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A Comprehensive Analysis of Financial Performance in Leading U.S. Airline Companies.

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Abstract: This research paper presents an in-depth and original examination of the financial performance and profitability of four leading U.S. airlines - Delta Airlines, American Airlines, Southwest Airlines and United Airlines Holdings inc. based on four years of financial data. Firmly grounded in the context of the U.S. aviation industry, which is vital to national infrastructure and economic development, the study evaluates key financial indicators including gross profit margin, net profit margin, return on assets (ROA), return on equity (ROE), return on investment (ROI), debt-to-equity ratio, liquidity, efficiency and turnover ratios etc. Through a combination of trend analysis and comparative assessment, the research identifies the most financially resilient and strategically efficient airlines among the selected companies. Financial data is drawn from publicly available annual reports and investor disclosures to ensure accuracy and credibility. The findings offer insights into each company's operational efficiency, cost management, asset utilization, and capital structure.

Keywords: U.S. airlines, aviation industry, financial performance, profitability analysis, financial ratios, ratio analysis, comparative analysis.

I. INTRODUCTION

The US airline industry is largely controlled by four major carriers - Delta Airlines, American Airlines, United Airlines, and Southwest Airlines. These dominant players operate vast domestic and international route networks, giving them a significant presence in both markets [1]. In 2024, the commercial aviation sector contributes about \$1.45 trillion to the U.S. economy, representing nearly 5% of the nation's GDP. Daily, U.S. carriers operate upwards of 27,000 flights, moving roughly 2.7 million passengers across close to 80 countries and delivering 61,000 tons of cargo to over 220 international destinations. According to the International Air Transport Association (IATA), the global airline industry is anticipated to generate approximately \$1.007 trillion in revenue in 2025, marking a 4.4% growth compared to the prior year. Passenger numbers are expected to rise to 5.2 billion, reflecting a 6.7% increase, with passenger revenue projected at \$705 billion. Additionally, ancillary services are forecasted to contribute \$145 billion to the industry's total earnings. In 2025, airlines are expected to make a net profit of \$36.6 billion, slightly higher than \$31.5 billion in 2024. This means they will earn about \$7 per passenger better than \$6.40 in 2024 but less than the \$7.90 in 2023. Operating profit is also expected to grow to \$67.5 billion, showing a small improvement from last year [2]. In 2024, Delta Air Lines and United Airlines each held the top position in the U.S. airline industry, both capturing a 21% share of the domestic market. Airlines followed closely behind with a 20% market share, making it the second-largest domestic carrier that year [3].

II. OBJECTIVES OF THE RESEARCH STUDY

- To evaluate the profitability of leading U.S. airline companies using key indicators such as Gross Profit Ratio, Net Profit Ratio, and Operating Profit Margin.
- To examine the liquidity position of selected airlines through the analysis of the Current Ratio.
- To assess the solvency and financial risk using the Debt-to-Equity Ratio and Debt Ratio.
- To analyze the operational efficiency of airline companies by applying the Asset Turnover Ratio.
- To evaluate the effectiveness of inventory and credit management using the Inventory Turnover Ratio and Accounts Receivable Turnover Ratio.
- To measure overall profitability and returns through Return on Equity (ROE), Return on Assets (ROA), and Return on Investment (ROI).
- To conduct a comparative financial analysis of major U.S. airlines based on comprehensive ratio evaluation across multiple performance dimensions.

III. REVIEW OF THE LITERATURE OF THE RESEARCH STUDY

Simeng Wang (2023), this literature highlights the vital role of financial health, risk management, and strategic planning in the airline industry. Studies reveal that airlines implement various strategies such as low-cost operations, financial leverage, and improved efficiency to cope with market uncertainties and satisfy investor expectations. For example, Southwest Airlines is noted for its effective fuel hedging, American Airlines for its high-risk financial tactics, and Singapore Airlines for its strong profitability and operational excellence. Moreover, there is a growing emphasis on sustainability and ESG (Environmental, Social, and Governance) factors, which are increasingly shaping investor choices and industry practices. Together, these findings offer a solid foundation for understanding how financial and strategic decisions affect airline success and investor appeal.

