



Market Prof	ile
Ticker	DAL
Closing Price (02/28/2024)	\$41.94
52 Week Range	\$30.57 - \$49.81
Market Cap	\$27.01B
Dividend Yield	0.95%
P/E	5.86
EV/EBITDA	5.74

Figure 1. Market Profile



Figure 2. DAL Index



Figure 3. DAL's comparable

## **EXECUTIVE SUMMARY**

We initiate a **Hold** recommendation on Delta Air Lines, Inc. (DAL) based on a 12-month target price of \$58.74, offering a 28.6% upside from the closing price on February 28, 2024, of \$41.91. Our recommendation is underpinned by the following factors:

**Management** - Delta is governed by an independent and diverse board of directors, who emphasize effective governance and operational integrity. The alignment of the board with stockholder interests underscores the management's focus on sustainability, profitability, and high standards of ethical conduct and compliance. Such commitments have not only enhanced Delta's culture but also strengthened its brand value and customer loyalty.

**Financial resilience -** Delta demonstrated robust financial management and strategic recovery after the pandemic, demonstrated through its net operating ROI and return on assets (ROA) consistently outstripping the industry average and main rivals.

Market leadership and Revenue growth - Delta has distinguished itself as a leading carrier with the largest market share among its competitors (25.57%). Coupled with this is the company's unprecedented increments in premium and ancillary revenue streams, constituting 55% of total revenue. This effort not only solidifies Delta's financial standing but also sets a benchmark for the operation of the overall sector.

**Valuation** - Using a 50% discounted cash flow analysis (DCF) and a 50% relative multiple valuation method, Delta's intrinsic value is \$58.74 per share. DAL's upside prospects are associated with the expansion of global footprint, the establishment of Sustainable Sky Lab aiming towards research and testing for sustainable aviation practices, and the acquisition of Trainer Refinery for cost control.

**Risks landscape** - the airline industry encompasses fuel volatility, regulatory constraints, geopolitical tensions, and intensifying competition. For Delta, a reduction in liquidity and a high debt-to-equity level could potentially exacerbate these challenges, making it more vulnerable to adverse fluctuations of the market and economic downturns.

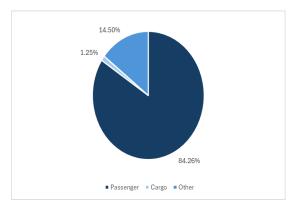


Figure 4. Revenue Breakdown as of 2022

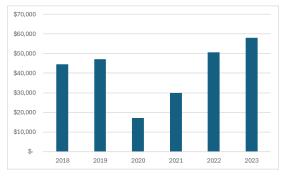


Figure 5. Annual Revenue's Delta Air (Millions of US \$)

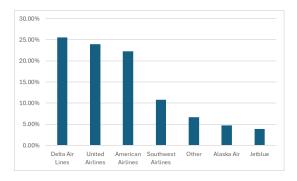


Figure 6. Market Share of Delta vs Competitors as of Q3 2023

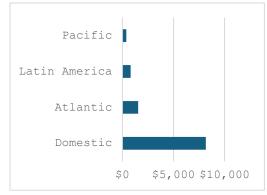


Figure 7. DAL's Revenue by Region as of 2022

#### **BUSINESS DESCRIPTION**

Delta Air Lines, Inc. (DAL), one of the largest carriers in the United States, was founded in 1924 with its headquarters in Atlanta, Georgia. Delta is a member of SkyTeam alliance and has a significant presence at various airports worldwide. The airline conducts more than 5,400 flights each day, providing service to 325 destinations across 52 countries spanning six continents. DAL's business focuses on two segments: airlines and refinery, with a remarkable market share in the international airline industry. The airline segment is a business unit responsible for global air transportation services, including passenger and cargo services, and the customer loyalty program. The refinery segment is represented by Delta's subsidiary, Monroe Energy, operating an oil refinery that exclusively supplies jet fuel to Delta's airline operations. Delta further categorizes its operating revenue into three areas: passenger, cargo, and others.

On average, passenger segment revenue constituted over 80% of the company's total operating revenue for the year 2023, highlighting its significant contribution to Delta's overall financial performance. Meanwhile, cargo revenue constituted approximately 2% of the companywide revenue. Other segments represented just over 18% of the total revenue, emphasizing its significance as a diversified component of Delta's overall revenue structure. Moreover, Delta achieved industryleading operational results in the December quarter of 2023, marked by record revenue and the highest holiday travel volumes in its history. Corporate sales, especially in Technology and Financial Services, experienced significant growth, and December witnessed double-digit year-over-year corporate sales expansion. Sectors like Media and Auto gained momentum following strike resolutions. Besides, the company reported strong international demand, with international passenger revenue 25 percent higher than the December quarter of 202 in the Transatlantic, Pacific, and Latin entities. Notably, the Transatlantic region led with a 9 percent increase in passenger unit revenues.

By maintaining a clear focus on delivering high-quality customer service to their target segment—business travelers and occupying the majority of seat share in 4 markets: Atlanta, Minneapolis, Detroit, NY's LaGuardia. Delta was able to distance their position from the largest competitors. The company has also managed to maintain high dispatch reliability through technical operation division, despite operating on an older fleet of approximately 1250 aircraft. This helped Delta to avoid debt load without sacrificing operational integrity.

### **Company Strategy**

• Sustainability: Delta commits to becoming Net Zero, reducing waste, implementing circular solutions.

#### Source: Company Website

# **DELTA'S PATH TO NET-ZERO 2050** Share of carbon footprint abated by solution (v. 2019 baseline) tCO<sub>-</sub>e Emission reduction within Delta control Fleet renewal (35-40%)

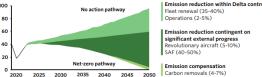


Figure 8. Delta's Path to Net-Zero 2050

Source: Company Website

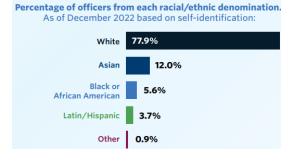


Figure 9. Delta's Commitment to Racial Equity

Source: Company Website

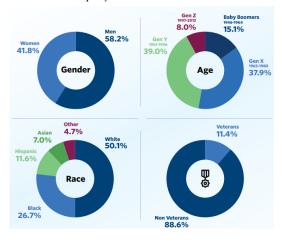


Figure 10. Workforce Diversity

Source: Company Website



- Diversity, Equity & Inclusion: The airline aims to connect, reflect, and respect the world through its commitment to diversity, equity and inclusion. The company is dedicated to being anti-racist and antidiscrimination, removing barriers, building equitable systems, and transparently tracking progress.
- Community Engagement: Delta emphasizes investing in progress, cultivating relationships, and being a strong partner in the communities where its employees are located. Through collaborations with strategic nonprofits, Delta focuses on driving positive change, particularly in the areas of the environment, equity, and education.
- Cost Efficiency: In 2012, the company acquired the Trainer Refinery from ConocoPhillips to vertically integrate their operations through the subsidiary of Monroe Energy (ME). The move aims to source discounted fuel for the supply of Northeast operations, resulting in effective fuel cost management. Through a five-year agreement with Bridger, LLC, ME has provided daily support of 65,000 barrels of crude oil to the Trainer Refinery since 2014. The alliance enhanced Delta's ability to control jet fuel costs by directly connecting the oilfield to the jet engine.

## **Management and Governance**

DAL is governed by an independent board (except CEO and ALPA Nominee), with seasonal members possessing diverse experience. The Board is elected by stockholders and acts on behalf of their interest to maximize long-term financial returns. Delta's Board of Directors demonstrates a commitment to effective governance through regular meetings held at least four times a year, supplemented by special meetings and executive sessions without management, fostering candid discussions. All directors are elected annually, with an average board tenure of less than 5 years, showcasing a commitment to board refreshment and diversity.

