



# DELTA

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# Investment Thesis

Investment Thesis

Business Model

Historicals

Industry Analysis

Governance

Risk and Growth

Valuation

Sell Proposal

Conclusion

## Company Overview

Company Name	DELTA AIR LINES INC.
Ticker	DAL: Delta Air Lines Inc. provides scheduled air transportation for passengers, freight, and mail over a network of routes.
Business Summary	
Current Price	\$54.12
Current Date	10/25/2024
Target Price	\$84.04
Target Date	10/28/2027
Industry	Airlines
Sector	Industrials
Change in Shares Outstanding (TTM)	\$1.9 million
Market Cap	\$35,240 million
Monthly Trading Volume	\$181.4 million
Beta	1.36
Sharpe Ratio	2.49
EPS	7.21
PE Ratio	7.51
52-week Low/High	\$30.76-56.48

## Investment Thesis

**Buy \$7,098 of DAL in the School Fund, sell off the Business Cycle Strategy**

### PROS

Stable revenue growth projections

Stable operating margins

Purchasing 312 new aircrafts by 2028

### CONS

Sensitive to the price of crude oil

Exposure to interest rate risk



# Business Model

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Delta provides scheduled air transportation for passengers and cargo throughout the United States and around the world.

## Revenue Streams:

- Passengers - 84.5%
- Cargo - 1.25%
- Other - 14.25%

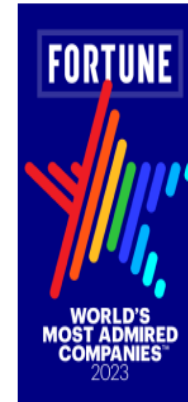
## Customer Incentives:

- SkyMiles frequent flyer program
- American Express partnership
- Delta Lounge access
- Excellent customer service
- Reliability, on-time performance
- Expansive route networks
- Delta One and Comfort+
- Ticket pricing is dynamic

## Marketing Strategy/Business & Operating Model:

- Attracting corporate travelers (inelastic demand & core demographic)
- Shift from fixed to variable costs to appropriately meet demand
- Owning a fuel refinery to control fuel costs
- Purchasing used aircrafts

We are proud to be the most awarded airline.



# Business Model

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## Revenue Streams and Operating Revenue 2023



Main Cabin  
Tickets

\$24.5 B



Premium  
Tickets

\$19.1 B



Loyalty Travel  
Awards

\$3.5 B



Travel-related  
services

\$1.9 B



Cargo

\$723 MM



# Historical Analysis

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## Major Historical Events

- EST: 1924
- Climbing out of Chapter 11 Bankruptcy 2005-07
- Dealing with Covid-19

## Simple Moving Average (as of 10/24/24)

- Current Price: \$54.77 Averages Showing Bullish Trend
- SMA20: \$52.14 - Current (up 4.8%)
- SMA50: \$47.00 - Current (up 14.19%)
- SMA200: \$45.72 - Current (up 16.52%)

## Delta Over Time

- Delta evolved to be the most profitable airline in the world with a profitability of 7.8%
- Highest stock price of Delta was at \$63.44 in July of 2019
- Since 2020 Delta stock has continued to climb and as of currently (October 2024) Delta stock is at 89% of its highest stock price in 2019.

## 52 Week High / Low

- High: \$56.48 Low: \$30.60
- Current: \$54.77 (10/24/24)
- 3.03% below 52-week high
- 44.13% above 52-week high



# Historical Analysis

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O 39.44 H 40.87 L 38.96 C 40.51 Vol 37.4m

SPY 501.20

vol undr 37,436,000.00

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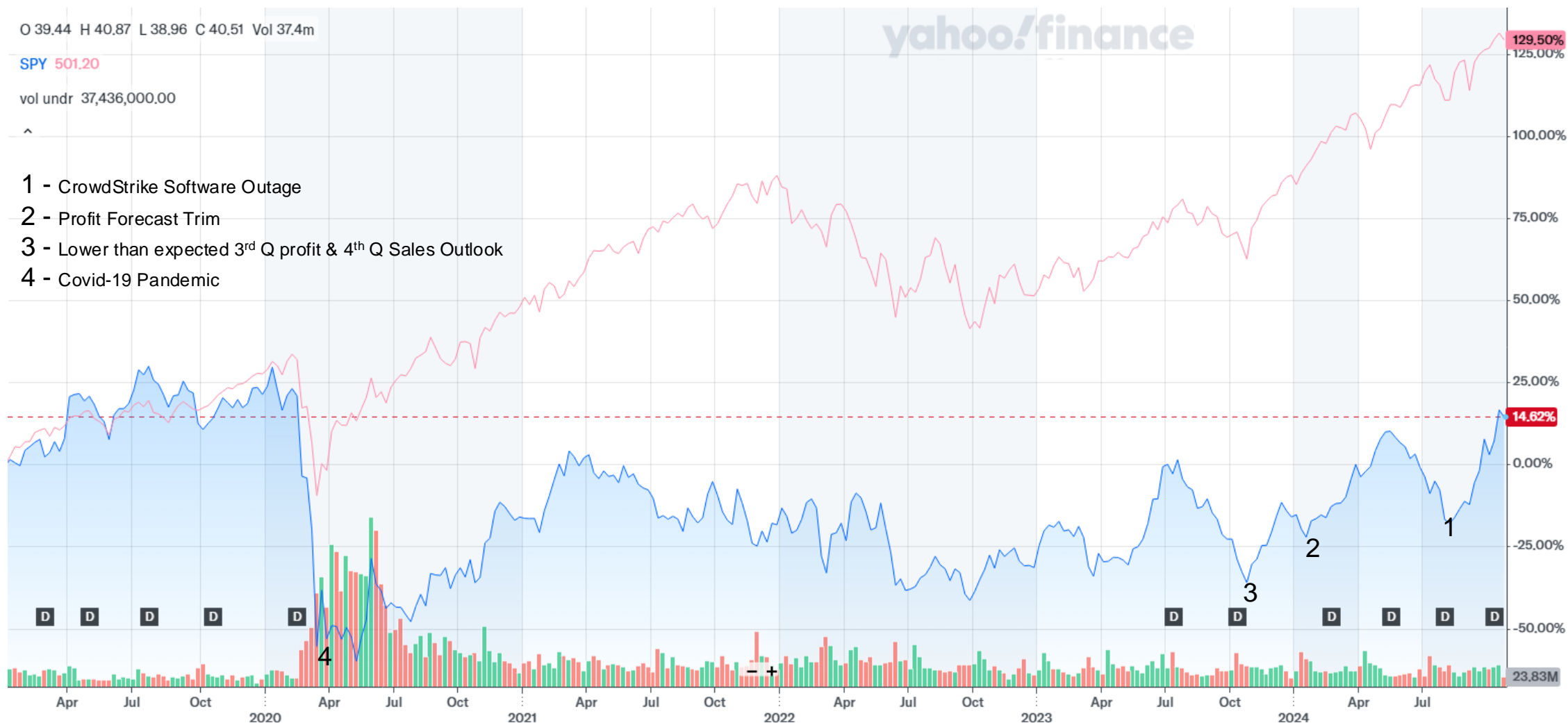
1 - CrowdStrike Software Outage