Yifan Wang (2021), this research study indicates that United Airlines is in a recovery phase after a significant revenue decline during the pandemic. While freight revenue has increased, it hasn't fully compensated for the drop in passenger revenue. Costs have followed the overall pandemic trend without heavily burdening the company, and asset depreciation remains stable. Ratio analysis shows fluctuations in profitability and liquidity based on market conditions. Looking ahead, United Airlines has strong growth potential but must navigate competitive pressures with effective strategies to fully regain and possibly surpass pre-pandemic performance.

DS Makwana (2020), research paper presents that the airline industry holds significant importance in the field of air transportation. A comparative analysis between Jet Airways and IndiGo highlights that both airlines aim to deliver high-quality service to their customers. The findings suggest that Jet Airways outperformed IndiGo in terms of profitability and service delivery. Nonetheless, the research points to the potential for further growth in the aviation sector, emphasizing the need for ongoing improvements and strategic expansion to enhance financial performance and customer satisfaction.

DS Makwana (2023), this research indicates that a comparative ratio analysis of AirAsia and SpiceJet reveals that SpiceJet demonstrates stronger profitability ratios than AirAsia. Several factors contribute to this difference in financial performance, including the impact of the COVID-19 pandemic, intense market competition, low fare structures, and variations in service quality. While AirAsia has been making consistent efforts to improve its profitability, the analysis indicates that SpiceJet maintains a relatively stronger position in terms of profit margins.

IV. SAMPLE SIZE

In the study "A Comprehensive Analysis of Financial Performance in Leading U.S. Airline Companies," four major carriers are as under:

- Delta Air Lines
- American Airlines
- Southwest Airlines
- United Airlines Holdings Inc.

V. DATA COLLECTION

This study is based on secondary data collected from reliable financial sources, including company annual reports, official investor presentations, and reputable financial databases. The research utilizes financial information from Delta Air Lines, American Airlines, Southwest Airlines and United Airlines Holdings Inc., covering the fiscal years from 2021 to 2024, to analyze and compare their financial performance over this period.

VI. FINANCIAL ANALYSIS AND INTERPRETATION

▪ COMPARATIVE FINANCIAL ANALYSIS OF US AIRLINE COMPANIES

6.1 Gross Profit Ratio (GP)

Gross Margin = Gross Profit / Net Sales

Table -6.1 Gross Profit Ratio of US Airline Companies of 2021-2024 (%)

Name of Airlines/ Years	Delta Airlines	American Airlines	Southwest Airlines	United Airlines Holdings Inc.	Min.	Max.	Avg./ Mean	Std. Dev
2021	24.76	6.85	34.12	62.58	6.85	62.58	32.08	23.27
2022	29.88	22.49	25.63	35.42	22.49	35.42	28.36	5.60
2023	30.10	26.04	22.02	39.36	22.02	39.36	29.38	7.43
2024	30.61	24.70	22.25	40.39	22.25	40.39	29.49	8.07
Min.	24.76	6.85	22.02	35.42				
Max.	30.61	26.04	34.12	62.58				
Avg./ Mean	28.84	20.02	26.01	44.44				
Std. Dev	2.74	8.90	5.66	12.28				

(Source: Annual Report of US Airline Companies from 2021 to 2024.)

Graph -6.1 Gross Profit Ratio of US Airline Companies of 2021-2024



Graph – 6.1 shows that United Airlines Holdings Inc. maintained the highest gross profit ratio each year, peaking at 62.58% in 2021 and stabilizing around 40.39% by 2024, indicating strong profitability despite fluctuations. Delta Airlines demonstrated consistent growth from 24.76% in 2021 to 30.61% in 2024, reflecting steady financial improvement. American Airlines rose sharply from a low 6.85% in 2021 to over 24.70% in subsequent years, showing significant recovery. In contrast, Southwest Airlines declined from 34.12% in 2021 to around 22.25%, suggesting narrowing margins over time.