Delta's corporate governance principles serve as a guiding framework for the board's function, structure and operation. The company promotes transparency and ethical behaviors through anti-hedging and antipledging policies for employees and the board, called Codes of Ethics and Business Conduct. The Code covers areas such as relationships with third parties, acceptance of compensation, and handling of gifts. Directors are prohibited from personally benefiting from opportunities related to the company's business and must maintain the confidentiality of entrusted information. Fair dealing, compliance with laws, and encouraging the reporting of any illegal or unethical behavior are integral aspects of the Code. Violations are subject to investigation by the Board or designated persons, with appropriate actions taken in response. The Code reflects Delta's commitment to ethical conduct and governance principles.

Source: Company Website

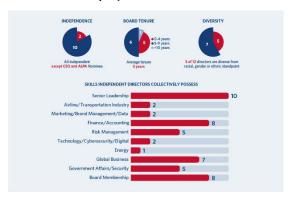


Figure 12. Member diverse experience



Figure 13. Total Revenue vs NI vs Net Profit Margin



Figure 14. ROA vs ROE

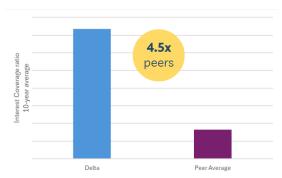


Figure 15. Interest Coverage of DAL vs Peer Average

To aid the fulfillment of responsibility, the Board has instituted committees dedicated to Audit, Corporate Governance, Finance, Personnel & Compensation, and Safety and Security. These committees bring diverse expertise to enhance Delta's governance and strategic functions.

## FINANCIAL ANALYSIS

#### **Revenue Growth**

Delta's bulk of revenue is primarily based on airline operation and ticket revenues, which explains the significant drop recorded in 2020 due to the pandemic. Compared to the financial year 2019, passenger revenue decreased 70%, while cargo and other revenue decreased at a lower extreme level (20% and 10% respectively). 2021 was a year of recovery for Delta, hinging on the introduction of vaccines and the growing demand for travel again after a year of travel suspension, resulting in an increase of 74.9% on sales growth.

## **Profitability**

Delta Air Lines achieved a record-high profit in 2019 after dropping since 2014, making 14% compared to the previous year. The airline reported a net income of \$4.77 billion. In 2020, air travel experienced a sharp decline as a result of the COVID-19 pandemic, constituting the company's most significant financial setback ever. The majority managed to recover profitability in the year 2021, primarily driven by a resurgence in domestic travel. The total revenue had recovered to approximately 75% of the figure recorded in 2020. In 2022, airlines benefited from strong travel demand, particularly from individuals who had spent a significant part of the pandemic confined to their homes. The net income reached \$1.3 million, a substantial year-on-year increase; however, this figure still lagged the profit levels achieved in the pre-pandemic year of 2019.

ROA and ROE serve as indicators of the effectiveness of investors' investment and asset management in generating profit. ROE typically higher than ROA over the period shown except from 2020, indicating that the company utilized effectively borrowed dollars.

Delta Air experienced fluctuations in ROE over the period given, with exceptionally high figures in 2013, followed by variations that could be influenced by industry dynamics, economic conditions, or specific company strategy. The negative ROE in 2020 aligns with the widespread challenges faced by the industry airline during the pandemic, while subsequent years show signs of recovery.

#### Liquidity



Figure 16. Debt Ratio vs Debt - Equity Ratio

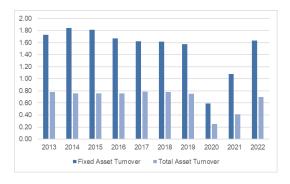


Figure 17. Fixed Asset Turnover vs Total Asset Turnover

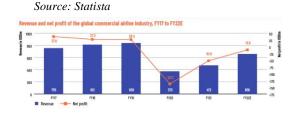


Figure 18. Revenue & Net Profit Airline Industry

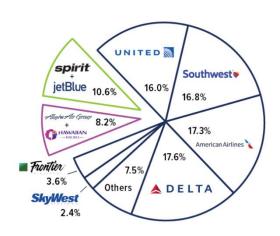


Figure 19. Projected Revenue of US Airlines 2024

The current ratio, ranging from 0.34 to a peak of 1.09 in 2020, indicates fluctuations in short-term solvency. The ratio consistently below 1 suggests challenges in meeting short-term obligations with current assets. The cash ratio focuses specifically on the ability to meet short-term obligations using cash and cash equivalents. Delta's cash ratio varies, with a notable increase in 2020 and a subsequent decrease in the following years. The cash ratio indicates that Delta has faced challenges in maintaining high levels of cash to cover short-term obligations. Specifically, Delta borrowed \$26 billion in 2020 to enhance liquidity and reinforce its financial position. Essentially, their aim was to maximize cash reserves to navigate through the challenges posed by the pandemic and ensure survival.

## **Operating Efficiency**

Delta's Fixed Asset Turnover shows a fluctuating trend, with the highest value in 2014 (1.84) and the lowest in 2022 (0.59). A decrease in Fixed Asset Turnover suggests challenges in generating revenue from fixed assets efficiently. Furthermore, Total Asset Turnover shows variability, with the lowest value in 2022 (0.25) and the highest in 2017 (0.79). A decrease in Total Asset Turnover indicates potential inefficiencies in generating revenue from the entire asset base.

#### **Leverage Ratios**

Delta's Debt Ratio and Debt-Equity Ratio remain stable from 2013 to 2019. The highest value is in 2022. The upward trend in both ratios, especially in 2022, suggests an increased reliance on debt for financing. The Debt Ratio exceeding 0.9 in 2022 indicates that a significant portion of Delta's assets is financed by debt. Meanwhile, the sharp rise in the Debt-Equity Ratio in 2022 indicates a substantial shift toward debt financing relative to equity. However, a significant reduction can be seen in the subsequent years.

## **INDUSTRY ANALYSIS**

Following the pandemic downturn in 2020 and 2021, the US aviation industry experienced a robust recovery in 2022 and started seeing profit again in 2023. Nonetheless, the overall cumulative margin of the whole industry stands at a slim profit margin of 0.4% from 2001 to Q3 2023, potentially due to various cost headwinds (i.e. rising fuel, labor cost, maintenance, and other operational expenditures). Despite such challenges, analyst consensus is optimistic about the industry's future, predicting a ~5% pretax margin in 2023. This information suggests that major airlines such as Delta are likely navigating a complex and competitive landscape, which requires scrutiny in cost management strategy and high adaptability in this evolving market condition.

### **Management Effectiveness**

ROI (%) Net

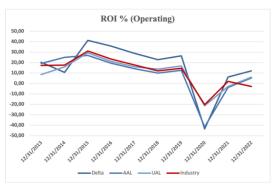


Figure 20. ROI% comparison of Delta Airlines and competitors

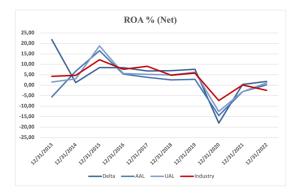


Figure 21. ROA (%) comparison of Delta Airlines and competitors

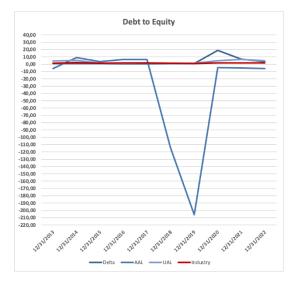


Figure 22. Debt to Equity of Delta and competitors

The Operating Return on Investment (ROI) trajectory for Delta indicates a volatile yet robust pattern, reaching a peak in 2015 at 41% followed by a significant contraction in 2020, ostensibly due to the pandemic included disruptions. Subsequent recovery effort was demonstrated as performance metric started to realign with sectoral benchmark in 2021. Before the pandemic, Delta consistently outstripped the industry average, indicative of high operation and management efficiency. While the downturn in 2020 was mirrored by all participants in the sectors, underscoring a systematic shock, the rebound after that suggests a strategic recalibration of Delta towards operational stability.