2 - Profit Forecast Trim

3 - Lower than expected 3<sup>rd</sup> Q profit & 4<sup>th</sup> Q Sales Outlook

4 - Covid-19 Pandemic

yahoo!finance



# Financial Statement Analysis

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## Financial Statement Overview

All numbers in millions

Revenue	\$60,307.0
Net Income	\$4,651.0
Operating Margin	10.4%
Operating Cash Flow	\$6,676.0
CAPEX	\$5,462.0
Free Cash Flow	\$492.9
Total Assets	\$75,368.0
Total Liabilities	\$61,722.0
Dividends	6.2%
ROA	5.3%
ROE	40.7%
ROI	85.6%
Operating Margin	10.4%
Goodwill / Intangibles	\$15,730.0

## Company/Industry Specific

- Pre-COVID, Delta maintained stable margins. Little fluctuation of accounts as a percentage of assets
- COVID disrupted entire industry, but Delta has seen an eventual return to stable pre-2020 levels
- High amount of asset value in goodwill and intangibles via mergers and the "SkyMiles" program, one of DAL's key differentiation points
- More profitable than other airlines in the "Big 4" of carriers



# Industry Trends – Present and Historically

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## Primary Industry Classification: Passenger Airlines

Expected Airlines CAGR	Deltas Competitive Advantage Paying Down Debt	Competitive Advantages of Delta Compared to 3 Main Competitor Airlines
<p>CAGR</p>  <p>4.43% 2024-2029</p>	<p>Delta 2024E Net Debt per EBITDAR Ratio: 1.94</p>  <p>Other full-service airlines ratio: 2.78</p>	<p>Based on a 2022 rating by business travel professionals Delta was rated the best airline for...</p>  <ul style="list-style-type: none"><li>• Business Travel</li><li>• Quality Customer Service</li><li>• Complaint Resolution</li><li>• Client Communications Quality</li></ul>





# PESTEL Analysis

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P

Political

- Suspended Israel flights
- 2024 election
- Potential corporate tax rate shift
- Delta lobbies

E

Economical

- Crude oil raised 1% YTD
- Travel costs rising
- Winter schedule
- Tourism expected to rise through 2028

S

Social

- Sustainable travel demand
- Partnership opportunities
- Airline reliability
- Employee unionization

T

Technological

- Fuel-efficient aircrafts
- Cyber risks
- Technological sector is evolving

E

Environmental

- Net-Zero emissions goals
- Evolving laws around the environment
- Extreme weather

L

Legal

- Lawsuits
- Highly regulated industry
- FAA, ICAO, IATA, DOT, TSA
- Health and Safety regulations: CDC, WHO



# Competitive Landscape

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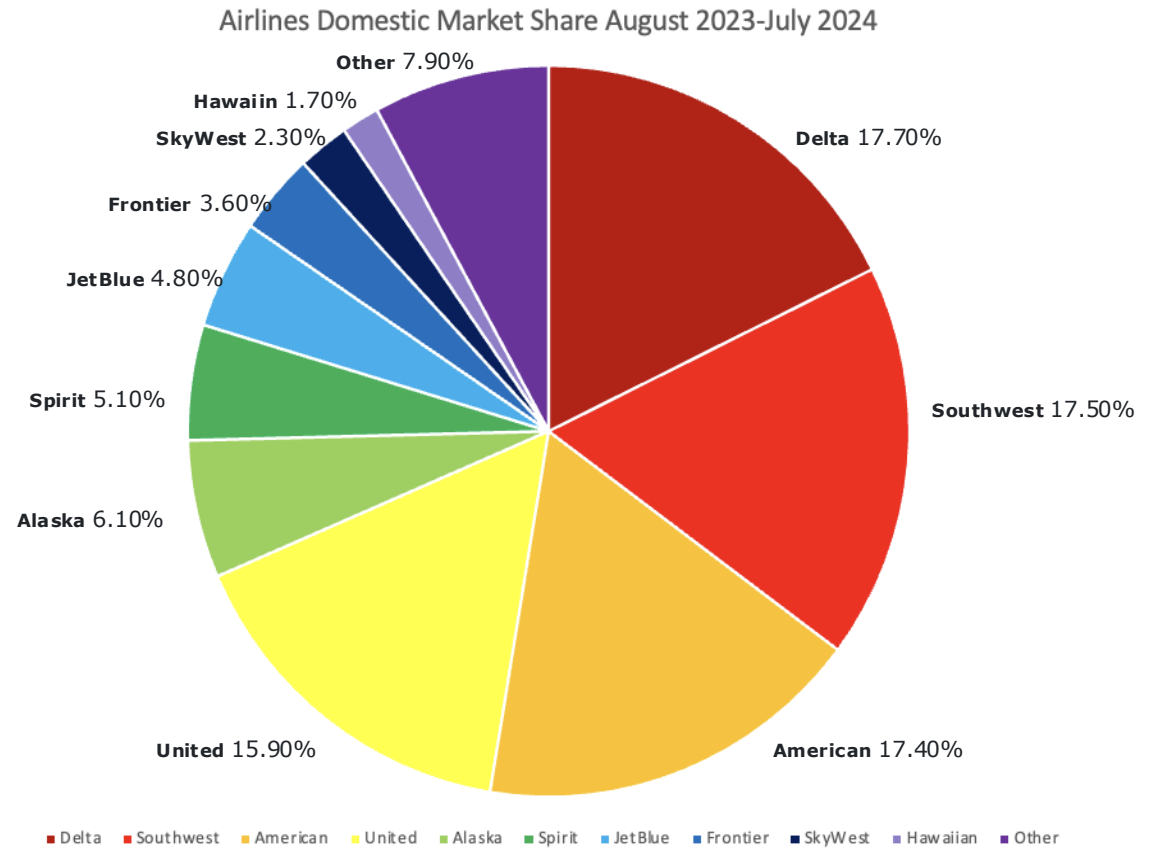
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**Deltas Competitive Advantage:**  
Rewards programs, customer experience, extensive flight schedules



