

The performance of airlines is highly reflective of macroeconomic conditions. This correlation is reflected in the above average 3-year average beta of 1.28. External shocks such as economic downturns and high oil prices cut deeply into the bottom line of airlines and the opposite is applicable conversely. In 2023 the travel & tourism sector accounted for 9.1% of global GDP. In times of consumer confidence, travel and tourism thrives. When compared to November of 2023, the US index of consumer sentiment is up 17%. Leisure travel is one of the largest sources of revenue for the airline vertical and with macroeconomic conditions considered Q4 of 2024 shapes up to end a positive year for the vertical.



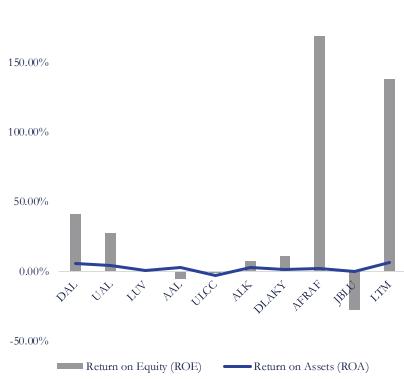


PROFITABILITY MARGIN

Profitability Margins (TTM)							
Company Name	Gross Margin	Operating Margin	Profit Margin	EBITDA (\$Bn)	EBITDA Margin	ROA	ROE
Delta Air Lines	22.59%	10.39%	7.71%	8.41	13.95%	5.27%	40.67%
United Airlines Holdings, Inc.	33.29%	8.57%	4.94%	7.48	13.36%	4.11%	27.25%
Southwest Airlines Co.	21.69%	0.96%	-0.18%	1.68	6.14%	0.46%	-0.45%
American Airlines Group Inc.	24.03%	5.31%	0.51%	5.07	9.45%	2.75%	-5.51%
Frontier Group Holdings, Inc.	6.22%	-8.13%	-0.16%	-0.23	-6.31%	-3.46%	-1.10%
Alaska Air Group, Inc.	23.92%	7.37%	2.99%	1.31	12.15%	2.86%	7.51%
Deutsche Lufthansa AG	17.96%	2.56%	2.43%	3.07	7.67%	1.27%	11.01%
Air France-KLM SA	18.02%	3.69%	0.40%	2.72	8.08%	2.08%	169.09%
JetBlue Airways Corporation	25.04%	-1.59%	-9.16%	0.44	4.68%	-0.62%	-28.17%
LATAM Airlines Group S.A.	24.63%	11.12%	6.20%	2.24	17.60%	5.98%	138.29%
Lower	18%	0%	(0%)	1.09	6%	0%	(2%)
Median	23%	4%	1%	2.48	9%	2%	9%
Mean	22%	4%	2%	3.22	9%	2%	36%
Upper	25%	9%	5%	5.67	14%	4%	65%

United Airlines stands out as the only airline on this list with an operating margin exceeding 30%, highlighting its strength gross margin performance. Passenger airlines continue to face constraints on both operating and profit margins, driven by limited growth opportunities and 150.00% increased competition that suppress prices while costs remain steady. Delta Air Lines maintains its leadership in the domestic aviation market with an EBITDA of \$8.41 billion and EBITDA margins of 13.95%. This success is largely attributed to its competitive positioning, leveraging passenger hubs in key locations such as Boston Logan Airport, Atlanta's Hartsfield Airport, and John F. Kennedy Airport in New York. These hubs, combined with competitive tiered pricing across seating options, give Delta an edge on heavily traveled routes. Meanwhile, Alaska Air Group is focusing on increasing market share on the West Coast, particularly in the Northwest Corridor, which could boost its EBITDA margin by approximately 1-2% in the coming year.