#### • Return on Asset (ROA)

Staring at a lower ROA, Delta has managed to significantly improve asset utilization, surpassing its peers and industry norm in 2015. The surge in ROA stems from the decline in market fuel prices of 40% compared to the previous year. From 2016, DAL witnessed a steep fall in net income due to the increase in 18% pay rate of the new pilot labor contract. The company then moved back into positive territory in 2021 and 2022, suggesting a recovery, although not to pre-crisis levels. This pattern is broadly seen across the industry, with all companies taking a hit in 2020 but varying in their recovery speed. Delta has maintained a ROA above the industry average, except in the year 2020, indicating a stronger asset utilization compared to the industry.

#### **Solvency**

## Debt-to-Equity

The Debt-to-Equity ratio chart indicates the financial leverage of the companies, comparing their total debt to their shareholders' equity. Delta shows a relatively stable Debt to Equity ratio until 2020, where there is an extraordinary spike, suggesting a significant increase in debt or reduction in equity, possibly due to financial strategies to manage the crisis. The ratio then improves but remains above the industry average, suggesting that Delta is operating with higher leverage compared to the industry. A higher debt to equity ratio indicates potential higher risk but also the potential for higher returns on equity.

#### **KPI** metrics

#### Load Factor

Load factor (percentage of seats occupied) is an airline efficiency gauge that measures the utilization of available seats. A consistent performance is observed for all airlines and industry as a whole from 2013 to 2019 at 82-83%, with Delta often leading slightly ahead of the industry average rate at 85-86%. The enforcement of the middle seat policy has led DAL's load factor to decline below its rivals, who abandoned the policy from the second half of 2020. Considering passengers' willingness to pay \$23 for the middle seat, Delta could have enhanced its profit margin had the company employed a similar strategy as AAL and UAL. Post-2020, Delta's recovery appears to be stronger compared to its main competitors, maintaining a lead above the industry average by the end of 2022.

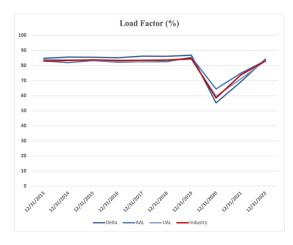


Figure 24. Load Factor comparison of Delta Airlines and competitors

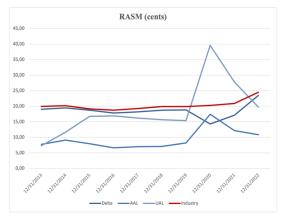
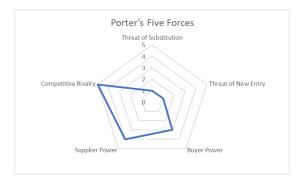


Figure 25. RASM comparison of Delta Airlines and competitors



#### Legend

- 0 No threat to the business
- 5 High threat to the business

Figure 23. Porter's Five Force Analysis

#### Revenue Per Seat Miles (RASM)

Delta's RASM shows a stable trend as well, closely mirroring the industry's performance, with values typically around the 18-20 cents range, until a noticeable increase to 23.48 cents by the end of 2022. This indicates that Delta may be effectively managing its pricing and capacity to maintain a consistent revenue stream per seat mile. In 2016, a slight drop is observed for Delta and the overall sector, which is attributed to the strengthening US dollar at the time. Delta and those who generated a significant revenue from international markets were facing lowered international revenue due to the appreciation of the US currency. AAL and UAL, on the other hand, display more volatility in its RASM, with a dramatic increase in 2020. This indicates a significant decrease in capacity (fewer seat miles available) and a higher fare to offset limited capacity.

## COMPETITIVE POSITIONING

#### **Porter's Five Forces**

Bargaining Power of Suppliers is High due to three external factors: aircraft and technology, fuel, and labor. The volatility of oil prices, influenced by geopolitical factors, directly affects aviation fuel costs. Additionally, the industry relies heavily on two aircraft manufacturers, Airbus and Boeing. The skilled nature of the labor force, consisting of high-level professionals, further enhances suppliers' bargaining power, as companies strive to attract and retain expertise in the field.

Bargaining Power of Buyers is Moderate. Buyers wield significant bargaining power over airlines due to the ease of switching carriers facilitated by third-party booking platforms and apps. Direct contact with airlines is minimal as travelers typically compare and choose the most cost-effective deals for their itineraries. To counteract this, Delta can respond by conducting market research, providing more affordable direct flights to frequently searched destinations, and enhancing partnerships with credit card companies to offer compelling reward programs, thus discouraging customers from switching carriers.

The Competitive Rivalry is High. The airline industry is characterized by intense competition, with major carriers often serving the same destinations from similar airports at comparable prices. Amenities and seat comfort are generally alike among airlines, contributing to a uniform air travel experience. Delta contends with traditional rivals like United Airlines and American Airlines, while also facing strong competition from the rising popularity of value carriers such as Southwest or JetBlue. Due to the similarity in customer experiences across airlines, the constant risk of losing passengers to competitors is a significant challenge.

The Threat of New Entry is Low as high barriers to entry, such as substantial operating costs and complex government regulations, deter newcomers. Notably, no airline established in the 21<sup>st</sup> century has attained more than a 2% market share, with JetBlue, founded in 1998, being the



Figure 26. SWOT Analysis



Figure 27. Revenue Projection

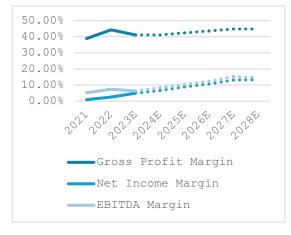


Figure 28. Projected Margin

most recent entrant to make a notable impact, yet its market share remains less than one-third of Delta's.

The Threat of Substitution is Low. In the context of air travel, substitutes include modes like trains, cars, or buses. However, for long-distance travel, such as from New York to Los Angeles, air travel remains the fastest and most convenient option. Despite longer travel times by car, bus, or train, until a new technology emerges as a superior alternative, Delta faces minimal threat from substitute methods of travel.

#### **SWOT Analysis**

Strengths: Delta stands out with a remarkable brand value, securing the top position as the most valuable airline brand globally, boasting a 22% increase in brand value from 2022 to 2023 to \$8.9 billion. Besides, Delta's impressive fleet comprises 979 aircraft, making it one of the world's largest. Delta's participation in the SkyTeam alliance and numerous codeshare agreements with international airlines has expanded its global presence. Besides, strategic acquisitions and joint ventures, such as Northeast and Western airlines, contribute significantly to its market dominance. Delta consistently ranks high in on-time performance metrics compared to its peers, enhancing customer satisfaction, and reducing costs associated with delays. Delta maintains a robust financial position with an 'investment grade' label from rating agencies. Multiple revenue streams contribute to the company's steady cash flow, ensuring financial stability.

<u>Weaknesses:</u> Despite international expansion efforts, Delta remains heavily reliant on the North American market for most of its profits. Challenges related to the Airbus A220 engine, affecting a considerable number of Delta's aircraft, require strategic mitigation efforts to address potential risks. Delta faces a notable attrition rate compared to industry competitors, necessitating substantial investments in employee training to maintain a reliable workforce.