# Porters Five Forces

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## Threat of New Entrants

- Low
- High barrier of entry
- Airline industry needs significant capital investments, regulatory approvals, and access to limited airport slots
- Economies of scale and strong brand loyalty

## Industry Rivalry

- High
- Intense competition
- Other major and low-cost airlines
- Price and capacity differentiation

## Threat of Substitutes

- Medium
- Cars, trains, boats available
- Planes are most efficient
- Zoom makes business travel less needed occasionally



## Bargaining Power of Suppliers

- High
- Limited number of suppliers for airplanes
- Mainly Boeing and Airbus manufacturers
- Fuel prices volatile
- Labor unions give labor suppliers bargaining power

## Bargaining Power of Buyers

- High
- Ability to substitute to other airlines
- Price sensitive customers may find other options
- Loyalty programs reduce buyer power by switching costs and offering deals



# Management and Employees

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## Leadership

- CEO Ed Bastian has been CEO since May 2016
- CFO Dan Janki
- Delta Leadership Committee
- Board of Directors
- Safety & Security Committee

## Compensation

- Delta's senior executives: base salary, performance bonuses, stock options, and participation in the company's profit-sharing program
- In 2023, Delta paid \$1.4 billion in profit sharing to employees
- Offers 401(k) matching contributions up to 6% of eligible earnings

## Retention

- Engagement surveys for employees to provide feedback
- Holds executive town hall sessions
- Employee resource groups, having nearly 19,000 members across 12 affinity groups

## Labor and Workforce

- Unionization efforts and high employee attrition rates
- High employee engagement score of 80 out of 100 in 2023, industry benchmarks is 66-71%
- Employs over 100,000 employees worldwide, about 20% are unionized
- Governed by Railway Labor Act

## Legal

- Has experienced labor related legal disputes
- Wage theft claims and employee lawsuits
- Cybersecurity protection: IT Risk Team, Enterprise Risk Management framework
- Environmental Compliance Obligations



# SWOT Analysis

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## Strengths

- One of the largest airlines globally
- SkyMiles program
- American Express and Digital ID TSA partnerships
- Low flight cancellation rates and high customer satisfaction
- SkyTeam alliance (e.g., Air France-KLM, LATAM, Virgin Atlantic)

## Weaknesses

- High operating cost sector
- Upfront costs from transition from Boeing to Airbus
- Dependence on U.S economy, consumer discretionary
- Wage theft claims and class-action lawsuits
- High employee turnover rate
- Business and results of operations dependent on aircraft fuel price

## Opportunities

- Demand for sustainable travel
- Business travel demand growth, expected from 8% to 12% 2024
- Expanding SkyMiles partnerships
- Promotion of Delta's 100th-anniversary event at CES 2025 in Las Vegas

## Threats

- Economic slowdowns
- Uncontrolled increases in oil prices
- High competition
- Government policies or regulations
- Climate change driven disruptions



# DCF - WACC

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## WACC Calculations

### Capital Structure

Total Debt	\$28,381.00
Total Equity	\$35,015.64
Debt-to-Total Capitalization	44.8%
Equity-to-Total Capitalization	55.2%

### Cost of Debt

Cost of Debt	2.7%
Tax Rate	24.1%
After-Tax Cost of Debt	2.1%

### Cost of Equity

Risk-free Rate	4.1%
Market Risk Premium	6.0%
Levered Beta	1.21
Cost of Equity	11.3%

<b>WACC</b>	<b>7.2%</b>
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# DCF – Assumptions Base

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## Select Operating Data

				Projected Annual Forecast				
	2021	2022	2023	2024	2025	2026	2027	2028
Period				1	2	3	4	5
Revenue	\$29,899.0	\$50,582.0	\$58,048.0	\$61,530.9	\$64,607.4	\$67,514.8	\$70,215.3	\$73,024.0
Growth Rate (%)		69.2%	14.8%	6.0%	5.0%	4.5%	4.0%	4.0%
EBITDA	(\$478.0)	\$5,782.0	\$8,090.0	\$8,614.3	\$8,399.0	\$9,114.5	\$9,479.1	\$10,223.4
EBITDA Margin (%)	(1.6%)	11.4%	13.9%	14.0%	13.0%	13.5%	13.5%	14.0%
EBIT	(2,175.0)	3,982.0	6,089.0	\$6,399.2	\$5,814.7	\$6,413.9	\$6,670.5	\$7,302.4
EBIT Margin (%)	(7.3%)	7.9%	10.5%	10.4%	9.0%	9.5%	9.5%	10.0%
Depreciation & Amortization	\$1,998.0	\$2,107.0	\$2,341.0	\$3,076.5	\$3,230.4	\$3,375.7	\$3,510.8	\$3,651.2
D&A as a % of revenue	6.7%	4.2%	4.0%	5.0%	5.0%	5.0%	5.0%	5.0%