Return on Assets vs. Return on Equity (TTM)





VALUATION MULTIPLES

Valuation Multiples (TTM)						
Company Name	TEV/EBITDA	TEV/EBITDAR	Price/Book	P/E	P/Sales	
Delta Air Lines	5.02x	5.37x	2.98x	8.79x	0.67x	
United Airlines Holdings, Inc.	4.31x	4.29x	2.71x	11.37x	0.55x	
Southwest Airlines Co.	4.88x	4.50x	1.83x	n/a	0.69x	
American Airlines Group Inc.	4.06x	3.68x	n/a	33.89x	0.17x	
Frontier Group Holdings, Inc.	6.72x	6.59x	2.27x	n/a	0.34x	
Alaska Air Group, Inc.	5.12x	5.25x	1.47x	20.85x	0.62x	
Deutsche Lufthansa AG	3.57x	2.38x	0.72x	8.14x	0.20x	
Air France-KLM SA	3.61x	2.43x	n/a	23.81x	0.05x	
JetBlue Airways Corporation	5.65x	5.24x	0.81x	n/a	0.23x	
LATAM Airlines Group S.A.	5.66x	6.69x	15.03x	15.03x	0.72x	
Lower	3.95x	3.36	0.97x	8.79x	0.19x	
Median	4.95x	4.87	2.05x	15.03x	0.45x	
Mean	4.86x	4.64	3.48x	17.41x	0.42x	
Upper	5.66x	5.68	2.91x	23.81x	0.68x	

Valuations in the airline industry remain modest as the sector navigates 2024. The valuation multiples for the airline industry reveal some variation across carriers. For instance, the TEV/EBITDA multiples range from 3.57x to 6.72x, with a mean of 4.86x. Various reasons can explain this relatively low mean. Investors may be considering the capital-intensive nature of the industry, relatively poor growth outlook, or other risks and threats. TEV/EBITDAR values, averaging 4.64x, further underscore these and give perspective by accounting for operating leases. Price/Book ratios exhibit wide differences, from lows of 0.72x to as high as 15.03x, illustrating mixed balance sheet health. Notably, some airlines P/B are n/a, or negative, meaning that they owe more than they own. The P/E ratio, with a wide range from 8.14x to 33.89x and a mean of 17.41x, reflects difference across business models and operational efficiencies. Lastly, with a mean of 0.42x, airlines price/sales ratio are very low. These values reflect the low to nonprofitable quarters airlines commonly experience. Overall, these metrics highlight the weaknesses and strengths between different airlines, with unique insight into the industry and individual companies.