Opportunities: Delta can harness the power of social media to expand its consumer base and enhance customer relations beyond traditional marketing. Delta's Maintenance, Repair, and Overhaul division possesses a growth opportunity as the global aircraft maintenance market's anticipated 5.02% CAGR over the next eight years (2023-2030). Recognizing millennials as the highest spenders on airline services, Delta can tap into this lucrative market by developing targeted benefits and programs tailored specifically to millennials. Delta Air Lines is set to establish Sustainable Skies Lab, a unique innovation facility aimed at expediting research, design, and testing for a more environmentally sustainable future of air travel, showcasing continuous efforts, inspiring industry innovation, and scaling technologies to achieve Delta's net-zero emissions target by 2050.

<u>Threats:</u> Despite its extensive fleet, Delta faces intense competition locally and internationally. Rising costs of fuel, labor, and raw materials

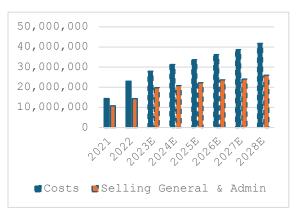


Figure 29. Forecasted Cost

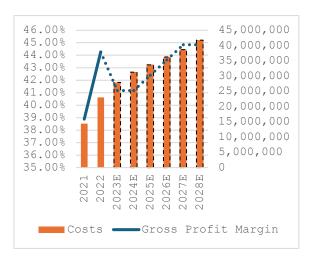


Figure 30. Forecasted Margin



Figure 31. Forecasted Liquidity

present financial challenges for Delta, affecting profit margins and necessitating effective cost management strategies. Recent geopolitical events, such as the Russian-Ukraine war, have forced Delta to cut ties with Aeroflot, reroute flights, and increase ticket prices, highlighting the vulnerability of the airline to geopolitical risks. The airline industry must constantly adapt to new regulations from entities like the Federal Aviation Administration (FAA) and Department of Transportation (DOT). In 2020, the company was given a penalty of \$156 thousand USD for alleged violations related to drug and alcohol testing by the FAA. This introduces the potential for increased operational expenses and the jeopardy of business continuity for Delta.

## PROJECTED FINANCIAL STATEMENT

### **Projected Income Statement**

From our calculation, the average sales revenue growth rate of Delta within the 10-year period (2013-2022) is 11.83%. Besides, Delta stated that it experienced a boost in international ticket sales, witnessing a 25% increase compared to the corresponding quarter in 2022. Additionally, the company observed a rise in the number of passengers opting for premium seating, leading to a 15% growth in revenue from these tickets compared to the same quarter in the previous year. Therefore, we assume that the sales revenue growth rate in 2023 is 15%. According to Chief Executive Officer (CEO) Ed Bastian, there continues to be a robust demand for air travel, and the customer base is financially well-positioned, with a strong emphasis on prioritizing travel in 2024. However, he expressed worry regarding increased maintenance expenses, attributing them to disruptions in the supply chain. Additionally, he highlighted challenges in adhering to the scheduled delivery of new planes due to disruptions at both engine and aircraft manufacturing facilities. So, we forecast the sales revenue growth in the next 5 years would be 15%-14%. Furthermore, we calculated the average direct cost over the past 10 years is around 48%. However, the airline industry is unstable, and the unpredictable nature of operational expenses poses a substantial concern. Fuel prices consistently remain an unpredictable factor within the aviation sector and based on what Bastian said, we assume the direct cost in 2023 would increase to 48% compared to 2022, then gradually decrease to 43-45% by 2027. On the cost side, labor costs surged by 20% in the first three quarters of 2023, primarily driven by increased wages, particularly resulting from a contract that union pilots approved in March 2023. Also, the average Selling General & Admin growth rate in the last 10 years is about 33%, so we assume the SG&A rate will increase to 34% in 2023 and decrease to 28% by 2028.

#### **Projected Balance Statement**

Based on historical data in the previous year, we calculated the average cash/sales ratio of 19.4%. However, it is growing at 12.92% in 2022, we assume the cash/sales ratio will maintain at 11% in 2023 and gradually decrease by 2028. Similarly, we forecast AR/Sales to maintain at 6% by 2028 based on the average of AR/Sales of 6.44% over the last 10 years since on top of retailing airline tickets, Delta Air is among the leading



Figure 32. Forecasted CapEx

Input	Rate	Source
Risk Free Rate	4%	Revenue Average of 10-year treasury
Beta	1.28	Average of monthly regression
Market Risk Premium	5.80%	Average market risk premium in the US from 2011 to 2022
Cost of Equity	11.42%	CAPM
Cost of Debt	6%	Delta's yield bonds
Tax rate	23%	Delta's effective tax rate
WACC	7.04%	

Figure 33. WACC Inputs

Simulatio	n Statistic
Mean	58.73703602
SD	20.68742342
25th Percentile	45.44904032
Median	54.71655
75th Percentile	67.38

Figure 32. Simulation Statistics

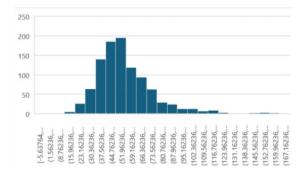


Figure 35. Monte Carlo Simulation

issuers of credit cards globally. These cards, coupled with its loyalty program, effectively engage customers with Delta and generate lucrative payments revenue.

Given the historical data on fixed assets to sales ratio, it fluctuated 78% - 105% from 2013 to 2022 with an average of 119.6%. Based on this, we assume this ratio drops to 100.5% in 2023 and gradually declines by 2028. The pattern of depreciation for fixed assets remains stable at 3%-4% with an average of 4.44% over the last 10 years, so we predict this ratio will remain at 5% for the next 5 years. In terms of Account Payable and Accrued Expenses, the historical average of AP/Sales ratio is 23.72%. Besides, the increase in wages and fuel prices have been forecasted by Delta. Therefore, we assume the ratio of AP to Sales will be at 24% in the next 5 years.

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Average
Cash/Sales	10.39%	8.19%	8.44%	8.20%	6.40%	3.98%	6.13%	82.46%	37.86%	12.92%	19.40%
AR/Sales	4.26%	7.98%	5.26%	5.21%	5.76%	5.21%	6.07%	8.17%	8.04%	6.28%	6.44%
Fixed Assets/Sales	78.48%	77.47%	83.31%	92.92%	98.58%	99.37%	102.83%	257.62%	158.60%	105.73%	119.60%
Depreciation/Fixed Asset		4.95%	4.51%	4.30%	4.04%	3.91%	2.49%	1.10%	2.45%	3.18%	3.44%
AP. Acr Exp etc/Sales	17.53%	17.38%	17.80%	18.03%	23.33%	19.03%	18.68%	45.02%	31.92%	22.29%	23.72%

Figure 36. Average Ratio from 2023 to 2022

## **VALUATION**

## DISCOUNTED CASH FLOW MODEL

We employed a discounted cash flow (DCF) analysis to assess the intrinsic value of Delta's stock, leveraging the predictability of cash flows concerning growth and profitability. The primary model projects over a five-year period, yielding a \$57.76 price target. The base case considered historical performance, industry outlook, Delta's competitive positioning, revenue, and earnings growth.

**Revenue Growth:** The forecast of growth in sales is based on historical price and increasing international ticket sales. Moreover, assuming a 15% growth rate in 2023, the CEO of Delta expressed confidence in strong air travel demand through 2024.