# DCF – Assumptions Base

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## Select Balance Sheet And Other Data

Period				Projected Annual Forecast				
	2021	2022	2023	2024	2025	2026	2027	2028
				1	2	3	4	5
Cash	\$7,933.0	\$3,266.0	\$2,741.0	3,563.3	3,385.1	3,215.9	3,055.1	2,902.3
Accounts Receivable	2,404.0	3,176.0	3,130.0	3,474.3	3,856.5	4,280.7	4,751.6	5,274.2
Inventories	1,098.0	1,424.0	1,314.0	1,432.3	1,503.9	1,624.2	1,737.9	1,842.1
Prepaid Expenses	956.0	1,739.0	1,758.0	1,881.1	2,012.7	2,153.6	2,304.4	2,465.7
Accounts Payable	\$4,240.0	\$5,106.0	\$4,446.0	\$4,846.1	\$5,233.8	\$5,652.5	\$6,104.7	\$6,593.1
Accrued Expenses	4,185.0	5,020.0	6,178.0	6,486.9	6,811.2	7,151.8	7,509.4	7,884.9
Debt	35,779.0	31,710.0	28,381.0	25,056.3	21,323.9	18,058.5	16,174.5	14,557.0
Capital Expenditures	3,247.0	6,366.0	5,323.0	5,003.6	5,203.8	4,579.3	4,899.9	3,772.9
Cash Growth (%)				30.0%	(5.0%)	(5.0%)	(5.0%)	(5.0%)
Accounts Receivable Growth (%)				11.0%	11.0%	11.0%	11.0%	11.0%
Inventories Growth (%)				9.0%	5.0%	8.0%	7.0%	6.0%
Prepaid Expenses Growth (%)				7.0%	7.0%	7.0%	7.0%	7.0%
Accounts Payable Growth (%)				9.0%	8.0%	8.0%	8.0%	8.0%
Accrued Expenses Growth (%)				5.0%	5.0%	5.0%	5.0%	5.0%
Capital Expenditures Growth (%)				(6.0%)	4.0%	(12.0%)	7.0%	(23.0%)





# DCF - Calculations

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Sum of present values of FCFs \$35,342.5

## Exit Multiple

*EV/EBITDA valuation method:*

EV/EBITDA	7.60
WACC	7.2%
Terminal Value	77,697.50
<b>Present Value of Terminal Value</b>	<b>\$54,956.0</b>

## Enterprise Value to Equity Value

Enterprise Value	\$90,298.6
Less: Net debt	25,640.0
<b>Equity Value</b>	<b>\$64,658.6</b>
Diluted Shares Outstanding	647.0
<b>Equity Value Per Share</b>	<b>\$99.94</b>

DCF Approach	Implied Share Price		
	Base	Downside	Upside
Exit Multiple	\$99.94	\$67.08	\$116.68

EV/EBITDA:

Delta: 6.7

Median: 7.6

Mean: 10.2



# Multiples

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Company Name	Market and Financial Data						Valuation		
	Price	Market Cap (B)	Enterprise Value (M)	LTM Sales (M)	LTM EBITDA (M)	Earnings (M)	EV / Sales	EV / EBITDA	P/E
<b>Target</b>									
Delta Air Lines, Inc.	\$54.120	\$35,133.100	\$56,441.100	\$60,307.000	\$8,415.000	\$4,651.00	0.9x	6.7x	7.51
<b>Comparable companies</b>									
American Airlines Group, Inc.	12.96	8,510.90	38,970.90	53,448.00	5,150.00	275.00	0.7x	7.6x	31.31
United Airlines Holdings, Inc.	74.49	24,498.00	43,693.00	55,994.00	7,483.00	2,764.00	0.8x	5.8x	8.90
Southwest Airlines Co.	30.49	18,268.30	17,375.30	27,031.00	1,730.00	-48.00	0.6x	10.0x	18.28
JetBlue Airways Corporation	7.37	2,556.20	7,065.20	9,315.00	313.00	-947.00	0.8x	22.6x	
Alaska Air Group, Inc.	45.98	5,800.80	7,166.80	10,521.00	1,212.00	225.00	0.7x	5.9x	25.88
Frontier Group Holdings, Inc.	6.72	1,508.50	4,919.50	3,612.00	-239.00	-64.00	1.4x		
Allegiant Travel Company	62.87	1,112.10	2,633.20	2,499.00	292.50	-14.20	1.1x	9.0x	

Mean							0.9x	10.2x	21.09
Median							0.8x	7.6x	22.1x
25 Percentile							0.7x	6.3x	15.94
75 Percentile							0.9x	9.8x	27.24
Standard deviation							0.259	6.306	9.728



# Precedent Transactions

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Date	Target	Buyer	Target Business Description	Transaction Value	Revenue	EBITDA	EV / Revenue	EV / EBITDA
9/18/2024	Hawaiian Airlines	Alaska Airlines	Airline that services 15 continental US states and other countries (New Zealand, Australia, Pacific Islands, etc.) with nonstop flights to Hawaii	\$2,800.00	\$2,716.00	-	1.03x	
12/9/2013	American Airlines	US Airways	Largest airline in the world through revenue passenger miles and available seat miles, with services to over 50 countries	11,000	26,712	2,252.00	0.41x	4.88x
12/14/2016	Virgin America	Alaska Airlines	Low-cost, high-value airline, operating primarily out of California with flights across the western US, Mexico and beyond	2,600	1,530.00	195.87	1.70x	13.27x
10/1/2010	Continental Airlines	United Airlines	One of the US's largest carriers despite consistent financial and labor issues, eventually became one of the most successful airlines in the US	8,500	23,229	2,055.00	0.37x	4.14x
5/2/2011	AirTran Airways	Southwest Airlines	Smaller regional airline operating primarily in the eastern and midwestern US	1,400	2,619	224.40	0.53x	6.24x
				Mean			0.81x	7.13x
				Median			0.53x	5.56x
				25 Percentile			0.41x	4.70x
				75 Percentile			1.03x	8.00x
				Standard deviation			0.564	4.185