TEV/EBITDA



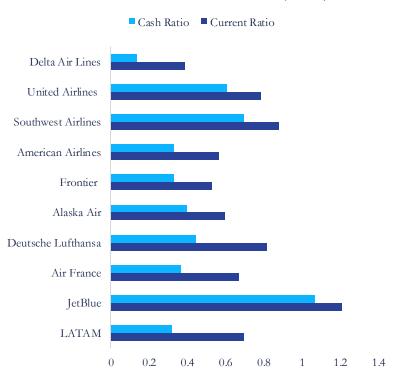


LIQUIDITY ANALYSIS

Liquidity Analysis (TTM)						
Current Ratio	Cash Ratio	Quick Ratio	Free Cash Flow (\$Bn)	Net Operating Assets (\$thsnd)	CapEx (\$Bn)	
0.39	0.14	0.27	1.25	34.52	(5.43)	
0.79	0.61	0.69	0.31	29.35	(6.01)	
0.88	0.7	0.78	(1.89)	8.27	(2.3)	
0.57	0.33	0.40	(0.55)	27.88	(2.79)	
0.53	0.33	0.42	(0.30)	3.36	(0.08)	
0.6	0.4	0.48	(0.22)	6.14	(1.35)	
0.82	0.45	0.45	0.31	12.37	(3.55)	
0.67	0.37	0.52	(2.52	6.61	(4.22)	
1.21	1.07	1.14	(1.56)	7.15	(1.64)	
0.7	0.32	0.58	1.15	5.66	(0.96)	
0.58	0.28	0.26	0.26	12.70	(0.62)	
0.69	0.40	0.52	0.52	25.60	(0.39)	
0.72	0.63	0.71	0.71	28.89	(0.40)	
0.81	0.54	1	1.56	27.68	(0.16)	
	0.39 0.79 0.88 0.57 0.53 0.6 0.82 0.67 1.21 0.7	Current Ratio Cash Ratio 0.39 0.14 0.79 0.61 0.88 0.7 0.57 0.33 0.53 0.33 0.6 0.4 0.82 0.45 0.67 0.37 1.21 1.07 0.7 0.32 0.58 0.28 0.69 0.40 0.72 0.63	Current Ratio Cash Ratio Quick Ratio 0.39 0.14 0.27 0.79 0.61 0.69 0.88 0.7 0.78 0.57 0.33 0.40 0.53 0.33 0.42 0.6 0.4 0.48 0.82 0.45 0.45 0.67 0.37 0.52 1.21 1.07 1.14 0.7 0.32 0.58 0.58 0.28 0.26 0.69 0.40 0.52 0.72 0.63 0.71	Current Ratio Cash Ratio Quick Ratio Free Cash Flow (\$Bn) 0.39 0.14 0.27 1.25 0.79 0.61 0.69 0.31 0.88 0.7 0.78 (1.89) 0.57 0.33 0.40 (0.55) 0.53 0.33 0.42 (0.30) 0.6 0.4 0.48 (0.22) 0.82 0.45 0.45 0.31 0.67 0.37 0.52 (2.52 1.21 1.07 1.14 (1.56) 0.7 0.32 0.58 1.15 0.58 0.28 0.26 0.26 0.69 0.40 0.52 0.52 0.72 0.63 0.71 0.71	Current Ratio Cash Ratio Quick Ratio Free Cash Flow (\$Bn) Net Operating Assets (\$thsnd) 0.39 0.14 0.27 1.25 34.52 0.79 0.61 0.69 0.31 29.35 0.88 0.7 0.78 (1.89) 8.27 0.57 0.33 0.40 (0.55) 27.88 0.53 0.33 0.42 (0.30) 3.36 0.6 0.4 0.48 (0.22) 6.14 0.82 0.45 0.45 0.31 12.37 0.67 0.37 0.52 (2.52 6.61 1.21 1.07 1.14 (1.56) 7.15 0.7 0.32 0.58 1.15 5.66 0.58 0.28 0.26 0.26 12.70 0.69 0.40 0.52 0.52 25.60 0.72 0.63 0.71 0.71 28.89	

JetBlue Airways Corporation showcases robust financial health within the airline sector, leading with a current ratio of 1.21, cash ratio of 1.07, and quick ratio of 1.14, indicating a superior ability to cover short-term obligations—a significant advantage in a capital-intensive sector. Conversely, Delta Air Lines presents a liquidity profile with red flags: a current ratio of 0.39, cash ratio of 0.14, and quick ratio of 0.27, highlighting a constrained cash position that could impact its ability to respond to immediate financial pressures. United Airlines and Deutsche Lufthansa AG demonstrate balanced liquidity positions near the industry median, coupled with notable capital expenditures that suggest strategic reinvestment and expansion potential. While JetBlue's liquidity ratios underscore financial resilience and adaptability, Delta's strained position warrants closer scrutiny, emphasizing the uneven financial footing within the industry and even among the strongest players in both international and domestic markets alike.

Current Ratio vs. Cash Ratio (TTM)