**WACC:** The cost of equity was determined using the CAPM model, incorporating a 10-year-treasury risk-free rate of 4.0%-4.75%. To calculate Beta, linear regressions of Delta's stock price were run against the S&P 500. The Market Risk Premium is estimated from "Average market risk premium in the United States from 2011 to 2022" by looking at its average rate from 2015 to 2022, and its trend. The Cost of Debt is determined by using the yield of Delta's bond with maturity is 10/28/2029.

**Terminal Value:** We used the Perpetuity Growth Method that yields a terminal value that represents 2.2% of the total estimated Enterprise Value. This is a small portion of the total value attributed to the terminal value in the valuation model.

Peer Group
American Airlines
United Airlines
Southwest Airlines
Alaska Air Group
JetBlue Airways
Spirits Airlines
Hawaiian Holdings

Figure 37. Peer Group

**Sensitivity Analysis:** we conducted sensitivity analysis (appendix 14) to gauge the impact of variations in key inputs on the DCF valuation. Specifically, we assessed the sensitivity of the valuation to changes in both the terminal growth rate and the WACC. By varying these inputs and observing their effect on the stock price, we gained valuable insights into the robustness of our valuation model and the potential range of outcomes under different scenarios.

#### **Monte Carlo Simulation**

A Monte Carlo Simulation was employed to assess the potential outcomes of Delta's future growth. This analytical technique models a diverse range of potential scenarios for various variables that significantly influence the intrinsic value of Delta's stock. By running 1000 simulations, the outcome revealed an average price of Delta \$58.73, closely aligning with our valuation model.

#### RELATIVE VALUATION

To confirm our recommendation, we conduct multiples valuation, where we compare Delta to market peers such as AAL, UAL, LUV, ALK, JBLU, SAVE and HA. DAL's evaluation against competitors involves four equity multiples: P/E ratio, EBITDA multiple, Sales multiple, and Book Value multiple. After determining the industry average for each multiple, we obtained the projected price of \$59.63. This implies that Delta's current share price of \$41.72 is undervalued in the current market environment (as of 2/23/2024).

	Сар	Based on AVG	Pric	e per share
P/E (forward or last earnings)	\$	73,555,831.57	\$	114.70
EBITDA multiplier	\$	45,021,962.96	\$	70.21
Sales multiplier	\$	21,921,491.80	\$	34.18
Book Value multiplier	\$	12,452,550.34	\$	19.42
		Average	\$	59.63

Figure 38. Relative Valuation

## **Target Price**

By employing a 50:50 portion for the projected prices derived from the DCF model and Relative Valuation, we obtained the target stock price of \$58.74. This Target Price results in a Hold recommendation.

#### **INVESTMENT RISKS**

### **Regulatory Risks**

- Delta's debt agreement, including credit facilities and SkyMiles financing agreements, requires the company to maintain a certain amount of cash and coverage ratio. Any reduction in these ratios due to factor beyond Delta's control would requires the company to provide additional collateral or face early repayment. The SkyMiles agreements also limit changes in their SkyMiles program that could potentially affect their ability to pay debt. Compliance to these rules imposes restriction on Delta's operation, especially when future debt agreement includes stricter terms.

- Monroe's refinery operation is subject to heavy environmental regulation, which can put adverse impact on the company's financial result if the company fail to comply with these regulations or attempt to enact new regulation applicable to Monroe.

## **Operational Risks**

- Delta's heavy use of technology infrastructure for electronic ticketing, mobile applications and other digital platforms imposes the substantial risk of system outage and cyberattacks if no regular reviews and system update are put into place.
- Due to the labor-intensive nature of airline business, labor-related disruptions, such as the collective bargaining with pilots and the potential for strikes or labor dispute if an agreement cannot be reached, can affect Delta's ability to maintain flight schedule and deter passengers from choosing Delta for future travel, impacting the company's bottom line and brand's image in the long term.
- Seasonality of air travel demand and external factors such as severe weather and disaster can disrupt operation and create unexpected fluctuations in financial result.

### **Economic Risks**

- In response to COVID-19, Delta has been facing with significant amount of incurred debt, together with the existing obligation. The company expressed concerns regarding diminishing liquidity, for which they might not be able to timely pay back leases or comply with certain financial covenants.
- The company's financial stability is directly impacted by economic uncertainties such as volatility of oil prices over the past decade. Additionally, tight credit markets pose a challenge in obtaining favorable terms for loans or issuing debt securities, leading to increased borrowing cost and an even more limited access to liquidity. As a result, Delta may be forced to rely more heavily on existing cash reserves or face constraints in executing strategic initiatives, such as fleet expansion or modernization efforts.
- A significant impairment of assets, including aircrafts, routes, and airport slots, was recorded due to the impact of pandemic and volatile fuel price. These impairment charges signal Delta's recognition of the diminished value of its assets in response to economic challenges.

## Appendix

# Appendix 1. Balance Statement

Standardized Annual Balance Sheet										
Report Date	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022
Cash & Equivalents	2966000	2088000	1972000	2762000	1814000	1565000	2882000	8307000	7933000	3266000
Short Term Investments	959000	1217000	1465000	487000	825000	203000	-	5789000	3386000	3268000
Cash & Equivs & ST Investments	3925000	3305000	3437000	3249000	2639000	1768000	2882000	14096000	11319000	6534000
Receivables (ST)	1609000	3222000	2139000	2064000	2377000	2314000	2854000	1396000	2404000	3176000
Inventories	1063000	852000	697000	891000	1329000	1055000	1251000	732000	1098000	1424000
Current Tax Assets	1736000	3275000	-	-	-	-	-	-	-	-
Other Current Assets	1318000	1811000	2783000	1247000	1499000	1203000	1262000	1180000	1119000	1877000
Total Current Assets	9651000	12465000	9056000	7451000	7844000	6340000	8249000	17404000	15940000	13011000
Gross Property Plant & Equip	29646000	31269000	33910000	36831000	40660000	44158000	48337000	44040000	47420000	53479000
Accumulated Depreciation	7792000	9340000	10871000	12456000	14097000	15823000	17027000	17511000	18671000	20370000
Net Property Plant & Equip	21854000	21929000	23039000	24375000	26563000	28335000	31310000	26529000	28749000	33109000
Long Term Investments	-	-	-	-	-	-	-	1665000	1712000	2128000
Intangible Assets	14452000	14397000	14655000	14638000	14641000	14611000	14944000	15764000	15754000	15745000
Deferred LT Assets	4992000	4320000	4956000	3064000	935000	242000	-	1988000	1294000	325000
Other Assets	1303000	1010000	1428000	1733000	3309000	10738000	10029000	8646000	9010000	7970000
Total Assets	52252000	54121000	53134000	51261000	53292000	60266000	64532000	71996000	72459000	72288000
Accounts Payable & Accrued Exps	6622000	7015000	7244000	7146000	9621000	8455000	8781000	7696000	9543000	11273000
Accounts Payable	2300000	2622000	2743000	2572000	3674000	2976000	3266000	2840000	4240000	5106000
Accrued Expenses	4322000	4393000	4501000	4574000	5947000	5479000	5515000	4856000	5303000	6167000
Current Debt	1547000	1216000	1563000	1131000	2242000	1518000	2287000	1732000	1782000	2359000
Other Current Liabilities	5983000	8648000	8719000	6962000	6710000	8605000	9136000	6499000	9641000	12308000
Total Current Liabilities	14152000	16879000	17526000	15239000	18573000	18578000	20204000	15927000	20966000	25940000
LT Debt & Leases	9795000	8561000	6766000	6201000	6592000	8253000	8873000	27425000	25138000	20671000
Pensions & OPEB	12392000	15138000	13855000	13378000	9810000	9163000	8452000	10630000	6035000	3707000
Deferred LT Liabilities	2559000	2602000	2246000	2278000	2296000	3652000	4965000	5405000	4849000	4448000
Minority Interests	0	0	0	0	0	0	0	0	0	0
Other Liabilities	1711000	2128000	1891000	1878000	2111000	6933000	6680000	11075000	11584000	10940000
Total Liabilities	40609000	45308000	42284000	38974000	39382000	46579000	49174000	70462000	68572000	65706000
Additional Paid-In Capital	13982000	12981000	10875000	12294000	12053000	11671000	11129000	11259000	11447000	11526000
Retained Earnings	3049000	3456000	7623000	7903000	9636000	10039000	12454000	-428000	-148000	1170000
Accum Other Comprehensive Income	-5130000	-7311000	-7275000	-7636000	-7621000	-7825000	-7989000	-9038000	-7130000	-5801000
Treasury Stock	258000	313000	373000	274000	158000	198000	236000	259000	282000	313000
Other Equity	0	0	0	0	0	0	0	0	0	0
Total Equity	11643000	8813000	10850000	12287000	13910000	13687000	15358000	1534000	3887000	6582000
Total Liabilities & Equity	52252000	54121000	53134000	51261000	53292000	60266000	64532000	71996000	72459000	72288000