6.2 Net Profit Margin (NP)

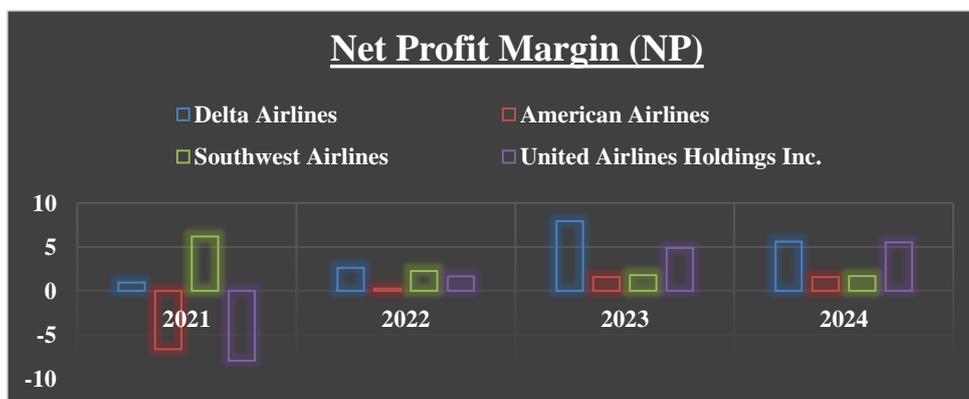
$Net\ margin = Net\ Profit / Revenue$

Table -6.2 Net Profit Ratio of US Airline Companies of 2021-2024 (%)

Name of Airlines/ Years	Delta Airlines	American Airlines	Southwest Airlines	United Airlines Holdings Inc.	Min.	Max.	Avg./ Mean	Std. Dev
2021	0.94	-6.67	6.19	-7.97	-7.97	-6.67	-1.88	6.66
2022	2.61	0.26	2.26	1.64	0.26	2.61	1.69	1.036
2023	7.94	1.56	1.78	4.87	1.56	7.94	4.04	3.01
2024	5.61	1.56	1.69	5.52	1.56	5.61	3.60	2.28
Min.	0.94	-6.67	1.69	-7.97				
Max.	7.94	1.56	6.19	5.52				
Avg./ Mean	4.28	-0.82	2.98	1.01				
Std. Dev	3.11	3.95	2.15	6.23				

(Source: Annual Report of US Airline Companies from 2021 to 2024.)

Graph -6.2 Net Profit Ratio of US Airline Companies of 2021-2024



Graph 6.2 reflects a positive turnaround across all four airlines after 2021. Delta Airlines demonstrated the strongest profitability, peaking at 7.94% in 2023, indicating solid financial performance. United Airlines moved from a significant loss in 2021 to a steady gain by 2024, reaching 5.52%, signaling effective recovery. American Airlines improved from a -6.67% loss to modest positive profits by 2023–2024. Southwest Airlines, initially leading in 2021, experienced a gradual decline in profit margins, ending at 1.69% in 2024. Overall, the industry exhibited a recovery trend, with Delta and United emerging as stronger performers.

6.3 Operating Profit Margin

Operating Profit Margin = Operating Profit / Total Revenue

Table -6.3 Operating Profit Ratio of US Airline Companies of 2021-2024 (%)

Name of Airlines/ Years	Delta Airlines	American Airlines	Southwest Airlines	United Airlines Holdings Inc.	Min.	Max.	Avg./ Mean	Std. Dev
2021	6.31	-3.54	10.90	-4.15	-4.15	-3.54	2.38	7.43
2022	7.24	3.28	4.27	5.20	3.28	7.24	4.9975	1.69
2023	9.51	5.75	0.86	7.84	0.86	9.51	5.99	3.75
2024	9.73	4.82	1.17	8.93	1.17	9.73	6.1625	3.96
Min.	6.31	-3.54	0.86	-4.15				
Max.	9.73	5.75	10.90	8.93				
Avg./ Mean	8.20	2.58	4.3	4.46				
Std. Dev	1.69	4.20	4.66	5.95				

(Source: Annual Report of US Airline Companies from 2021 to 2024.)

Graph -6.3 Operating Profit Ratio of US Airline Companies of 2021-2024



Here, from 2021 to 2024, Delta Airlines consistently improved its operating profit ratio, reaching 9.73% in 2024. American Airlines recovered from negative results in 2021 to positive profitability by 2024. Southwest Airlines saw a sharp decline in profitability, falling from 10.90% to just 1.17%. United Airlines also improved steadily, moving from a negative ratio to 8.93%. Overall, Delta and United showed strong growth, American Airlines recovered gradually, while Southwest's profitability declined significantly.