Sources: Bloomberg

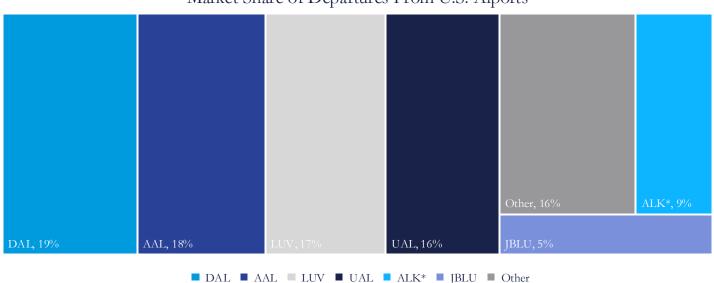


INDUSTRY SPECIFIC ANALYSIS

Passenger Airlines Key Metrics (YTD 2024)					
Company Name	Load Factor (%)	RASM (¢/mile)	CASM (¢/mile)	OTP (On-time Performance)	Market Share (% of Region)
Delta Air Lines	86.00%	21.30 ¢	19.32 ¢	84.32%	19%
United Airlines Holdings, Inc.	83.30%	18.19 ¢	16.65 ¢	78.67%	16%
Southwest Airlines Co.	80.80%	15.37 ¢	15.34 ¢	75.51%	17%
American Airlines Group Inc.	85.00%	16.79 ¢	17.64 ¢	79.11%	18%
Frontier Group Holdings, Inc.	76.40%	9.22 ¢	6.60 ¢	68.68%	4%
Deutsche Lufthansa AG	83.40%	9.20 ¢	6.50 ¢	67.58%	10%
Air France-KLM SA	89.00%	8.78 ¢	7.97 ¢	71.49%	11%
JetBlue Airways Corporation	83.50%	14.13 ¢	15.42 ¢	68.25%	5%
LATAM Airlines Group S.A.	83.90%	7.20 ¢	7.20 ¢	82.74%	38%
-					
Lower	82.05%	8.99¢	6.90¢	68.47%	8%
Median	83.50%	14.13 ¢	15.34 ¢	75.51%	16%
Mean	83.48%	13.35 ¢	12.52 ¢	75.15%	15%
Upper	85.50%	17.49 ¢	17.15 ¢	80.93%	19%

The airline industry remains at the forefront of innovation and competition, driving a variety of incentives to capture the highest customer demand. These incentives are tied to baseline metrics universal across the industry, such as RASM, CASM, and Load Factor. Delta Air Lines leads in Revenue Per Available Seat Mile (RASM) at 21.30 (¢/mile), attributed to its strong hub presence, control over flight pricing in those locations, and cost advantages from its in-house oil hedging operations. Load Factor, a metric measuring an airline's ability to fill planes and gauge consumer demand, is highest for Air France-KLM at 89%, reflecting its dominance in the European market and profitability on routes to Eastern Asia and the Middle East. Market share is led by LATAM at 38%, driven by its position as the sole international and ULCC carrier in South America, enabling it to undercut competitors on historically profitable routes. We predict that with the rebound of business travel, Legacy Carriers will gain ~1-2% market share compared to their ULCC peers, especially in the premium segment.

Market Share of Departures From U.S. Aiports







Southwest Airlines (LUV)

About Southwest Airlines

Southwest Airlines Co., founded in 1967 and headquartered in Dallas, Texas, operates a fleet of 817 Boeing 737s, serving 121 U.S. destinations. The firm originated as the first United States Airline to offer free check-in baggage to customers on all routes.

Business Model

Low-Cost Carrier Model: Southwest follows a strict LCC model, focusing on efficiency and affordability with a point-to-point network that reduces layovers and maximizes aircraft use.

Other Revenue Sources: About 10% of TTM revenue comes from ancillary services like baggage fees, EarlyBird check-in, upgraded boarding, and Rapid Rewards, supporting profitability while maintaining its low-cost approach.

Our views

Efficient Operations: Southwest's point-to-point network and single aircraft fleet minimize costs, attracting price-sensitive travelers and driving strong demand.

Loyal Customer Base: The Rapid Rewards program and customer-friendly policies ensure steady traffic and brand loyalty.

Underappreciated Catalysts: Potential board members from Ellington, with a track record of restructuring companies, could enhance operational efficiency in-turn cutting cost and lower yielding routes. Additionally, premium seating and new routes launching in 2026, along with operational fixes, present clear growth opportunities.

Strategic Advantage: The streamlined fleet not only supports cost efficiency but also positions Southwest to better adapt to sustainability regulations, offering long-term competitive benefits.

Performance and Resilience: Southwest's stock shows volatility amid challenges, but its low debt and strong balance sheet support stability and future growth.

Key Performance Indicators

CASM: In 2023, Southwest Airlines reported a CASM of 13.50, lower than Alaska Airlines (14.64) and full-service carriers like Delta (18.84) and United (16.99). This reflects its operational efficiency through a simplified fleet and streamlined operations.