## Appendix 2. Income Statement

	1	ı								
Standardized Annual Income Statement										
Report Date	12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022
Sales Revenue	33879000	35888000	35595000	34445000	35548000	40620000	43030000	13491000	23551000	41268000
Other Revenue	3894000	4474000	5109000	5194000	5696000	3818000	3977000	3604000	6348000	9314000
Total Revenue	37773000	40362000	40704000	39639000	41244000	44438000	47007000	17095000	29899000	50582000
Revenue Growth Rate (y-o-y)		6.85%	0.85%	-2.62%	4.05%	7.74%	5.78%	-63.63%	74.90%	69.18%
Direct Costs	20964000	22967000	17096000	15940000	17358000	19442000	19931000	10695000	14395000	23002000
Gross Profit	16809000	17395000	23608000	23699000	23886000	24996000	27076000	6400000	15504000	27580000
Selling General & Admin	9829000	10976000	11938000	12859000	13288000	13985000	14861000	9336000	10789000	14356000
Depreciation & Amortization	1658000	1771000	1835000	1902000	2235000	2329000	2581000	2312000	1998000	2107000
Restruct Remediation & Impair	-	-	-	-	-	-	-	8219000	-19000	-124000
Other Operating Expense	1922000	2442000	2033000	1986000	2249000	3418000	3016000	-998000	850000	7580000
Total Indirect Operating Costs	13409000	15189000	15806000	16747000	17772000	19732000	20458000	18869000	13618000	23919000
Operating Income	3400000	2206000	7802000	6952000	6114000	5264000	6618000	-12469000	1886000	3661000
Interest Income	-852000	-650000	-481000	-388000	-396000	-311000	-301000	-929000	-1279000	-1029000
Gains on Sale of Assets	-	-	-	-	-	14000	119000	-105000	56000	-783000
Other Non-Operating Income	-21000	-484000	-164000	72000	-17000	184000	-238000	-2084000	-265000	65000
Total Non-Operating Income	-873000	-1134000	-645000	-316000	-413000	-113000	-420000	-3118000	-1488000	-1747000
Earnings Before Tax	2527000	1072000	7157000	6636000	5701000	5151000	6198000	-15587000	398000	1914000
Taxation	-8013000	413000	2631000	2263000	2124000	1216000	1431000	-3202000	118000	596000
Extraordinary Items	0	0	0	0	0	0	0	0	0	0
Accounting Changes	0	0	0	0	0	0	0	0	0	0
Net Income	10540000	659000	4526000	4373000	3577000	3935000	4767000	-12385000	280000	1318000
Preference Dividends & Similar	0	0	0	0	0	0	0	0	0	0
Net Income to Common	10540000	659000	4526000	4373000	3577000	3935000	4767000	-12385000	280000	1318000
Average Shares Basic	849000	836000	797000	751000	720000	691000	651000	636000	636000	638000
EPS Net Basic	12.41	0.79	5.68	5.82	4.97	5.69	7.32	-19.49	0.44	2.07
EPS Continuing Basic	12.41	0.79	5.68	5.82	4.97	5.69	7.32	-19.49	0.44	2.07
Average Shares Diluted	858000	845000	804000	755000	723000	694000	653000	636000	641000	641000
EPS Net Diluted	12.29	0.78	5.63	5.79	4.95	5.67	7.3	-19.49	0.44	2.06
EPS Continuing Diluted	12.29	0.78	5.63	5.79	4.95	5.67	7.3	-19.49	0.44	2.06
Shares Outstanding	851443.133	825258.233	778783.991	730737.709	707197.979	679944.475	642771.713	638182.52	639967.515	641265.753

Appendix 3. Financial Ratios

Financial Ratios	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Profitability										
Gross Profit Margin	38.12%	36.00%	51.97%	53.72%	51.17%	52.14%	53.68%	20.72%	38.88%	44.26%
Operating Profit Margin	7.46%	2.99%	20.11%	19.27%	16.04%	12.68%	14.40%	-115.54%	1.69%	4.64%
Net Profit Margin	31.11%	1.84%	12.72%	12.70%	10.06%	9.69%	11.08%	-91.80%	1.19%	3.19%
Return on Assets	21.78%	1.24%	8.44%	8.38%	6.84%	6.93%	7.64%	-18.14%	0.39%	1.82%
Return on Equity	221.61%	6.44%	46.04%	37.80%	27.31%	28.52%	32.82%	-146.64%	10.33%	25.18%
Liquidity										
Current Ratio	0.68	0.74	0.52	0.49	0.42	0.34	0.41	1.09	0.76	0.50
Quick Asset Ratio	0.61	0.69	0.48	0.43	0.35	0.28	0.35	1.05	0.71	0.45
Cash Ratio	0.49	0.32	0.31	0.39	0.24	0.18	0.29	1.41	0.92	0.38
Operating Efficiency										
Fixed Asset Turnover	1.73	1.84	1.81	1.67	1.62	1.62	1.58	0.59	1.08	1.64
Total Asset Turnover	0.78	0.76	0.76	0.76	0.79	0.78	0.75	0.25	0.41	0.70
Receivable Turnover	22.88	16.71	15.19	18.86	18.57	18.95	18.19	8.04	15.74	18.13
Receivables Period (days)	16	22	24	19	20	19	20	45	23	20
Inventory Turnover	20.10	23.99	22.07	20.08	15.64	16.31	17.29	10.79	15.73	18.24
Inventory Period (days)	18	15	17	18	23	22	21	34	23	20
Payable Period (days)	22	22	24	24	28	27	24	65	43	34
Payable/Sales	6.79%	7.31%	7.71%	7.47%	10.34%	7.33%	7.59%	21.05%	18.00%	12.37%
Operating Period (days)	34	37	41	38	43	42	41	79	46	40
Cash Conversion Cycle	12	15	17	13	15	14	17	14	3	6
Leverage Ratios										
Debt Ratio	0.78	0.84	0.80	0.76	0.74	0.77	0.76	0.98	0.95	0.91
Debt - Equity Ratio	0.84	0.97	0.62	0.50	0.47	0.60	0.58	17.88	6.47	3.14
Interest Coverage	2.97	1.65	14.88	17.10	14.40	16.56	20.59	-16.78	0.31	1.86