6.4 Current Ratio

Current Ratio = Current Assets/Current Liabilities

Table -6.4 Current Ratio of US Airline Companies of 2021-2024 (%)

Name of Airlines/ Years	Delta Airlines	American Airlines	Southwest Airlines	United Airlines Holdings Inc.	Min.	Max.	Avg./ Mean	Std. Dev
2021	0.76	0.91	1.97	1.19	0.76	1.97	1.21	0.54
2022	0.50	0.71	1.43	1.00	0.50	1.43	0.91	0.40
2023	0.39	0.62	1.14	0.83	0.39	1.14	0.75	0.32
2024	0.37	0.54	0.93	0.81	0.37	0.93	0.66	0.25
Min.	0.37	0.54	0.93	0.81				
Max.	0.76	0.91	1.97	1.19				
Avg./ Mean	0.51	0.70	1.37	0.96				
Std. Dev	0.18	0.16	0.45	0.18				

(Source: Annual Report of US Airline Companies from 2021 to 2024.)

Graph -6.4 Current Ratio of US Airline Companies of 2021-2024



Between 2021 and 2024, the current ratios for all four airlines gradually decreased, reflecting a reduction in their ability to cover short-term liabilities with current assets. Southwest Airlines maintained the strongest liquidity position despite the decline, moving from 1.97 to 0.93. Delta and American Airlines experienced steady decreases, with Delta’s ratio dropping from 0.76 to 0.37, and American’s from 0.91 to 0.54. United Airlines also showed a downward trend, declining from 1.19 to 0.81. This overall decrease points to a tightening in short-term financial stability across these companies.

6.5 Debt - Equity Ratio

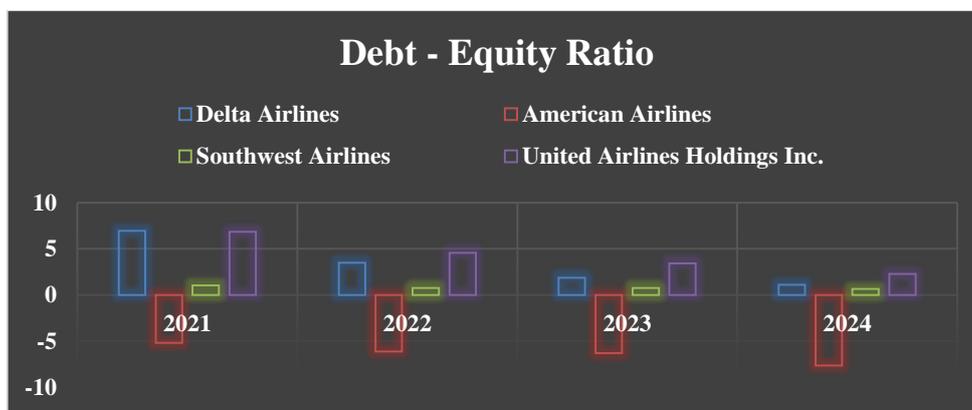
Debt-to-Equity Ratio = Liabilities (Total) / Shareholder Equity (Total)

Table -6.5 Debt - Equity Ratio of US Airline Companies of 2021-2024 (%)

Name of Airlines/ Years	Delta Airlines	American Airlines	Southwest Airlines	United Airlines Holdings Inc.	Min.	Max.	Avg./ Mean	Std. Dev
2021	6.93	-5.19	1.03	6.86	-5.19	6.93	2.41	5.77
2022	3.50	-6.15	0.76	4.56	-6.15	4.56	0.67	4.82
2023	1.87	-6.32	0.76	3.40	-6.32	3.40	-0.07	4.30
2024	1.11	-7.66	0.65	2.26	-7.66	2.26	-0.91	4.55
Min.	1.11	-7.66	0.65	2.26				
Max.	6.93	-5.19	1.03	6.86				
Avg./ Mean	3.35	-6.33	0.8	4.27				
Std. Dev	2.59	1.02	0.16	1.97				

(Source: Annual Report of US Airline Companies from 2021 to 2024.)