RASM: Southwest's RASM of 14.80 in 2023, while slightly below Alaska Airlines (15.21), remains competitive for a low-cost carrier. Its profitability is driven by cost control, strong customer loyalty, and ancillary revenue streams, solidifying its leadership in the low-cost carrier space.

Thesis Risks

Technology Failures: Outdated systems risk major disruptions, harming operations and reputation.

Shifting Preferences: Growing demand for premium travel or alternatives like high-speed rail could challenge Southwest's low-cost model.

ESG Pressure: Stricter emissions rules may drive higher costs and force expensive sustainability efforts. Yet, given these strict emission standards we expect to see relaxed regulation in the next four years potentially allowing for Southwest to use lower quality fuel and potentially lower cost in the immediate future.

Equity Research

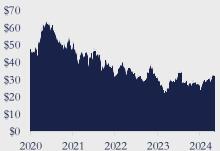
Industrials | Passenger Airlines 19 November 2024

Stock Rating	BUY
Price Target	\$36.01
Price (11/26/24)	\$31.62
Ticker	LUV
Exchange	NYSE
52 Week Range.	\$23.58 - \$35.18

Research Team

Aru Mehta mehta.aru1@northeastern.edu Owen Romano romano.o@northeastern.edu Trayna Bui

bui.tra@northeastern.edu



2020	2021	2022	2023	2024
		LU	V	Peers
P/E		39x		13.2x
P/FCF		8.5x	:	2.27x
P/BV		1.84	-X	4.5x
EV/EB	BITDA	10.1	X	4.88x
Market	Cap (m	nm)		\$19,17 0
Shares		600		
Free Fl		98.5%		
Divider		0.00%		



WALL STREET PERSPECTIVE

Triumph Against Headwinds



Select Wall Street Commentary: Michael Linenberg (Deutsche Bank Lead Passenger Airlines Equity Research Analyst)

Once all of the changes are finalized, Elliott's appointed directors will represent five of the 13 Board seats. The new Board has stated its intention to work closely with CEO Bob Jordan. We view this change as a very favorable development for a company that has been performing well its full potential for numerous years.

October 25, 2024





Alaska Air Group Inc. (ALK)

About Alaska Airlines

Alaska Airlines is the 5th largest US airline operating primarily out of the West Coast with hubs across Seattle, Anchorage, Portland and more.

Business Model

Hybrid Product Offerings: Alaska Air has features of both full-service carriers and low-cost carriers. Similar to full-service competitors the carrier offers multiple cabin classes, in flight amenities, allowing for higher profit margins. However, Alaska Air only operates one type of aircraft, offering more competitive pricing, resulting in cost structures comparable to low-cost carriers.

Alaska Hawaiian Merger

Outlook: The strategic acquisition of Hawaiian Airlines opens doors for Alaska. The Airports Council International reports Asia Pacific as having 90% of the world's fastest growing air traffic markets and is forecasted to more than double by 2042. Hawaiian Airlines gives Alaska a foothold into this market.

Balance Sheet Health: Despite the merger, Alaska's balance sheet also looks healthy. Alaska's debt to capitalization ratio is 58% with net leverage at 2.4% placing them right behind Delta Airlines in terms of credit quality. Lastly, the merger is expected to bring synergies of \$235m.

Sustainability/Innovation

ESG Initiatives: In 2024, the carrier made one of the largest investments ever into clean jet-fuel and agreed to buy fuel capable of lowering carbon emissions by 90%. They plan to reach net-zero carbon emissions by 2040.

Aircraft Investments: Alaska invests heavily into new aircrafts, boasting the youngest fleet of all U.S. airlines. From 2024 to 2027, Alaska is on track to add 15-25 new Boeing Aircrafts yearly.

Key Performance Indicators

CASM: Compared to other full-service carriers, Alaska Airlines has some of the lowest expenses. In 2023 carriers such as Delta, United, and American had CASMs of 18.84, 16.99, 17.92 respectively. Alaska Airlines has a CASM 14.64, a metric more comparable to that of a low-cost carrier such as JetBlue at 14.37.