## Appendix 4. Ratio comparison of Delta Airlines and Competitors

		12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022
ROI % (Operating)											
	Delta	20,26	10,61	41,31	35,74	28,86	22,79	26,48	-43,47	6,13	12,12
	AAL	19,14	25	26,9	19,4	14,21	9,97	12,64	-41,63	-3,75	5,31
	UAL	8,6	15,87	29,32	21,06	16,06	13,74	16,84	-21,33	-2,85	6,07
	Industry	17,28	17,55	31,09	23,33	17,77	12,10	14,63	-20,25	1,99	-2,83
ROA % (Net)											
	Delta	21,78	1,24	8,44	8,35	6,84	6,93	7,64	-18,09	0,39	1,82
	AAL	-5,58	6,7	16,51	5,35	3,74	2,52	2,8	-14,53	-3,1	0,19
	UAL	1,53	3,05	18,77	5,57	5,17	4,89	6,18	-12,57	-3,08	1,09
	Industry	4,21	4,70	12,16	7,63	9,05	4,80	5,79	-7,35	0,10	-2,48
Debt to Equity											
	Delta	0,97	1,11	0,77	0,6	0,64	0,71	0,73	19,01	6,93	3,5
	AAL	-6,1	8,86	3,65	6,43	6,38	-114	-206	-4,7	-5,1	-6,1
	UAL	4,16	5,06	1,31	1,35	1,63	1,47	1,29	4,56	6,69	4,56
	Industry	1,31	2,27	1,29	1,95	1,87	1,17	0,96	1,80	1,89	1,96

# Appendix 5. KPI comparison of Delta Airlines and Competitors

		12/31/2013	12/31/2014	12/31/2015	12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022
Revenue Passenger-miles											
	Delta	168720300	177467708	185840944	189706790	195589820	204285183	217001391	66088373	121056188	181604928
	AAL	128300273	129217971	166899541	198832426	201270352	205384647	212809789	77047241	136482344	191464414
	UAL	176387984	177553107	182306929	185186545	192834252	204686012	212940806	62342826	110610352	190113856
	Industry	834782639	858029553	899034049	931025627	962949559	1010572608	1054798537	379609759	687823862	947924419
Available Seat-miles											
	Delta	198758823	207222868	217078181	222588250	226587630	237061948	249694906	119626551	174921341	215384006
	AAL	154351912	157428907	200150839	241466381	243708802	248479803	248779882	119529867	182047974	229841079
	UAL	210005432	211954183	218138240	223281445	233667254	244417122	252816292	104313705	155517316	22791650
	Industry	1004140149	1028487121	1073106176	1116048267	1153149529	1207036478	1246032777	648153319	932696129	114064976
Load Factor											
	Delta	84,89	85,64	85,61	85,23	86,32	86,17	86,91	55,25	69,21	84,32
	AAL	83,12	82,08	83,39	82,34	82,59	82,66	85,54	64,46	74,97	83,3
	UAL	83,99	83,77	83,57	82,94	82,53	83,74	84,23	59,76	71,12	83,41
	Industry	83,13	83,43	83,78	83,42	83,51	83,72	84,65	58,57	73,75	83,1
RASM (cents)											
	Delta	19,00	19,48	18,75	17,81	18,20	18,75	18,83	14,29	17,09	23,48
	AAL	7,73	9,11	7,96	6,63	7,01	7,10	8,20	17,39	12,16	10,87
	UAL	7,31	11,62	16,76	16,90	16,20	15,66	15,39	39,59	27,82	19,72
	Industry	19.94	20.20	19.14	18.75	19.27	19.88	19.90	20.28	20.88	24.51

Appendix 6. External Factors & Parameters Estimates

	2021	2022	2023	2024	2025	2026	2027	2028
External Factors								
Risk Free Rate			4.00%	4.25%	4.50%	4.50%	4.75%	4.75%
Market risk premium			5.8%	5.8%	5.7%	5.7%	5.6%	5.6%
Interest rate on debt (cost of debt)			6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Annual sales growth			15%	12%	10%	10%	9%	8%
Cost of equity			11.42%	11 67%	11 80%	11 74%	11.86%	11.869
Capital Structure (% debt)			66.63%	66.63%	66.63%	66.63%	66.63%	66.639
WACC (discount rate)			6.89%	6.97%	7.01%	7.00%	7.04%	7.04%
Perpetual CF growth			2.2%					
Perpetual discount Payout and financing			7.04%					
Debt portion to fin operations			100%	100%	100%	100%	100%	100%
Payout ratio	0%	0%	0%	0%	0%	0%	0%	0%
Parameter Estimates								
COGS/Sales			48%	48%	47%	46%	45%	45%
SGA/Sales			34.0%	32.0%	31.0%	30.0%	28.0%	28.0%
Depreciation & Amortization			4.00%	4.00%	4.00%	4.00%	4.50%	4.50%
Other Operating Expense/Sales			8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Depreciation/Fixed Assets			5%	5%	5%	5%	5%	5%
Other Non-Operating Exp/Sales			4.50%	4.50%	5.00%	5.00%	5.50%	5.50%
Tax rate			23%	23%	23%	23%	23%	23%
Cash/Sales			11.0%	11.0%	10.0%	9.0%	8.0%	8.0%
AR/Sales			6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Other Assets/Sales			49.0%	47.0%	45.0%	43.0%	40.0%	38.0%
Fixed Assets/Sales			100.5%	92.0%	85.0%	81.0%	79.0%	79.0%
AP. Acr Exp etc/Sales			24.0%	22.0%	21.0%	21.0%	20.0%	20.0%
Beta			1.28	1.28	1.28	1.27	1.27	1.27
Number of shares			641,266					
Market Cap			20,969,139					

## Appendix 7. Income Statement Forecast

Income Statement	2021	2022	2023	2024	2025	2026	2027	2028
Sales Revenue	23,551,000	41,268,000	47,458,200	53,153,184	58,468,502	64,315,353	70,103,734	75,712,033
Other Revenue	6,348,000	9,314,000	10,711,100	11,996,432	13,196,075	14,515,683	15,822,094	17,087,862
Total Revenue	29,899,000	50,582,000	58,169,300	65,149,616	71,664,578	78,831,035	85,925,829	92,799,895
Direct Costs	14,395,000	23,002,000	27,921,264	31,271,816	33,682,351	36,262,276	38,666,623	41,759,953
Gross Profit	15,504,000	27,580,000	30,248,036	33,877,800	37,982,226	42,568,759	47,259,206	51,039,942
Selling General & Admin	10,789,000	14,356,000	19,777,562	20,847,877	22,216,019	23,649,311	24,059,232	25,983,971
Depreciation & Amortization	1,998,000	2,107,000	2,326,772	2,605,985	2,866,583	3,153,241	3,866,662	4,175,995
Other Operating Expense	831,000	7,456,000	4,653,544	5,211,969	5,733,166	6,306,483	6,874,066	7,423,992
Total Indirect Operating Costs	13,618,000	23,919,000	26,757,878	28,665,831	30,815,768	33,109,035	34,799,961	37,583,957
Operating Income (EBIT)	1,886,000	3,661,000	3,490,158	5,211,969	7,166,458	9,459,724	12,459,245	13,455,985
Interest Expense	1,279,000	1,029,000	2,385,960	2,512,012	2,512,012	2,512,012	2,512,012	2,512,012
Other Non-Operating Exp	-209,000	-718,000	2,617,619	2,931,733	3,583,229	3,941,552	4,725,921	5,103,994
Total Non-Operating Exp	-1,488,000	-1,747,000	231,659	419,720	1,071,216	1,429,539	2,213,908	2,591,982
Earnings Before Tax (EBT)	398,000	1,914,000	3,721,817	5,631,690	8,237,674	10,889,264	14,673,153	16,047,967
Taxation	118,000	596,000	856,018	1,295,289	1,894,665	2,504,531	3,374,825	3,691,032
Net Income	280,000	1,318,000	2,865,799	4,336,401	6,343,009	8,384,733	11,298,328	12,356,934
Profit margin	0.94%	2.61%	4.93%	6.66%	8.85%	10.64%	13.15%	13.32%