# Weighted Valuation

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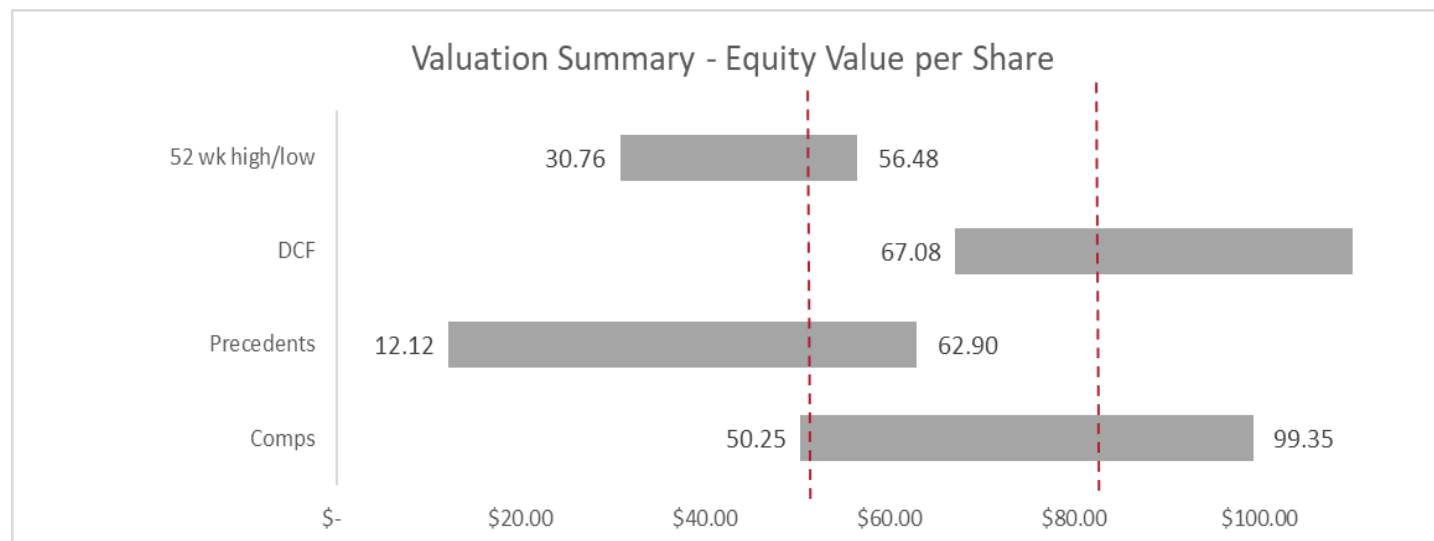
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## Football Field Data

	Low bar	Difference	High Bar
Comps	50.25	49.10	99.35
Precedents	12.12	50.78	62.90
DCF	67.08	49.59	116.68
52 wk high/low	30.76	25.72	56.48

Implied Stock Price	
Total DCF	\$99.94
Comparable	\$84.28
Precedent Transactions	\$46.77



## Weights

DCF	40%
Comparable	40%
Precedent Transactions	20%

**Target Price** **83.04**

**Current price** **54.12**



# Weighting Analysis

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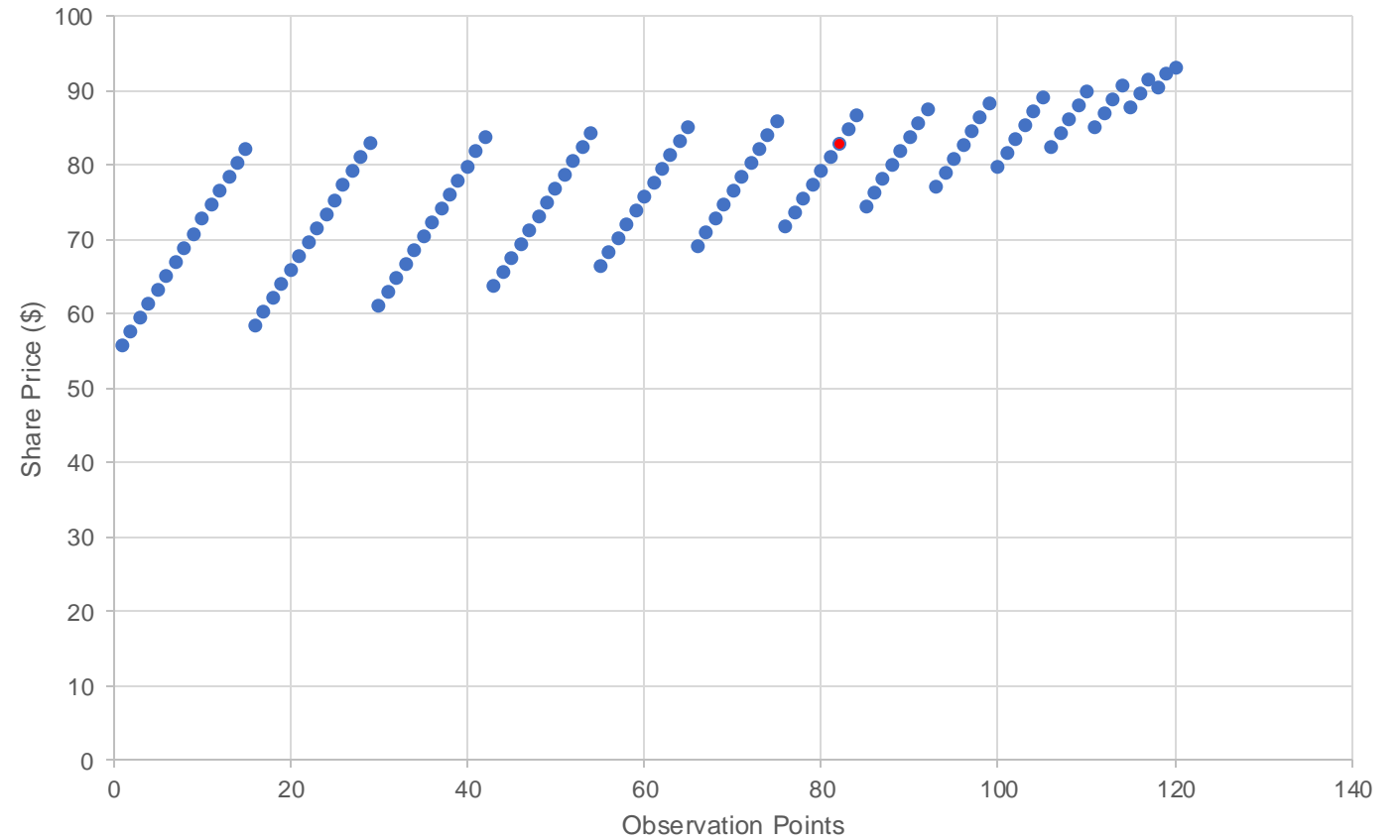
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Summary	Share Price
Min	55.83
Max	93.05
25th Percentile	70.96
Mean	76.99
75th Percentile	83.55
Median	78.11
<b>Our Estimate</b>	<b>83.04</b>
Stdev	8.64