Graph -6.5 Debt - Equity Ratio of US Airline Companies of 2021-2024



In the year of 2021 and 2024, both Delta Airlines and United Airlines steadily lowered their debt-to-equity ratios, signaling a move toward less debt dependence. Delta’s ratio fell from 6.93 to 1.11, and United’s from 6.86 to 2.26. Southwest Airlines kept a low and fairly stable ratio, slightly decreasing from 1.03 to 0.65. On the other hand, American Airlines showed negative debt-to-equity ratios throughout, indicating possible equity deficits or unusual financial conditions, with the ratio declining further from -5.19 to -7.66. This highlights stronger debt management by Delta and United, stable leverage at Southwest, and financial strain at American.

6.6 Debt Ratio

Debt Ratio = Total Liabilities/Total Assets

Table -6.6 Debt Ratio of US Airline Companies of 2021-2024 (%)

Name of Airlines/ Years	Delta Airlines	American Airlines	Southwest Airlines	United Airlines Holdings Inc.	Min.	Max.	Avg./ Mean	Std. Dev
2021	0.87	1.26	0.50	0.86	0.50	1.26	0.87	0.31
2022	0.76	1.22	0.43	0.80	0.43	1.22	0.80	0.32
2023	0.61	1.22	0.43	0.75	0.43	1.22	0.75	0.34
2024	0.48	1.19	0.33	0.67	0.33	1.19	0.67	0.38
Min.	0.48	1.19	0.33	0.67				
Max.	0.87	1.26	0.50	0.86				
Avg./ Mean	0.68	1.22	0.42	0.77				
Std. Dev	0.17	0.03	0.07	0.08				

(Source: Annual Report of US Airline Companies from 2021 to 2024.)

Graph - 6.6 Debt Ratio of US Airline Companies of 2021-2024



From 2021 to 2024, the debt ratios for all four airlines generally declined, indicating a gradual reduction in their proportion of total assets financed through debt. Delta Airlines showed a significant decrease from 0.87 to 0.48, reflecting improved financial stability. United Airlines followed a similar downward trend, moving from 0.86 to 0.67. Southwest Airlines maintained the lowest debt ratio throughout the period, though it decreased further from 0.50 to 0.33, suggesting conservative debt management. American Airlines' debt ratio remained relatively steady, with a slight decrease from 1.26 to 1.19, indicating sustained high leverage compared to its peers. Overall, these trends suggest most airlines are working toward lowering their debt burden, with American Airlines still carrying a comparatively higher debt load.

6.7 Assets Turnover Ratio

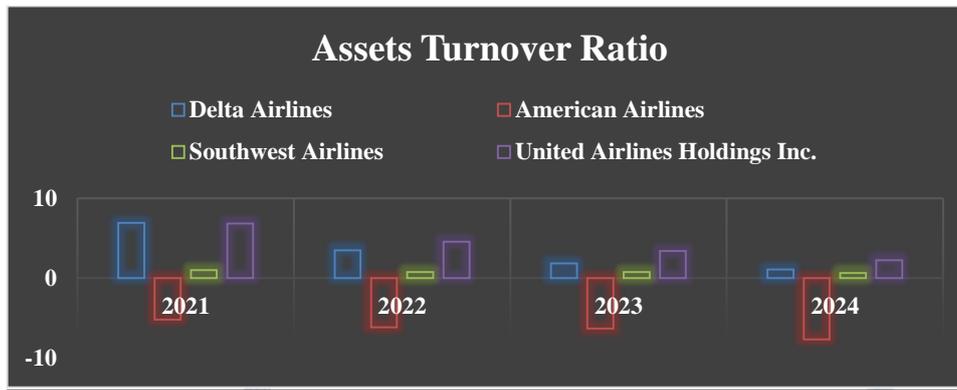
Assets Turnover Ratio = Net Sales / Average Total Assets

Table -6.7 Assets Turnover Ratio of US Airline Companies of 2021-2024 (%)

Name of Airlines/ Years	Delta Airlines	American Airlines	Southwest Airlines	United Airlines Holdings Inc.	Min.	Max.	Avg./ Mean	Std. Dev
2021	0.41	0.45	0.43	0.36	0.36	0.45	0.41	0.04
2022	0.70	0.76	0.67	0.67	0.67	0.76	0.7	0.04
2023	0.79	0.84	0.72	0.76	0.72	0.84	0.78	0.05
2024	0.82	0.88	0.81	0.77	0.77	0.88	0.82	0.05
Min.	0.41	0.45	0.43	0.36				
Max.	0.82	0.88	0.81	0.77				
Avg./ Mean	0.68	0.73	0.66	0.64				
Std. Dev	0.19	0.19	0.16	0.19				

(Source: Annual Report of US Airline Companies from 2021 to 2024.)