RASM: Alaska Airlines RASM of 15.21 is more representative of a full-service airline. Low-cost or ultra low-cost airlines have failed to remain profitable over the last few years. Yet, Alaska Airlines is in a unique position leveraging costs like those of low-cost airlines but profit margins of those like full-service carriers.

Thesis Risks

Complications with Merger: A merger this size inherently brings uncertainty and risks. Several factors could impede Alaska's financial health including Hawaiians unprofitability, changing consumer image, and unification of the companies. Notably, one hurdle is the integration of Hawaiian Airlines Airbus fleet and Alaska's Boeing fleet.

Boeing Complications: New airplanes are crucial for maintaining efficient and competitive services. Boeing has been riddled with safety concerns, strikes, and other supply chain issues.

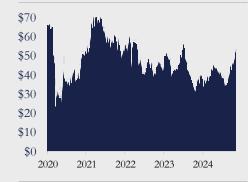
Equity Research

Industrials | Passenger Airlines 19 November 2024

Stock Rating	BUY
Price Target	\$65.32
Price (11/22/24)	\$52.42
Ticker	ALK
Exchange	NYSE
52 Week Range.	\$32.00-54.01

Research Team

Aru Mehta mehta.aru1@northeastern.edu Nicolas Ras ras.n@northeastern.edu Andrew Wu wu.andr@northeastern.edu



	ALK	Peers
P/E	20.85x	13.2x
P/BV	1.47x	2.27x
EV/EBITDAR	5.25x	4.5x
EV/EBITDA	5.12x	4.88x
Market Cap (mm)	\$6,430
Shares Outs. (mr	m)	126.94
Free Float (%)	89.36%	
Dividend Yield ((%)	0.00%



WALL STREET PERSPECTIVE

Buy Ratings Dominate Alaska Airlines



Select Wall Street Commentary: Brandon R. Oglenski (Barclays Lead Passenger Airlines Equity Research Analyst)

With the addition of Honolulu to Alaska's strong market presence in Seattle, Portland, San Francisco and other West Coast markets, we see that airline delivering improved growth outcomes through leveraging a larger network for connecting opportunities, reimagining Hawaiian's long-haul widebody international operations and increasing customer loyalty and engagement.

October 18, 2024

Team Outlook



The Passenger Airlines sector is set to rebound entirely in 2024 and is looking to beat pre-pandemic global passenger traffic in 2025. Regions like APAC and Latin America are set to lead this recovery along with growth in the business travel segment, driven by strong economic growth and increased demand for air travel. Legacy carriers are set to continue to dominate in the North American region, with certain carriers such as Delta Air Lines (DAL) and United Airlines (UAL) set to jump above the 20% market share hurdle set by the FAA. On the other hand, Low-Cost carriers (LCCs) are expected to gain market share in emerging markets, while the legacy carriers focus on premium routes. Revenue for the industry is forecasted to reach \$950 billion globally, supported by higher passenger yields and growing ancillary revenue streams, with operating metrics such as load factors stabilizing around 84-86%.

Sustainability and FAA regulation will be central in shaping the industry in the coming years. Airlines are expected to triple their use of sustainable aviation fuel (SAF) by the end of 2025, driven by regulatory incentives and debtholders demand for increased sustainability among their lessors. Fleet modernization and carbon offset programs will help carriers align with net-zero carbon emission goals. Airlines investing in fuel-efficient aircraft and ESG-conscious practices will gain a competitive edge in markets with stringent environmental policies and potential carbon tax credits.

Despite growth opportunities, the sector faces some key challenges, such as rising fuel costs, regulatory pressures, and geopolitical headwinds. Oil price volatility could inflate operational costs as it currently sits at about 30-40% of many airlines' yearly CASM totals. These continue to make fuel hedging and fleet efficiency for profitability in the deliveries of efficiency as the Airbus A320neo, which is about 20% more fuel-conscious than its counterparts. Additionally, stricter emissions and passenger rights regulations may increase compliance costs, while regional tensions could disrupt key routes and supply chains, mainly in the Middle East. Passenger airlines must strategically balance growth, cost management, and sustainability initiatives to thrive in the coming years.