Weighting Sensitivity Analysis



# Sell Proposal

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**Old Strategy:** Business Cycle Tracking

**Proposal Group:** SIFway Surfers

**Date Adopted:** 12/2023

**Expected Rebalance:** 4/2024

**Expected Sell:** 6/2024

**% of Overall Fund:** 7.25%

This strategy was meant to be rebalanced in April then sold in June. The old group expected negative returns after June; we should therefore exit the old strategy.

Given we want to lower the overall beta of the fund, we will be able to fund the DAL purchase and should keep the excess capital in BIL, a low-beta asset for new strategies.

	CYCLE	DAL	BIL
<b>Amount</b>	\$123,210	\$7,098	\$116,112
<b><math>\beta</math></b>	1.10	1.21	0.00
<b>StDev</b>	5.87%	28.79%	0.29%
<b>Sharpe</b>	1.81	2.49	3.73

	Old	New
<b><math>\beta</math></b>	1.14	1.05

## **BIL KEY STATS:**

**Yield:** 5.54%

**Securities:** US Government Bonds

**Maturity:** Between 1-3 months

**Expense Ratio:** 0.1356%



# Conclusion

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<b>Investment Thesis</b>	BUY \$7,098 of DAL in School Fund, sell off the "Business Cycle Strategy"
<b>Business Model</b>	Delta provides scheduled air transportation for passengers and cargo throughout the United States and around the world.
<b>Industry Analysis</b>	High expected growth, high competition, low threat of new entrants
<b>Risks and Growth</b>	Largest airline in the industry with many plans to continue growing, but much of the business is dependent on US economy
<b>Governance</b>	Extensive leadership team, regulations, employee programming
<b>Valuation</b>	Implied Stock Price at \$83.04, which is 53.44% higher than current
<b>Sell Proposal</b>	Sell "Business Cycle Strategy" from School Fund, \$7,098 goes to purchasing delta, \$116,112 goes into BIL (a bond ETF), for a total amount of \$123,210
<b>Recommendation</b>	BUY \$7,098 of DAL (equal to 131.15 shares), target price: \$83.04, target date: 10/27/2027 (sell \$123,210 amount from School Fund)



# Voting

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VOTE

- BUY \$7,098 of DAL (equal to 131.15 shares)
- Sell "Business Cycle Strategy" from School Fund, \$7,098 goes to purchasing delta, \$116,112 goes into BIL (a bond ETF), for a total amount of \$123,210





The image features a background of financial data, including stock price charts and tables. A semi-transparent red rectangle is overlaid on the center, containing the word "Exhibits" in a white, bold, sans-serif font. The background text is partially obscured but includes terms like "ImgnTech Share Price", "Change on day 32.30", and "2013/2013".

# Exhibits

# Exhibit 1 – Downside Operating Data

Exhibit 1: Downside Operating Data

Select Operating Data								
Period	2021	2022	2023	Projected Annual Forecast				
				2024	2025	2026	2027	2028
				1	2	3	4	5
Revenue	\$29,899.0	\$50,582.0	\$58,048.0	\$61,530.9	\$58,454.3	\$61,377.1	\$64,445.9	\$69,601.6
Growth Rate (%)		69.2%	14.8%	6.0%	(5.0%)	5.0%	5.0%	8.0%
EBITDA	(\$478.0)	\$5,782.0	\$8,090.0	\$8,614.3	\$6,430.0	\$6,751.5	\$7,089.0	\$7,656.2
EBITDA Margin (%)	(1.6%)	11.4%	13.9%	14.0%	11.0%	11.0%	11.0%	11.0%
EBIT	(2,175.0)	3,982.0	6,089.0	\$4,307.2	\$4,091.8	\$4,296.4	\$4,511.2	\$4,872.1
EBIT Margin (%)	(7.3%)	7.9%	10.5%	7.0%	7.0%	7.0%	7.0%	7.0%
Depreciation & Amortization	\$1,998.0	\$2,107.0	\$2,341.0	\$3,076.5	\$2,922.7	\$3,068.9	\$3,222.3	\$3,480.1
D&A as a % of revenue	6.7%	4.2%	4.0%	5.0%	5.0%	5.0%	5.0%	5.0%