Graph -6.7 Assets Turnover Ratio of US Airline Companies of 2021-2024



All four airlines demonstrated a consistent increase in their asset turnover ratios, indicating improved efficiency in utilizing assets to generate revenue. Delta Airlines improved significantly from 0.41 to 0.82, reflecting enhanced operational performance. American Airlines also saw steady growth, rising from 0.45 to 0.88. Southwest Airlines maintained a strong position, increasing from 0.43 to 0.81. United Airlines showed notable improvement as well, moving from 0.36 to 0.77. Overall, the upward trend across all airlines suggests better asset utilization and increased revenue generation over the period.

6.8 Inventory Turnover Ratio

$$\text{Inventory Turnover Ratio} = \text{Cost of Goods Sold} / \text{Avg. Inventory}$$

$$\text{Average inventory} = (\text{beginning inventory} + \text{ending inventory}) / 2$$

Table -6.8 Inventory Turnover Ratio of US Airline Companies of 2021-2024 (%)

Name of Airlines/ Years	Delta Airlines	American Airlines	Southwest Airlines	United Airlines Holdings Inc.	Min.	Max.	Avg./ Mean	Std. Dev
2021	20.49	15.51	19.37	9.38	9.38	20.49	16.19	5.01
2022	24.91	16.66	22.42	26.18	16.66	26.18	22.54	4.22
2023	30.88	16.27	25.21	20.87	16.27	30.88	23.31	6.23
2024	29.95	15.47	26.71	21.64	15.47	29.95	23.44	6.32
Min.	20.49	15.47	19.37	9.38				
Max.	30.88	16.66	26.71	26.18				
Avg./ Mean	26.56	15.98	23.43	19.52				
Std. Dev	4.82	0.59	3.24	7.15				

(Source: Annual Report of US Airline Companies from 2021 to 2024.)

Graph -6.78 Inventory Turnover Ratio of US Airline Companies of 2021-2024



From the data, Delta Airlines and Southwest Airlines consistently improved their inventory turnover ratios, indicating more efficient inventory management. Delta rose from 20.49 to 29.95, while Southwest increased from 19.37 to 26.71, reflecting stronger operational efficiency. United Airlines saw significant improvement in 2022 but experienced slight fluctuations thereafter, ending at 21.64 in 2024. In contrast, American Airlines maintained relatively stable but lower turnover ratios, moving slightly from 15.51 in 2021 to 15.47 in 2024. Overall, Delta and Southwest demonstrated the strongest inventory efficiency, while American remained comparatively less efficient in this area.

6.9 Account Receivable Turnover Ratio

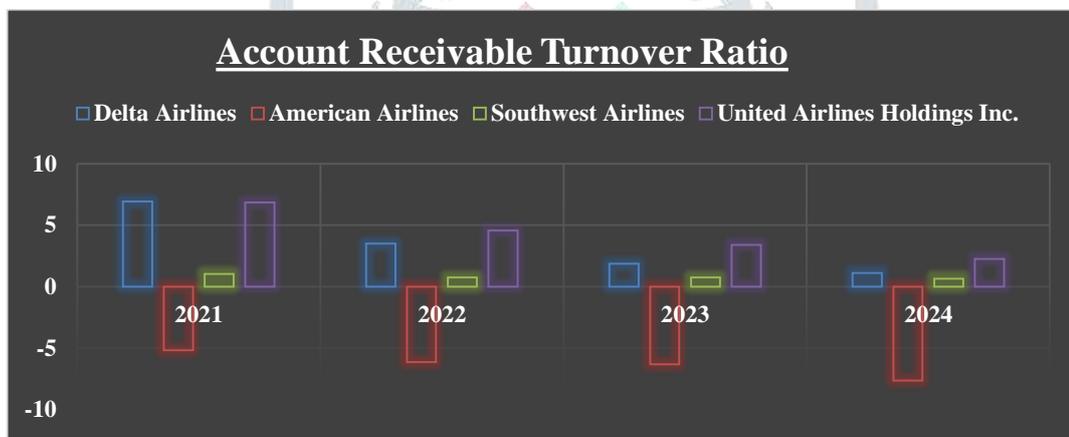
Accounts Receivable Turnover Ratio = Net Credit Sales / Average Accounts Receivable