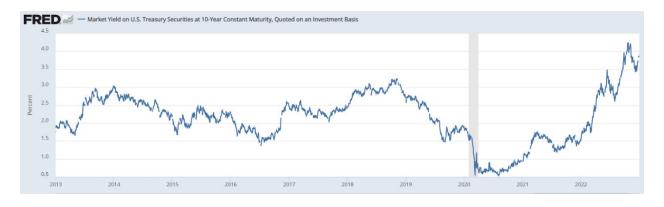
Appendix 8. Balance Statement Forecast

Total Liabilities & Equity	72,459,000	72,288,000	76,984,406	78,805,977	78,781,546	80,607,201	82,020,051	85,776,728
Total Equity	3,887,000	6,582,000	8,848,900	10,298,188	9,557,111	9,877,810	10,660,011	13,041,875
Retained Earnings	-148,000	1,170,000	4,035,799	8,372,200	14,715,209	23,099,942	34,398,270	46,755,204
Total Liabilities	68,572,000	65,706,000	68,135,506	68,507,789	69,224,435	70,729,391	71,360,040	72,734,853
LT Debt & Leases & Other long	47,606,000	39,766,000	41,866,874	41,866,874	41,866,874	41,866,874	41,866,874	41,866,874
Total Current Liabilities	20,966,000	25,940,000	26,268,632	26,640,916	27,357,561	28,862,517	29,493,166	30,867,979
Other Curr L (customers)	9,641,000	12,308,000	12,308,000	12,308,000	12,308,000	12,308,000	12,308,000	12,308,000
AP, Accr Exp, etc	11,325,000	13,632,000	13,960,632	14,332,916	15,049,561	16,554,517	17,185,166	18,559,979
Total Assets	72,459,000	72,288,000	76,984,406	78,805,977	78,781,546	80,607,201	82,020,051	85,776,728
Total LT Assets	56,519,000	59,277,000	63,794,625	64,429,543	64,014,214	65,481,546	66,689,435	69,483,743
Other Assets	27,770,000	26,168,000	28,502,957	30,620,320	32,249,060	33,897,345	34,370,331	35,263,960
Net Property Plant & Equip	28,749,000	33,109,000	35,291,668	33,809,223	31,765,154	31,584,201	32,319,103	34,219,783
Accumulated Depreciation	18,671,000	20,370,000	23,168,479	26,128,423	29,149,737	32,268,938	35,562,301	39,092,134
Gross Property Plant & Equip	47,420,000	53,479,000	58,460,147	59,937,647	60,914,891	63,853,139	67,881,405	73,311,917
Total Current Assets	15,940,000	13,011,000	13,189,781	14,376,435	14,767,332	15,125,655	15,330,616	16,292,985
Other Cur Asstets	2,217,000	3,301,000	3,301,000	3,301,000	3,301,000	3,301,000	3,301,000	3,301,000
Receivables (ST)	2,404,000	3,176,000	3,490,158	3,908,977	4,299,875	4,729,862	5,155,550	5,567,994
Cash & Equivs & ST Investments	11,319,000	6,534,000	6,398,623	7,166,458	7,166,458	7,094,793	6,874,066	7,423,992

Appendix 9. Free Cash Flow

Cash flow	2021	2022	2023	2024	2025	2026	2027	2028	
			0	1	2	3	4	5	
Operating CF	4,926,000	4,764,000	5,432,619	6,876,626	8,293,106	10,074,394	12,377,783	13,294,785	
Net CAPEX		7,758,000	7,779,625	4,437,445	3,998,558	6,057,448	7,321,629	8,960,345	
Net NWC		(7,903,000)	(149,851)	814,370	(325,748)	(1,146,633)	(425,688)	(412,444)	
Free cash flow		4,909,000	(2,197,155)	1,624,810	4,620,297	5,163,579	5,481,842	4,746,884	
								100,301,285	Terminal Value
								105,048,169	

Appendix 10. Risk Free Rate - 10-Year-Treasury

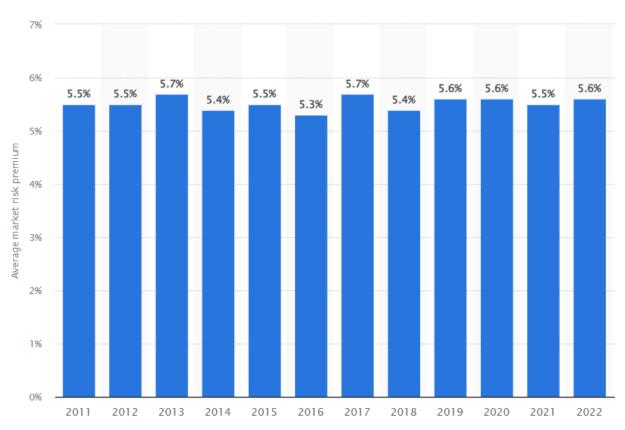


Appendix 11. Cost of Debt – Delta bond yield rate

#### More Bonds of Delta Air Lines Inc.

ISIN	MATURITY	COUPON	YIELD
US247361ZT81	10/28/2029	3.7500%	5.5115%
US247361ZN12	4/19/2028	4.3750%	5.3111%
US247361ZZ42	1/15/2026	7.3750%	5.6225%
US247361ZU54	10/28/2024	2.9000%	5.9368%

Appendix 12. Market Risk Premium



Appendix 13. Peer Average

AAL	UAL	LUV	ALK	JBLU	SAVE		HA		
\$ 8,276,172	\$ 12,325,273	\$ 19,455,110	\$ 5,476,306	\$ 2,118,960	\$ 1,920,425	\$	527,886		
650,642	326,930	594,000	127,534	327000	108941.92		51450.904		
127000	737000	539000	58000	-362000	-554150	\$	(240,081)		
\$ 3,465,000	\$ 4,329,000	\$ 1,927,000	\$ 335,000	\$ 122,000	\$ (338,332)	•	(74,758)		
\$ 48,971,000	\$ 44,955,000	\$ 23,814,000	\$ 9,646,000	\$ 9,158,000	\$ 5,068,447	\$	2,641,267		
\$ (5,799,000)	\$ 6,896,000	\$ 10,687,000	\$ 3,816,000	\$ 3,563,000	\$ 1,571,651	\$	333,265		
								Avg	
12.72	37.70	32.75	42.94	6.48	17.63		10.26		25.67
2.39	2.85	10.10	16.35	17.37	-5.68		-7.06		9.81
0.17	0.27	0.82	0.57	0.23	0.38		0.20		0.38
-1.43	1.79	1.82	1.44	0.59	1.22		1.58		1.41

Appendix 14. Sensitivity Analysis

		Terminal Growth						
		1.20%	1.70%	2.20%	2.70%	3.20%		
	6.04%	\$56.67	\$69.97	\$86.73	\$108.51	\$137.96		
g	6.54%	\$46.36	\$57.22	\$70.58	\$87.42	\$109.30		
WACC	7.04%	\$37.81	\$46.85	\$57.76	\$71.19	\$88.11		
>	7.54%	\$30.61	\$38.26	\$47.34	\$58.31	\$71.79		
	8.04%	\$24.46	\$31.02	\$38.71	\$47.84	\$58.85		

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