# Exhibit 2 – Downside Balance Sheet/Assumptions

Exhibit 2: Downside Balance Sheet and Assumptions

Select Balance Sheet And Other Data								
Period				Projected Annual Forecast				
	2021	2022	2023	2024	2025	2026	2027	2028
				1	2	3	4	5
Cash	\$7,933.0	\$3,266.0	\$2,741.0	3,563.3	7,563.3	7,033.9	6,541.5	6,083.6
Accounts Receivable	2,404.0	3,176.0	3,130.0	3,474.3	3,926.0	4,397.1	4,880.8	5,417.6
Inventories	1,098.0	1,424.0	1,314.0	1,432.3	1,647.1	1,778.9	1,903.4	2,017.6
Prepaid Expenses	956.0	1,739.0	1,758.0	1,881.1	2,012.7	2,153.6	2,304.4	2,465.7
Accounts Payable	\$4,240.0	\$5,106.0	\$4,446.0	\$4,846.1	\$5,379.2	\$5,917.1	\$6,449.7	\$6,965.7
Accrued Expenses	4,185.0	5,020.0	6,178.0	6,486.9	6,811.2	7,151.8	7,509.4	7,884.9
Debt	35,779.0	31,710.0	28,381.0	25,056.3	25,123.9	21,668.5	19,784.5	17,806.0
Capital Expenditures	3,247.0	6,366.0	5,323.0	5,003.6	5,203.8	4,579.3	4,899.9	4,000.0
<i>Cash Growth (%)</i>				30.0%	112.3%	(7.0%)	(7.0%)	(7.0%)
<i>Accounts Receivable Growth (%)</i>				11.0%	13.0%	12.0%	11.0%	11.0%
<i>Inventories Growth (%)</i>				9.0%	15.0%	8.0%	7.0%	6.0%
<i>Prepaid Expenses Growth (%)</i>				7.0%	7.0%	7.0%	7.0%	7.0%
<i>Accounts Payable Growth (%)</i>				9.0%	11.0%	10.0%	9.0%	8.0%
<i>Accrued Expenses Growth (%)</i>				5.0%	5.0%	5.0%	5.0%	5.0%
<i>Capital Expenditures Growth (%)</i>				(6.0%)	4.0%	(12.0%)	7.0%	(23.0%)



# Exhibit 3 – Downside Exit Multiple

## Exhibit 3: Downside Exit Multiple and Enterprise Value to Equity Value

### Exit Multiple

#### *EV/EBITDA valuation method:*

EV/EBITDA	7.60
WACC	7.2%
Terminal Value	58,186.92
<b>Present Value of Terminal Value</b>	<b>\$41,156.0</b>

### Enterprise Value to Equity Value

Enterprise Value	\$69,042.8
Less: Net debt	25,640.0
<b>Equity Value</b>	<b>\$43,402.8</b>
Diluted Shares Outstanding	647.0
<b>Equity Value Per Share</b>	<b>\$67.08</b>



# Exhibit 4 – Upside Operating Data

Exhibit 4: Upside Operating Data

Select Operating Data								
				Projected Annual Forecast				
	2021	2022	2023	2024	2025	2026	2027	2028
Period				1	2	3	4	5
Revenue	\$29,899.0	\$50,582.0	\$58,048.0	\$61,879.2	\$65,591.9	\$69,527.4	\$73,699.1	\$78,121.0
Growth Rate (%)		69.2%	14.8%	6.6%	6.0%	6.0%	6.0%	6.0%
EBITDA	(\$478.0)	\$5,782.0	\$8,090.0	\$8,663.1	\$9,346.8	\$10,255.3	\$11,054.9	\$11,718.2
EBITDA Margin (%)	(1.6%)	11.4%	13.9%	14.0%	14.3%	14.8%	15.0%	15.0%
EBIT	(2,175.0)	3,982.0	6,089.0	\$6,187.9	\$6,756.0	\$7,509.0	\$8,106.9	\$8,593.3
EBIT Margin (%)	(7.3%)	7.9%	10.5%	10.0%	10.3%	10.8%	11.0%	11.0%
Depreciation & Amortization	\$1,998.0	\$2,107.0	\$2,341.0	\$3,094.0	\$3,279.6	\$3,476.4	\$3,685.0	\$3,906.1
D&A as a % of revenue	6.7%	4.2%	4.0%	5.0%	5.0%	5.0%	5.0%	5.0%



# Exhibit 5 – Upside Balance Sheet/Assumptions

Exhibit 5: Upside Balance Sheet and Assumptions

Select Balance Sheet And Other Data								
Period				Projected Annual Forecast				
	2021	2022	2023	2024	2025	2026	2027	2028
				1	2	3	4	5
Cash	\$7,933.0	\$3,266.0	\$2,741.0	3,563.3	3,385.1	3,215.9	3,055.1	2,902.3
Accounts Receivable	2,404.0	3,176.0	3,130.0	4,950.3	5,247.4	5,562.2	5,895.9	6,249.7
Inventories	1,098.0	1,424.0	1,314.0	1,208.9	1,208.9	1,208.9	1,208.9	1,208.9
Prepaid Expenses	956.0	1,739.0	1,758.0	1,878.1	2,006.3	2,143.4	2,289.8	2,446.2
Accounts Payable	\$4,240.0	\$5,106.0	\$4,446.0	\$4,851.9	\$5,294.9	\$5,778.3	\$6,305.9	\$6,881.6
Accrued Expenses	4,185.0	5,020.0	6,178.0	6,187.9	6,559.2	6,952.7	7,369.9	7,812.1
Debt	35,779.0	31,710.0	28,381.0	25,056.3	21,323.9	18,058.5	16,174.5	14,557.0
Capital Expenditures	3,247.0	6,366.0	5,323.0	5,003.6	5,203.8	4,579.3	4,899.9	3,772.9
Cash Growth (%)				30.0%	(5.0%)	(5.0%)	(5.0%)	(5.0%)
Accounts Receivable (%) of revenue				8.0%	8.0%	8.0%	8.0%	8.0%
Inventories growth (%)				(8.0%)	0.0%	0.0%	0.0%	0.0%
Prepaid Expenses Growth (%)				6.8%	6.8%	6.8%	6.8%	6.8%
Accounts Payable Growth (%)				9.1%	9.1%	9.1%	9.1%	9.1%
Accrued Expenses % of revenue				10.0%	10.0%	10.0%	10.0%	10.0%
Capital Expenditures Growth (%)				(6.0%)	4.0%	(12.0%)	7.0%	(23.0%)