Table -6.9 Account Receivable Turnover Ratio of US Airline Companies of 2021-2024 (%)

Name of Airlines/ Years	Delta Airlines	American Airlines	Southwest Airlines	United Airlines Holdings Inc.	Min.	Max.	Avg./ Mean	Std. Dev
2021	12.44	19.86	11.64	14.81	11.64	19.86	14.69	3.70
2022	15.93	22.91	22.90	24.96	15.93	24.96	21.68	3.95
2023	18.55	26.06	22.61	28.30	18.55	28.30	23.88	4.25
2024	19.12	27.02	24.76	26.38	19.12	27.02	24.32	3.59
Min.	12.44	19.86	11.64	14.81				
Max.	19.12	27.02	24.76	28.30				
Avg./ Mean	16.51	23.96	20.48	23.61				
Std. Dev	3.05	3.25	5.97	6.03				

(Source: Annual Report of US Airline Companies from 2021 to 2024.)

Graph -6.9 Account Receivable Turnover Ratio of US Airline Companies of 2021-2024



From 2021 to 2024, all four airlines showed a rising trend in their accounts receivable turnover ratios, indicating improved efficiency in collecting payments from customers. Delta Airlines increased steadily from 12.44 to 19.12, reflecting better credit and collection practices. American Airlines maintained the highest ratios throughout the period, growing from 19.86 to 27.02, suggesting strong control over receivables. Southwest Airlines also showed significant improvement, rising from 11.64 to 24.76. United Airlines demonstrated notable progress, increasing from 14.81 to 26.38. Overall, the upward trend across all carriers indicates enhanced receivables management and faster cash conversion.

6.10 Return on Equity (ROE)

Return on Equity = Net Income / Average Shareholder Equity

Table -6.10 Return on Equity Ratio of US Airline Companies of 2021-2024 (%)

Name of Airlines/ Years	Delta Airlines	American Airlines	Southwest Airlines	United Airlines Holdings Inc.	Min.	Max.	Avg./ Mean	Std. Dev
2021	7.20	27.15	9.38	-39.05	-39.05	27.15	1.17	28.26
2022	20.02	-2.19	5.04	10.69	-2.19	20.02	8.39	9.38
2023	41.50	-15.80	4.42	28.08	-15.80	41.50	14.55	25.38
2024	22.61	-21.27	4.49	24.84	-21.27	24.84	7.67	21.34
Min.	7.20	-21.27	4.42	-39.05				
Max.	41.50	27.15	9.38	28.08				
Avg./ Mean	22.83	-3.03	5.83	6.14				
Std. Dev	14.15	21.66	2.38	31.06				

(Source: Annual Report of US Airline Companies from 2021 to 2024.)

Graph -6.10 Return on Equity Ratio of US Airline Companies of 2021-2024



From 2021 to 2024, Delta Airlines delivered strong returns to shareholders, with ROE rising sharply to 41.50% in 2023 before easing to 22.61% in 2024, reflecting consistent profitability. United Airlines made a notable recovery, improving from a steep negative ROE of -39.05% in 2021 to a solid 24.84% in 2024. In contrast, American Airlines reported negative ROE throughout the period, with a further decline to -21.27% in 2024, indicating continued financial challenges. Southwest Airlines maintained modest but stable performance, with ROE ranging from 4.42% to 9.38%. Overall, Delta and United showed strong shareholder value creation, while American struggled with ongoing losses.

6.11 Return on Assets (ROA)

Return on Assets = Net Income/Total Assets

Table -6.11 Return on Assets Ratio of US Airline Companies of 2021-2024 (%)

Name of Airlines/ Years	Delta Airlines	American Airlines	Southwest Airlines	United Airlines Holdings Inc.	Min.	Max.	Avg./ Mean	Std. Dev
2021	0.39	-3.00	2.69	-2.88	-3.00	2.69	3.27	2.65
2022	1.82	0.20	1.52	1.09	0.20	1.82	1.16	0.71
2023	6.26	1.30	1.27	3.68	1.27	6.26	3.13	2.37
2024	4.59	1.37	1.38	4.25	1.37	4.59	2.90	1.76
Min.	0.39	-3.00	1.27	-2.88				
Max.	6.26	1.37	2.69	4.25				
Avg./ Mean	3.27	-0.03	1.72	1.54				
Std. Dev	2.65	2.05	0.66	3.25				

(Source: Annual Report of US Airline Companies from 2021 to 2024.)

Graph -6.11 Return on Assets Ratio of US Airline Companies of 2021-2024



Delta Airlines demonstrated a strong upward trend in asset profitability, improving from 0.39% in 2021 to a peak of 6.26% in 2023, before slightly declining to 4.59% in 2024. United Airlines also showed significant improvement, recovering from a negative ROA of -2.88% in 2021 to 4.25% in 2024, reflecting better asset utilization. Southwest Airlines maintained stable performance, with ROA ranging between 1.27% and 2.69%, indicating consistent but moderate returns. American Airlines moved from a negative ROA of -3.00% in 2021 to a positive 1.37% in 2024, suggesting a gradual financial recovery. Overall, Delta and United led in asset efficiency, while American showed signs of improvement and Southwest remained steady.

6.12 Return on Investment (ROI)

Return on Investment (ROI) = Net Return ÷ Cost of Investment

Net Return = Gross Return – Cost of Investment

Table -6.12 Return on Investment Ratio of US Airline Companies of 2021-2024 (%)

Name of Airlines/ Years	Delta Airlines	American Airlines	Southwest Airlines	United Airlines Holdings Inc.	Min.	Max.	Avg./ Mean	Std. Dev
2021	0.96	-7.06	4.72	-5.52	-7.06	4.72	-1.72	5.53
2022	4.84	0.48	2.88	2.09	0.48	4.84	2.57	1.81
2023	16.36	3.42	2.51	7.13	2.51	16.36	7.36	6.33
2024	11.79	3.99	3.02	8.31	3.02	11.79	6.78	4.06
Min.	0.96	-7.06	2.51	-5.52				
Max.	16.36	3.99	4.72	8.31				
Avg./ Mean	8.49	0.21	3.28	3.00				
Std. Dev	6.90	5.08	0.98	6.29				

(Source: Annual Report of US Airline Companies from 2021 to 2024.)

Graph -6.12 Return on Assets Ratio of US Airline Companies of 2021-2024



From 2021 to 2024, Delta Airlines showed strong improvement in investment returns, rising from 0.96% to a high of 16.36% in 2023, before settling at 11.79% in 2024, reflecting solid financial performance. United Airlines moved from negative ROI in 2021 to 8.31% in 2024, indicating a significant recovery. Southwest Airlines maintained moderate but stable returns, ranging between 2.51% and 4.72%. American Airlines, despite starting with a negative ROI of -7.06% in 2021, gradually improved to 3.99% in 2024. Overall, Delta and United led in investment returns, while Southwest remained consistent and American airlines showed gradual progress.

VII. CONCLUSION

Between 2021 and 2024, the U.S. airline industry demonstrated a robust recovery, with Delta and United Airlines leading in both profitability and operational efficiency. United Airlines consistently achieved the highest gross profit margins, while Delta and American Airlines showed gradual improvements. Southwest Airlines, however, experienced a decline in profitability during this period. Although current ratios decreased across all four carriers, Southwest maintained the strongest liquidity position, reflecting prudent short-term financial management. Delta and United made significant progress in reducing their debt-to-equity ratios, indicating improved debt management, whereas American Airlines continued to struggle with elevated leverage, and Southwest sustained a stable, low level of debt.

All U.S. airlines enhanced their asset turnover and accounts receivable turnover ratios, signaling increased efficiency in asset use and cash flow management. In inventory management, Delta and Southwest outperformed their peers, with American Airlines trailing behind. Shareholder returns improved markedly for Delta and United, underscoring their strong financial recovery, while American Airlines recorded ongoing losses and Southwest maintained moderate but steady returns.

Overall, the financial analysis highlights Delta and United as the most consistent performers, exhibiting sustained growth in profitability and investment returns. Southwest Airlines demonstrated solid stability with effective liquidity and conservative leverage, despite some profitability challenges. American Airlines faces continued financial difficulties, marked by instability and high leverage, necessitating strategic interventions to enhance performance and financial health.

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