# Exhibit 6 – Upside Exit Multiple

Exhibit 6: Upside Exit Multiple and Enterprise Value to Equity Value

## Exit Multiple

### *EV/EBITDA valuation method:*

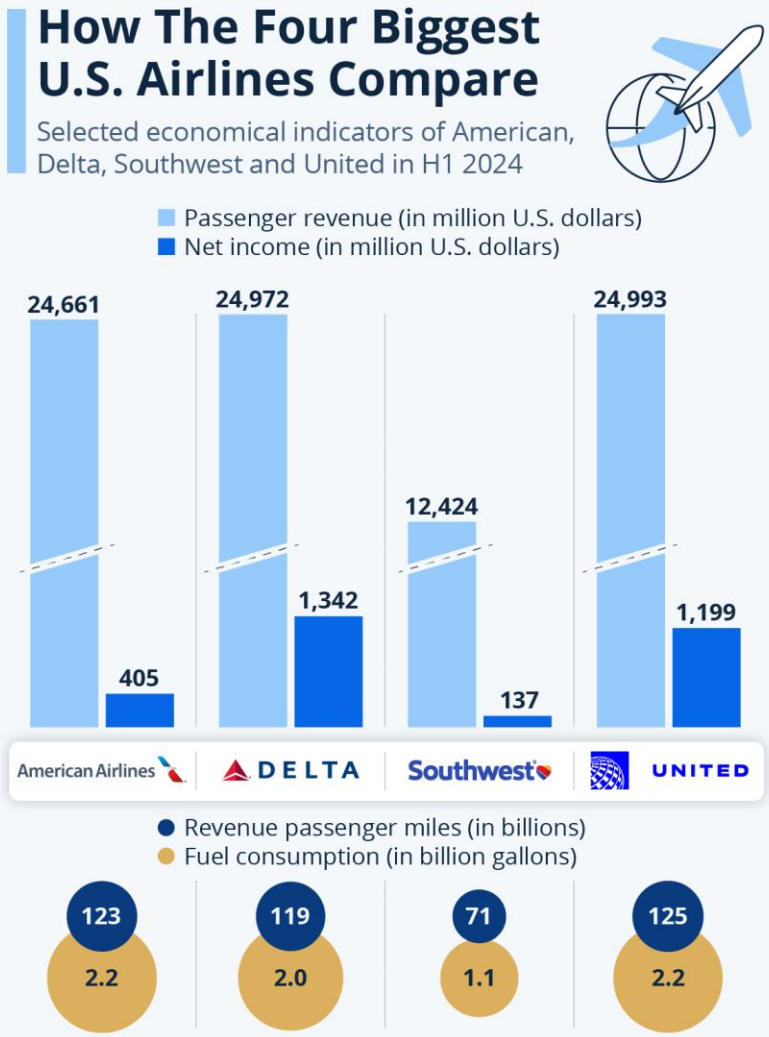
EV/EBITDA	7.60
WACC	7.2%
Terminal Value	89,057.97
<b>Present Value of Terminal Value</b>	<b>\$62,991.4</b>

## Enterprise Value to Equity Value

Enterprise Value	\$101,130.4
Less: Net debt	25,640.0
<b>Equity Value</b>	<b>\$75,490.4</b>
Diluted Shares Outstanding	647.0
<b>Equity Value Per Share</b>	<b>\$116.68</b>



# Exhibit 7 – Comparative Net Income



Source: Company statements







# Exhibit 8.2 - StDev and Sharpe Calculations

	AZEK	ECL	ONON	WDFC	WING	BSET	MSGS	PBPB	GME	NWGL	TREX	MEI	CHWY	BECN
<b>StDev</b>	4.6228%	1.9569%	5.9164%	3.9764%	4.5414%	4.5541%	2.1007%	6.4153%	9.8772%	22.0709%	5.8879%	10.6119%	8.1265%	4.3698%
<b>Weight</b>	10.36%	7.41%	9.45%	7.14%	6.73%	6.43%	8.04%	4.59%	12.05%	0.65%	4.49%	5.21%	11.31%	6.14%
<b>WeightedSt</b>	<b>5.87%</b>													

	AZEK	ECL	ONON	WDFC	WING	BSET	MSGS	PBPB	GME	NWGL	TREX	MEI	CHWY	BECN
<b>Return</b>	18.7647%	28.5777%	51.5113%	11.5460%	39.7230%	-15.1382%	25.0432%	-19.4458%	29.5981%	-185.252%	-11.3767%	-93.4620%	38.5990%	11.8828%
<b>Weight</b>	10.3600%	7.4100%	9.4500%	7.1400%	6.7300%	6.4300%	8.0400%	4.5900%	12.0500%	0.6500%	4.4900%	5.2100%	11.3100%	6.1400%
<b>WeightedReturn</b>	14.6521%													
<b>Sharpe</b>	<b>1.81</b>													



# Exhibit 8.3 - StDev and Sharpe Calculations

BIL \$	Return	BIL \$	Return
91.75	0.09%	89.62	0.51%
91.67	0.08%	89.16	-0.30%
91.6	0.50%	89.43	0.09%
91.14	-0.32%	89.35	0.10%
91.43	0.08%	89.26	0.53%
91.36	0.12%	88.79	-0.33%
91.25	0.53%	89.08	0.10%
90.77	-0.31%	88.99	0.09%
91.05	0.09%	88.91	0.11%
90.97	0.09%	88.81	0.47%
90.89	0.12%	88.39	-0.28%
90.78	0.52%	88.64	0.08%
90.31	-0.33%	88.57	0.12%
90.61	0.11%	88.46	0.53%
90.51	0.10%	87.99	-0.34%
90.42	0.53%	88.29	0.10%
89.94	-0.32%	88.2	0.08%
90.23	0.09%	88.13	0.12%
90.15	0.09%	88.02	0.09%
90.07	0.56%	87.94	0.55%
89.57	-0.33%	87.46	-0.35%
89.87	0.06%	87.77	0.11%
89.82	0.13%	87.67	0.55%
89.7	0.09%	87.19	
<b>0.28%</b>	<b>StDev</b>		
<b>5.10%</b>	<b>Total Return</b>		
<b>3.73</b>	<b>Sharpe</b>		

